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Evidence-based recommendations for reproductive health in developing countries

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Evidence-based reproductive health in developing countries

Health care priorities are different in developing and developed countries. Yet in many developing countries the allocation of resources for health care as well as health care practices remain modelled after those of developed countries. The result is that in developing countries health care in general, and reproductive health in particular, have suffered from inadequate staffing and inappropriate allocation of resources.

A prerequisite for need- and evidence-based allocation of resources and appropriate health care practices is access to scientifically solid and up-to-date information. The lack of access to sound and current information has even more damaging consequences for health care in that practices of unknown effectiveness, or, in some cases, of practices that are known to be harmful, become entrenched in clinical practice. This places a further burden on the limited resources for health care in developing countries.

A variety of problems are caused when clinical practices that are not based on sound scientific evidence find their way into established medical/health care practice. It is generally acknowledged that removing an entrenched practice is much more difficult than introducing a new one. Thus, not only valuable resources continue to be used for practices of unknown effectiveness, but also, research is needed later to evaluate the usefulness of these practices. For example, large trials had to be conducted to show that routine episiotomy is not beneficial. Furthermore, routine electronic fetal monitoring during labour, and routine ultrasound assessment during pregnancy, have not been shown to decrease morbidity and mortality. Yet these two practices are used widely in some developing countries. A more effective resource allocation, complemented by efforts to implement only those practices that are effective should be a priority in order to improve reproductive health services in developing countries.

The WHO Reproductive Health Library (RHL) seeks not only to prevent the introduction of unsubstantiated health care practices into programmes but also to replace the practices that have been demonstrated to be ineffective or harmful with those based on best available evidence. The sections below explain the terms and concepts employed in generating evidence-based knowledge in health care practice. By presenting these terms and concepts in simplified terms we hope to promote a better understanding and utilization of the data presented in RHL.

Evidence based services

Evidence-based health care means that the policies and practices employed in the prevention and treatment of health care problems are based on principles which have been proven through appropriate scientific methods. However, proving clinical effectiveness of a procedure is not sufficient. It needs to be complimented by evidence of provider and user satisfaction, and feasibility and cost-effectiveness of the procedure in different settings.

Most health workers and policy-makers in developing countries do not have easy access to the latest reliable information on effective care. This is not only because of the high cost and erratic delivery of most subscription journals, but also because few medical journals publish comprehensive systematic reviews on the effectiveness of health care interventions in developing countries. Such information remains scattered in different papers in numerous journals, making it very difficult for health practitioners to get a good overview of all the data available on a given subject.

The Cochrane Collaboration publishes systematic reviews (Cochrane reviews) of effectiveness of health care interventions in electronic form in *The Cochrane Library* . These systematic, up-to-date summaries constitute reliable evidence of the benefits and risks of health care and are intended to help policy-makers and clinicians make sound practical decisions. RHL includes Cochrane reviews on reproductive health topics that are relevant to developing countries.

Systematic reviews

"Where is the knowledge we have lost in information" T.S. Elliot, The Rock

Each systematic review attempts to answer one clearly formulated health question. It uses rigorous and explicit methods to identify, select, and critically appraise relevant research. The data extracted through this methodology are then analysed using standard statistical methods and presented in the review.

In contrast to the traditional narrative reviews, systematic reviews adhere to a strict scientific design. In the case of Cochrane reviews the design requires a comprehensive search for all available data in all languages on the topic. This helps to avoid bias in the selection of data to be included in the review. The review methodology is designed to minimize selection bias in order to ensure reliability of the data to be included. Explicit methodology is used to ensure reproducibility of results. As new data become available each Cochrane review is updated. An important distinction between a systematic review and a traditional narrative review is that the former contains a comprehensive summary of all available information rather than reflecting the views of the author(s). The methodological rigour of a systematic review is achieved by preparation of a review protocol that gives details of how the studies are going to be searched, retrieved and critically appraised before inclusion in the review. It must be remembered that the results of a review will only be robust and conclusive if the trials included are of sufficient quality.

Randomized controlled trials

Currently, systematic reviews are based mostly on data from randomized controlled trials (RCT) because these are the most reliable method of assessing the effectiveness of preventive or therapeutic health care interventions. RCTs are experiments in which investigators randomly allocate eligible people or health care units into groups to receive, or not to receive, the intervention(s) being compared. When sample size is adequate, randomization ensures baseline comparability of known and unknown prognostic variables. Outcomes are selected *a priori* in order to achieve unbiased assessment of the results.

However, the most appropriate research design depends on the health problem or question that one faces. For example, if the objective is to evaluate the accuracy of a diagnostic test, cross-sectional studies of patients suspected of harbouring the disorder are required. Similarly, questions about prognosis can be answered by follow-up studies of patients having the disorder and corresponding controls.

Meta-analysis

Meta-analysis is the statistical method used to integrate results from more than one study to produce a summary estimate of the treatment effect across studies (typical relative risk). It is an application of a statistical technique used in observational studies (case-control studies and cohort studies) during stratified analysis. The difference is that in a meta-analysis in a systematic review of RCTs each stratum is an individual randomized controlled trial. In a stratified analysis of observational studies, on the other hand, a stratum is a category of the variable under consideration (for example age <20 years versus > 20 years). This technique is commonly known by the names of those who developed it for case-control studies (Mantel-Haenszel) although several variations of it also exist. Meta-analysis is only an analytical tool in a systematic review and not all systematic reviews necessarily include a meta-analysis. In the presence of disparities among trials meta-analysis can help by stratifying different characteristics, to identify the sources of such disparities. Meta-analysis is conducted in a systematic review when the review includes more than one trial, although it does not necessarily follow that a summary estimate of the treatment effect is obtained. When there are clinical or biological disparities (heterogeneity) between trials, then using meta-analysis to produce a single summary estimate may be misleading and should be avoided.

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Meta-analyses in the Cochrane reviews can be viewed in the "Summary of analyses" section in the review by double-clicking on the *MetaView: Tables and Figures* . To view individual tables double-click on the outcome that you are interested in. The results can be viewed as per different parameters, including relative risk, odds ratio, etc. RHL editors recommend that you view the results using relative risk (at 95 % confidence interval) as the summary estimate using a fixed-effects model.

The RHL contribution

RHL aims to provide health care planners and providers in developing countries with the most current and the best available information on reproductive health care. RHL is updated annually and this issue (No 2, 1999) contains 40 Cochrane reviews and corresponding commentaries. These include the 27 Cochrane reviews that were included originally in issue No.1. Ten of these 27 reviews have been updated and are included together with 13 new Cochrane reviews with corresponding commentaries in this issue.

The expert commentaries on the reviews included in RHL reflect the opinions of the authors of the commentaries on the findings of the reviews and their relevance to developing countries. Each commentary also includes practical advice from the authors on the management of the specific reproductive health problem in resource-poor settings. RHL editors accept that the opinions expressed in the commentaries and the advice presented under "Practical aspects" in the commentaries may not apply to all developing-country settings. Readers who have different views and experience of handling specific reproductive health problems in developing countries are encouraged to submit their opinions to RHL. RHL editors will give due consideration to publishing such opinions in future issues of RHL. Please submit your opinions to:

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Qualitative Data-Gathering for Reproductive Health Research

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Johns Hopkins University Working Paper

It is now widely accepted that effective research in community health problems should involve an integration of qualitative and quantitative methodology. In many cases qualitative research will have the "lead role," in order to get full, descriptive materials of complex subjects. This is particularly true with reference to reproductive health research because of the many sensitive issues such as abortion, sexually transmitted infections, domestic sexual violence, and related problems. While the basic forms of quantitative data-gathering are well understood among health researchers in developing countries, the newer developments in qualitative data-gathering have not yet been assimilated into the research thinking of most research organizations.

This paper reviews some main features of qualitative methods as they are being applied in the newest reproductive health research in South Asia and other developing areas of the world. I will suggest guidelines concerning use of specific qualitative research methods, based on recent experiences in India, Bangladesh, and neighboring areas. The general idea I want to express is that qualitative and quantitative research approaches should go hand in hand. Every research group needs to be skilled in both areas, as well as skilled in the inter-relating of qualitative and quantitative materials in data analysis and writing. In some cases qualitative, in-depth contextual materials are used as a supplement to the quantitative/numerical statistics. In other studies the quantitative methods are a secondary feature, to add a bit of numerical credibility to the qualitative information. In some cases basically qualitative studies, with only minor numerical treatment, are sufficient in themselves for presenting the basic "facts" about some aspect of reproductive health, particularly in the planning of interventions.

Background

Relatively little was known about women's reproductive health problems in India and South Asia until the landmark report by Bang and colleagues in *Lancet* a few years ago (Bang et al, 1989). Primary health care systems had paid scant attention to gynaecological morbidity except in relation to family planning programs. It was widely claimed that women do not seek health care for many of their gynaecological problems, partly because they cannot or will not divulge these problems to male doctors. Several other reasons are usually mentioned, including the feeling that primary health services have often been unresponsive to gynaecological problems. Also, there are considerable communications gaps between women's cultural understandings about these complaints and health professionals' biomedical approaches to the same problems.

Bang and colleagues found very high rates of untreated gynaecological problems in their study population in an eastern Maharashtran rural region. Since that time, a number of other studies have documented high prevalence of gynaecological morbidity in both rural and urban populations of India as well as elsewhere in South Asia (BCC et al, 1996; Bhatia et al, 1996;Bhatia and Cleland, 1995; Jejeebhoy, 1996).

During the 1990s the several surveys that asked women about gynaecological problems demonstrated that, when asked, women report fairly high rates of morbidities. Some of the studies have included clinical examinations and laboratory tests, which confirmed the high prevalence rates, even though women's self-reported gynaecological problems do not have unequivocal correspondence with clinically identified disease. Some women report health problems that are not confirmed through clinical examination. Other women report no problems, but are found to have vaginal infections and other problems. All of these studies have revealed numbers of cases of currently untreated health problems.

The various surveys of gynaecological morbidity in India and other south Asian populations demonstrate the pressing need for much greater attention to gynaecological morbidity in the primary health care system. At the same time, the studies raise a number of questions for which further research is needed. Many of these research questions call for qualitative styles of data-gathering, in order to provide systematic, in-depth information that can be used for designing more effective interventions. Some of the priority research questions include:

A. *What are women's culturally constructed explanatory models concerning white discharge, menstrual problems, and other gynaecological complaints*? What are the different symptoms and signs they recognize? What vocabulary do they use to refer to these problems? What are the different types and degrees of white discharge they recognize. What do they call these different types? What degree of seriousness do they assign to the different types? What do they perceive as the main causes, and secondary, contributing causes, of these illnesses? What do they regard as appropriate treatment (in light of different perceived causes); and which providers do they define as competent or available for providing such treatments?

B. *What are the complexes of cultural beliefs, social relations, and other factors affecting their seeking treatment for these conditions*? To what extent do economic factors affect treatment seeking? To what extent is lack of treatment-seeking caused by failures of communication or understanding in husband-wife interactions? What health care facilities are actually available to give treatment for these gynaecological problems? What kinds of treatments do they provide?

C. *What are the males' explanatory models about their own reproductive tract infections and those of their wives*?

D. *To what extent do women and men in various communities recognize sexual transmission as contributing to gynaecological morbidities*? How do different rural and urban populations inter-relate perceptions of sexual transmission with their other ideas about causes of their health problems?

E. *To what extent do women and men communicate with each other about reproductive health problems, in cases of sexually transmitted disease as well as other reproductive problems*?

F. *In what manner can systematic data about women's and men's reproductive health problems be gotten through interviews, given the sensitive nature of information linked to sexual behaviors*?

G. *What kinds of health care interventions can reach the hard-to-reach*? For example, the poorest people in the villages; and the women with few supporting family members, particularly the widows, divorced. abandoned, and others.

Qualitative research methods are needed to seek answers to these questions for several reasons: 1) Useful information about peoples' cultural **explanatory models** of illness are best gotten through systematic exploration of specific *illness episodes,* which requires patient, in-depth interviewing, with careful follow-up probing to fill in important details. 2) The sensitive nature of information concerning reproductive health issues, particularly as they relate to sexual behaviors, means that the data-gathering will often depend on developing excellent rapport with individual informants through repeated conversation-like interviews. 3) Qualitative methods are also useful for discovering all the varieties of local language use--the vocabularies--by means of which people communicate about reproductive health matters.

After the qualitative methods have been used for answering some of the questions about reproductive health issues, quantitative surveys can then be developed to get estimates of prevalences of particular patterns of beliefs and practices, as well as estimating the likelihoods of the varieties of treatment seeking behaviors. The quantitative survey methods have a much better chance of getting useful data if the forms of questions "make sense" in relation to local terminology and usual health practices.

The Emic Perspective

There is one other major aim of qualitative research. Many people would say this is the main reason for using these methods. That is to produce data that as nearly as possible reflect the points of view, the ideational perspective, the cultural definitions of things, from the *people's own intellectual standpoint.*

This data perspective--reflecting the peoples' criteria, vocabulary, and compartments of thinking, is referred to as the **emic perspective.** Survey questionnaires do not get, in any meaningful way, a truly **emic perspective** because the questions are framed from the researcher's point of view, in the researchers' (usually middle class) language, asking for "Yes" or "No" or "Maybe" answers to very complex questions. There is no room or reason for the villager's or the slum dweller's own cultural and ideational perspective to enter into answering. Only when the interviewing leads to extensive *talking* from the people, the respondents, do we get the possibility for another view, the *emic view*, to enter the data. Those data, from the *emic* perspective, can only come into the picture in the form of peoples' narration of events, behaviors and explanations. That is why the prime requirement for good qualitative research is that the data come to us in the form of *extended statements from the informants*, in their own vocabulary; the way they express, or narrate their experiences.

Types of Qualitative Data-Gathering Methods

There is a wide range of qualitative methods, but they are mostly variations of the following main categories:

1. Individual in-depth interviews;
2. Group interviews, including those usually referred to as Focus Group Discussions, as well as some group methods commonly referred to as PRA (participatory research approaches), such as social mapping of communities; and mapping of health care resources.
3. Structured qualitative techniques of various kinds, including pile sorting, paired comparisons, matrix interviewing, "body-mapping," and others.
4. Direct observation of situations, such as treatment events at health centers and private providers' clinics and shops.

In-Depth Individual Interviews: The Basic Foundation of Qualitative Research

Whatever mixtures of data-gathering are used in the different types of research projects, in-depth individual interviews are far and away the most usual, and the most productive methods. To understand this we need only consider the extent to which all of us rely on first-hand verbal, conversational information every day of our lives. Without deeply involved conversations with many types of people, we would be lacking much practical information for dealing with daily problems.

We commonly distinguish two main types of in-depth interviews: 1) *key informant interviews;* and 2) *case studies*.

Key Informants and Key Informant Interviews

The idea of "key informant" is often misunderstood in discussions of research methodology. Many people seem to consider as key informants only persons in some sort of position of authority or leadership. We often see research proposals that list as key informants people such as doctors, teachers, local officials, district medical officers, and other government personnel. Sometimes the list of "key informants" also includes *dais* and traditional healers. Such restricted lists are based on a misinterpretation of the anthropogical concept. Key informants are, indeed, considered to be "experts" in a cultural sense, but people in positions of authority are not the only experts when it comes to cultural information. Our most important key informants are quite ordinary people in the community, whose "expertness" is based on their knowledge of local cultural beliefs and practices.

We usually consider as *key informants* all those individuals from whom we receive extensive amounts of information, and who have the following characteristics:

A. Persons with whom we establish a special informational and social relationship, and with whom we have contact on a number of occasions, instead of just a "one-shot interview."

B. Persons who provide us with "expert information" not only about themselves, but about local history, cultural beliefs and practices in the community, the physical, geographic environment, and other general information.

C. Persons who are by their personal natures "good observers," and interested in talking about their knowledge with outsiders.

D. Persons who are able to "synthesize" to some extent, and to analyze--to give thoughtful explanations--to some of the local practices and patterns they are familiar with.

E. Persons who know a lot more information about a particular area or topic (domain) of information. Very often, in both rural and urban communities researchers will be directed to "Go talk with _____; he knows a lot more than we do about all the traditional remedies." On the other hand, we often discover especially knowledgeable people simply through our various conversations and interactions in the research communities.

Thus, the really defining mark of a "key informant interview" is that we ask the informant to try to generalize somewhat about local community behaviors and beliefs, or to give other information that is not solely concerned with his or her own behaviors. (This interviewing about general information

contrasts with a "case study interview" in which we are asking informants to relate information about specific behaviors, actions and beliefs *concerning their own personal lives.*)

It is useful to identify three types of key informants, who play somewhat different roles at various stages of our data-gathering.

Type One Key Informants: Administrators, Leaders, and other "Authorities"

When we begin our research the first key informants we contact are likely to be personnel in government health services, administrators in NGOs, and others who are broadly familiar with local situations and activities because of their official duties. These "first-line key informants" can often help us to get started in the study communities. Also, we often talk first with these types of key informants as we need their approval before we go on with the rest of our research.

Often researchers will find that these "type one key informants" have rather limited perspectives. They may be misinformed about important aspects of the local communities, perhaps because of middle class biases, or the theoretical biases common to their professional status. The attitudes and beliefs of these informants are nonetheless very important, as they can point the way to certain kinds of structural obstacles, or systematic determinants, that must be taken into consideration in the design of specific health intervention activities.

Type Two Key Informants: Community-based Outreach Worker.

In most areas and communities there are outreach workers of health services as well as various social programs and NGOs. These "type two" informants are particularly important because they can frequently provide direct contacts with some of the people in the study populations. For example community health workers in NGOs, and ANMs connected with primary health services, are often excellent guides for introducing us directly into both urban and rural communities. Provided we can assure these outreach workers of our legitimate good intentions, they can give us "guided tours" of relevant community settings, and can introduce us to some of their own contact persons in the study population. They also have wide-ranging information about individual "cases" of illness in the communities they serve.

Type Three Key Informants: Members of the Study Population

In qualitative research in reproductive health, as in most other research, the prime key informants are the various types of actors and actresses in the relevant study communities. In gathering information on

"explanatory models of white discharge" for example, it is essential to get information directly from the speakers of that vocabulary. Collection of local vocabulary and explanatory models of gynaecological illnesses can sometimes be carried out with small groups, even focus group discussions (see below), but in-depth exploration of the local vocabularies and ideas should also be done with those individuals who are "the most knowledgeable" about local cultural features, and who not only tell about their own experiences and ideas, but can connect them with those of their relatives, friends and neighbors. Such key informants are the persons with whom field researchers come to feel a sense of friendship and social exchange.

Case Study Interviews, Illness episodes, and Case Histories

As pointed out above, case study interviews are just as much "in-depth," but they are focused on individuals' own actions and explanations. One of the most useful types of case study is an individual "illness episode." For example, researchers in a rural area in Bangladesh collected women's narratives of their treatment-seeking with white discharge, prolapse, and other gynaecological problems. After learning from an informant that she currently suffered from one of the illness conditions, the researcher goes through the following:

One: Ask the woman to "tell about the entire episode, from the beginning." In some cases the women actually do relate a fairly long narrative, which must of course be followed up with specific probes and queries.

Two: Using a "checklist of items" (memorized), ask questions to fill in the entire sequence of treatment seeking. Usually the questions can "begin at the beginning," in order to find out about the very first signs, symptoms or experiences the woman remembers; and the very first things she did. Questioning should focus on issues of "How long was it after you began to feel uncomfortable that you did something? Did you do anything at home (remedies or other actions)?

Three: Concerning treatment by health providers, we try to get the informant to "tell all about" the actual encounter with the health provider, including mode of transportation, interactions, medicines or other treatments provided, costs, and other features.

Four: Probing should continue until you are sure that all the different visits to health providers, and all the different resorts to home remedies have been covered.

Five: Return to visit the woman two or three times; each time asking for more depth, or more detail about some aspect of the encounter with individual health service providers.

Six: Ask her for her explanations concerning the cause(s) of the illness: as well as explanations for the worsening, or improvements that occurred over time. A full history of a complex, chronic, gynaecological illness can sometimes require three or more sessions to get the full story in detail. In the course of such in-depth interviewing the informant usually brings out much useful contextual information, including her comments about the husband's attitudes and actions, sexual relations with her husband, role of the mother-in-law and others in health-seeking behaviors; and many other contextual factors that point to important determinants of treatment-seeking actions.

Sexual Histories

Several recent research projects have taken the form of "Gynaecological and Sexual Histories." We recommend that each such "history" should involve at least four or five sessions with each woman. In a study in Gujarat carried out by Archana Joshi and her colleagues at ORG the in-depth case histories began with the discussion of the woman's recent gynaecological illness, as reported in a quick house-to-house census. The first qualitative interview session was used to "break the ice," get acquainted, and to focus on the immediate health problems of the woman. Second and third sessions followed up with more background history and exploration of specific illness episodes and experiences in menstruation, including treatment-seeking behaviors. By the time the interviewers met with the woman the third and fourth time, they were able to discuss very personal matters, including the woman's own sexual experiences and current sexual relations with the husband. It is recommended that the fifth session should use a checklist (memorized) to "fill in" topical areas that may have been skipped over in previous sessions. Joshi's group collected a total of over 60 sexual histories from women in several villages.

The development of a *checklist of key topical areas* is an important element in the collection of sexual histories, illness episodes, and other types of "cases." A draft checklist should be prepared at the start of the research, and then revised during the research, based on new types of information that come to light. The researchers use the checklist to make sure they have gotten data in all the key content areas, after which they can carry out systematic content analysis, including simple quantifying and categorizing of their cases.

Mixed Case Study-Key Informant Interviewing

It usually happens that case study interviewing helps the researchers to identify some individuals who are excellent key informants. These are usually people who have had considerable experience in the topical area (for example, dealing with their own gynaecological problems), and who have accumulated

general knowldge and ideas through talking with the relatives and neighbors as well as other people. Such persons are often the kind of people that other villagers turn to for advice about their health problems and other matters.

The conversations with such a person will often switch from her own experience--her own case--to discussion of other people's experiences. From that transition the informant goes on to more generalizations or observations concerning "usual practices," or "cultural norms" of her community. There is no harm in such mixing of two different styles of informant interviewing, though it may sometimes be difficult to get the "key informant" to switch back to talking about her own personal life. It is usually best to complete all or most of the "case interviewing," and then follow up with full-scale key informant interviewing.

In most qualitative studies the researchers return to the study communities for follow-up of selected key topics. Such follow-up contacts can be especially fruitful with those key informants from whom one has a personalized case history. The background of case materials gives the researchers a clear picture of "where the key informant is coming from" in her cultural ideas and descriptions about the community.

Group Interviews: Myths and Realities

Focus Groups

For some people previously unacquainted with qualitative data-gathering, "focus group discussions" (FGD) have come to be regarded as some sort of "panacea" for quickly getting lots of rich qualitative data about what the community people "really think." The so-called focus group discussion often results in a great amount of animated (often vociferous) conversation, covering a wide range of topics. Skillful discussion leaders can usually keep the discussions somewhere within the intended topics, and there are usually some sorts of opposing views and debates concerning health problems, health care choices, and other materials.

For some topical areas these group discussions can be quite useful, if properly managed. On the other hand, several warning flags should be raised immediately, to head off the tendency for over-reliance on group interviews, as well as some other serious hazards in their use and misuse. We will first present some of the main warnings about group interviews, after which we can explore some recommended uses.

Problems about Focus Group Discussions (FGD)

1. The first cautionary note is that most group discussions are not, properly speaking, FGD. The literature about focus groups, which developed mostly among marketing and advertising people, specifies that the people in such groups should not be acquainted with one another. A second recommendation is that they be quite homogeneous in composition, in terms of age, marital status, socio-economic status and other key characteristics. Most group discussions concerning health matters, as described in India and other parts of South Asia, do not conform to those specifications. Most such groups are actually informal neighborhood groups of women who all know one another. They are best labelled simply "informal group discussions."

2. One problem concerning these group discussions, often overlooked by research planners, is the question of how to transcribe and analyze the complex mixtures of opinions and arguments--including the times when two or more people are talking at the same time. Usually such group discussions are tape-recorded. That, of course, should only be done with the consent of the people in the discussion group. But transcribing the tape is a massive task. One hour of good, lively discussion can take as much as 10 hours to transcribe into the computer. Another solution is to eliminate tape recording and use two note-takers, each of whom must be very quick and very well trained to get high quality notes. The jottings of notes taken during the session must then be expanded and edited. That process also requires at least two or three hours for each hour of actual discussion. Special problems arise if complex arguments result in several persons speaking at the same time, so the recorder has difficulty keeping up with the pace of their speaking. These transcribing problems can be overcome, but the requirements in terms of skilled persons must be calculated into the costs.

3. There are ethical problems involved if groups get into discussions of personal sensitive issues such as sexual matters, abortions, health-care seeking for STDs, or other socially disapproved topics. We feel that such topics should not be introduced in group discussions. There are many occasions in which one person in the discussion will point to another individual and say, "You had an abortion. Why don't you tell us about it?" Such events in group discussions expose some individuals to inappropriate (ethically unjustified) public exposure.

4. The data from group discussions on sensitive topics will often seem frank and honest, yet the actual data are slanted toward socially acceptable behaviors. This tendency in relation to sexual behavior was documented by Hellitzer-Allen in a remarkable study in Malawi (Africa), in which she systematically compared the results of focus group discussions with individual interviews of adolescent girls (Hellitzer-Allen, 1994).

5. In group discussions one or two dominant persons often "take the floor" and control much of the discussion. Their views and experiences then dominate the discussion, and give an impression of unanimity of experience and sentiment that quieter members of the group do not contradict.

In a recent study in Gujarat the women in several focus groups spoke at length about the many varieties of home remedies they used for white discharge and other reproductive tract illness. The researchers felt that home remedies were very widely used in the community. A survey conducted at nearly the same time disclosed that only a very small percentage of women used any home remedies for gynaecological problems. In retrospect, it would appear that in the discussion groups the "home remedy experts" (somewhat older women) had dominated the discussions, leading to an erroneous impression of general community practices.

6. A main objection to FGD data is concerning the nature of the data. In FGD there is no possibility for getting a truly connected, systematic "case" or description of an illness episode, a crisis and its resolution, or other "full narrative." Instead, the data in FGD are the bits and pieces that come from conversational exchanges, in which no individual story, nobody's "case" is seen in its full pattern. Pattern is the heart and soul of qualitative data, along with the idea of getting peoples' own perspectives, the emic version, with the appropriate language that goes with those perspectives. Most of the data from FGD are too fragmented. Also, it is extremely difficult to separate idealized beliefs from actual behaviors in group discussions.

Group Discussions and Participatory Research Approaches (PRA)

The research techniques which are referred to as PRA are in actuality simply informal group discussions with a specific format. In many cases PRA discussions have some material aids in the form of paper and colored markers; rangoli powders; or sticks, stones and other things used for marking locations, amounts, or other information. In all of the following examples of group discussions, material equipment is used to facilitate the construction of a specific product. One useful definition of PRA-style group discussions, then , is that "specific products are produced (maps, diagrams, "bar charts," etc), using paper, markers, pencils, and other readily available marking materials." .

1. Listing and mapping of Providers and Health Facilities

Informal community groups can quickly list and map the locations of the health care providers that "women usually go to for their health problems." Careful prompting and facilitation is necessary, to be

sure that they are not just listing the "high end" of MBBS, clinics and hospitals. If you don't get TBAs, medicine shops, traditional healers, etc. then you must probe deeper. Here are the main steps in the listing and mapping.

A. After explaining your general project objectives, explain to the group that: "We need to know where you go for help when you have any health problems. Lets start by just listing all the people and places that you and your neighbors and friends go to when you have any health problems when you need some medicines or medical advice about what to do about a health problem."

[*Its useful to have a blackboard or newsprint to write out the listing in plain view.*]

You will need to probe and prompt, at first: "...for example, what are all the places and the people that a woman might go to if she can't get a child..." "How about outside this area...do people go to other places? [*Keep prompting and asking*].

B. The second stage of this PRA-style interview consists of mapping the locations of the different providers. The map can be drawn on the dirt or cement floor with chalk; or onto newsprint with markers or pencils (or other equipment).

2. Listing of All the Health Problems (Vocabulary of Health Problems)

The listing can start more widely, and then you can focus on "problems during pregnancy;" "problems during childbirth" and "problems after the child is born."

Try using a "time line" as a visual aid:

X[first sign of pregn.]----------[childbirth]-------[six weeks]------X

Mark the problems into the appropriate times in the pregnancy sequence. **Find out their vocabulary for the different parts of the pregnancy, as well as their terminology for the significant period after childbirth.**

You are trying to find out "what are all the things that happen; all the problems at each of the stages of pregnancy and child birth."

3. Rating of Degree of Seriousness, "Contagiousness," or other characteristics of illnesses

Select about 15 or 20 conditions or health problems, be sure to include some that you consider mild. Write them on index cards, (each on a separate card), with an illustration to help illiterate persons remember the different conditions. Ask the group to discuss each health problem and to put them into three piles: "most serious" "intermediate" and "not so serious." You can suggest that they start with picking out a problem or condition that is: "the most serious of all." If the women debate sharply over two or three items, you can say: "OK, then you are saying that all these three conditions are "very serious", lets put them here in a pile. Now, which are the one or two that are "not at all serious," or "least serious." When all the "very serious" problems have been put in a pile; and all the "not serious" problems are in a separate pile, any remaining items are left in the "intermediate" category. After the group has finished sorting the illnesses into the different groups or "piles," ask them to discuss the reasons, or explanations, for individual ratings. For example, "why do you consider _____ to be very serious?" Probe for several reasons.

(**Note**: This same method is also very useful with individuals. I recommend that you collect 20 to 25 individual responses, and compare with the focus group results.)

4. Sorting (with Index cards) of Providers/Health Facilities

Pick 25 or 30 providers (results of example No. 1 above). Write the names of the providers on index cards. They should be identified in the way that the women have identified them:

1. "Sushila dai"; 2. "Rameshbhai"; 3. "Dr. Asma Clinic"; 4. "Green Blvd Clinic"; 5. "Kanapur dawakhanna"; 6. "Govt. Hospital"; 7. "Farooq Medicine Shop;" 8. "Nursama;" etc. etc.

Tell the people to sort the cards (providers) into piles or groups "that are similar", using any criteria, any reasons, that they feel like using. "There is no right or wrong way--just any way you feel that some are similar/resemble each other. After they have grouped the providers (health facilities and persons) into groups, ask the group to explain (give the criteria) for each of the individual groups.

5. Present "Cases" For the Group of Women to Discuss

For example: "This woman, Kalpana, 25 years old, has no children. She has been married three years. Her husband works in construction work. They have a tiny bit of savings, but they are quite poor. One child was born, but died two weeks after it was born. Kalpana is pregnant, and it is almost time. She thinks it will be two more weeks. She had been working hard all day, doing laundry, cleaning, and many

other things. In the night, about 2:00 AM, she wakes up and realizes that she is bleeding quite a lot. What will she do? Who will she talk with? What would be the usual thing that happens in this kind of situation? What are the different possible ways that different families/people would handle this situation?"

Be sure to ask the women to discuss and outline several alternative outcomes. Several different "coping strategies." Ask the women what factors (conditions) would bring about different actions; different coping strategies.

6. Ask the Group to list and discuss various channels of communication

If the research is directly connected with development of intervention strategies, it will be very useful to get peoples' views of appropriate channels of communication. Group discussions are useful for this purpose, including not only their listing of the "inventory" of all possible communications channels (and forms of messages, etc.), but also their assessments of the contents and vocabularies for use in different kinds of information channels.

When you are nearly ready to start specific planning of intervention strategies, you can try out a few very simple, preliminary ideas about IEC to get the women's reactions. The women's groups are also important in sorting out who all the different targets of messages should be: a) husbands; b) mothers-in-law; c) the pregnant women; d) teenage school children; etc. etc.

There are several other frequently used PRA-style group interviews. Some additional "models" include:

A. **Social Mapping of the village, slum community, or local region.** (E. g., in preparation for an intervention project.) This is the most common, best known example of the participatory research (PRA) technique. You simply ask a group of women or men to draw a schematic map (you provide the materials) of their own village or slum neighborhood. You must assure them that you don't care if its "rough and ready;" it doesn't have to be exact. You will need to insist that *they draw the map;* not you. Often people will resist, saying "You are educated and we are not." To which you then reply: "Yes, but you are the ones who really know all about your own community." After the basic form of the community has been captured, you can ask the people to put in special features such as "all the local dais and other health providers;" "all the places where alcohol is available," and so on.

B. **Construction of the Annual Cycle: Migration Patterns, Rainfall, Crops, or Other data.** (Usually this is done in the form of "bar charts" which show different amounts of migration or rainfall (etc.) for the several different times of year (or 12 columns representing the months of the year).

C. **"Body-mapping"** to show peoples' ideas of the physiological processes involved in pregnancy, childbirth, and in reproductive health problems.

The Fertility Transition in Tamil Nadu: Example of an FGD Study Design

Ravindran and her colleagues (Ravindran, unpublished) carried out a comprehensive study of factors affecting acceptance of family planning in selected communities in Tamil Nadu. Their research design covered 15 villages, in which they carried out a total of 92 focus groups and 138 in-depth interviews in the period from November 1994 to May 1995. Half of the FGDs were females; half were males.

Each FGD can be treated as a "case" for statistical comparisons. For example, Ravindran reports the following statistics concerning the question: "Has women's status improved?"

Has women's status improved?	Male FGDs	Female FGDs
Yes	46	32
In some respects	2	3
No	17	22
Not here, but yes in towns and cities	9	18

(Ravindran, no date, page 57)

In this example we note that the researchers have used the 92 FGDs as cases, and have carried out a thorough content analysis concerning their main research questions. Each case has been given a "value" for each research question. Similarly, for the question of sources of information concerning family planning, the researchers found that the overwhelming majority (88 of 92 FGDs) said that they got their information from: "hospital/PHC/Doctors/ANMs/Nurses/teachers/govt. Employees." (Page 58).

Content analysis of focus group discussions requires that the researchers make careful definitions of **coding rules** for assigning the values, as in the table above. If one follows very strict methodological standards, one should have *two independent coders* (or coding teams) to go through all the cases, to decide which FGDs said "yes," "no" and other more ambiguous responses. In such coding there will always be some ambiguous cases, for which the coders will disagree. The procedures for such rigourous

coding should be described when one publishes the results of the counting of cases. All of this can be a tedious process, but for certain types of data (subject to the reservations above), the FGDs give quite informative results because the conclusions are "distillations" from complex, free-ranging discussions.

Many research projects combine group interviewing, indepth individual interviews, and direct observation. A recent study by M.E. Khan and colleagues on quality of family planning services, in Sitapur District, U.P., is an excellent example, demonstrating the power of *triangulation*, using more than one data gathering method. The researchers interviewed health providers at several levels, with particular focus on the community-based health workers. Both group and individual, indepth, interviews were conducted. Direct observation was also employed in examining the facilities and equipment available in the primary health care locations. ("Triangulation" as a research strategy involves bringing together data from two or more different methods, in order to strengthen the credibility and validity of data. The metaphor of "triangulation" is derived from traditional navigational practices for establishing a ship's position in relation to points of land.)

Structured Qualitative Interviews with Individuals

There are several types of structured qualitative interviews that are generally used for discovering *emic patterns* in relation to peoples' **explanatory models** of reproductive illnesses, categories of health resources, and other domains of cultural information.

Free Listing to Explore Cultural Domains

In the examples above, particularly concerning informal group interviews, we mentioned that it is very useful to get such groups to develop *lists* of health care resources and *lists* of illnesses. Those are only two examples of the usefulness of *lists*. There are many more, and most lists are very easy to get from key informants, group discussions, and casual encounters with people in your study communities. Although we often collect such lists in group discussions, we get more complex and interesting data when we collect lists from a number of persons, individually. The chief advantage of the individual lists is that we get a good idea of the *salience* (the degree of general awareness), based on the number of people who mention a particular illness (for example). The following table (Table 1) shows the illnesses most frequently mentioned by women in a tribal area of Gujarat, interviewed by P. Patel. If she had gotten the list from a group interview, she would not have been able to report that "*safed pani*" was the most frequently mentioned illness, since we can't know from group interviews the actual individual knowledge and awareness.

Table 1. Results of Free Listing of Illnesses in Panchamahal District of Gujarat (Number of Respondents = 41)

Local Word	Approximate English Equivalent	Number of Persons who Mentioned this item
Safed Pani /dhat	White discharge	37
Hath pag tute	Leg and hand pains	26
Kamarma mar chale	Backache	25
Pakhado	Heavy bleeding in childbirth	24
Mathuchale	Headache	23
Choru vachoti jay	Miscarriage	22
Tav	Fever	22
Kamshakti	Weakness	18
Swat chale	Breathlessness	17
Chadine/vahelu masik	Irregular menstruation	14
Ratondi	Night-blindness	12
Peshab bek ave	Burning in urination	12
Jhada	Diarrhoea	9
Piliyo	Jaundice	6

(Adapted from Patel, 1994, p. 60)

These data from a simple "free listing" of illnesses show some very interesting features. They show us, first of all, that the women in the Panchamahal District do, indeed, consider *safed pani* to be an illness, rather than something "normal." The fact that the condition was mentioned by nearly all of the 41 respondents is an important indicator of salience: *safed pani* is "on the minds" of nearly all the women--much more than such health problems as night-blindness, diarrhoea, and jaundice. Often (not always) we can regard those conditions mentioned by most people as *the most serious in their minds.*

There was a long list of other illnesses that were mentioned by only one or two persons. Those illnesses, we believe, are among the "less important," "less salient" in the thinking of the local people of the area. On the other hand, we should be aware of some important exceptions to this generalization. As in all data-gathering methods, there are some problems. Very few illnesses in the category of "sexual diseases" were mentioned. Thus, free listing tends to get the social acceptable, more important items. We have to go into intensive key informant interviewing to get the others--the illnesses people may be embarrassed to mention.

Generally it can be recommended that 20 to 30 free lists are enough to get a good "inventory" of a specific domain. If you have very good key informants, sometimes eight to twelve lists from "local experts" (for example, of local "home remedies") will provide a very good introduction to that domain of information. Other important topics for free listing include: "home remedies;" symptoms of specific illnesses; "all the causes you can think of for ___ (illness or condition);" "ways to prevent pregnancies;" "places/people to go to for abortions;" and "problems women have during pregnancy." Your research group is likely to discover other interesting domains to explore with free listing.

Pile Sorting to Establish Groups and Categories

The idea of pile sorting was also introduced above, in connection with informal group discussions. Usually pile sorting is carried out with index cards, or any sort of cards, each of which has the name of an item (e.g., *safed pani; tav; ratondi),* sometimes with pictures to illustrate the concept (illness, symptom, health provider, or whatever). You ask individuals (or groups) to sort the cards into groups (piles), according to similarities. "Put things into piles that are *similar* to each other in some way."

If we don't give people any other instructions, other than "put them into groups of similar items," then we find out about *emic categories and principles of grouping.* The important point here is to get the informants themselves to come up with their own *criteria for grouping.* Finding out about people's groupings of illness categories, types of health care services, types of medications, types of contraceptives, and other topics is an important step toward understanding the *systematic organization of cultural ideas* that people have in every community.

The last step in connection with the sorting exercises is to find out from people their specific *criteria* for sorting and categorizing. People will use many different criteria for grouping. Some may refer to the characteristics of people: "these are illnesses of children;" "this only happens to older women;" "only men get this problem;" and so on. Other criteria are likely to be "acuteness," "seriousness," "may be transmitted by sexual contact;" and others. These criteria for groupings give us clues for further questions and additional structured techniques.

Rating, Ranking, and Sorting Concerning Characteristics

While the free, general pile sorting is useful for getting the *emic* principles of categorizing items (illnesses, people, remedies) in a cultural domain, we need to go further, to find peoples' *ratings*, or *assessments* about those characteristics. For example, in all societies everywhere, people rate illnesses in

terms of **severity.** We of course want to know which illnesses or conditions people rate as "most severe."

For example, some writers have said that women regard white discharge as "normal," or simply "women's burden." Sometimes the implication is that women do not seek treatment because they do not regard the condition as serious. On the other hand Bang and Bang have found in their research in eastern Maharashtra that the women in their area "...regard white discharge as a chronic disease which drains the body of energy and blood, leading to severe weakness and ultimately death." (Bang and Bang, 1994:84)

Often the easiest systematic way to get peoples' ratings (e.g. "severity of different illnesses") is to use the card sorting technique, described above. On the other hand, we can ask people to use a three-point scale: "high, medium and low" and ask people to respond to each item as we read them for a list.

Direct Observation of Events

Direct observation usually includes some attention to peoples' speaking, but most attention is directed to physical characteristics of specific locations (e.g. health clinics), equipment, and peoples' actions and interactions.

Observations of Complex Events: Laproscopic Camps in Madhya Pradesh.

Recently Lakshmi and associates (CORT) observed several instances of laproscopic camps in Madhya Pradesh (Lakshmi and Barge, 1995). Some of the laproscopic camps were in PHCs, but others were in outreach areas with very few facilities. Observations of this type of event usually require a team approach, since the clients (women being sterilized) pass through a succession of "stages" in the process. These stages can be broken down into (1) arrival and registration; (2) brief interview concerning any current illness; (3) waiting; (4) taking of blood and urine samples for laboratory purposes; (5) anesthesia (xylocaine and penidura); (6) surgery in operating room; (7) post-operative lying in "recuperation area;" (7) payment of "incentive money" to the woman (and taking of thumb print); (8) departure for home. In order to present this sequence clearly, it is useful to include sketch maps as well as descriptions of the buildings and related physical locations. Light, electricity, and water sources should be noted, particularly in those many cases where makeshift arrangements are necessary to get power, water, and other necessities in marginally served outlying areas.

Each of the stages in the process involves physical locations, equipment, and actions of health care personnel. In each location the observers made careful note of hygienic conditions; antiseptic precautions of personnel; durations of clients' stay in each stage; auditory and visual privacy for the

client; and other features. The operating room was of course a main focal point of observation. The general cleanliness of the OR was noted, as well as efforts to insure aseptic conditions. In some, at the outlying camps, temporary, makeshift sources of electricity were arranged. In some cases the operation of the laproscopic equipment had to rely on power generated from a motor vehicle parked outside the building.

Lakshmi and her associates found that many of the procedures in the laproscopic camps included violations of, or compromises with, antiseptic procedures. Equipment was reused time and again without proper sterilization; power supplies were irregular in some of the outlying areas; water supplies were unsatisfactory. Also, some activities involved violations of the women's modesty--including the ways in which the women were carried (by men) from the operating room to the recuperation area. (Lakshmi and Barge, in press). Detailed observations of this type are useful for identifying possibilities for improving quality of care in difficult circumstances.

Guidelines for Direct Observation of Complex Health Events

1. Complex events (such as laproscopic camps or RTI/STD camps) should be analyzed in terms of a series of stages, with detailed points of observation identified for each stage.
2. The observation team should include enough persons to cover all the stages.
3. When the observation team does not have enough persons, then two adjacent stages may be assigned to one person.
4. A written observation protocol should be developed for each stage.
5. Observation protocols must be field tested during pilot observations, and modified to suit specific local conditions.
6. If large numbers of clients are processed during the event, then observers can use sampling techniques, such as "every third client."
7. If the event continues over many hours, observers may find it useful to break observations into time blocks, including time off for lunch, and occasional short periods of relaxation.
8. Observers should keep time records, so that the precise timings of unusual events; lengths of time of clients in specific stages; and other chronological features are recorded.
9. Observation records should include lists of all health care personnel and others involved in the complex event.

10. Brief informal interviews with key personnel can be carried out, to get their explanations of complex processes; reactions to specific problems encountered; and other details that may come up unexpectedly. If some procedures are unusual, or some conditions appear to be unsatisfactory (e.g., likely to contribute to infections), it is useful to get the reactions of the doctors and other persons to those problems.
11. Brief informal interviews with clients can also be carried out, to get specific background information, and perhaps to make appointments for later follow-up visits at their homes.
12. Brief informal interviews can also be carried out with husbands, in-laws, and/or other persons who accompany the women to the "camp event." All such additional interviews should be carefully integrated into the "time budget" of the observations. Usually it is best to have extra observer/interviewers on hand, to specialize in the spot interviews while the other observers concentrate on direct visual observations.
13. Photography is generally a very good additional way of recording physical features of complex health care events. However, researchers should be *very careful to obtain permissions from patients, practitioners and others*, otherwise it is a violation of ethical standards to take photographs of potentially sensitive medical situations.

Observations of Patient-Provider Interactions

Unlike the observations of laproscopic camps and other special events, patient-provider interactions occur on a regular basis, so that observations do not have to be concentrated into a special, short-term time frame. Direct observation of patient-provider interactions was carried out by Hunte and Sultana in a rural area near Quetta, in Pakistan (Hunte and Sultana,1993). They particularly noted the ways in which male doctors carried out the consultation with female patients without any physical examinations. Some studies of the activities of Auxiliary Nurse Midwives (ANMs) in India have included informal observations of interactions between ANMs and the community people they encountered in the course of their duties. Observation of patient-provider interaction has a number of distinct features:

1. Much of the interaction is verbal, so the main observations involve careful notes concerning the exchange of words between provider and patient.

2. Observers write down as much as possible of the verbal interactions as well as describing any physical examinations, in order to determine the basis for diagnosis, amount of health history elicited from the patient, answers to patients' questions, and other details.

3. The elapsed time per patient is noted.

4. Other features of the interaction are also written down, so that observers can give concrete evidence of "politeness," "responsiveness," "rudeness," and other characteristics of the interaction.

This kind of detailed observation of patient-provider interaction has not been used much in health care research in South Asia, but the methodology would be very useful for answering certain questions about the relationships of health providers to their clients.

Writing Up the Notes: A Prime Concern

This section will cover writing of notes from both informal observations and interviews. Formally structured interviews (survey interviews) on the other hand, are generally recorded directly on prepared interview forms.

Unquestionably the most difficult part of qualitative research is the documentation--getting the data written down *in sufficient, extensive detail* so that complex analysis can be carried out, and so that "the voices of the informants" can be clearly distinguished. Even experienced interviewers must be carefully retrained, supervised, and checked to be sure they have thoroughly documented (written out) each interview and observation. For that reason this section is presented as a set of guidelines you can use directly in training field interviewers.

Field Notebook

The field notebook should be small enough to keep in your pocket or purse. The notebook should not be overly conspicuous, but it is often a good idea to make it obvious to community people that you (and your team members) are taking notes. Writing things down from interviews demonstrates to the informants that you are serious about wanting the information, and you regard them as "experts" about their own local cultural practices.

Explain to people why you are taking notes

People do not generally object to note-taking, but it is important to explain to your informants why you are writing things down. You can say something like: "I talk with many people here in your community, so I might forget some things that you tell me. That's why I need to write things down in my notebook (here), so I can remember exactly what you said. This notebook is a big help to my poor brain." (It's often helpful to make this sort of statement partly jokingly.)

Descriptive notes in the study area.

No matter what the topic(s) you are studying, you should write notes and prepare sketch maps of the community in which you are carrying out the interviews. You and your research team members should write notes giving *descriptions of places* (e.g. details about health facilities; and sketches or diagrams of places of meetings, encounters, homes, as well as comments about the appearance and style of one's informants. It is important to include in your notes such comments as: "The male community worker, X, is a very good key informant, but it is best to get him in the morning, before he starts drinking heavily...." "The water tap near the _____building is a good place to find some women to talk with, especially in the first part of the morning...."

Many of the things you write down in descriptive notes are the *same information* as your "street-wise" community outreach workers carry in their heads. The difference is that it is *available*, and *organized* for direct use in getting a better understanding of living conditions and life styles, locations of facilities, and other features that are important for planning interventions.

Writing and Managing Notes in In-depth Interviews

Sometimes you will meet your informants informally, "just for a chat." Sometimes the "chat" [very informal conversation] will be so "ordinary" that you don't take down any notes; you just sit and gossip, discuss the weather, and other "light conversation." During these "light" meetings, you might just keep your notebook in your bag. On the other hand, it is sometimes useful to get the informant accustomed to the idea of your taking notes. She says something about a health condition, and you quickly take out your notebook to jot down a few words, perhaps asking her to repeat what she just said:

Interviewer: "Let me just get this down in my notebook so I will remember it tomorrow.... Could you just say that again? How did you say that? You said the word, *bimari*--what *bimari* were you referring to?....."

When you get into your in-depth interviews (often starting with your second meeting with an informant), you will try hard to get the woman to "open up" and talk about health problems, and the behaviors, decisions, and other things in connection with her health problems. The same applies to the other topics you wish to connect with her health concerns, and treatment-seeking behaviors. You explore ways to get the woman to talk, to narrate, to "tell her story" and you also try to take enough notes so you can reconstruct "her story" afterwards.

Obviously you can't write down everything the informant says. But you jot down key words and phrases (sometimes entire sentences), to keep a running "log" of the ideas and answers as your informant responds to your probes, comments and encouragements.

The "jottings" are intended to give you enough framework to jog your memory when you expand them into fuller statements--as soon after the interview as possible. Sometimes when your informant says something particularly interesting, you can stop her, saying, "Excuse me. I want to write down exactly the way you said that, so I can remember it. Please, would you say that again, just the way you said it? Let me check to see that I understand exactly how you said this." [When you do this kind of note-taking seriously, the people you are talking with you often take the matter quite seriously, and try to help you to "Get the exact words."]

Some additional guidelines:

1. Look for *key words and special vocabulary*. (Words for illnesses, symptoms, types of treatments; words for "self-esteem," personal self-worth, etc. etc.). Be sure to write down those key words in the exact language of the informant. Note especially any words that are special to this population and which identify special roles, (e.g. "Woman who knows many medicines") and special words for actions or behaviors (or ideas) that might be useful in structured questions later on. Also note the use of *English* or other foreign words. They are often used for special meanings.

2. Check with the informant to be sure that the special vocabulary is actually used by the local population, that it is an "insider vocabulary." You many have to label special words--e.g. "that's what the police call them" or "_____ is the word used by the people in ethnic group A only." Often it is useful to ask people, "What other words are there for this condition (or this illness; or this type of person, etc.).

3. Particularly important ideas of the key informants *should be written down in their exact words* (at least key phrases showing how they expressed the idea). For example, in most urban areas you will find

that people have special words and phrases for different health clinics, different hospitals, and for the different types of healers/doctors in the local area.

4. Often it is useful to check some part of your "jottings" during the interview. Sometimes you can say to the informant "Let me just check this thing I have here in my notes...lets see...you said that many people go to the _____hospital, but it is better to go to the _____clinic for these kinds of illnesses. Did I get that right?"

5. It is a good idea to go over your notes thoroughly right after an interview, if you can find a private place (such as the back seat of a vehicle). Just go through and add in a few details to the written notes. That will help to make sure that you will remember clearly when you sit down to write out the notes more fully. Check to see that you can still read words that you scribbled down quickly.

6. Expand and write out full field notes from your jottings as soon as possible after an interview. If you don't have the opportunity to write out the full notes immediately, try very hard to get all the notes written out *the same day of the interview.*

7. As you write out your notes more fully, try to preserve as much as possible of the "play-by-play" flow of the interview. Don't try to write a polished essay--just go through the specific information...what the informant said...in the order that it occurred in the interview. Often during the interview you have interrupted to go back to some more information about a point made earlier. Usually it is best that those *later additions be written in the order in which the interview actually happened.*

The preferred way to write out your expanded notes is with a microcomputer. If possible, your team members should become familiar with using a "word-processor" system in the microcomputer, so that all the interview notes and other fieldnote materials will be accumulated in computer files. That makes it much easier to go through the files of notes to find particular points of information.

If one of your team members cannot type, they must write out the notes fully by hand, and those hand-written notes should be checked by others to be sure that they can be read easily. In some cases, if you have typists available, it is possible that your information gatherer can *dictate* out loud from the field note jottings, while the typist writes out the full text.

8. Include in your notes some of your own *interpretation* of things that your key informant said. You should also include comments such as "At this point the informant seemed to be covering up something, and quickly changed the subject. Next time I should ask her some more about this. This time it seemed to be a touchy and emotional subject." When you write such personal impressions, you will of course, make sure they are clearly your ideas and not the words or ideas of the informant.

9. Allow at least *two hours of writing time for each hour of interview.* That's right--two hours! If you are quite slow in writing with the word processor, then it is three hours. It is slow work, because often you will be remembering many different things that your informant has said, at the same time trying to make sense of the very short and cryptic jottings in your field notebook.

10. In some cases you may be able to use *tape-recording* of some informant interviews. This is not usual, because so much of the information concerning peoples' reproductive health problems, as well as other areas of data, is sensitive information. Even when people say that they don't mind the tape recorder, there will be some hesitation when you get into sensitive subjects. On the other hand, when you have developed a social relationship with an individual, after two or three meetings with them, they may be more relaxed about talking in general, with or without a tape recorder.

11. If you use a tape-recorder, be sure to transcribe the interview(s) into the computer or write them out on paper as soon as possible. *Never* leave tape recorded materials in unwritten form, as it is very difficult to go back to find information on tapes. Often you won't be able to hear everything clearly in the recording, especially after several weeks have passed after the interview. All highly confidential materials should be erased from tapes after you have transcribed them into your field note files.

12. When you translate local language statements into English (for example, writing notes into the computer), keep the translation as close as possible to the word order of the local language, even though it is slightly awkward in English. Translate from the local language into English observing the following general guidelines:

(a) Do not expect that words, especially health terms, can be translated exactly into English. For example, *kamjori* is not exactly the same as "weakness." *"Garmi"* cannot be translated into English, but you can "explain" the meaning through giving examples of the word in context of, phrases and sentences. Therefore, your English language notes should keep many of the local language words, even after translation.

(b) We should collect up examples of these "key words" in context, for our "dictionary of special language" in relation to reproductive health and other important topics.

(c) Be sure to put informants' exact words in quotation marks.

Keep all field notebooks and your written out field notes in safe and secure places where unauthorized persons cannot get them. Remember that your ethical responsibility is to protect your informants. Do not allow the field notes to fall into the hands of authorities, or others who might use the materials against your informants. It is best that you don't include your informants' identities (names,

etc.) in your regular interview notes. Use code names or initials, and keep your codelist of persons in a different, very safe place. This is especially important if you are collecting very sensitive information.

Summary and Conclusions

Most projects concerned with health issues include a medley of different individual research techniques. Experience has demonstrated that in-depth interviews--case studies and key informant interv iews--are basic to the entire process. Group interviews are often used, but are best seen as a secondary data-gathering approach. Sometimes group activities (particularly PRA style) are used for introducing a project, motivating local people to cooperate in ongoing intervention activities. Qualitative methods are sometimes used as a preparation for quantitative data-gathering, to identify and sharpen key questions, obtain correct local vocabulary, and other aspects of questionnaire construction. Again, some researchers have found qualitative research to be useful to search out post-hoc explanations for results obtained in quantitative surveys. On the other hand, in recent years it has been recognized that qualitative data-gathering methods often stand on their own, with relatively little need for elaborate, large-sample surveys.

As noted above, qualitative research is particularly important in topical areas in which very little is known from previous studies, and in which the information is relatively personal and sensitive. Research in reproductive health is a topical domain in which both of those characteristics are present. Another feature of qualitative research is that the methodology produces a great amount of *contextual detail*. Such detailed information, essential for effective program planning, is generally lacking in quantitative (survey) research.

In several examples above we have noted that qualitative research data can and should be subjected to some numerical analysis. This is particularly true of all studies that consist of the collection of several dozens of "cases"--in group interviews, case studies of individual patients, provider-client encounters, and others. Thus we do not draw a hard-and-fast distinction between qualitative and quantitative research in actual practice.

Qualitative research is not a new idea. In fact, all sciences, particularly in earlier centuries, were largely qualitative in nature. Darwin's **Origin of Species**, one of the most revered models of biological research, contains practically no numbers. Geologists, palaeontologists, botanists, zoologists, medical scientists, chemists, and others developed their theoretical and descriptive frameworks largely based on qualitative research methods. In all of those sciences, significant progress toward effective theory, and hence practical applications, depended on the sharpening of peoples' powers of observation, often with

the help of newly developed research tools such as microscopes and telescopes. The refinement of numerical procedures and mathematical/statistical tools was not useful until a great deal of basically descriptive information was assembled. Even the monumental achievement of unraveling the structure of the DNA molecule (the double helix structure), by Watson, Crick, and others, involved a good deal of descriptive, non-quantitative work. The tasks ahead for research in the area of reproductive health will require much painstaking, careful qualitative data-gathering, but numerical analysis will also play a vital role in these processes of advancing our understanding.

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Gender, Reproductive Health and Weakness: Experiences of Slum Dwelling Women in Bombay, India

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GENDER, REPRODUCTIVE HEALTH AND WEAKNESS:

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1. Introduction

There is a great deal of documentation and in-depth analysis to establish that the emphasis of public policy on treating women as mere instruments of family planning programmes has not made any dent on the vicious circle of poverty, population growth and high rates of infant mortality. The search for an alternative course has led to opening of the doors to a whole new domain, namely women's reproductive health, within which fertility control may be more meaningfully contextualised. The new thrust in the direction of women's reproductive well-being brought to the fore for the first time the considerable burden of reproductive morbidity carried by poor women in developing countries (Dixon-Mueller and Wasserheit, 1991, Germaine et al, 1992)

Since the late 1980s and early 1990s, findings from some significant community based studies set in developing countries, which sought to estimate the incidence of reproductive tract infections (RTI) among poor women, have become available They revealed that there was a whole world of symptomatic and asymptomatic women out there in the community who remained outside the pale of the clinic-based studies that had hitherto governed thinking on reproductive morbidity. (Bang et al, 1989, Wasserheit et al, 1989, Khattab, 1992, Younis, Khattab, Zurayk et al, 1993, Brabin et al, 1995, Bhatia et al, 1995, Streehitakarini, 1995, Baroda Citizens Council et al, 1995, Oomman, 1996) It is notable that a number of these studies have been in India with more underway (Koenig et al, 1996).

The insights afforded by these exploratory studies have only served to highlight how much more we need to know - particularly about the underlying socio-cultural and behavioural factors which bring about reproductive morbidities, and which contribute to keeping them in place - , if intervention strategies that can begin to address these problems are to be devised. Are medical interventions, i.e., enhancing women's care seeking capabilities through facilitating access, the principal means of reducing reproductive morbidities? Or are there a range of reproductive illnesses which defy direct medical intervention alone and which require more broad-based approaches?

Attempts at looking at how women rank their health problems in order of severity, and the way they group common illnesses, have revealed vaginal discharge and weakness to be among the most severe and common afflictions (Patel, 1994; Narayanan and Srinivasan 1994). While there have been attempts at probing the question of vaginal discharge (Patel, 1994; Bang and Bang 1994), the unravelling of the phenomenon of weakness remains unattended to. It ought to be acknowledged, however, that vaginal discharge is closely linked to weakness.

This paper attempts to capture the various dimensions of weakness, which is the most common and nagging problem concerning the health of women in poverty. There is a two-way relationship between weakness and reproductive health. Just as weakness impacts upon reproductive health (bearing children in a state of anaemia, lowered immunity and therefore greater susceptibility to infection including of the reproductive tract), it also has its roots in specific reproductive episodes (problematic pregnancies and deliveries, sterilisation). Overall, it engulfs women deeply, as well as extensively

Poor nutrition which finds its expression in the feeling of weakness, complicates pregnancies and translates into maternal deaths, low birth weight infants and low child survival, which in turn encourages high fertility among women. Gender relations leading to nutritional discrimination against women in the household, impede the realisation of genetic potential in body size. This impacts upon reproductive success. Lower caloric intakes coupled with high energy expenditures on physical work and at the time of pregnancy and lactation, drain the body of energy and lead to weakness, persistent feelings of physical distress from an early age, and in some cases to premature death.

Social problems such as unemployment in the household, male alcoholism, and gender abuse such as wife beating, too, could be hypothesised as contributory factors to the weakness and sickness load experienced by women. Health seeking behaviour is yet another aspect impinging upon women's ability to cope with weakness and to bolster reproductive health.

Finally, there are certain reproductive episodes which are perceived to cause weakness. These pertain to problems during pregnancy, delivery, the post partum period, abortions, child loss and sterilisation.

This paper addresses the problem of weakness in relation to all these aspects, through an in-depth study of a small number of slum dwelling women in Bombay. The structure of the paper runs as follows. We begin with a brief description of the overall environment in which women lead their day to day lives. This is followed by a synoptic presentation of the scope and design of the study. Section three of the paper deals with the construction of weakness symptoms, as well as their causes-associations, as perceived by the women concerned. Section four contains a discussion of women's perception of weakness as contextualised in their pregnancy narratives and narratives of reproductive health histories and life circumstances and health seeking behaviour. Section five summarises the main points and conclusions emerging from our probe.

2. The study and setting

Our observations on the problem of weakness are drawn from an ongoing research study of socio-cultural and behavioural determinants of reproductive health , and may be seen as one of the second generation of studies on women's reproductive health, with a greater emphasis on qualitative investigation of underlying causes and meanings of states of reproductive health, illness and morbidity. The study is investigating a wide-ranging set of issues through the instrument of individual interviews with around 60 women. These are, menstrual, pregnancy and obstetric histories, experience of illness and morbidity, health service use, family and neighbourhood support in daily life and during crucial events such as pregnancy, childbirth and major health crises in the family. It seeks to place these within the context of household dynamics - family size, gender and age hierarchies, male employment / unemployment, alcoholism and domestic violence and, communication between marital partners on health related isues.

The study is being conducted in the urban environmental setting of Bombay, which is among the most populous cities in the world. Its focus is on the urban poverty groups who are concentrated in slum pockets. It is important to note here that there is considerable diversity among the slum dwelling households themselves, in terms of income levels, assets, skills, physical environment, and ethnic identity. Within individual slum pockets (made up of between 1000 and 2000 households), some measure of homogeneity may prevail, in terms of ethnic identity, economic levels and micro-

environmental conditions One study found significant differentials in disease prevalence between slum pockets, particularly where airborne transmission is the major route, depending upon household socio-economic correlates such as income, the presence of a salaried member in the household, educational structure of the household i e , educational attainment of adults (having completed at least middle school), and presence of school going children, and physical environmental correlates such as quality of housing and density within the dwelling (Ramasubban, Crook and Singh, 1996) A large scale study (Singh 1990) of poverty groups in Bombay highlighted the existence of three distinct environmental settings in Bombay. Those living in multi-storied, one-room tenements in the island city represent the stable face of the poor in Bombay, in terms of their social history and skill levels They are relatively more responsive to institutional and technological innovations In comparison, pavement dwellers emerge as a floating group, lacking in the back-up of strong kinship and family support They have the lowest incomes, there is a preponderance of males among them, and they are the least responsive to intervention strategies The third and largest group is represented by slum settlements outside the island city, in the suburbs and extended suburbs. Each of these pockets houses a large community of upto 2000 households. Households have divergent social histories coming as they do from different parts of the country, kinship and caste ties are resilient, the asset base and income levels are low and enviornmental quality is generally poor However, they have a strong desire to make it good in the city and the provision of public goods and services is crucial to the amelioration of their conditions. The women in our study are drawn from the last-mentioned universe

The study is based on intensive qualitative investigation of around 60 ever-married women using the tool of repeated in-depth interviews The women are distributed over four pockets of around 1000 households each. A list of around 300 women in the age group of 20 to 45 years was prepared, from which our sample was selected randomly While the first round of interviews collected life histories, pregnancy and obstetric histories, health service use patterns, and support systems, the second round was a detailed probe into specific illnesses and morbidities, relating to discharge, menstruation, urinary problems, prolapse, back pain and other pains, weakness, sexual problems, mental tension, etc. Currently clinical investigations are underway, both to meet ethical considerations of providing medical treatment to women suffering from remediable problems (since almost all the women reported various reproductive health problems), and to gain further insights into health seeking behaviour and family dynamics These tools are being supplemented by key informant interviews with local health care providers, men (both husbands of some of the women and non-husbands), older menopausal women and adolescent girls

The field investigators were themselves selected from within the same communities and underwent a four week long training in the project objectives and in carrying out in-depth interviews. The investigators are married women who have done high school, and who have proven communication skills Their greatest strengths are not only their gender appropriateness, but that they speak the same language, come from the same class, and reside in the same localities as the women being interviewed. Their friendship and kinship networks have facilitated getting women's consent to being repeatedly interviewed for a research project with no immediate and apparent practical useful outcomes for themselves. The investigators have been part of the research team study from the start and act as facilitators between the social scientists in the team and the communities. The selection of the interviewers was facilitated by two NGOs with experience of credible and longstanding involvement with these communities

As the study is still in progress, we have restricted our evidence on weakness in this paper only to around half of our sample Hence, our observations here are tentative and by no means

comprehensive. Slum pockets of the type included in this study are generally ordered along ethnic lines. The women on whom this discussion of weakness focuses are Marathi speaking, neo-Buddhist by religion, and scheduled caste by background. They reside in two slum pockets in M Ward in the north-eastern suburbs of the city, the ward with the highest concentration of scheduled caste population living in slums. In their socio-economic, demographic and cultural profile, these women may be said to be fairly representative of this underclass. The average age in this sub-sample ranges from 28 years (in pocket A) to 35 years (in pocket B). Average age at menarche was 13 years, and average age at marriage 16 years. Within a year of marriage, i.e., at age 17, these women were mothers. There is a discernible pattern in their descriptions of weakness, the causes attributed to this illness, and the background reproductive health histories. Except for two persons, all these women reported suffering from weakness.

The slum pockets concerned are permanent and "recognised" (which means that they have access to electricity, and public water and toilet amenities, and that they cannot be demolished by the local government). The quality of housing is mostly semi-brick, semi-corrugated iron sheet walls with corrugated iron sheet or tiled roofing. The average size of a dwelling is 15' x 10', usually with just one window, with the door kept closed when privacy is required. One corner of the room is taken up by a tiny bathing area. Some of the residents own the houses they live in, while others rent them annually on the basis of a large cash deposit and monthly rent.

Families have strong links with their villages of origin. In fact, the village is in the city, as observed from the cultural norms governing the daily lives of these women and, the pattern of their interaction within their families and neighbourhoods. Where families still own some land in the village, the trend is for parents to leave the city after retirement to return to their roots, leaving the laboriously secured city dwelling to be shared by the younger generation. Annual vacation visits to the village are made in the summer by whole families or at least by women and their children, village deities are regularly propitiated both by newly married couples visiting from the city and on other occasions such as when vows are made, to restore the temple for instance, or during major fairs or religious occasions. Brides are also regularly brought to the city from the village, and an overwhelming proportion of marriages are arranged within the close kin group or arranged between migrants hailing from the same or proximate village(s). With women married to men from within a known circle of relatives and acquaintances, and with natal homes close-by, do we then have more supportive environments for women during their reproductive years?

The educational levels of these women are low. Less than a fourth have done between 8 and 10 years of schooling, broadly the level required for absorption and retention of health related information (Ramasubban, Crook and Singh, 1990). While around a quarter of all the women in the sample are illiterate, the majority have only been through between 2 and 5 years of schooling and can barely read and sign their names. Their being taken out of school generally coincides with the onset of menstruation. This is the overwhelming cultural explanation women give for their families denying daughters the chance to finish school even in metropolitan cities like Bombay. Parental fears for the personal safety of their daughters, fears of roaming male youth gangs in the slums and their potential for destroying girls' reputations and thereby their marriage prospects, fears of girls becoming independent enough to make their own marriage choices and thereby bring shame to their families, all lead to suppression and close supervision of daughters. There is an additional explanation, this one being through the agency of the State. Most villages in the country have schools which only take children upto middle school (i.e., seven years of schooling). For high school children have to travel to other nearby villages. This becomes a reason for parents

keeping their daughters at home, since this is also about the time when pubertal girls are kept away from the male gaze. Even in metropolitan Bombay, the free municipal school system which locates schools within easy reach of poor income housing areas, does not go beyond middle school. A poor family wishing to educate its children beyond middle school must access private schools, which demand "donations" as a price for admission and which are generally at a distance from the low income areas. In keeping with the tendency of poor households to allocate resources more readily for boys' education, the husbands of these women are relatively better educated than their wives; almost three-fourths have done between 8 and 10 years of school.

The husbands of these women are by and large unskilled. Among them, only a very small number have permanent jobs (e.g., as sweepers or watchmen with the municipality or private commercial establishments). The majority are in unstable jobs or are self-employed: unskilled workers in the conservancy department of the Municipal Corporation, in textile mills, and casual workers on rail- and road works, watchmen in small private commercial units, or driving autorickshaws. Almost all of them have experienced prolonged periods of unemployment at some time or other, and a few are currently unemployed or laid off due to alcoholism or advanced TB.

As long as the extended family lives together, with the patriarch still in employment, - and this is usually during the early years of the sons' marriages when, additonally, younger sons and daughters have yet to finish school / find employment / be married off / - , there is a pooling in of resources of earning members, while the unemployed son(s) waits out the period of unemployment. But as the patriarch ages and either retires or becomes unemployed, as daughters are married off and the sons' families begin to grow, the extended family splits up into nuclear fragments. Given the space constraints in Bombay, it is not uncommon to find two, three or even more nuclear families sharing a 15' x 10' space, through an arrangement of curtaining off little sections for each family. While each family has its own individual kitchen, the bathing corner is common to all. In such a situation, the parents may generally choose to live with any one of their sons, where they do not have a house in their native village and some farm land to go back to. Alternatively, if there are resources available, a mezzanine floor might be built (accessed through a steep staircase from the outside or inside), or the "room" next door may be rented or purchased to accomodate the growing family. Where women face daily conflicts in the husbands' families and where support is forthcoming from their own natal families, they may move with their husbands and children to a dwelling closer to the natal home.

A negligible minority of the women in this sub-sample work for wages. It is only in the direst of circumstances, as when the family is threatened with prolonged starvation and disorientation due to the husband's prolonged unemployment, his alcoholism and wilful refusal to undertake paid work, or when the husband's total wages go into buying liquor, that women seek work outside the house. In these cases, the options open are of piece work which women bring into the house, such as: sewing buttons / ironing and folding of readymade garments, making light switches, etc., which they carry out sometimes with the help of other women members of the family, or wage work in small workshops, or part-time domestic paid work, or carrying headloads at fishing wharfs, or retailing dried fish and vegetables in the local market. A miniscule minority are self employed in somewhat more daring occupations - one woman in this sub-group is a broker for "house" seekers in the shanty colony, for liaising with the police in the matter of arrested persons, in evicting unwanted tenants, etc., while another vends liquor from out of her house (generally liquor vending is an occupation that women undertake when they are forced into becoming sole earners, grown up sons may be coopted into the business if expansion into distillation takes place and, when married

daughters find themselves in the position of having to support husbands and children, they may take to retailing liquor)

The majority of women, however, stay at home where their movements and behaviour are closely supervised by their husbands, and by mothers-in-law where the latter continue to live with the couple. Where there is no mother-in-law, the husband uses a mixture of detailed accountability, direct confrontation, threats of violence, or seeking intelligence reports from neighbours - kin and non-kin - on his wife's movements, in order to maintain surveillance over her. Women going out to work live in constant threat of violence. Husbands monitor their timings to and from work, closely watch their deportment for signs of independence and their interactions with persons in the neighbourhood for signs of infidelity, and daily extract liquor money from them as the price for permission granted to go out to work. The women in the study live cloistered defensive lives, their physical movements being severely restricted to the immediate neighbourhood. Most women are used to this, having been brought up this way even in their natal homes. The majority of the women who were put into school were withdrawn from school when they began to menstruate, their movements even in the immediate neighbourhood were severely monitored, they were ideologically conditioned to refrain from playing even with girl companions and from talking to boys other than their own brothers, and were generally married off within a year or so of this event.

The majority of the husbands drink heavily and regularly beat their wives. Anything could become a provocation for violence, but the most oft cited reason is when women refuse sex to husbands who come home drunk and demand sex from their wives, whatever the hour and however severe the lack of privacy. There is very little communication between partners around daily lives and events, and most women know little about the lives that their husbands lead among their peers. It is only around major decisions - marriages of children, education of children, house repairs - that women are party to a dialogue. However men, often with the participation of their parents or brothers, remain the decision makers.

Births in this population are almost universally in the municipal hospitals / maternity homes which offer free services. Institutional delivery is accepted by all, even the most illiterate, as crucial for child survival. Ante-natal care, however, is another matter altogether. Since childbirth is seen as a natural phenomenon and not one requiring medicalisation, contact with the maternity hospitals is kept to the minimum. Registration is done only in the seventh month, which is when even the hospitals start taking in registration to coincide with the government policy of giving women their two tetanus toxoid injections in the seventh and eighth months of pregnancy, prescribing iron, folic acid and calcium supplements and doing a routine urine and blood test. Women with obvious problems earlier in their pregnancy (sudden bleeding, pain, or inexplicable swelling of the body) generally access private doctors or private maternity homes or one of the larger public hospitals. Otherwise contact with the health system is only in the last trimester. There is no awareness that the very high levels of anaemia and early age of childbearing make it imperative that pregnancies are closely monitored from the start. Identification of the fact of pregnancy is generally done by the experienced women in the family or neighbourhood when two menstrual cycles have been missed.

The average birth weight of babies born to the women ranges between 1.5 kg. and 2.5 kg. Foetal and infant loss, too, is an experience which has touched around half of these women. Spontaneous abortions (due variously to dilatation and currettage as an anti-infertility measure, violent assault by the husband against his pregnant wife, or other undetermined causes), perinatal deaths (due to prolonged labour, low birth weight), the need for caesarean deliveries (possibly due

to poorly developed pelvic structures) are the fate of those pregnancies which do not result in low birth weight survivors. With the exception of two women (who got themselves fitted out with IUDs for short periods), none of these women has ever used a contraceptive, nor knew of any methods during the years when their families were being made. Over two thirds of them have undergone sterilisation, the average age of sterilisation being 24 years. They have never used condoms.

3. The construction of weakness

The most commonly used word for weakness among our sample households is *ashaktapana*. *Ashakta* is an antonym for the word *shakti* (strength) and the word *pan* is added to mean 'lacking in strength' or 'feeling of weakening'. *Ashaktapana* is very specific in its connotation. It is not used to convey a generalised state of helplessness or powerlessness vis-a-vis others or a loss of control over established gender equations. These circumstances are conveyed through the use of different expressions such as *ghara madhey garibi hai* (we are a weak household because we are engulfed by poverty), *navara taabya madhey thewula nahi* (a woman has reduced herself to a position of weakness by not being able to entice her husband into her grip), and *hai koo taabya madhey thewuli nahai* (a man has lost control over his wife by not wielding authority sternly).

The word *ashaktapana* is used specifically to connote a state of weakness with particular physical symptoms and mental states. Based on the experience of women in the community whom we have studied, the incidence of weakness would appear to be almost universal among women above the age of 24 years. Its form is varied. The most oft-recurring description is that of feeling physically ill all the time, and of wanting to lie down and sleep and to never get up. Other descriptions are: body being engulfed by tremendous weakness as a constant feeling; excessive fatigue; generalised weakness resulting in slow body movements; a feeling of weakness most of the time accompanied by fever; feeling of being tired most of the time (sapped of body energy); persistent feeling of always being very ill; wanting to lie down and rest all the time; weakness as both a physical and mental problem; feeling of helplessness and depression due to the persistent feeling of lethargy; feeling of being a sickly person; feeling of having a mild fever always; not being able to get through with the housework briskly; the feeling of no life being left in the body.

More specifically, women describe the various manifestations of weakness as: backache; breathlessness while walking; feeling of heaviness in the head; chest pain; numbness in the hands and legs; exhaustion while climbing stairs; exhaustion when overworked in the house; blurring of vision and blackouts when bending over (as in household work of sweeping and cleaning) ; doing heavy work, climbing stairs, lifting heavy things (water for household use has to be filled and brought in from the public taps), working at heights (such as when fixing / repairing leaking roofs), giddiness and black outs when walking in the sun; feeling of wobbliness in the arms and legs, or a sense of them dissolving or becoming lifeless; tremendous exhaustion after intercourse; exhaustion with the daily housework routine; acute feeling of weakness after lifting weights or walking a little more than usual; headaches; inability to do heavy work.

Along with the above-described manifestations of weakness, women also report other health problems, several of which overlap with the descriptions of weakness. These are blurred vision and black-outs, giddiness and breathlessness while climbing stairs, lifting weights or doing heavy

work; numbness in hands and feet; inability to walk much. Others which are mentioned are: pains and aches all over the body; especially in the thighs, calf muscles and ankles; acute low back pain; and, mental stress.

4. Weakness and its correlates

We first look at women's perception of the causes for their feelings of weakness. These perceptions are then juxtaposed against their pregnancy narratives and narratives of reproductive illness and life circumstances as well as health seeking behaviour, as gleaned from the individual interviews.

4.1 Causes of weakness as perceived by women

(a) Neglect of diet

Very few women consciously recognise this. On probing, however, some admit this to be a cause: neglect of one's diet during pregnancy, not having been properly fed from childhood due to poverty, and frequent starvation due to poverty in the husband's house; neglect of one's health - diet and rest - from the start and now being faced with the inability to take care of oneself due to the demands of a growing family, loss of all appetite due to sheer exhaustion; not being able to eat on time due to the demands of housework.

(b) Pregnancy and childbirth

Women are able to identify which one of their pregnancies sparked off the problem of weakness; also, the experience of too many and too closely spaced pregnancies; having had too many children; the experience of caesarian deliveries; lack of blood in the body; lack of rest after deliveries; overwork during pregnancies; the experience of an accident during pregnancy.

(c) Experience of sterilisation.

Although sterilisation is more closely linked in women's minds with the experience of white discharge and low back pain, it is also an oft-cited cause of weakness. It is when talking about sterilisation that descriptions of weakness symptoms overlap with descriptions of other reproductive health problems, with women attributing almost all feelings of physical distress to this episode: weakness, white discharge, severe low back pain, deep abdominal pain, giddiness and black-outs and blurred vision particularly when walking in the sun, feeling of weakness in the hands and legs; aches and pains all over the body, particularly in the thighs and calf muscles; and irregular menstruation. Many of these symptoms - particularly white discharge - are in in turn seen to be exacerbated by weakness.

(d) White discharge

Around half the women report the associated problem of white discharge, seen as result of weakness

(e) T.B.

A few of the women have been diagnosed to be suffering from T.B. or have husbands with active T.B. But none of them have consciously associated this with weakness.

(f) Excessive housework.

The responsibility of having to look after each and every need of husband and children; the exhausting nature of house management and the difficulty in getting through with the daily routine (particularly fetching water, lifting heavily loaded containers); the worsening of problems in this regard during menstruation and pregnancy; sheer inability to do housework during extreme bouts of weakness but there being no escape from the drudgery due to this being a woman's lot; the exacerbation, due to overwork, of other symptoms of physical distress such as low back pain, giddiness and blurred vision, body pains in general, and insomnia which is a frequently mentioned complaint. The capacity to do housework is also described as being affected by mental distress, leaving no will to work.

(g) Menstruation:

Painful menstruation, feeling of tremendous exhaustion just before and during menstruation; excessive bleeding (for over ten days); severe abdominal pain due to late or delayed periods; tension during the menstrual period leading to exhaustion.

(h) Mental stress.

This is universally cited as among the most important problems women have, along with weakness. The main causes of stress mentioned are: poverty; worries about how to make both ends meet; husband's alcoholism; unemployment of the husband and of grown up sons; worries that women have about their own health, and dark fears about what their reproductive problems - such as prolapse, continuous white discharge accompanied by burning and pain, urinary incontinence - might lead to; T.B. or other major disease in the family; the future of the children.

4.2 Weakness as contextualised in pregnancy narratives and anrratives of reproductive health histories, life circumstances and health seeking behaviour

(a) Neglect of eating habits and of health in general during childhood and through the pregnancies.

Much of women's feelings of weakness are rooted in their poor nutritional status. However, they themselves do not easily admit to sufferring from any nutritional deficiencies. In their own eyes, their food is adequate in quantity and quality. Nor are they conscious of the implications of their poor diet during pregnancy. The importance of diet and nutritional supplements during lactation, too, is poorly understood by them, although several of them say that they are generally aware that a diet rich in greens and fruits has benefits. Only few of the women mention that neglect during childhood and during pregnancies could be a deep rooted cause of their weakness.

Women's state of undernutrition can be gleaned from their life histories. The narratives describe a continuous experience of poverty in the natal family followed by poverty in the husband's home. Over and above poverty during childhood and there being simply too little food to go around, early death of the mother in many cases exacerbates this neglect. When women describe a continuous existence of poverty, they do not generally make any connection with physical debility. It is significant that despite probing, not a single woman mentioned any conscious experience of unequal food sharing between girls and boys in the natal home. Despite the poverty, the happiest memories for almost all the women are childhood memories of growing up in the natal home.

Poverty in the husband's home combines with cultural expectations of what constitutes a proper wife and daughter-in-law to determine a woman's food intake. In the early years of marriage, the husband is often unemployed or unstably employed, and dependent on pooled earnings of his father and brother(s). So the young wife must play out her pregnancies, which follow in quick succession during these early years, as best as she can. Where he is employed and contributing to the family expenses, it is culturally impermissible for him to be showing interest in his wife's eating habits or in the allocation of food in the household by his mother. Even where affectionate and supportive parents-in-law are the case (and this is not rare), the importance of diet during pregnancy and lactation is simply not understood.

The inability to make a separate dietary provision for oneself during pregnancy, despite problems of vomiting and inability to retain food virtually throughout the pregnancy, is cited by women universally. Most women seem to find it very natural to have eaten miniscule quantities during their pregnancies, due to vomiting, giddy spells and disinclination for food. Some of the more extreme cases describe themselves as having subsisted on tea and *pau* (bread made from refined flour and bought cheap from the market) through their pregnancies. Detailed probing into eating habits reveals an upto 30 per cent deficiency in caloric and protein intake.

Visits to private health providers in the neighbourhood (of whatever variety) for the problem of vomiting and giddiness during pregnancy may be sanctioned by the decision makers in the husband's home, since these symptoms are seen as pathological if they persist. Doctors' prescriptions, that special or more nutritious food be eaten during pregnancy, are ignored, and only prescriptions of pills to stop the vomiting are acted upon. Where additionally tonics and *takat golis* (tablets for strength) are prescribed, they are not bought, both for reasons of expense and because it is not becoming of a woman to be seen to be hungry and to eat "a lot", since women's experience of the tonics, especially of the liquid variety, is that they increase the appetite. Tonics are also seen as making women fat, also a sign of eating too much, and thus drawing negative attention to oneself in a situation of economic precariousness. Even the vitamin supplements given free by municipal hospitals to ante-natal women are not always consumed.

Culturally, women are not supposed to make demands on the resources of the husband's home. Short of being admitted to the hospital for rest, supervision or saline administration (which some of the women report doing with the husband's support under doctors' insistence), all advice (special foods, reduced housework, etc.) other than the most minimal medical intervention (anti-vomiting pills) are not acted upon either by the woman concerned or supported by other members of the family. The woman's status within the household simply does not permit this preferential treatment.

But the most efficient self censors are the women themselves, who do not easily admit to eating less than they should, or who do not not think it it is abnormal that their food intake is inadequate in quantity or in quality generally, but specially during their pregnancy or when they suffer from chronic diseases like TB and are prescribed better food to be able to ingest the powerful antibiotics When households have to be run on meagre and uncertain earnings, women's socialisation lead them to first minimise their own food intake. This is explained by them as having to place their roles as mother and wife - providing for the needs of children and the husband - on a higher plane than looking after their own needs. This ideological conditioning is unable to surmount the health education argument that a woman has a responsibility to herself for her own health. This would seem to suggest that women need both relative freedom from poverty and tremendous support from the husband / his family to be able to act on advice regarding their own health, particularly during their pregnancies and lactating periods. As long as men even in poverty groups are socialised into thinking that their own needs and pleasures come before that of their families, as when their earnings go predominantly into buying liquor and marketed snacks for themselves, leaving wives to run the household on extremely slender budgets, women's skewed roles as wife and mother will take precedence over their self concern. The unreformed attitudes of men serve to perpetuate the socialisation by women of newer generations of men into this mindset.

(b) Weakness relating to pregnancy and childbirth: problems during pregnancy, post-delivery / post abortion / post child-loss

A number of associations emerge from the narratives.

(i) Early age at marriage and early age at the first pregnancy are attended by several problems, the most important of which are lack of knowledge of ante-natal care, i.e., about diet, physiological changes during the course of a pregnancy, and the need for continuous monitoring, particularly given the age of the mother and her anaemic status. Households have the fixed notion that the hospital is to be accessed only in the seventh month, i.e., when registration officially begins (even then, compliance is mainly for the tetanus toxoid injections and urine and blood tests, while other prescriptive supports such as tonics are mostly ignored or are taken haphazardly). This may partly be rooted in the cultural practice of the pregnant woman being taken to her natal home to stay there for the remainder of the pregnancy; indirectly, therefore, her well-being during pregnancy and delivery is the responsibility of her parents. It is only when women experience major problems, such as acute swelling of their bodies, sudden pain, sudden and heavy bleeding, or unbearable weakness of the kind that keeps them in bed, that the health system is accessed before the seventh month. The reasons for this are a combination of ignorance about the dangers of pregnancy in a state of anaemia, a wait and watch approach, the belief that childbirth is a natural process which should not be needlessly medicalised, as well as hesitancy to spend money.

Women who make the strongest association between problems during any of their pregnancies and the onset of a chronic feeling of weakness are those who have experienced spontaneous abortions, perinatal child loss, or delivered stillborn babies. Around half of the women in this sub-group have experienced perinatal child loss or spontaneous abortions. By contrast, women who had to be admitted to a public hospital or a private nursing home on account of complications, were able to bolster their body reserves through injections, tablets (*golis*) and saline drip (*glucose*) given during hospitalisation.

In some cases successive spontaneous abortions or stillborn / perinatal deaths - with the attendant physical debility and mental trauma - have followed upon *pishwi saaf* - literally, cleaning of the 'bag' or uterus - resorted to as a fertility inducing measure. Young wives who do not conceive within two or three months of marriage may be taken to the hospital for this procedure by mothers-in-law, who present the problem as one of infertility. It is a commonly held belief in this community that *pishwi saaf* is a panacea for many ills. In the city, it is only when even *pishwi saaf* does not work that holy men and temples are visited to ask for the boon of a child. Even 12 year olds may be subjected to this procedure, as happened to PUPA, one of the women in this sub-group who was married at 10 and brought to her husband's house at 12 upon attaining menarche. When by thirteen she had still not become pregnant, her mother-in-law took her to the municipal hospital for a *pishwi saaf*.

> "Despite the doctor's advice against it, saying that I was too young for it and that I would conceive in due course, and his warning that future pregnancies may become difficult to sustain, I was made to undergo this procedure at my in-laws' insistence. My first pregnancy did not go beyond the seventh month. Because of the *pishwi saaf* my stomach pains started. I went to Rajawadi Hospital with my husband for a check up. The doctor checked me and admitted me there and then and within 30 minutes I delivered. The feet came out first. It was a boy."

The birthweight of the child was 2.5 kgs.

> "Within three days of the delivery I came back to my husband's house. After all, I had no *maike* (natal home). I had no problems and both the baby and I were well. For 15 days I was able to rest after which I resumed doing all the work in the house. After the delivery, the doctor had told me that the *pishwi ka tond* (mouth of the cervix) had expanded after the delivery and that the next baby may not be able to stay inside easily. And that if I did heavy work or went out too much, I would have a miscarriage. He warned that if I got pregnant again, I would have to be very careful after the delivery. He had also stitched up the uterus (*garbhacha pishwila tanke marli*). He also advised us against intercourse (*sambandh*) for another one and a half years. He spoke to my husband also about this.
>
> We did not have *sambandh* as he had advised, and I got pregnant only two years later. From the third month, I started getting vomiting and giddy spells, but no other problems. I did the lighter chores in the house and did not lift heavy weights. My mother-in-law and sister-in-law (husband's sister) did that. This pregnancy lasted for eight months. In the eighth month the pains started. My mother-in-law who was living with us came with me to Rajawadi Hospital. Within an hour I delivered. The child died within an hour of birth. I don't know the cause. They kept me in the hospital for one day and I was sent home after that. I rested for two days, and after that I had to resume all the housework. I was deeply sad. But my family members consoled me saying, 'So what if the child died, you still have the first child. Whatever had to happen, happened. What will you get from continuing to grieve? Stop crying and concentrate on the living child'. I did as I was told. I bottled up my sorrow within me and worked hard at my household chores.
>
> Within a year I was pregnant for the third time. The doctor admitted me in the fourth month itself. He kept me in bed rest for nearly six months. He was a good doctor and looked after me well. My health really improved. I got plenty of food and rest and put on weight. The baby grew big. I was now having problems delivering it. Nine months were fully over and I had not delivered. My back started paining and *pandhra pani* (white water meaning discharge) started for one day and one night. There was no pain in the stomach. The doctor gave me an injection

and soon after, the pains started. After a night of the pains and still no delivery, he started preparing for a *ceezar* (caesarian). I was unconscious from the pain. They gave me an injection to put me to sleep and performed the operation."

The child survived, but PUPA (40 years) went on to have four more pregnancies (seven in all), of which two resulted in peri-natal deaths. Two of her four surviving children died, one at 3 years and one at 2 years. They died of accidents (eating some poisonous stuff and third degree burns from a kerosene lamp, respectively) due to being neglected and unattended in the house, while she was away doing wage labour.

Another is the case of NASA (24 years) married at 15 to a kinsman and pregnant with her first child within three months of marriage, brought to her parents' house and registered at a private maternity home in the 7th. month by her parents.

NASA says that in the eighth month of her pregnancy, she developed a sudden severe pain in her abdomen. Ignorant of what to expect, she describes herself as having tried to suppress the pain by pressing hard on her abdomen. She stayed in this position and did not tell anyone about the problem. When the pain subsided a few hours later and she noticed that the child did not seem to move, she told her parents who panicked and took her to the hospital. The child was found to be dead and was delivered using forceps. (Those might have been labour pains, and it may have have been a case of obstructed labour leading to hypoxia).

After this experience NASA went through four spontaneous abortions, all in their second trimester, and finally brought only two pregnancies to term resulting in two live children, after which she underwent sterilisation. NASA complains of a constant feeling of weakness, she gets tired easily and gets a pain in her chest when she exerts herself. Her strength is at its lowest ebb during her monthly periods. She reports visiting a local health provider every month for being given two bottles of glucose intravenously to treat the weakness and to help her cope with her menstrual periods.

(ii) Women describe post delivery weakness *(balantarog)* as something that can be brought on by several reasons: lack of blood in the body, giddiness, TB, mental tension due to lack of access to good food , or ill-treatment by the mother-in-law, or due to the husband's drinking and violence against the wife. From the narratives, yet other causes may be gleaned for post-delivery weakness, such as when a woman gives birth to a second or third daughter, or to a weak or sickly child, or to a stillborn child, or faces perinatal child loss. Spontaneous abortions, too, could result in neglect and ill-treatment with the resultant mental stress.

Women describe *balantarog* as a nightmare which every woman dreads, but which many women actually die of if not supported emotionally and financially through access to prompt health care by her parents. Women particularly stress the mental trauma aspect, which they refer to as *dimag me jhatka* (a state of shock). Many women start observing fasts voluntarily, they start becoming thin, and there is a death wish at work. "If I have to die, let me die. I'll do what is expected of me and it doesn't matter if I die in the process". They become reckless and start lifting heavy weights such as filling large water containers and carrying them home, bathing and working in cold water such as washing the household's clothes, eating very small meals, all of which activities are traditionally proscribed for post-partum women as the root cause of later ill health.

Often, the foetal loss may be attended by severe physical and mental trauma, such as a violent assault on the pregnant wife by the husband, who loses his self control due to the influence of liquor or egged on by family conflicts, or by another male member of the family such as the husband's brother who becomes the violent face of the conjugal home, resulting in heavy blood loss. Where the foetal loss takes place at home and where it occurs successively, even a health facility may not be accessed.

MALO (32 years), married at 15 years to a kinsman (20 years).

> "As the eldest daughter-in-law, with three younger brothers-in-law and two younger sisters-in-law, I was expected to take complete responsibility for all the housework. Since I did not know how to cook or do housework, I was regularly berated by my parents-in-law, 'Haven't this girl's parents taught her anything? They have kept her ignorant.' And my *sasur* (father-in-law) would slap me. They would all tell my husband, 'Leave her and marry another woman'.
>
> My husband did not pay any attention to them, but I used to get very scared to be there. When my husband was away at work and everyone at home was asleep, I would steal away to my parents' home. I had never even thought of marriage. My father had taken me out of school when I was in the 8th std. Whenever my mother-in-law's and sisters-in-laws' taunts increased, I would fight with my father. 'You didn't allow me to study, you've ruined my life.' Then my father would comfort me, 'We don't keep our daughters like that after they have become big. Whatever the age, we must marry them off. How was I to know that your in-laws would turn out like this? But why don't you listen to them and cook as they say'. ...The fights went on for seven years."

MALO went on to give birth to two children in quick succession, a girl whose birthweight was 1.5 kg. and a boy who weighed 2 kg at birth. Within two months of the second child, she was pregnant again.

During her second pregnancy:

> "One day, when I was eight months pregnant, my husband in a fit of rage due to the constant fights between my in-laws and I, took out his anger on me. He pushed me down the flight of 16 steps outside the house. The child in my stomach died. My husband picked me up and carried me in. At that time I didn't feel any pain. But I was aghast that my husband, too, had left my side and had joined my tormentors. But he was weeping as he carried me in and told me that he had done it in anger, unable to bear the conflict around him. The next day a terrible pain started in my stomach which lasted for two days, and then, just as suddenly, it stopped. My husband took me to a private nursing home in Worli. But they wouldn't take me in because I looked bad and they didn't want a problem. It was only when one of my husband's aunts pleaded with them, telling them that we had just come to Bombay from the village, that the hospital agreed to admit me. I was taken to a cot and made to lie down. A doctor came up to me and carelessly looked at my eyes and face and said, "If you don't deliver, we will do a caesarian and take the baby out'. At mid-night, the senior lady doctor came in. She examined me thoroughly and said something angrily to the other doctor in English. On her instructions, I was given 3 bottles of glucose and an injection to kill the pain. My pain stopped and the dead child in my stomach was taken out with the help of forceps. If that senior doctor had not come when she did, I would have died.... I became pregnant immediately after that. It was a boy and he was 1.5 kg. The delivery was normal..."

The crucial importance to the young mother of bringing her pregnancy to full term and of delivering a live child which survives, is poignant in more ways than one. Whereas municipal hospitals keep a woman for upto three or four days if she delivers a live infant, she is sent home in one day in the case of infant / foetal loss. The reproductive trauma that attends an unsuccessful pregnancy among women from poor households is not appreciated either by the health system or by the community. Nor does the woman go back to an environment where she can recoup from the mental agony of child loss. She generally goes back to her husband's home directly; it is only in the case of the first pregnancy even if it results in infant loss, that she may be taken back to her mother's home where she gets the rest and mental peace to recover. In the husband's house she is generally put to work immediately, if it is a joint household; or she must perforce shoulder the burden of house management if her household is a nuclear one. She may be the victim of verbal and physical violence by powerful family members. Within a few months of her return after an unsuccessful pregnancy, the woman is usually pregnant again. Husbands who are willing to wait for 45 days after a live birth to resume sex with their wives, are not willing to wait at all after a foetal or infant loss.

NASA (24 years), married and pregnant at 15 years.

> "After my first child was born dead, I was brought home to my parents' place in a state of tremendous weakness. I had become very thin. After one month my husband took me back to my in-laws. The people there were nice to me for just two days. Then they started mistreating me. My mother-in-law said just what came to her, and when my husband came back home from work she filled his ears with complaints about me and urged him to beat me. He would get enraged with me and would beat me. It happened every day. Whenever I heated water for my bath, my mother-in-law would taunt me. 'Look at her heating water for her bath as though she had a live child.' I would get angry and have my bath in the cold water from the *matka* (earthen pot in which water is stored). I started a fever. One day my father came to see me and took me to a private doctor. I was given capsules for *takat* (strength). They never gave me enough food to eat and I was often forced to go hungry. Despite all these torments, I never told anyone in my *maike* (mother's house). Within fifteen days of my coming back home my husband resumed sex. I was so weak that it hurt. But I never thought of protesting. It was part of the daily beating and starvation. Six months later I found that I was pregnant again."

During her fourth pregnancy (following three unsuccessful ones), which was being medically monitored and paid for by her natal family.

> "During my pregnancy my husband continued to threaten me with divorce if the baby did not stay in my stomach for nine months, or if it turned out to be a girl. He threatened alternatively to beat me and to divorce me. I lived in dread. More than him, it was his mother who kept his attention on me in this manner."

While *halantarog* is the extreme expression of post-delivery weakness, such weakness can also occur due to resumption of heavy household duties in a state of general undernutrition. Wherever women have got the mandatory post-delivery 45 days rest, it has been due to supportive natal homes.

(c) Weakness after sterilisation

The overwhelming majority of women in this sub-group have been sterilised. On an average, sterilisation was resorted to as early as between 23 and 25 years (since average age at marriage is

16 years), by which time the family size had been completed with at least one son. Apart from a couple of women who used IUDs for short periods, none of the women reported any knowledge of non-terminal methods of contraception during their child-bearing years. Yet all of them in retrospect wish that they had known of some method. Most women feel that both men and women must share the responsibility, and the desired norm is to have two children with a spacing of between 2 and 5 years.

It is interesting to note that while the women in their desire to stop babies willingly went through the experience of sterilisation, a great majority of them feel that their problems of weakness, low back pain, white discharge, painful intercourse, burning and itching in the vagina, pain in the arms and legs, blurred vision and black-outs, can be dated back to their sterilisation, or have been exacerbated by the sterilisation. Although women speak in their narratives of diet and pregnancy as intervening factors, they do not readily attribute their feelings of weakness, exhaustion, pains and aches, to their poor nutritional history or history of childbirth. The emphasis on sterilisation is relatively greater.

As CHNA (27 years):

> During her first two pregnancies she suffered from vomiting throughout and survived on tea and *pau* (bread made from refined flour). During the first pregnancy, she had a foul smelling white discharge from the third month that continued until the end, and her hands and feet including her pubis became swollen. Taken by her husband, she was admitted to one of the large municipal hospitals twice during the pregnancy and given glucose drip on both occasions. Neither she nor her husband was told or instructed about anything to do with her problem. During her second pregnancy she started to get severe tremors in her hands and feet around the second month. This time, accompanied by her mother-in-law, she went to another municipal hospital where she was given some pills and sent home. But the tremors didn't stop and she did not go back to the hospital. The tremors continued uptil the 9th. month. The third pregnancy was not problematic and after the delivery she got herself sterilised with her husband's consent.
>
> Ever since her sterilisation, her menstrual periods have become irregular, coming once in two or three months. They are accompanied by tremors in the hands and legs, her body feels weak and tremulous and she gets blackness before her eyes. She says she suffers periodically from foul smelling vaginal discharge, and gets a deep abdominal pain during and after intercourse. She gets pain in the vagina sometimes, and has seen boils and redness there sometimes. She also has acute low back pain and tremendous weakness. She is quite categorical that all these problems have started since the *operation* (sterilisation). But she has never talked to anybody about all these problems. She went once to the insurance doctor (her husband used to work with a maintenance squad in the naval cantonment earlier before he stopped working due to alcoholism, so she could go to the cantonment-based doctor for free) and explained her problems to him. He did not examine her but gave her some pills. She took the pills but did not feel better. She did not go back again.
>
> "I think that sterilisation is the culprit. I was happy to get myself sterilised. But when I came home, I felt weak. I get severe chest pain sometimes. It is two years since the operation and I have become the victim of pains all over my body."

(d) Weakness due to housework

Women see the launching of any strategy to overcome or redeem their weakness and the causes which lead to it, as being far too insurmountable. Weakness is accepted as an inexorable part of their lives of which they will be rid only when the life leaves their bodies.

Food improvement, even when technically and financially possible, is impeded by mental conditioning which informs women that a household is built upon a woman's sacrifice. Ideologically, redistribution where women are the takers, is not accepted by them nor by others in the household, since the mother's and wife's role *in relation to others* takes precedence over her own health. Even when they are the earners, women do not stake their claim to their earnings, and even when the situation makes it imperative, as during pregnancy or lactation, the demand is not made. Since others' needs cannot be denied, and even the drunk unemployed husband must get his food first, redistribution whereby women too get a greater share must await a much more bountiful scenario.

The only relief that women see for themselves is when their daughters reach pubertal age, an event which is awaited by them, since daughters can now be made to share in the burden of housework. Daughters' educational needs become secondary even in the eyes of their mothers who are themselves disadvantaged.

(f) Weakness due to mental stress

The main form of mental stress arises from their conditions of poverty - worry about how to keep the house going on the basis of the meagre and unstable earnings of the husband, how to repay loans taken, and how to get daughters married. Every contingency leads to mental stress, since the day to day expenses permit no leeway to plan for minor or major crises. But most worrying is the feeling of lack of control, particularly in planning for the future of the children - education of sons and marriage of daughters, in that order. When the husband is an alcoholic, women's worries compound. And where alcoholism is accompanied by violence against the wife and children, mental stress becomes a physical fact as well. There is little dialogue between marital partners, and the emotional gulf between them is a cause of distress to the women. Women speak of their husbands spending their earnings on drinking and on friends, and as evincing little interest in how their wives manage to run these precarious households.

The somatisation of stress would seem to be evident in the way some women speak about weakness, tension and body pains, particularly pain of the lower back ("My back feels it will break"). Women use the word *tensun* (tension) to describe the mental distress they have to suffer in this regard. They speak of brooding when alone in the house, and the consequent neglect of their own health due to the feeling of despair ("Since I brood, I don't notice things about myself") Weakness itself is seen as a cause of brooding and "bad thoughts" - "what would happen to my children if something were to happen to me" Sometimes it is almost a death wish, as symbolised in the phrase "I wish I could just sleep and never get up" Brooding may also become a cause of domestic accidents, as in the case of one woman whose sari caught fire as she sat before the burning kitchen stove totally lost in her own gloom after a brutal beating from her husband

Women speak of feelings of frustration and despair over having to put up with their intermittent bouts of sickness, their persistent aches and pains, the feeling of being debilitated in the midst of so much domestic responsibility, and yet being able to do nothing about it..

> "I can't go to the doctor, because if I do he will say take this or that tonic and there is no money to buy these things. So it is better not to go at all."

> " I feel so weak, but I cannot even afford to buy milk for my tea."

They speak of fears that their symptoms of vaginal itching or discharge could mean cancer or some terrible tumour.

Health seeking behaviour for weakness, as for other problems such as chest pain, blood pressure, and vaginal discharge, remains episodic and haphazard. Local doctors, whatever their qualifications, are resorted to. These providers generally dispense allopathic pills for one day and / or give injections, for which a fee is charged, and the patient is asked to come back the next day. If the acute symptoms persist, she may go back on the next day, but more often than not, she does not go. Since the fees and the medicines / injections are on a daily basis, it gives the sufferer the chance to decide how far she wants to go with the "cure". The providers are therefore seen as being friendly and understanding, and some even permit credit. But, as the women say, "Even he has to be paid some day", so visits are kept to the minimum and take place only when the distress is so acute that housework becomes impossible.

5. Summary and conclusions

From among the range of symptoms reported by the women in our community based study, weakness emerges almost as a mirror of women's general socio-economic, physical and mental condition. In response to detailed probing on different aspects of reproductive ill health, such as white discharge, menstrual problems, urinary problems, back pain, abdominal pain, prolapse, weakness, mental worries, etc., nearly all the women in our study report weakness as one of their most nagging problems, irrespective of age. It is a pathology which is to be found almost universally among women of reproductive age, and increases in severity with age and successive reproductive episodes. Poverty is a qualifying characteristic of the women covered in our study, and its strong link with the incidence of weakness is, therefore, axiomatic. It is significant to note that the word weakness - *ashaktapana* - is not used to convey a generalised state of helplessness or powerlessness vis-a-vis others in the society, community or members of one's household. Weakness - *ashaktapana* - represents a physical state described through specific symptoms. Also, the mention of weakness is not just another means of drawing attention to the problem of white discharge. There is a range of physical symptoms and mental states representing the state of weakness.

In their description of weakness, women are capable of disaggregating specific reproductive illnesses such as vaginal discharge from what they describe as weakness, although these specific illnesses - including urinary incontinence, low back pain, painful intercourse, abdominal pain - may also carry with them feelings of weakness. It is when seen within the context of a woman's life as a whole, that weakness emerges as an illness distinct from white discharge (*safed pani, pandhra pani)* or other reproductive tract infections, and as symbolic of women's general condition of

physical and mental distress. The physical distress symptoms are described variously as: extreme exhaustion, desire to sleep and never get up, giddiness and blurred vision, feeling of being ill all the time, sometimes accompanied by fever, numbness / looseness of arms and legs, severe pain in the back and legs, etc. The mental stress symptoms are described as: brooding and mental exhaustion due to economic insecurity, husband's alcoholism, domestic violence and worries about the children's future security.

There would appear to be a two-way relationship between weakness and reproductive health. Just as weakness has consequences for women's ability to enjoy a state of reproductive well-being, it in turn has roots in specific reproductive episodes. Our investigation of descriptions of a range of symptoms, when seen against the backdrop of reproductive histories, suggests that women's presentation of their problem of weakness reveals strong associations with unfavourable experiences in those histories.

The narratives, based upon multiple interviews with the women in our study, point to the importance of awareness raising about nutritive diets for women, both to meet general requirements of body energy, and in specific situations like pregnancy, lactation and morbidity episodes. It emerges that efforts in this direction must concentrate as much on the husband in a nuclear family, and on mothers-in-law and mutual caring between sisters-in-law in joint families, as on the woman herself. It becomes crucial for awareness raising strategies to balance an other-centred slant with a self centred one because, ideologically and culturally, a woman ought not to be seen as caring for herself. Fortunately, our observations suggest that supportive mothers-in-law and sisters-in-law do exist in the community. Among men, however, self centredness is deep rooted. Seeking supportive roles from husbands / fathers / brothers in the fulfillment of the nutritional needs of women in the household, requires change in this attitude among men.

While the nutrition dimension is totally ignored in overcoming weakness, attention is paid when weakness is accompanied by heavy bleeding during menstrual cycles, complications during pregnancy, or surgeries (as, for example, sterilisation operations). The bolstering of women's survival by and large takes place only when they approach the health system in a virtual state of crisis, on which occasions they are administered saline intravenously or, in extreme cases, given blood transfusions. The narratives reveal that almost every major contact with hospitals - as during pregnancy crises, deliveries, sterilisations - is an occasion for administration of a few bottles of *glucose*.

Attempts at seeking relief from weakness during the post-delivery period is mediated by success or failure of the outcome of pregnancy. Adverse outcomes, i.e., foetal or infant loss, birth of a sickly child or birth of a girl child successively, may result in withdrawal of sympathy, medical attention, rest and care. In frustration, many women resort to self-flagellation through overwork, reducing food intake and recklessness in self care.

There is thus a rank order in the perception of problems relating to women's health which influences / dictates when health care will be sought. Sudden onset of problems to do with menstruation, pregnancy and delivery rank highest. Next in importance for contact with the health system comes sterilisation (which reflects the family acceptance that the family size and gender composition of offspring is as desired). Nutritional needs rank below this. Other reproductive

illnesses such as white discharge, low abdominal pain, etc., come last. Health care seeking takes place only when any of these sets of problems puts women into dire straits, i.e., when they are unable any more to carry out their household responsibilities.

There is also a rank order of factors perceived by women as exacerbating weakness. The link with feelings of weakness is highest in the case of sterilisation. This is followed by the experience of foetal / child loss. Reproductive tract infections such as white discharge, low back pain, abdominal pain, etc. come third and it is only when they become so severe that fears of cancer build up, that women begin to contemplate the next step. The link between nutrition and weakness ranks last in the perception of these women.

In sum, lower nutritional intake, gender relations, individual behavioural factors and institutional arrangements all seem to work in tandem to add to the incidence and severity of weakness and mental stress among women during their reproductive years.

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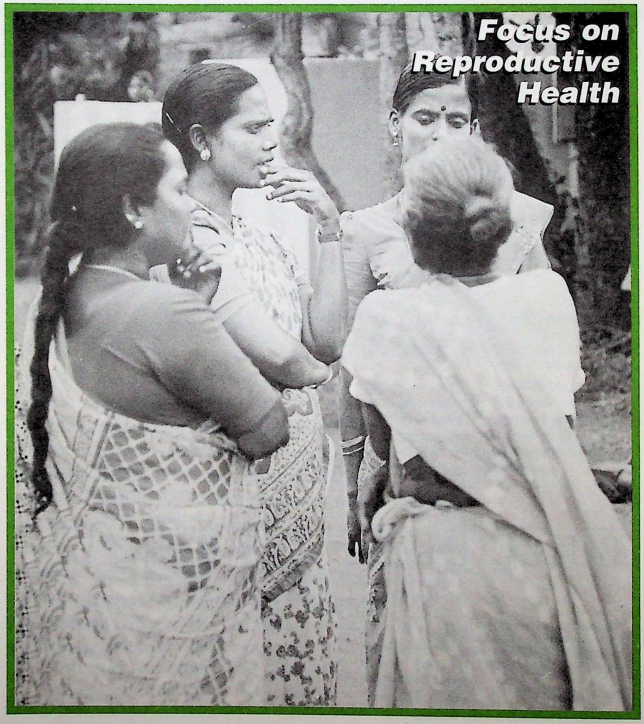

● Safe Abortion ● Preventing HIV/AIDS ● Community-based Reproductive Health Programs

FOREWORD

Autumn/Winter 1997 THE FORD FOUNDATION
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The changes in reproductive health policies and programs within India in the three years following the 1994 International Conference on Population and Development, have been both unprecedented and dramatic. The Indian government has recently launched a serious effort to reorient the family welfare program from a demographic to a client-oriented reproductive health approach, reversing programs and policies which have remained largely unchanged for the last three decades. An important first step toward this goal has been the decision by the government to withdraw contraceptive method targets nationally, with a shift in emphasis to quality of care and client needs. Equally significant has been the government's decision to expand the range of its health program from family planning to reproductive and child health.

Over the last decade, the Reproductive Health Program of the New Delhi office has been at the forefront of efforts in India to develop policies and programs to more effectively address the reproductive health needs and rights of women and men. Through a coordinated program of support for social science research, innovative community-based experimental projects and public education and advocacy, Foundation programs have sought to foster and contribute to these promising changes. In this edition of the Bulletin, *we present several of the reproductive health projects supported by the New Delhi office which reflect the range and diversity of activities funded under the Reproductive Health Program.*

Jane Rosser
Acting Representative

Women Take Responsibility For Their Own Well-Being

The RUWSEC project has made special efforts to reach dalit *women in its community-based program*

Situated about 100 km from Chennai, Chengalpattu is witnessing a modern revolution of sorts. The women have taken up cudgels on their own behalf by instituting the Rural Women's Social Education Center (RUWSEC), one of the most successful community-based grassroots women's organizations in India

IN an open, peaceful, thatch-roofed shed on a rural campus in Tamil Nadu, a meeting of health and literacy workers is in progress. The participants are predominantly women, about 45 in all, who have gathered together to report on and evaluate a survey on indicators that they have designed and conducted for the Rural Women's Social Education Center (RUWSEC). Funded by the Foundation, it is an attempt to develop an alternative set of program indicators compatible with better health care and broader reproductive health needs.

The scope and quality of their work is impressive. The women have successfully designed a set of impact indicators for a comprehensive community-based reproductive health program. They have covered young married women, adolescent girls, single women, widows and

It all began in 1981 when a young couple decided to join the government-sponsored National Adult Literacy Program, choosing to work in rural Tamil Nadu at Chengalpattu

menopausal women. They have looked into figures of child deaths, both soon after birth and during the first five years of childhood. They have considered immunization figures and have taken into account pregnancy, abortion, contraception and sexually transmitted diseases (STDs). They have commented on the materials which have been used in the survey and made suggestions for improvement. They have also suggested that a survey of male health be organized through male workers.

This would be an impressive presentation at any meeting. But when one realizes that all the women come from surrounding villages, that most of them are *dalits* (scheduled castes) without formal education and training, and that they were illiterate and reticent only 16 years ago, their achievements are truly remarkable.

It all began in 1981 when Sundari and Ravindra – a young couple with ideals of working for the people – decided to join the government-sponsored National Adult Literacy Program. They chose to work in the rural areas of Tamil Nadu at Chengalpattu, about 100 km from the city of Chennai. Chengalpattu was then, and is still, considered a backward area. About 80 per cent of its *dalit* people are landless laborers. Even their homes, huts with straw roofs, are built on waste land. Until about 20 years ago, they were bonded laborers, tied for life to landlords who exacted punishing physical labor in repayment of debts – which were impossible to clear. Treatment was cruel and harsh. For example, a scheduled caste man who had stolen a pumpkin was tied to a tree and lashed as many times as there were seeds in the pumpkin! Poor health, not surprisingly, was the norm, as were maternal and child deaths. Government health programs never reached the lower castes who lived in their own demarcated areas outside villages. Education, also, was not within the reach of the poor.

This was the situation when Sundari and Ravindra set up home in the area. They began work by recruiting adult education teachers from the villages, experimenting with dropouts from the schooling system and focusing on the lower *dalits* and castes. But within a few years, with a change of government, the Adult Education Program fell by the wayside. However, the seeds for development had been sown. The women who had been trained as adult educators continued to meet regularly, brought closer together by conflicts in their domestic lives, opposition from male leadership in their communities, and the need to know about the many reproductive health problems they faced. Sundari recalls how the first discussions on women's health centered around her reading aloud from the American women's publication – *Our Bodies, Ourselves* – explaining and adapting the material for her rural Tamil audience.

And so in 1981, RUWSEC, a grassroots women's organization, was formed. The founding members were 12 women from 12 villages in the area. Carrie, one of the 12 women, is now the coordinator of the many different activities of the RUWSEC. The founding members felt that with limited resources, the focus should shift from adult education and concentrate on two crucial areas: teaching children and women's health. Children were the future of the community, and a woman's health was all she had. She carried all the burdens of the family, from bearing children to working in the field to caring for the home and the family.

Carrie is forthright and articulate when she talks about this. Women, she says, have been the neglected factor in every program. Nobody has prioritized their problems or taken into account their health, work, capabilities or feelings. The traditional attitude to woman has created a situation in which her decision-making ability has been compromised. She has no power to make her own decisions – even about her own body. Husbands and mothers-in-law determine when or whether she needs medical attention. They decide on abortions, family planning, whether and what kind of contraceptive will be used. Government health facilities impose their own demands: for example, insistence on a tubectomy after the second child is born. The woman is not 'advised' or 'persuaded', she is pressurised, no matter what her

Women community health volunteers form the backbone of RUWSEC's programs

reason for resisting, into undergoing the procedure.

Carrie is not alone in being a spokesperson for the group. The women who attend the indicators' survey meeting are equally confident and outspoken. They have come a long way since the first tentative steps they took in 1981. Now the areas of their concern have extended to include community-based action for health promotion and education, programs for women's development, programs for men and youth, action research and a reproductive health clinic in Chengalpattu. All the work is conducted in the language of the state – Tamil. But the women are well on the way to learning English – another accomplishment which will help extend their activities and bring more information and training within their reach.

The RUWSEC is today one of the most successful community-based reproductive health programs in India. Its strategy, from the start, has been to involve local women, trained as community health workers, to form the core group of the organization. Each village – and there are 92 such villages – form a women's *sanghams* or association. These *sanghams* act as catalysts initiating and promoting a wide range of health promotion activities. The strategy has been highly successful. Women, coming together to discuss their problems, their health and their reproductive rights, have discovered their power in challenging other dimensions of their subordination as women, wage laborers and *dalits*. Regularly held inter-village workshops have helped identify women with leadership qualities, and over the years, have created groups that are largely self-sustaining.

Future plans for RUWSEC include dissemination through documentation – not necessarily to a larger number of villages – but by mainstreaming and reaching out to broader audiences. Working with the public health system is another future goal, as is the upscaling of training and campaigning for male involvement in the program. This will strengthen and sustain a movement which has proved that the well-being of women and the communities to which they belong, ultimately lies in their own hands. ⊿

The women of RUWSEC have come a long way since their first tentative steps in 1981. Their areas of concern have now extended to include community-based action for health promotion and education, programs for women's development and for men and youth, action research and a reproductive health clinic in Chengalpattu

NGO-Public Sector Collaboration To Strengthen Reproductive Health Services

The Foundation's efforts to re-orient the public sector health program include an innovative action research collaboration between a women's health NGO, the Bombay Municipal Corporation and the University of Liverpool to address women's health needs more effectively

THE last few years have seen remarkable progress in building consensus and commitment on the reproductive health needs of poor women in developing countries. Reproductive health and women's rights concerns have, in these years, moved from relative obscurity to becoming a central organizing principle for international health and population policies.

Over the past decade, the Ford Foundation has supported a range of community experimental projects aimed at developing more comprehensive health programs for disadvantaged women and their families. These programs address a broad range of women's health needs – family planning, abortion, maternal health services, reproductive health care for adolescents and unmarried women, treatment for gynecological problems such as reproductive tract infections and AIDS/STD prevention. The programs were for the most part, however, confined to the NGO sector. The Foundation has recently sought to support similar experimental efforts within the larger public sector program, which remains in India the most important source of health care for many poor women and their families. This initiative has acquired or added importance in light of the recent policy decisions of the Indian Family Welfare Program to emphasize client needs and quality of care rather than

The public sector remains a key source of reproductive health care for women

Auxiliary Nurse Midwives have been trained to listen to female clients and to provide effective counseling

demographic targets, and to expand the focus of the program to address the broader reproductive health needs of Indian couples.

New Initiative

"In a way, the work of the health post is drab and dry. We never seem to consider the problems and feelings of the patients."

"There was quantity in our previous work, but no quality. Now the quality is important, not the quantity."

These are the reactions of some of the 20 Auxiliary Nurse Midwives (ANMs) of the Public Health Department of the Bombay (Mumbai) Municipal Corporation (BMC), who participated in a research study conducted by the BMC and the University of Liverpool which investigated the social and clinical aspects of Pelvic Inflammatory Disease (PID) among poor women in Mumbai.

Before joining the project, the experience of the ANMs was confined to working in health posts, maternity clinics and post-partum centers. Their work involved persuading women to limit the number of their children, delivering their babies in hospital and bringing their children in for immunization. It also included visiting women in their homes to explain the concept of family planning. But within their usual routines, they had little time or training to discuss issues of equal concern to their clients.

As part of the innovative PID research study group, the ANMs learned to adopt a new approach. They began to listen to their patients, to talk to them about their needs and problems and to reckon with the fact that their own knowledge and skills might need enhancement. For example, in a target-oriented program for family planning, there is little thought or concern for women who are infertile and who suffer social and sexual humiliation in consequence. Sex and sexuality are never discussed, and even a problem like cramps during intercourse is not given due attention.

Understanding these difficulties – which they as women also shared – and

An innovative and experimental action research initiative involving collaboration between a women's health NGO (Sahaj), the Greater Mumbai (Bombay) Municipal Corporation, and the University of Liverpool represents an effort to introduce a women's health perspective within existing municipal health services

The program covers a population of almost one million people, and involves the participation of medical professionals, community-level development workers, health volunteers and other Corporation staff

faced with their own inability to cope with them, the ANMs acquired new perspectives on women's reproductive health needs and the quality and scope of services required.

Self-evaluation, inter-personal communication and interaction with the resource person resulted in an urge to share this new awareness with senior staff and administrators. The ANMs performed plays and made presentations highlighting the needs of the community. The Municipal Corporation has been sensitized to this critical input, and made aware of the importance of incorporating changes within regular health services to reach out to poor women of all ages. Initiatives are now being taken to build capacity and expand women-friendly services.

The new project, supported by the Foundation, brings together the BMC, the University of Liverpool and Sahaj, an NGO with experience in women's reproductive health field, to collaborate in a three-year effort to extend the scope and quality of this work through research and interventions within the realistic constraints of a municipal health program.

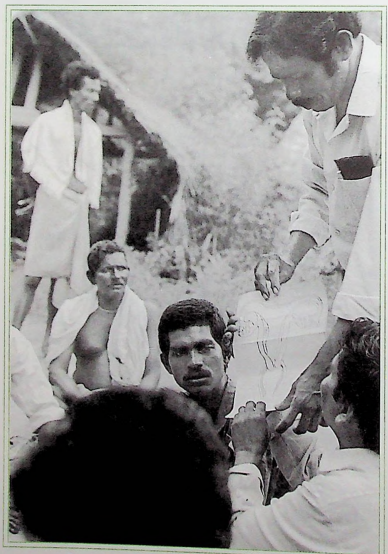
Focusing on women's health centers and satellite health posts attached to these centers, the program covers a population of almost one million people and involves the participation of medical professionals, community-level development workers, health volunteers and other BMC staff.

The planned interventions will focus heavily upon augmenting the skills of the existing cadre of trained and experienced female paramedical staff and incorporating the perspectives of both community women and service providers. The issues addressed will cover knowledge of reproduction, physiology, sexuality, disease transmission and other health problems such as infertility.

Although the health needs of women are the primary project objectives, considerable emphasis is placed upon increasing the involvement of male partners and on drawing on the services of male health workers to help improve the sexual and reproductive health of both men and women.

Implementing new ideas poses many challenges. Introducing change within a well-established system, redefining and reorganizing jobs and functions, evaluating results, changing attitudes, pulling together a large number of people to work together as a team – these are some of the tasks that need to be successfully completed. But with the commitment of the three partners of this project – the BMC, Sahaj and the Liverpool School of Tropical Medicine – this innovative and experimental initiative may provide a model for larger institutional programs that reach the poorest of women with the services they need. ⊔

Reaching male partners is a critical component of comprehensive health care. The program places considerable emphasis on the involvement of male partners and health workers



Legal But Still Unsafe – The Complexity Of Abortion In India

Abortion, though made legal in India in 1971, remains an emotive but little-discussed issue, hidden behind walls of traditional mores and beliefs. The Foundation is trying to break down these walls and give greater visibility to the issue through a coordinated program of research and advocacy

Safe abortion constitutes a key element of reproductive health care: Women undergoing examination prior to abortion

PERHAPS no aspect of reproductive health remains as contentious or emotionally charged as the issue of abortion. Despite encouraging trends in legalization over the last two decades, much of the world's population continues to live in settings where access to abortion is highly restricted. This is especially true in developing countries where, with few exceptions, abortion continues to be permitted only in the event of a woman's life being endangered, or on broader medical or judicial grounds such as rape or incest. Yet the right to terminate an unwanted or unintended pregnancy through safe abortion

In developing countries, abortion continues to be permitted only in the event a woman's life is endangered, or on broader medical or judicial grounds such as rape or incest

The Case of Waghapur

WAGHAPUR village in the dry farming area of Saswad *taluka*, one of the districts under study by the Center for Enquiry into Health and Allied Themes (CEHAT), is a fairly large and reasonably prosperous village. Interestingly, it has a tradition of providing school tea-chers for the surrounding areas, which makes it one of the more progressive villages in the region. But when CEHAT began work in the village, its field workers faced both mistrust and hostility. Patience, persistence and assurance of confidentiality, however, eventually paid off and helped build a relationship of mutual respect. With the help of local women, CEHAT was able to gather information on the incidence of abortion in the village, the types of services that were available, and the responses of the women involved.

The story that emerged through these case studies and interviews in six villages by CEHAT highlighted the multiple factors that come into play during the decision-making process for an abortion: practical and financial conditions; the need for secrecy; the social compulsion to produce male children; and family planning. Also underlined was the fact that abortion, in many cases, is substituted for effective contraception. Lack of privacy is a crucial factor. For example, sexual relations can take place in the field, or wherever an opportunity arises. Husbands take little or no responsibility for contraception. What is more, they often prevent wives from using contraceptives for fear about their subsequent fidelity. Vasectomy is never mentioned or considered as an alternative method. And the physical and mental trauma suffered by the wife from repeated abortions causes little or no concern to other family members.

An interesting finding was that there was almost no ethical or religious guilt on the question of abortion. In one instance only, was the woman upset on this account when she actually saw the four-month old fetus, and the family was asked to dispose it off. In most cases, women fear for their own safety, their health and their status in the family. ❑

represents a fundamental element of reproductive health.

Abortion – or the Medical Termination of Pregnancy (MTP), to give it its official name – was made legal in India in 1971, one of the earliest developing countries to have done so. Safe abortion, however, continues to be a major problem in the promotion of women's health and reproductive health. Complex social and emotional factors inhibit access to safe medical services, especially in a predominantly traditional society where the status of women is low and a recognition of their rights is rarely taken into account.

Abortions, however, do take place. But often enough, they constitute illegal or unsafe abortions: illegal, because they are performed by unskilled, non-medical practitioners, and doubly unsafe because they are often performed in secret, under highly unhygienic conditions, endangering the life of the woman. Although reliable data is lacking, it has been estimated that abortion may account for as much as one quarter of the estimated 100,000 maternal deaths which still occur in India annually. Despite its potential to contribute significantly to improvements in women's health, safe abortion remains a largely neglected component of reproductive health services in India.

In recognition of this situation, the Ford Foundation's Reproductive Health Program sought to give greater visibility to the issue through a coordinated program of research and advocacy in 1992. A monograph entitled *Abortion in*

The KEM study showed that of 1,600 married women who had undergone abortion, 70 per cent cited the lack of contraceptive means as the cause for resorting to abortion to limit the size of their families or space births

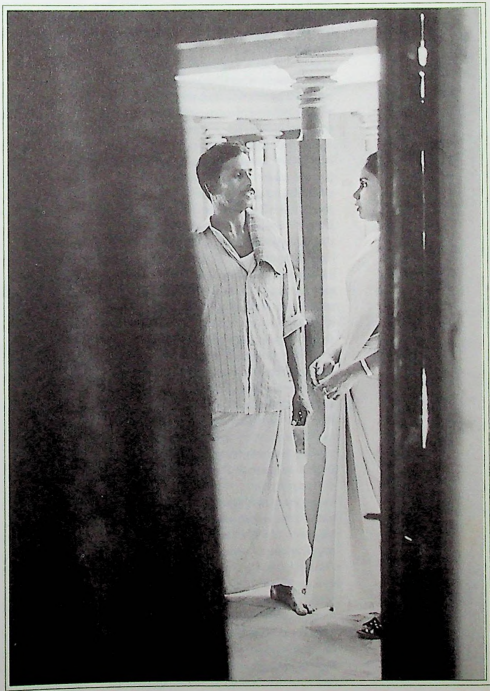
India: An Overview, was commissioned to examine the issue of abortion 20 years after legalization. In 1993, a Foundation grant supported the first national workshop on the current status of abortion and abortion services through the Parivar Seva Sanstha (PSS), the nonprofit Indian affiliate of Marie Stopes International. Later grants enabled PSS to establish linkages with a large number of community-based organizations, provide training to the field staff of NGOs, and upgrade its current facilities to include high-quality abortion services as well as ante-natal and post-natal care, treatment for reproductive tract infections and STDs, besides counseling and education.

In 1995, the Foundation supported two in-depth research studies on abortion in rural Maharashtra to focus on the experiences of poor women with regard to abortion and to better understand their needs. The Center for Enquiry into Health and Allied Themes (CEHAT) study took place in six villages in Pune district, while the King Edward Memorial (KEM) Hospital Research Center, Pune, conducted a community-based surveillance study of 1,600 abortion cases in 200 villages in the districts of Pune, Nagar and Aurangabad.

Not all findings from the two studies were comparable; in part, because the KEM study considered abortions among married women, while the CEHAT study explored abortions both among married and unmarried women.

Abortion is far more prevalent in rural settings than is apparent on the surface. Its incidence is, however, difficult to assess because the subject is taboo and seldom openly discussed. It is a strictly private, personal or familial affair – one in which, according to CEHAT findings, frequently the woman concerned had little say. The parents-in-law, the husband, the mother and elders in the family are most often the decision-makers. The woman herself is pressurized into doing what is considered 'best' for the family, and her physical and emotional needs are

There is a need for increasing women's decision-making capacity in all aspects of the issue



Women are beginning to use the services of trained medical practitioners and, given a choice between free public services at government hospitals and private clinics, families are choosing private practitioners

generally overlooked. The CEHAT study confirmed this. But as reported in the KEM survey, in 86 per cent of the cases, the women interviewed claimed, rather surprisingly, that the decision for abortion was jointly taken by husband and wife.

There are many different reasons for abortion in rural Maharashtra: to prevent the birth of a girl child; an unwanted birth; when pregnancy is the result of rape; when illicit sexual relations have taken place before or outside of marriage, especially if the husband has been away for long periods of time or if widows or abandoned women are involved.

However, several interesting findings emerged from the KEM study which showed that out of a total of 1,600 married women who had undergone abortion, 70 per cent cited the lack of contraceptive means as the cause for resorting to abortion to limit the size of their families or space births. Less than one out of five women opted for abortion for the purpose of sex selection.

In the past, abortions in village communities were usually performed by a *dai* or local midwife who relied on traditional practices and local herbal remedies. Not surprisingly, the cost in terms of women's health and lives was high, even in small towns or villages with access to basic medical facilities. The reasons for this are not hard to identify. Although abortion has been legal in India for more than two decades, it is still a subject that is connected with 'shame' in the family. Moreover, spending money on the woman, usually the daughter-in-law, has very low priority, even if her health and safety are at risk. Ignorance, poverty, social problems and lack of access to safe medical facilities compound the problem.

At the same time, the studies indicated that more and more women are beginning to use the services of trained medical practitioners and that, given a choice between public services at government hospitals which are free and private clinics where payment has to be made, families choose private practitioners for reasons of safety (the provider has performed many such operations), and quality (the availability of medical facilities like oxygen/blood in case of emergencies). The KEM research showed that 90 per cent of the women studied opted for the private sector.

Another important factor in the choice of private clinics is the issue of confidentiality. At government facilities, the consent and signature of the husband are essential for an abortion, the exception being when the woman alleges that she is the victim of rape. That the husband's consent is not a legal requirement is not generally known, nor is there widespread knowledge of legal issues. And, although the population control program is now moving away from a target-oriented approach, in the final analysis, it is still numbers that seem to matter most in the public sector. The result is that acceptance of a long-term contraceptive method is still often made a pre-condition for the provision of an abortion.

Once again, on the question of women's health and safety, the KEM study presented a largely optimistic picture. It found relatively low rates of morbidity and mortality through technically 'illegal' abortions, suggesting the need for allowing more practitioners (non-allopathic doctors and nurses) to be officially trained in providing early pregnancy terminations.

The studies highlighted a number of significant factors that need to be addressed in creating an acceptable climate for the use of safe abortion, particularly by poor women: strengthening the outreach and quality of services provided by the family planning program; easy access and a high quality of abortion services in rural areas; the need for more practitioners (nurses and *dais*) to be officially trained to provide safe, early pregnancy terminations; legal reform (the law is ambiguous about certain issues like unwed mothers) along with active efforts to disseminate legal information among women and abortion providers; and an expanded program of public education and advocacy on safe abortion. Equally, if not more, essential is the need for counseling before and after abortion and for increasing women's decision-making capacity on all aspects of the issue, especially those of their own sexuality and reproductive health. ❑

From Safe Blood And Safe Sex... To HIV/AIDS Awareness For All

In Nasik, the SOS Medical and Educational Foundation is taking giant strides in ensuring availability of safe blood and in creating awareness of HIV/AIDS among the community

Project Red Revolution

As a doctor working in Nasik on a variety of community health projects since 1989, Ramesh Goud was distressed at the unavailability of safe blood for transfusion as a life-saving measure. In 1992, determined to consolidate his activities and work on concrete and focused projects, he set up the SOS Medical and Educational Foundation. One of his first projects was to look into the problem of ensuring that safe blood was available for all members of the community.

India has the largest blood bank turnover in the world. The national blood requirement per annum is eight million units. Yet only 1.5 million units come from the voluntary sector. The rest is obtained from professional blood donors who are paid for the blood they sell; 75 per cent of this blood is not screened at all.

When people sell blood for money, it is because of poverty, drug addiction, alcoholism or for some other desperate reason. Not infrequently, the result is unsafe blood. The hazards of using such blood for transfusions can be imagined, especially now, with the advent of HIV/AIDS, the incidence of which is rising daily. People infected with the HIV virus may look and feel well and may, therefore, be unaware that they are infected. Even with rigorous HIV testing, it is not always possible to get 100 per cent accurate results, as the donor could well be in the window period, a period that could stretch from six weeks to one year in which, although infected with HIV virus, the donor may not test positive.

This was the problem that Dr Goud had to overcome. From a base-line study conducted in the Nasik region, some disturbing findings emerged. It was established that 50 per cent of the supply in blood banks came from professional donors, 30 per cent was collected through blood bank camps, and only 20 per cent came from voluntary donors. It was also clear that, contrary to general belief, only 10 per cent of it was required for emergencies, and 30 per cent for post-operative surgeries. The largest proportion, some 60 per cent, was used in the treatment of anemia in women. It could safely be concluded, therefore, that most blood requirements could be arranged before planning surgery; that banking blood could more safely and efficiently be supplemented by motivating voluntary blood donors to be on call;

ANIL, a young boy in Nasik, was a drug addict. In an effort to control him, his parents stopped giving him pocket money. So he began to steal to buy 'brown sugar'. He stole money and valuables from home and was reduced to selling kitchen utensils to satisfy his growing addiction.

One day, unable to pay at his regular *adda* (den), he was thrown out on the street. Someone gave him a bright idea — one that would solve his problem forever: Why didn't Anil become a blood donor? Here was the easiest way to make money. What is more, he would not have to depend on anyone except himself. Anil found that it was really easy. He sold his blood 19 times to three licensed blood banks within weeks!

The Realities About Blood Donation In India

- India has the largest blood bank turnover in the world (Rs 100 million).
- National blood requirement per annum is eight million units.
- Only 1.5 million units come from the voluntary sector.
- 75 per cent of the blood from professional donors in the country is not screened at all.
- Average cost per bottle of blood is Rs 450.

Source: SOS, Nasik

A Crisis Of Confidence

AT a Nasik workshop on AIDS awareness in 1993, commercial sex workers, who call themselves "women in the trade", complained bitterly about sub-standard condoms supplied under the government's AIDS Control Program and proved that the lessons on safe sex had been well learned. One of them demonstrated – very dramatically – how vulnerable they were to the disease. From several layers of wrapping she produced a used condom, carefully knotted at the top. The fluid inside was brown – semen tinged with blood. How, she demanded, could they protect themselves if the condoms were no good or ruptured easily?

It was a legitimate complaint. Despite the fact that condoms have been placed under the 'Schedule R' category, on par with essential and life-saving drugs, manufacturers are not held sufficiently accountable for strict quality control.

At a more light-hearted level, a woman said they were so concerned about the AIDS menace that they always turned away a customer if he refused to use a condom. "Even if he offered me Rs 300, I would send him packing. Even if he offered me Rs 3,000 I would ask him to get lost. But if he offered me Rs 3 lakh (a ringing laugh here), I suppose I would accept. I know I would die, but at least my children would be provided for." ⊔

and that alternative remedies for the treatment of anemia were not only possible but also more efficacious.

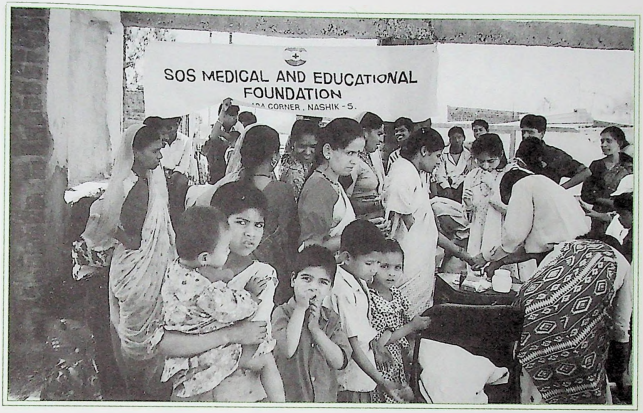
Project Red Revolution, the first SOS initiative, was thus launched. It has helped bring about considerable change in Nasik's attitude to blood donation. Meetings with professional blood-sellers, workshops for voluntary donor motivation, lectures at colleges, schools, clubs, offices, factories and *gram panchayats* in the villages – all highlighted the need for gifting rather than selling blood, ensuring that every patient receives blood from a known and safe source. The most tangible result of this effort is the publication of a *Voluntary Blood Donors' Directory* for Nasik city listing, according to their blood type, willing donors who are available in an emergency to gift blood and can be contacted by individuals or hospitals, should the need arise.

Project For Commercial Sex Workers

An unexpected result of Project Red Revolution was the entry of SOS into the field of HIV/AIDS awareness, prevention and control. Unsafe blood was one factor linked to the spread of HIV/AIDS. Unsafe sex was another – and more important – factor. Now SOS involved itself in the crucial function of creating awareness in communities that were most vulnerable to the disease through unsafe sex. The Project for Commercial Sex Workers (CSW) began in 1992 and was at first confined to Nasik city. Today, it reaches out to four districts around the city and covers an area of 1,500 sq km. Although the number of women it reaches amounts to about 1,000, the size of the clientele they serve is enormous.

Over the years, SOS has built up a

Project Red Revolution, the first SOS initiative, has helped bring about considerable change in Nasik's attitude to blood donation



One focus of HIV/AIDS prevention efforts by SOS is among women in the slums of Nasik

relationship of trust and respect with the members of this community. Distributing condoms and providing information about safe sex is only one aspect of the project. Empowering women to nego-tiate safe sex is another. But SOS goes well beyond these immediate concerns. It looks into issues like health, STD services, addiction and dealing with the police. It inculcates saving habits, advises on children's welfare and visits the women on festive occasions like Diwali and Holi.

This has underlined the organization's concern and involvement with the community and brought about a feeling of greater empowerment among the women. HIV/AIDS is not dealt with in isolation. It has been treated as one more problem issue for women. SOS has expanded its activities to reach out to slum women in many parts of the city, and its STD/AIDS Sexual Health Counseling Center in Nasik city is open to all in need of information or counseling. Work with CSWs led naturally to other high-risk behavior groups who were most vulnerable to HIV/AIDS. Clients of CSWs, truck drivers, industrial workers and professional blood donors were identified and the program was extended to draw them in. SOS has also developed and conducted training sessions and workshops for a variety of public organizations – among them, the Maharashtra Police Academy in Nasik, the Central Jail in the city, and local corporate groups, factories, colleges, schools, clubs and *gram panchayats*. An important target group are doctors. Many of these initiatives, like the approach to the Police Academy, started out as pilot projects. These have proved so successful that there is now a demand from these and other organizations for more workshops and follow-up sessions.

Creating a network of sensitized groups – doctors, police and NGO AIDS Cells – will, it is expected, make for a more sympathetic and well-informed approach to the prevention and control of the disease and help towards the health and well-being of women for whom the project has ultimately been designed. ⊿

Distributing condoms and providing information about safe sex is only one aspect of SOS. Empowering women to negotiate safe sex is another

Educating The Guardians Of Law

WHO is your favourite film star? Why do you like her best?" This is the beginning of an AIDS awareness workshop being held at the Police Academy at Nasik. About 45 young men and 15 young women – all training to become police officers – sit together in a classroom, a little uncertain perhaps, but all attentive. They are here to attend a special course conducted by Dr Goud to familiarize them about HIV/AIDS and to sensitize them to a problem that they will have to handle in their own lives and also as part of their duties as police officers.

Breaking the ice, and the barriers of silence that such subjects invariably create, is the first step in the process. But well before the workshop is over, the young people have been drawn in, and are participating in a lively discussion. They are informed about the gra-vity of the spread of AIDS, their misconceptions and fears are addressed, and their questions are answered fully and frankly. Long after the workshop is over, they continue to crowd around Dr Goud, clarifying doubts or seeking reassurance.

These workshops for police cadets have been so popular that every year a fresh batch of about 500 officers is trained and sensitized. ⌟

Media And Advocacy For Reproductive Health

Utilization of the media for dissemination and advocacy in the field of reproductive health has acquired a prominent position in the Foundation's programing

THE 1934 Cairo Conference on Population and Development marks a watershed in international thinking on population issues. It achieved a remarkable global consensus on the need for a new approach to this most urgent of problems facing developing countries. What was needed for the greater success of such programs in the 1990s, the Cairo meeting stressed, was an approach that was "non-coercive, of good quality and client-centered".

Responding to this call, the Government of India abolished its policy of setting demographic targets, implemented and monitored for the most part by officials. The emphasis now is on an increased coverage and toning up of the reproductive and child health delivery systems, the governmental effort supplemented by the private and voluntary sectors. However, while India's new approach recognizes the importance of this paradigm shift, an official strategy to disseminate information about the new approach – and about what the new thinking implies at the conceptual, programmatic and operational levels – is yet to be articulated.

For over four decades, the Ford Foundation has been concerned with health issues in India. Beginning with

Full and accurate information on sexuality and reproduction are essential prerequisites of reproductive health and rights

population, it moved into the areas of infant mortality and child survival, an involvement that later broadened to include reproductive health. With the government and other large donors also initiating action in these areas, the Foundation shifted its focus to the problem of women's health in its various dimensions: their health as wives and mothers, and as individuals whose problems had long been neglected or ignored.

The Foundation had concerned itself so far on funding non-governmental organizations (NGOs), launching innovative proposals with an operational content and programs of public advocacy and policy-making. But it also now turned its attention to the important goal of supporting communication programs utilizing the media for dissemination and advocacy purposes.

The media today serves a number of the public; it is increasingly seen as a powerful tool in the promotion of socially relevant and development causes. Harnessing this tool in the service of reproductive health and child welfare is one of the more recent thrusts of the Foundation's development strategy.

Creating public discourse around reproductive health issues is widely acknowledged today as among the most critical challenges facing South Asian countries. A recent consultancy and workshop on advocacy for women's reproductive health and empowerment identified media advocacy as an important means through which its objectives can be pursued and the information spread among multiple constituencies. To date, however, NGO and voluntary sector interactions with the media have been, for the most part, either reactive or just plain negative.

Developing radio and TV production skills to promote reproductive health and sex education is an important component of Foundation grants in this field

In India, the media sector has grown into a vibrant, independent and diverse entity, increasingly reaching rural communities. Radio, television and print media in particular have grown substantially over the past few years – with radio broadcasting clearly in the lead, covering approximately 96 per cent of the country's population. With India's adult literacy rate estimated at 51 per cent, television is naturally another popular medium although its reach is limited at present to the more affluent population of the cities, towns and larger villages. Despite the high level of illiteracy, however, there are approximately 40,000 registered newspapers or magazines published in some 90 languages and dialects, 2,500 of them registered as dailies.

Recognizing the importance of more information, debate and discussion on reproductive health issues and its intimate links with women's livelihood and empowerment, the Foundation's New Delhi office has made grants to the following organizations:

The Panos Institute, UK, was funded in 1995 to organize a workshop for journalists to promote balanced and comprehensive reporting of reproductive health and rights issues in South Asia. The workshop brought together journalists from the South Asian region and resource persons to interact with NGO representatives from the reproductive health field. The objective was to review existing barriers standing in the way of better coverage of such issues by the press, and to develop a systematic long-term strategy to promote more, better informed and quality reporting on the subject. The idea of creating a media resource center focusing on reproductive health emerged out of the workshop.

Madhyam Communications in Bangalore has been funded to set itself up as a one-stop archival window for resource materials and communication tools. Books, research studies, videos, slide presentations, tapes, posters and innovative communication materials like toys from research organizations, funding agencies, filmmakers, documentation centers and women's groups can thus be readily accessed by students, activists, researchers and all those working with women's health issues.

To document three key reproductive health groups on film is yet another media initiative advocating reproductive health policies and programs in India. **The Magic Lantern Foundation**, New Delhi, is producing a set of films on health groups from different areas to underscore the commonality of experience and problems; to present replicable alternatives; and, to generate awareness

of such interventions. The films are targeted at groups working on women's health, STDs and HIV/AIDS, but they are also expected to address a larger audience of planners, policy-makers and health professionals.

Street theater and innovative audio-visual entertainment are the non-conventional mediums put to use by the **Nalamdana Charitable Trust**, Chennai, to raise the awareness levels of HIV/AIDS-related issues among largely illiterate audiences. Support from the Foundation will enable Nalamdana to disseminate information on STD testing, counseling and other services available in the inner city slums of Chennai, surrounding villages and in factory townships.

Nexus, a bimonthly newsletter on health issues is produced by **Population Services International**, Delhi. Foundation funding has helped it to expand and strengthen its objectives. A two-pronged media advocacy strategy encourages journalists to write on issues of sex, sexuality, reproductive health, maternal and child care, STDs and HIV/AIDS and publish them in local, regional or national newspapers. These articles are then reprinted in *Nexus* which serves as a source of information for journalists, policy-makers, researchers and health workers. In order to reach out to the widest possible readership, a Hindi insert is now a regular feature of this journal.

Point of View, Mumbai, has been funded to create a 30-minute video film and a 30-second public service TV spot on the issue of women and HIV/AIDS. A new project under consideration is an ambitious 52-part reproductive health serial for TV and a set of three films based on *Our Bodies, Ourselves*.

To create awareness about women's health, lives and realities, a new, national-level media initiative funded through **Aalochana** includes the reproduction of a photographic exhibition documenting women's lives over the past 50 years. This will be published in book form and the exhibition-cum-book will be distributed in 16 of India's states through various channels to coincide with the 50th anniversary of the country's independence. On completion of the 16-state tour, the photographs will be used as long-term resource materials for use in training and orientation.

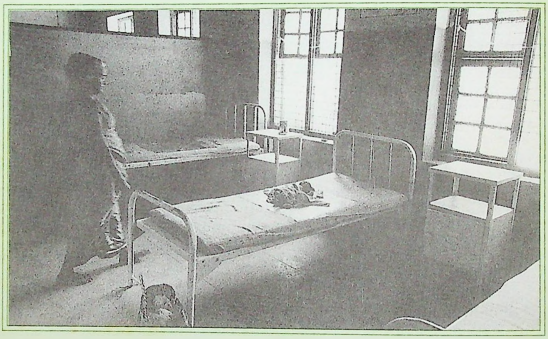
Direct interaction at the grassroot level is an important complement to mass media efforts

A grant made recently to the **British Broadcasting Corporation (BBC)** takes a major step in this direction. National workshops will bring together radio and TV producers from different parts of the country for a general orientation on reproductive health and sexuality issues.

This initiative will be followed by longer workshops, combining in-depth topic material and intensive training on radio and TV production and formats, leading to the development of proposals for radio and/or TV programing around the themes of reproductive health and sexuality. The BBC would then select and support, on a competitive basis, a minimum of two TV and six radio projects for production. In the project's final phase, a one-day monitoring and evaluation exercise will bring together all participants from the previous workshops to preview completed projects, to discuss and evaluate approaches for addressing reproductive health and sexuality issues in India. ❑

What Has 50 Years Of Independence Meant For Women In India?

Two telling photographs from the *In Black and White* photo exhibition, funded by the Foundation and presented by Point of View, Mumbai and Aalochana, Pune



ZANA BRISKI

Abandoned new-born girl and midwife

ZANA BRISKI

Mother-in-law and new-born grandson

WH 15

Reproductive Freedom & human rights

CENTER FOR REPRODUCTIVE LAW & POLICY • INTERNATIONAL PROGRAM

Women's Reproductive Rights

The International Legal Foundations

All persons have reproductive rights, which are founded upon principles of human dignity and equality. But women have a unique role to play in human reproduction and are uniquely affected by government policies. A reproductive rights perspective can empower us to identify the numerous strategies for social and political change and to seek policies and laws that improve women's lives. Women's reproductive rights have thus served as a rallying cry in many countries around the world. While the human rights perspective is not limited to legal principles, it is important to note that there is an international legal basis for our demands for reproductive self-determination. Women's reproductive rights under international human rights law are a composite of a number of separate human rights. In this publication, we seek only to cite selected human rights provisions from major international legal treaties or conventions that may be understood, at least in principle, to provide protection for reproductive rights. Widespread recognition of the legal foundation for such claims is a first step toward ensuring that reproductive rights become a reality for the world's women.

The Rights to Health, Reproductive Health, and Family Planning

The International Covenant on Economic, Social and Cultural Rights
(the "Economic Rights Covenant")

Article 12

1. The State Parties to the present Covenant recognize the right of everyone to the enjoyment of the highest attainable standard of physical and mental health.

2. The steps to be taken by the State Parties . . . to achieve the full realization of this right shall include those necessary for: (a) The provision for the reduction of the stillbirth-rate and of infant mortality . . .; (d) The creation of conditions which would assure to all medical services and medical attention in the event of sickness.

120 WALL STREET • NEW YORK, NEW YORK 10005 USA • TEL 212-514-5534 • FAX 212-514-5538

The Convention on the Elimination of All Forms of Discrimination Against Women (the "Women's Convention")

Article 10 State Parties shall . . . ensure . . . (h) Access to specific educational information to help to ensure the health and well-being of families, including information and advice on family planning.

Article 12.1 State Parties shall take all appropriate measures to eliminate discrimination against women in the field of health care in order to ensure, on a basis of equality of men and women, access to health care services, including those relating to family planning.

Article 14.2 State Parties . . . shall ensure to . . . women [in rural areas] the right . . . (b) To have access to adequate health care facilities, including information, counselling and services in family planning.

Article 16.1 State Parties shall . . . ensure, on a basis of equality of men and women: . . . (e) The same rights to decide freely and responsibly on the number and spacing of their children and to have access to the information, education and means to enable them to exercise these rights.

The Right to Life, Liberty, and Security

The International Covenant on Civil and Political Rights (the "Political Covenant")

Article 6.1 Every human being has the inherent right to life. This right shall be protected by law.

Article 9.1 Everyone has the right to liberty and security of person.

The Universal Declaration of Human Rights (the "Universal Declaration")

Article 3 Everyone has the right to life, liberty and security of person.

The Right to Marry and to Found a Family

The Universal Declaration

Article 16.1 Men and women of full age, without any limitations due to race, nationality or religion, have the right to marry and to found a family.

The Women's Convention

Article 16.1 State Parties shall take all appropriate measures to eliminate discrimination against women in all matters relating to marriage and family relations . . . .

The Economic Rights Covenant

Article 10.1 Marriage must be entered into with the free consent of the intending spouses.

The Political Rights Covenant

Article 17.1 No one shall be subjected to arbitrary or unlawful interference with his (sic) privacy, family, home . . . .

Article 17.2 Everyone has the right to the protection of the law against such interference or attacks.

Article 23.2 The right of men and women of marriageable age to marry and to found a family shall be recognized.

Article 23.3 No marriage shall be entered into without the free and full consent of the intending spouses.

The Right to Modify Customs That Discriminate Against Women

The Women's Convention

Article 2 State Parties . . . undertake . . . (f) To take all appropriate measures, including legislation, to modify or abolish existing laws, regulations, customs and practices which constitute discrimination against women; (g) To repeal all national penal provisions which constitute discrimination against women.

Article 5 State Parties shall take all appropriate measures: (a) To modify the social and cultural patterns of conduct of men and women, with a view to achieving the elimination of prejudices and customary and all other practices which are based on the idea of the inferiority or the superiority of either of the sexes or on stereotyped roles for men and women; . . . .

The Right to Enjoy Scientific Progress and to Consent to Experimentation

The Economic Rights Covenant

Article 15.1 The State Parties to the present Covenant recognize the right of everyone . . . (b) To enjoy the benefits of scientific progress and its applications . . . .

The Political Rights Covenant

Article 7 No one shall be subjected to torture or to cruel, inhuman or degrading treatment or punishment. In particular, no one shall be subjected without his (sic) free consent to medical or scientific experimentation.

The Right of Sexual Non-Discrimination

The Women's Convention

Article 1 [T]he term "discrimination against women" shall mean any distinction, exclusion or restriction made on the basis of sex which has the effect or purpose of impairing or nullifying the recognition, enjoyment or exercise by women . . . of human rights and fundamental freedoms . . . .

Article 3 State Parties shall take in all fields, in particular in the political, social, economic and cultural fields, all appropriate measures, including legislation, to ensure the full development and advancement of women, for the purpose of guaranteeing them the exercise and enjoyment of human rights and fundamental freedoms on a basis of equality with men."

The Universal Declaration

Article 2 Everyone is entitled to all the rights and freedoms set forth in this Declaration, without any distinction of any kind, such as race, colour, *sex*, ...

The Political Rights Covenant

Article 2.1 Each State Party . . . undertakes to respect and to ensure . . . the rights recognized in the present Covenant, without distinction of any kind, such as race, colour, *sex*, language, religion . . . .

The Economic Rights Covenant

Article 2.2 The State Parties to the present Covenant undertake to guarantee that the rights enunciated in the present Covenant will be exercised without discrimination of any king such as race, colour, *sex*, ...

May 25, 1994

For further information on these issues, contact Rachael N. Pine, Director of International Programs, Anika Rahman, Staff Attorney, or Rebecca Casanova, Associate.

DH 6

finrrage ..

Feminist International Network of
Resistance to Reproductive and
Genetic Engineering

FINRRAGE POSITION PAPER

RU 486

October 1991

FINRRAGE supports the exclusive rights of all women to decide whether or not to bear children without coercion from any man, medical practitioner, government or religion. FINRRAGE demands that women shall not be criminalized for choosing and performing abortion.
Declaration of Comilla. FINRRAGE - UBINIG International Conference 1989, Comilla, Bangladesh

RU 486, synthesised by French medical scientist in 1980, is promoted as a new concept of abortion. Scientific reports recommend RU 486, administered with adjunct prostaglandins, as preferable to conventional abortion methods on the basis of its safety, privacy, medical independence, and community acceptability. Research by FINRRAGE women denies these claims and suggests that the short and long term biological safety aspects of these two potent drugs have been inadequately addressed. Specifically, we are concerned that the RU 486 anti-progesterone activity may extend to other vital organs such as the adrenal gland, and the hypothalamus and pituitary glands within the brain. Furthermore, the prostaglandin component of chemical abortion, that has been added to boost RU 486 efficacy from its 80% when administered alone, to 95%, represents an unnecessary challenge to the immune system of healthy women. In other words, yet another time, women are used as an experimental site a "miracle pill".

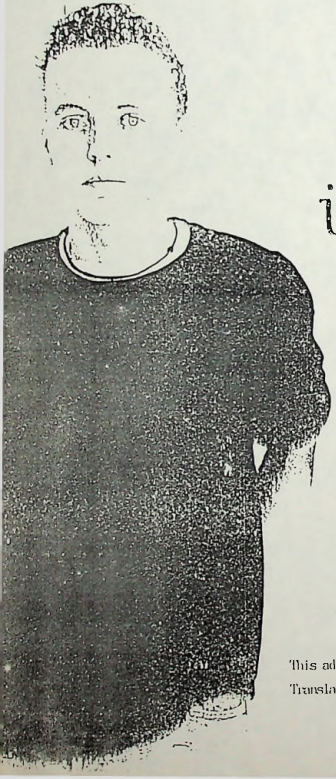
FINRRAGE
International Coordination
D-2000 Hamburg 20
Postfach / P.O. Box 20 19 03 Federal Republic of Germany

Contrary to the reports of chemical abortion by the media, a number of short-term adverse effects are apparent within the conflicting evidence from the medical literature. Included are pain, bleeding, vomiting, diarrhoea and several less common, but more serious, effects such as thrombosis and cardiac arrythmia. The pain experienced is frequently of sufficient severity to warrant the use of strong analgesia, often opiates. Blood loss has lowered haemoglobin levels to the extent that emergency curettage and/or blood transfusion were necessary in as many as 4% of RU 486/prostaglandin-treated women. The short-term side effects of chemical abortion appear ethically unacceptable for women in general, and particularly for women from the so-called third world, where many are already disadvantaged by pre-existing anaemia and have restricted access to medical rescue facilities.

Proponents of RU 486/prostaglandin have stressed the advantages of chemical abortion in demedicalising and humanising the abortion process. Yet at its present stage of development, an RU 486 induced pregnancy termination requires 4 medical consultations, compared with 2 for conventional abortion. The perception that it is a do-it-yourself method is mistaken and groundless. The intensive medically supervised procedures and follow-up visits are absolutely essential to safeguard women against the hazards of RU 486 and prostaglandins, both at the time of taking the medications, and for the immediate 4 to 6 hours, as well as for the ensuing 2 weeks. While this may be possible in industrialised countries, such safety precautions will be impossible to implement in developing countries given their poor infrastructure of medical facilities. Thus essential safety precautions will be denied to the vast majority of women. With this in mind, RU 486 and prostaglandin should not be sold (with or without prescription) at pharmacies and drug stores, so that its unsupervised, self-administered use in women may be kept to a minimum.

The psychological impact of chemical abortion resulting in miscarriage over a period of up to 2 weeks is a further argument against RU 486 when measured against safe, compassionate services that terminate pregnancy under local anaesthesia within 2 hours. The vociferous moral objections to RU 486 in Australia, the USA and western countries, may have prompted some women's health and community activists to prematurely join those in favour of RU 486-based abortion to encourage the drug's commercial distribution. However, FINRRAGE believes that this is a debate that needs to be urgently broadened to question the health hazards of drug-induced abortion, together with its ethical and socio-political consequences for women. Multifactorial analysis is essential to ensure that the global acceptance of RU 486 is not a premature judgement that represents an unethical hazard for women's reproductive health and which ironically may further erode women's access to the safe termination services presently available.

For all these reasons FINRRAGE strongly reject the promotion and use of RU 486/prostaglandin induced abortion. FINRRAGE sees it as a further part of the medical "weaponry" to destroy women. Like DES, Net-En, the Dalkon Shield and fertility drugs it is a new form of medical violence against women and violates women's dignity and their right to be free from bodily harm.



was würdest du tun?

ohne die

überbevölkerung

könnten die menschen

mit der natur i

harmonie leben

christoph krüger, 18, wrestedt

This advertising was spread in Cemmy

Translation: Wnt would you do?

without overpopulation
people could live with
nature in harmony

ESPRIT

was würdest du tun? esprit de corp., halskestr. 42-46, 4030 ratingen

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Family Planning at Work

Among the reams of graphs and tables published by the World Bank, nothing is as striking as a single chart that relates the economic status of countries to their fertility rates. With few exceptions, fertility rates — the average number of children born to a woman in her reproductive years — are highest in the poorest countries. In most developing countries the average woman has more than six children. In the wealthiest countries, with the exception of Gulf oil states, women on average have fewer than two. Reduction in population growth in developing countries, it is plain, is vital to economic progress.

Earlier this month the privately funded Population Crisis Committee published a report praising the progress of five countries toward that goal. Each of these countries has been successful in the years since 1980, for different reasons.

India's fertility rate has gone from 5.3 to 3.9 because of strong local efforts, mainly in five specific regions of the country.

In Thailand, which has cut its fertility rate in half, 68 percent of married couples are using modern contraceptive methods, with materials and services provided free or highly subsidized by the government.

Fertility rates in Colombia have gone from 3.9 to 2.9 largely because of the work of a private family planning association assisted by the government. Surprisingly, the report attributes some of this progress to tacit acceptance of family planning efforts by the Catholic hierarchy and to the open support of many priests and nuns at the parish level.

Moroccan women now average 4.5 children, as opposed to 6.9 in 1980, because of mobile teams of nurses and midwives who saturate the country with information and maternal and even make home visits.

And although Kenya still has a dauntingly high fertility rate of 6.7, it is better than 8.1, the rate 12 years ago. There, new technologies, including injectable contraceptives and contraceptive sterilization, have proven effective.

The United States no longer funds United Nations population programs or those run by foreign nongovernmental organizations that use their own money to fund abortions. That is shortsighted policy. But the American government has not reduced its overall spending on family planning abroad; this year it will be about $350 million. Each of these successful countries has received direct U.S. population assistance. Still, U.S. participation in multilateral population efforts would complement these programs and contribute even more to worldwide development.

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ವಿಕೇಂದ್ರಿಕೃತ ಯೋಜನೆಯಲ್ಲಿ ಸಮುದಾಯದ ಭಾಗವಹಿಸುವಿಕೆ: ಆರೋಗ್ಯ ಕಾರ್ಯಕ್ರಮದಲ್ಲಿ ಒಂದು ಪ್ರಯೋಗ

ಫೌಂಡೇಷನ್ ಫಾರ್ ರಿಸರ್ಚ್ ಇನ್ ಹೆಲ್ತ್ ಸಿಸ್ಟಮ್ಸ್ (FRHS)
ಮತ್ತು
ಆರೋಗ್ಯ ಮತ್ತು ಕುಟುಂಬ ಕಲ್ಯಾಣ ಇಲಾಖೆ, ಕರ್ನಾಟಕ

ಮುಖ್ಯ ಸಂಶೋಧಕರು :
ಡಾ॥ ನಿರ್ಮಲಾ ಮೂರ್ತಿ
ಆಲಿಲಾ ವಾಸನ್
ಡಾ॥ ಜಿ. ವಿ. ನಾಗರಾಜ್
ಡಾ॥ ಆರ್. ಕೆ .ಕುಮಾರಸ್ವಾಮಿ

ವಿಕೇಂದ್ರಿಕೃತ ಯೋಜನೆಯಲ್ಲಿ ಸಮುದಾಯದ ಭಾಗವಹಿಸುವಿಕೆ :

ಆರೋಗ್ಯ ಕಾರ್ಯಕ್ರಮದಲ್ಲಿ ಒಂದು ಪ್ರಯೋಗ

ಹಿನ್ನೆಲೆ :

ಏಪ್ರಿಲ್ 1996ರಲ್ಲಿ ಭಾರತ ಸರ್ಕಾರವು ಸಮುದಾಯ ಆಗತ್ಯಗಳ ನಿಗದಿಯನ್ನು (C.N.A.) ಆಳವಡಿಸಿಕೊಂಡಿತು. ಈ ವಿಧಾನದ ಉದ್ದೇಶಗಳೇನೆಂದರೆ :-

1. ಸ್ಥಳೀಯ ಆರೋಗ್ಯ ಯೋಜನೆಯ ಸಾಮರ್ಥ್ಯವನ್ನು ಹೆಚ್ಚಿಸುವುದು.
2. ಸಮುದಾಯ ಭಾಗವಹಿಸುವಿಕೆ ಹೆಚ್ಚಿಸುವುದು ಮತ್ತು ಸಮುದಾಯದ ಅವಶ್ಯಕತೆಗಳಿಗನುಗುಣವಾಗಿ ಒಳ್ಳೆಯ ಗುಣಮಟ್ಟದ ಸೇವೆಗಳನ್ನು ಒದಗಿಸುವುದು. ಈ ವಿಧಾನದ ಕೆಳಗೆ ಆರೋಗ್ಯ ಕಾರ್ಯಕರ್ತರು ಜನರನ್ನು ಮತ್ತು ಸಮುದಾಯದ ನಾಯಕರನ್ನು ಅವರ ಆಗತ್ಯವಾದ ಸೇವೆಗಳ ಬಗ್ಗೆ ಸಂಪರ್ಕಿಸಿ ವಿಕೇಂದ್ರಿಕೃತ ಯೋಜನೆಯನ್ನು ಸಿದ್ಧಪಡಿಸುವುದು.

FRHS ಎಂಬ ಸಂಸ್ಥೆಯು ಆರೋಗ್ಯ ಮತ್ತು ಕುಟುಂಬ ಕಲ್ಯಾಣ ಇಲಾಖೆ, ಕರ್ನಾಟಕದ ಜೊತೆಗೂಡಿ ಆರೋಗ್ಯ ಸೇವೆಗಳನ್ನು ಯೋಜಿಸುವಲ್ಲಿ ಮತ್ತು ಪರಿಶೀಲಿಸುವಲ್ಲಿ ಸಮುದಾಯದ ಭಾಗವಹಿಸುವಿಕೆಯನ್ನು ಹೆಚ್ಚಿಸಲು ಎರಡು ವರ್ಷಗಳ ಒಂದು ಯೋಜನೆಯನ್ನು ಕೈಗೊಂಡಿದೆ.

ಸಮುದಾಯದ ಭಾಗವಹಿಸುವಿಕೆಯ ಹಿಂದಿನ ಅನುಭವಗಳು: ಭಾರತದಲ್ಲಿ ಕುಟುಂಬ ಯೋಜನಾ ಕಾರ್ಯಕ್ರಮಗಳನ್ನು ಉತ್ತಮಪಡಿಸುವಲ್ಲಿ ಸಮುದಾಯವನ್ನು ತೊಡಗಿಸಲು ಅನೇಕ ಪ್ರಯತ್ನಗಳನ್ನು ಮಾಡಲಾಗಿದೆ. ಉದಾ: ಸಮುದಾಯ ಆಧಾರಿತ ವಿತರಣೆ (CBD) ಸಮುದಾಯ ಆರೋಗ್ಯ ಕಾರ್ಯಕರ್ತರ ಯೋಜನೆ ಹಾಗೂ ಸಂಪರ್ಕ ಕಾರ್ಯಕರ್ತರ ಯೋಜನೆ.

ಮಹಾರಾಷ್ಟ್ರದ ಪಾರ್ನರ್ ತಾಲ್ಲೂಕಿನಲ್ಲಿ FRHS ಸಂಸ್ಥೆಯು, ಆರ್. ಸಿ. ಹೆಚ್. ಸೇವೆಗಳನ್ನು ಉತ್ತಮಪಡಿಸಲು ಸಮಾಜ ಸೇವಕರ ಸಹಾಯವನ್ನು ಪಡೆದುಕೊಂಡಿತು. ಇದರಲ್ಲಿ ಸಮಾಜ ಸೇವಕರು ಪ್ರಮುಖ ಪಾತ್ರವಹಿಸಿದ್ದರು. ಈ ಸೇವೆಗಳನ್ನು ಬೆಂಬಲಿಸಲು ಪಂಚಾಯತ್ ನಾಯಕರನ್ನು ಪ್ರೇರೇಪಿಸಿದರು. ಗ್ರಾಮ ಮಟ್ಟದಲ್ಲಿ ಕ್ಲಿನಿಕ್‌ಗಳನ್ನು ನಡೆಸಲು ಜಿಲ್ಲಾ ಆರೋಗ್ಯಾಧಿಕಾರಿಗಳನ್ನು ಒಪ್ಪಿಸಿದರು. ಸಮಾಜ ಸೇವಕರು ಗ್ರಾಮಮಟ್ಟದ ಕ್ಲಿನಿಕ್‌ಗಳಿಗೆ ಭೇಟಿ ನೀಡಿ ಆವುಗಳ ಕಾರ್ಯಗಳ ಬಗ್ಗೆ ಆರೋಗ್ಯ ಆಧಿಕಾರಿಗಳಿಗೆ ತಿಳಿಸುತ್ತಿದ್ದರು. ಕ್ಲಿನಿಕ್‌ಗಳಲ್ಲಿನ ಸಾಮಗ್ರಿಗಳನ್ನು ಆದಷ್ಟು ಬೇಗ ಸರಿಪಡಿಸುವುದಲ್ಲದೆ, ಆಗತ್ಯವಾದ ಔಷಧಿಗಳನ್ನು ಸಾಕಾಗುವಷ್ಟು ಪೂರೈಸುತ್ತಿದ್ದರು. ಇದಲ್ಲದೆ ಕ್ಲಿನಿಕ್ ನಡೆಸಲು ಉದ್ದವಾದ ಜಾಗಗಳನ್ನು ಒದಗಿಸಲು ಸಹಾಯ ಮಾಡಿದರು. ಈ ರೀತಿ ಸಮಾಜ ಸೇವಕರು ಸಮುದಾಯ ಮತ್ತು ಆರೋಗ್ಯ ಸಿಬ್ಬಂದಿಗಳ ನಡುವಿನ ಸಹಕಾರವನ್ನು ಹೆಚ್ಚಿಸಿದರು. ಇದರಿಂದ ಆರ್. ಸಿ. ಹೆಚ್. ಸೇವೆಗಳ ಸಾಧನೆಯು ಹೆಚ್ಚಿತು. ಕ್ಲಿನಿಕ್‌ಗಳಲ್ಲಿ ಬಂದಿಗಿಂತ ಗರ್ಭಿಣಿ ಮಹಿಳೆಯರ ಹಾಜರಿ ಶೇ. 30 - 50 ರಷ್ಟು ಹೆಚ್ಚಾಯಿತು. ಸೇವೆಗಳ ಗುಣಮಟ್ಟವೂ ಹೆಚ್ಚಾಯಿತು. ಇದಲ್ಲದೆ ಈ ಕ್ಲಿನಿಕ್‌ಗಳಲ್ಲಿ ಮಹಿಳೆಯರಿಗೆ ಸಂಬಂಧಿಸಿದ ಆರೋಗ್ಯ ಸಮಸ್ಯೆಗಳನ್ನು ಗುರುತಿಸಿ ಅವುಗಳಿಗೆ ಚಿಕಿತ್ಸೆಯನ್ನು ನೀಡುವಂತಹ ಹೆಚ್ಚಿನ ಸೇವೆಗಳನ್ನು ಒದಗಿಸಲಾಯಿತು. ಈ ಸಾಧನೆಗೆ ಕಾರಣವೇನೆಂದರೆ ಇವರು ಆರೋಗ್ಯ ಕಾರ್ಯಕರ್ತರ ಸಮಸ್ಯೆಗಳನ್ನು ಗುರುತಿಸುತ್ತಿದ್ದರು ಮತ್ತು ಅವುಗಳಿಗೆ ಪರಿಹಾರವನ್ನು ಸೂಚಿಸುತ್ತಿದ್ದರು. ಇದಲ್ಲದೆ ಸಂಪನ್ಮೂಲಗಳನ್ನು ಸಜ್ಜುಗೊಳಿಸಲು ಸಮುದಾಯದ ಸಹಕಾರವನ್ನು ಪಡೆಯುತ್ತಿದ್ದರು.

ಯೋಜನೆಯ ವಿವರ :-

ಪಾರ್ನರ್ ತಾಲೂಕಿನ ಅನುಭವದ ಆಧಾರದ ಮೇಲೆ ಈ ಯೋಜನೆಯನ್ನು ತಯಾರಿಸಲಾಗಿದೆ. ಈ ಯೋಜನೆಯು ಸಮಾಜ ಸೇವಕರಲ್ಲಿ ಕಂಡ ಕುರಿತೆ ಮತ್ತು ಮನೋವೃತ್ತಿಯನ್ನು ಸಮುದಾಯ ಮಟ್ಟದ ಸಂಘಗಳಲ್ಲಿ ತರಲು ಪ್ರಯತ್ನಿಸುವುದು.

ಭಾರತದ ಜನ ಸಂಖ್ಯಾ ಯೋಜನೆ IX ರ ಅಡಿಯಲ್ಲಿ ಕರ್ನಾಟಕ ಸರ್ಕಾರವು , ಸರ್ಕಾರದ ಆರೋಗ್ಯ ಸೇವೆಗಳನ್ನು ಬೆಂಬಲಿಸಲು ಉಪಕೇಂದ್ರ ಆರೋಗ್ಯ ಸಲಹಾ ಸಮಿತಿಗಳನ್ನು ರಚಿಸುವಂತೆ ಪ್ರಕಟಿಸಿತು. ಪ್ರತಿಯೊಂದು ಸಮಿತಿಯಲ್ಲಿ 8- 10 ಸದಸ್ಯರಿರಬೇಕು. ಗ್ರಾಮ ಪಂಚಾಯತಿಯ ನಾಯಕರು ಇದರ ಅಧ್ಯಕ್ಷರು. ಮುಖ್ಯ ಸೇವಕಾ, ಸ್ಥಳೀಯ ವೈದ್ಯರು

ಗ್ರಾಮ ಮಟ್ಟದ ಸಮಿತಿಗಳ ಪ್ರಸ್ತುತ ಸ್ಥಿತಿಗತಿಗಳನ್ನು ತಿಳಿದುಕೊಳ್ಳಲು ನಾವು ಹುಣಸೂರು ತಾಲ್ಲೂಕಿನ 7 ಪ್ರಾಥಮಿಕ ಆರೋಗ್ಯ ಕೇಂದ್ರಗಳ ವ್ಯಾಪ್ತಿಯಲ್ಲಿ ಬರುವ ಇವುಗಳಲ್ಲಿ 11 ಮಹಿಳಾ ಆರೋಗ್ಯ ಸಮಿತಿ ಸದಸ್ಯರು , 11 ಸ್ವ-ಸಹಾಯ ಸಂಘದ ಸದಸ್ಯರು, 8 ಶಾಲಾ ಸುಧಾರಣಾ ಸಮಿತಿ ಸದಸ್ಯರೂ, 16 ಚುನಾಯಿತ ಸದಸ್ಯರೂ, 8 ಹಾಲು ಉತ್ಪಾದಕ ಸಹಕಾರ ಸಂಘದ ಸದಸ್ಯರೂ, 6 ಯುವಕ ಸಂಘದ ಸದಸ್ಯರು, 2 ವ್ಯವಸಾಯ ಸಹಕಾರ ಸಂಘದ ಸದಸ್ಯರು ಮತ್ತು 1 ರೇಷ್ಮೆ ಸಹಕಾರ ಸಂಘದಲ್ಲಿನ ಸದಸ್ಯರುಗಳು ಇದ್ದಾರೆ.

ಈ ಸಮಿತಿಗಳ ಸದಸ್ಯರು ಹೇಳಿದಂತೆ ಈ ಸಮಿತಿಗಳ ಚಟುವಟಿಕೆಗಳನ್ನು ಮತ್ತು ಅವರ ಪ್ರಕಾರ ಹಳ್ಳಿಗಳಲ್ಲಿನ ಸೇವೆಗಳನ್ನು ಹೇಗೆ ಉತ್ತಮ ಪಡಿಸಬಹುದು ಎಂಬುದನ್ನು ಈ ಮುಂದೆ ಸಂಕ್ಷಿಪ್ತವಾಗಿ ವಿವರಿಸಲಾಗಿದೆ.

ಮಹಿಳಾ ಆರೋಗ್ಯ ಸಮಿತಿ :

ಆರೋಗ್ಯ ಕಾರ್ಯಕರ್ತರು ಪ್ರತಿ 1000 ಜನ ಸಂಖ್ಯೆಗೆ ಒಂದು ಮಹಿಳಾ ಆರೋಗ್ಯ ಸಮಿತಿಯನ್ನು ರಚಿಸಬೇಕಾಗಿರುತ್ತದೆ. ಅಂಗನವಾಡಿ ಕಾರ್ಯಕರ್ತೆಯರ ಸಲಹೆಯೊಂದಿಗೆ ಆರೋಗ್ಯ ಕಾರ್ಯಕರ್ತೆಯರು ಮತ್ತು ಹಳ್ಳಿಯಲ್ಲಿ ಚಟುವಟಿಕೆಯಿಂದಿರುವ ಮಹಿಳೆಯರನ್ನು ಮಹಿಳಾ ಆರೋಗ್ಯ ಸಮಿತಿಗೆ ಸದಸ್ಯರನ್ನಾಗಿ ಆಯ್ಕೆಮಾಡುತ್ತಾರೆ. ನಾವು ಭೇಟಿ ನೀಡಿದ ಪ್ರಾ. ಆ. ಕೇಂದ್ರಗಳ ಕೆಲವು ಉಪಕೇಂದ್ರಗಳಲ್ಲಿ ಮಾತ್ರ ಇವು ಕಂಡುಬಂದಿವೆ. ಪ್ರತಿಯೊಂದು ಮ.ಆ. ಸಯು ಸರಾಸರಿ 14 ಸದಸ್ಯರನ್ನು ಹೊಂದಿದ್ದು 1-4 ವರ್ಷಗಳಿಂದ ಕಾರ್ಯ ನಿರ್ವಹಿಸುತ್ತವೆ. ಸಂದರ್ಶಿಸಿದ 11 ಸದಸ್ಯರಲ್ಲಿ 4 ಸದಸ್ಯರು ಇತರ ಸಮಿತಿಗಳಿಗೂ ಅಂದರೆ ಸ್ವಸಹಾಯ ಸಂಘಕ್ಕೆ, ವ್ಯವಸಾಯ ಸಹಕಾರ ಸಂಘಕ್ಕೆ ಹಾಗೂ ಗ್ರಾಮ ಪಂಚಾಯತಿಗಳಿಗೂ ಸದಸ್ಯರಾಗಿದ್ದಾರೆ. ಈ 11 ಸದಸ್ಯರಲ್ಲಿ ಇಬ್ಬರು ಸದಸ್ಯರು ಅನಕ್ಷರಸ್ಥರಾಗಿದ್ದು ಉಳಿದವರು ಕಡಿಮೆ ಎಂದರೆ ಮಾಧ್ಯಮಿಕ ಶಿಕ್ಷಣವನ್ನು ಹೊಂದಿದ್ದಾರೆ.

ಮಹಿಳಾ ಆರೋಗ್ಯ ಸಮಿತಿಯ ಚಟುವಟಿಕೆಗಳನ್ನು ವಿವರಿಸುವಾಗ ಸದಸ್ಯರು ಹೇಳಿದಂತೆ ಆರೋಗ್ಯ ಕಾರ್ಯಕರ್ತೆಯು ತಿಂಗಳಿಗೊಂದು ಬಾರಿ ಸಭೆಯನ್ನು ಕರೆಯುತ್ತಾರೆ. ಆ ಸಭೆಯಲ್ಲಿ ಆರೋಗ್ಯಕ್ಕೆ ಸಂಬಂಧಿಸಿದ ವಿಷಯಗಳ ಬಗ್ಗೆ ಅಂದರೆ ತಾಯಿಯ ಆರೋಗ್ಯ, ಪೌಷ್ಟಿಕ ಆಹಾರ, ಚುಚ್ಚುಮದ್ದು, ಕುಟುಂಬ ಯೋಜನಾ ವಿಧಾನಗಳು, ಆರ್.ಟಿ.ಐ., ಎಸ್.ಟಿ.ಐ. ಮತ್ತು ಹೆಚ್.ಐ.ವಿ.ಗಳ ಬಗ್ಗೆ ಚರ್ಚಿಸಲಾಗುತ್ತದೆ. ಇದಲ್ಲದೆ ಅಂಗನವಾಡಿ ಕಾರ್ಯಕರ್ತೆಯರು 15 ದಿನಗಳಿಗೊಮ್ಮೆ ತಾಯಂದಿರ ಸಭೆ ಕರೆಯುತ್ತಾರೆ. ಈ ಸಭೆಯಲ್ಲಿ ಹಳ್ಳಿಯ ಇತರ ಮಹಿಳೆಯರೂ ಸಹ ಭಾಗವಹಿಸಬಹುದು. ಈ ಸಭೆಗಳಲ್ಲಿಯೂ ಸಹ ಆರೋಗ್ಯ ಕಾರ್ಯಕರ್ತೆ ಮತ್ತು ಅಂಗನವಾಡಿ ಕಾರ್ಯಕರ್ತೆಯರು ಆರೋಗ್ಯದ ಬಗ್ಗೆ ಶಿಕ್ಷಣವನ್ನು ಕೊಡುತ್ತಾರೆ.

ಸಮಿತಿಗೆ ಸದಸ್ಯರಾಗಿದ್ದರಿಂದ ಅವರಿಗೆ ಆಗಿರುವ ಪ್ರಯೋಜನದ ಬಗ್ಗೆ ಕೇಳಿದಾಗ ಬಹಳಷ್ಟು ಸದಸ್ಯರು ಅವರಿಗೆ ಆರೋಗ್ಯದ ಬಗ್ಗೆ ಹೆಚ್ಚಿನ ಮಾಹಿತಿ ದೊರೆತಿದೆ ಎಂದು ಹೇಳಿದ್ದಾರೆ. ಸಮಿತಿಯಿಂದ ಹಳ್ಳಿಗೆ ಯಾವ ರೀತಿಯ ಪ್ರಯೋಜನವಾಗಿದೆ ಎಂದು ಕೇಳಿದಾಗ ಆ. ಕಾ.ಕ.ರೊಡನೆ ಕೇಳಲಾಗದ ಕೆಲವು ವಿಷಯಗಳ ಬಗ್ಗೆ ಅಂದರೆ ಆರ್.ಟಿ. ಐ., ಮತ್ತು ಎಸ್.ಟಿ.ಐ.ಗಳ ಬಗ್ಗೆ ಸದಸ್ಯರೊಡನೆ ಕೇಳಿ ತಿಳಿದು ಕೊಳ್ಳುತ್ತಿದ್ದಾರೆ. ಕೆಲವು ಸದಸ್ಯರು ಆರೋಗ್ಯ ಕಾರ್ಯಕರ್ತೆಯರ ಕೆಲಸ ಕಾರ್ಯಗಳ ಬಗ್ಗೆ ನಿಗಾ ಇಡುತ್ತಿರುವುದಾಗಿಯೂ ತಿಳಿಸಿದ್ದಾರೆ. ಒಬ್ಬ ಸದಸ್ಯರು ಹೇಳಿದಂತೆ ''ನಮ್ಮ ಊರಿನ ಸಿಸ್ಟರ್ ಔಷಧಿ ಕೊಡುತ್ತಿಲ್ಲ' ಎಂದು ಎಲ್ಲರೂ ಹೇಳುತ್ತಿದ್ದರು. ನಾನು ಅವರನ್ನು ಪರೀಕ್ಷೆ ಮಾಡಬೇಕೆಂದು ಹೋಗಿ ಅವರ ಹತ್ತಿರ ನನಗೆ,ತಲೆನೋವು ಮಾತ್ರೆ ಕೊಡಿ ಎಂದು ಕೇಳಿದೆ ಆಗ ಅವಳು ನೀನು ರಕ್ತ ಪರೀಕ್ಷೆ ಮಾಡಿಸಿಕೊಳ್ಳಬೇಕು ಅಲ್ಲಿ ತನಕ ನಾನು

ಔಷಧಿ ಕೊಡುವುದಿಲ್ಲ ಎಂದು ಹೇಳಿದರು. ಆದಕ್ಕೆ ನಾನು ಅವಳನ್ನು 48 ಗಂಟೆಯ ಒಳಗೆ ವರ್ಗಾವಣೆ ಮಾಡಿಸಿದೆ.” ಮಹಿಳಾ ಆರೋಗ್ಯ ಸಮಿತಿಗೆ ಸೇರಿದ ಮೂವರು ಸದಸ್ಯರು ಆ ಹಳ್ಳಿಯ ಸ್ವಯಂ ಆಡಳಿತದ ಸದಸ್ಯರೂ ಆಗಿದ್ದಾರೆ. ಸರ್ಕಾರದಿಂದ ಸಮಿತಿಗಳಿಗೆ ಯಾವುದೇ ರೀತಿಯ ಅನುದಾನವಿಲ್ಲವೆಂದು ಸದಸ್ಯರು ಹೇಳಿದ್ದಾರೆ. ಪ್ರತಿ ತಿಂಗಳು ನಡೆಯುವ ಸಭೆಗೆ ಅವರು ಯಾವುದೇ ರೀತಿಯ ವಿರ್ಚನ್ನು ಮಾಡುವುದಿಲ್ಲ. ಆದರೆ ಕೆಲವು ವಿಶೇಷ ಸಭೆಗಳು ನಡೆದಾಗ ಆರೋಗ್ಯ ಕಾರ್ಯಕರ್ತೆಯರು ಹಾಗೂ ಅಂಗನವಾಡಿ ಕಾರ್ಯಕರ್ತೆಯರು ಸೇರಿ ಹಣವನ್ನು ಖರ್ಚು ಮಾಡುತ್ತಾರೆ.

ಬಹಳಷ್ಟು ಸದಸ್ಯರು ಹಳ್ಳಿಯಲ್ಲಿ ಕುಟುಂಬ ಯೋಜನೆಯ ವಿಧಾನಗಳ ಬಗ್ಗೆ, ಗರ್ಭಿಣಿಯರ ಆರೈಕೆ ಬಗ್ಗೆ ತಿಳುವಳಿಕೆ ನೀಡುವ ಮೂಲಕ ಆರೋಗ್ಯ ಕಾರ್ಯಕರ್ತರಿಗೆ ಸಹಾಯ ಮಾಡುತ್ತಿದ್ದೆವೆ ಎಂದು ಹೇಳಿದ್ದಾರೆ. ಆರೋಗ್ಯ ಕಾರ್ಯಕರ್ತೆಯರಿಗೆ ಸಮುದಾಯದ ಸಹಕಾರದ ಅವಶ್ಯಕತೆಯಿದೆ ಎಂದು ಅವರು ಭಾವಿಸಿದ್ದಾರೆ. ಅವರಿಗೆ ಉಳಿದುಕೊಳ್ಳಲು ಸರಿಯಾದ ವಸತಿ-ವ್ಯವಸ್ಥೆಯನ್ನು ಮಾಡಲು ಸಿದ್ದರಿದ್ದೇವೆ ಎಂದು ಕೆಲವು ಸದಸ್ಯರು ಹೇಳಿದ್ದಾರೆ.

ಸ್ವ-ಸಹಾಯ ಸಂಘಗಳು :

ಸ್ವ-ಸಹಾಯ ಸಂಘಗಳು ಸಾಮಾನ್ಯವಾಗಿ ನಾವು ಭೇಟಿ ನೀಡಿದ ಎಲ್ಲಾ 7 ಪ್ರಾಥಮಿಕ ಆರೋಗ್ಯ ಕೇಂದ್ರಗಳ ವ್ಯಾಪ್ತಿಗೆ ಬರುವ ಬಹುತೇಕ ಎಲ್ಲಾ ಉಪಕೇಂದ್ರಗಳ ಹಳ್ಳಿಗಳಲ್ಲಿ ಕಂಡು ಬಂದಿವೆ. ಸ್ವ-ಸಹಾಯ ಸಂಘಗಳಿಲ್ಲದ ಕಡೆ ಅವುಗಳನ್ನು ರಚಿಸಲು ಪ್ರಯತ್ನಿಸಲಾಗುತ್ತಿದೆ. ಕೆಲವು ಸ್ವ-ಸಹಾಯ ಸಂಘಗಳು ಸರ್ಕಾರೇತರ ಸಂಘ ಸಂಸ್ಥೆಗಳಿಂದ ರಚಿಸಲ್ಪಟ್ಟಿದ್ದರೆ ಕೆಲವು ಸ್ವ ಸಹಾಯ ಸಂಘಗಳು ಅಂಗನವಾಡಿ ಕಾರ್ಯಕರ್ತೆಯರಿಂದ ರಚಿಸಲ್ಪಟ್ಟಿವೆ. ಬಹಳಷ್ಟು ಸ್ವ-ಸಹಾಯ ಸಂಘಗಳಲ್ಲಿ ಅಂಗನವಾಡಿ ಕಾರ್ಯಕರ್ತೆಯರು ಲೆಕ್ಕ ಪತ್ರಗಳನ್ನು ನೋಡಿಕೊಳ್ಳುವುದು, ಸಭೆಯ ಕಾರ್ಯ ಕಲಾಪಗಳನ್ನು ಬರೆದಿಡುವುದು ಮತ್ತು ಬ್ಯಾಂಕಿಗೆ ಸಂಬಂಧಿಸಿದ ಕಾರ್ಯಗಳನ್ನು ನಿರ್ವಹಿಸುತ್ತಿದ್ದಾರೆ. ಅಂಗನವಾಡಿ ಕಾರ್ಯಕರ್ತರಿಗೆ ಸಮಯವಿಲ್ಲದಿರುವ ಕೆಲವು ಕಡೆಗಳಲ್ಲಿ ಈ ಎಲ್ಲಾ ಕಾರ್ಯಗಳನ್ನು ನಿರ್ವಹಿಸಲು ವಿದ್ಯಾವಂತ ಮಹಿಳೆಯನ್ನು ನೇಮಿಸಿಕೊಳ್ಳಲಾಗಿದ್ದು ಅವರಿಗೆ ತಿಂಗಳಿಗೆ 10-25 ರೂ.ಗಳನ್ನು ಕೊಡಲಾಗುತ್ತದೆ. ಸರ್ಕಾರೇತರ ಸಂಘ - ಸಂಸ್ಥೆಗಳಿಂದ ರಚಿಸಲ್ಪಟ್ಟ ಸ್ವ-ಸಹಾಯ ಸಂಘಗಳು ಆದಾಯ ತರುವ ಕೆಲವು ಚಟುವಟಿಕೆಗಳ ಬಗ್ಗೆ ತರಬೇತಿಯನ್ನು ಪಡೆದಿವೆ.

ಉದಾ : ಬಿಳಿಕೆರೆ ಪಿ.ಹೆಚ್.ಸಿ. ಯಲ್ಲಿನ ಮಲ್ಲಿನಾಥಪುರದಲ್ಲಿನ ಸ್ವ-ಸಹಾಯ ಸಂಘವು ಕಂಬಳಿ ನೇಯುವುದರ ಬಗೆಗೆ ತರಬೇತಿಯನ್ನು ಪಡೆದಿದೆ ಹಾಗೂ ಅದನ್ನು ರಚಿಸಿದ ಸರ್ಕಾರೇತರ ಸಂಸ್ಥೆಯು ಅವರಿಗೆ ಚರಕಗಳನ್ನು ಸಹ ಮಂಜೂರು ಮಾಡಿದೆ. ಅಂಗನವಾಡಿ ಕಾರ್ಯಕರ್ತರಿಂದ ರಚಿಸಲ್ಪಟ್ಟ ಸ್ವ-ಸಹಾಯ ಸಂಘಗಳು ಕೇವಲ ಉಳಿತಾಯ ಗುಂಪುಗಳಾಗಿ ಕಾರ್ಯನಿರ್ವಹಿಸುತ್ತಿದ್ದು ಅವುಗಳ ಸದಸ್ಯರು ಸಾಮಾನ್ಯವಾಗಿ → ಕೂಲಿ ಕೆಲಸ ಮಾಡುವವರಾಗಿದ್ದಾರೆ.

ಪ್ರತಿಯೊಂದು ಸ್ವ-ಸಹಾಯ ಸಂಘವು ಸರಾಸರಿ 16 ಸದಸ್ಯರನ್ನು ಹೊಂದಿದೆ. ಎಸ್.ಸಿ./ ಎಸ್.ಟಿ ಸದಸ್ಯರು ಪ್ರತ್ಯೇಕ ಸಂಘಗಳನ್ನು ಹಾಗೂ ಇತರ ಜಾತಿಯವರು ಪ್ರತ್ಯೇಕ ಸಂಘಗಳನ್ನು ರಚಿಸಿಕೊಂಡಿದ್ದಾರೆ. ಸಂದರ್ಶಿಸಿದ 11 ಸದಸ್ಯರಲ್ಲಿ 5 ಜನರು ಅನಕ್ಷರಸ್ಥರಾಗಿದ್ದು ಉಳಿದವರು ಕಡಿಮೆ ಎಂದರೆ ಮಾಧ್ಯಮಿಕ ಶಿಕ್ಷಣವನ್ನು ಹೊಂದಿದವರಾಗಿದ್ದಾರೆ. ಮೂರು ಸದಸ್ಯರು ಇತರ ಕೆಲವು ಸಮಿತಿಗಳಿಗೂ ಅಂದರೆ ಶಾಲಾ ಸುಧಾರಣಾ ಸಮಿತಿ, ಮಹಿಳಾ ಆರೋಗ್ಯ ಸಮಿತಿ ಮತ್ತು ಗ್ರಾಮ ಪಂಚಾಯಿತಿಗಳಿಗೂ ಸದಸ್ಯರಾಗಿರುವುದಾಗಿ ತಿಳಿಸಿದ್ದಾರೆ. ಈ ಸ್ವ-ಸಹಾಯ ಸಂಘಗಳ ಸದಸ್ಯರು ಪ್ರತ್ಯೇಕ ಚಟುವಟಿಕೆಗಳಲ್ಲಿ ತೊಡಗಿದ್ದು, ಯಾವುದೇ ಸ್ವ-ಸಹಾಯ ಸಂಘದವರು ಕೂಡ ಗುಂಪು ಚಟುವಟಿಕೆಗಳನ್ನು ಕೈಗೊಂಡಿಲ್ಲ. ಅವರು ತಾವು ಗಳಿಸಿದ ಹಣದಲ್ಲಿ ತಿಂಗಳಿಗೆ ರೂ. 25 ರಿಂದ 60 ರೂ.ಗಳನ್ನು ಉಳಿತಾಯವೆಂದು ಸ್ವ-ಸಹಾಯ ಸಂಘಕ್ಕೆ ನೀಡುತ್ತಾರೆ. ಸ್ವ-ಸಹಾಯ

ಸಂಘದ ಸದಸ್ಯರು ಈ ಒಟ್ಟು ಉಳಿತಾಯದ ಹಣವನ್ನು ಅವರು ೫% ಬಡ್ಡಿಯಂತೆ ತಮಗೆ ಅವಶ್ಯಕತೆ ಇದ್ದಾಗ ಸಾಲವಾಗಿ ಪಡೆಯುತ್ತಾರೆ. ಸ್ವ-ಸಹಾಯ ಸಂಘಗಳು ಕೈಗೊಂಡಿರುವ ಚಟುವಟಿಕೆಗಳೆಂದರೆ ಕಂಬಳಿ ನೇಯುವುದು, ಎಲೆ ಜುಟ್ಟುವುದು, ಟೈಲರಿಂಗ್, ಮಡಕೆಗಳನ್ನು ಮಾಡುವುದು ಮತ್ತು ಬಳೆಗಳನ್ನು ಮಾರುವುದು. ಸ್ವ-ಸಹಾಯ ಸಂಘಗಳು ಸಾಮಾನ್ಯವಾಗಿ ತಿಂಗಳಿಗೊಂದು ಬಾರಿ ಅಥವಾ ಎರಡು ಬಾರಿ ಸಭೆ ಸೇರುತ್ತವೆ. ಈ ಸಭೆಗಳಲ್ಲಿ ಉಳಿತಾಯದ ಹಣವನ್ನು ಕಟ್ಟುವುದು, ಸಾಲ ತೆಗೆದುಕೊಳ್ಳುವುದು ಮತ್ತು ಸಾಲ ಮರುಪಾವತಿ ಯಂತಹ ಕಾರ್ಯಗಳನ್ನು ಕೈಗೊಳ್ಳಲಾಗುತ್ತದೆ. ಕೆಲವು ಸ್ವ-ಸಹಾಯ ಸಂಘಗಳು ಸಭೆಯ ನಂತರ ಸ್ಪರ್ಧೆ ಮತ್ತು ಸಾಂಸ್ಕೃತಿಕ ಚಟುವಟಿಕೆಗಳಂತಹ ಮನೋರಂಜನಾ ಕಾರ್ಯಕ್ರಮಗಳನ್ನು ಕೂಡ ಏರ್ಪಡಿಸುತ್ತವೆ.

. ಈ ಸ್ವ-ಸಹಾಯ ಸಂಘಕ್ಕೆ ಸದಸ್ಯರಾಗಿರುವುದರಿಂದ ಆವರಿಗಾಗಿರುವ ಪ್ರಯೋಜನದ ಬಗ್ಗೆ ಕೇಳಿದಾಗ ಬಹಳಷ್ಟು ಸದಸ್ಯರು ತಾವು ಆರ್ಥಿಕವಾಗಿ ಸ್ವಾತಂತ್ರ್ಯರಾಗಿರುವುದಾಗಿಯೂ ಉಳಿತಾಯ ಮಾಡುತ್ತಿರುವುದಾಗಿಯೂ ಮತ್ತು ತಮಗೆ ಆವಶ್ಯಕತೆಯಿದ್ದಾಗ ಸಾಲ ಪಡೆಯುತ್ತಿರುವುದಾಗಿಯೂ ಹೇಳಿದ್ದಾರೆ. ಕೆಲವು ಸದಸ್ಯರು ಈ ಸಮಿತಿಯ ಸದಸ್ಯರಾಗಿದ್ದರಿಂದ ಆವರಿಗೆ ಸದಸ್ಯರ ಬೆಂಬಲ ಹಾಗೂ ಸಹಕಾರ ದೊರೆತಿರುವುದಾಗಿಯೂ ಮತ್ತು ತಮಗೆ ಆತ್ಮವಿಶ್ವಾಸ ಬಂದಿರುವುದಾಗಿಯೂ ತಿಳಿಸಿದ್ದಾರೆ.

ಸ್ವ-ಸಹಾಯ ಸಂಘಗಳು ಆರೋಗ್ಯಕ್ಕೆ ಸಂಬಂಧಿಸಿದಂತೆ ಮಹಿಳೆಯರಿಗೆ ಕುಟುಂಬ ಯೋಜನಾ ವಿಧಾನಗಳನ್ನು ಆಳವಡಿಸಿಕೊಳ್ಳುವಂತೆ ಪ್ರೇರೇಪಿಸುವುದು, ಪಲ್ಸ್‌ಪೋಲಿಯೋ ಕಾರ್ಯಕ್ರಮದ ಸಮಯದಲ್ಲಿ ಚುಚ್ಚುಮದ್ದು ನೀಡುವ ಕಾರ್ಯಕ್ರಮದಲ್ಲಿ ಸಹಾಯ ಮಾಡುವಂತಹ ಚಟುವಟಿಕೆಗಳನ್ನು ಕೈಗೊಳ್ಳುತ್ತಿವೆ ಮತ್ತ ಕೆಲವು ಸ್ವ ಸಹಾಯ ಸಂಘಗಳು, ರಸ್ತೆ ರಿಪೇರಿ, ನೀರಿನ ಟ್ಯಾಂಕ್‌ಗಳನ್ನು ಸ್ವಚ್ಛಗೊಳಿಸುವಂತಹ ಕೆಲಸಗಳನ್ನು ಮಾಡಿವೆ. ಈ ಬಗೆಯ ಆರೋಗ್ಯಕ್ಕೆ ಸಂಬಂಧಿಸಿದ ಚಟುವಟಿಕೆಗಳಷ್ಟೇ ಅಲ್ಲದೆ ಇತರೆ ಸಂಗತಿಗಳಲ್ಲೂ ಭಾಗವಹಿಸಿವೆ. ಒಂದು ಊರಿನ ಸ್ವ-ಸಹಾಯ ಸಂಘವು ಸಾರಾಯಿ ವ್ಯಾಪಾರದ ವಿರುದ್ಧ ಹೋರಾಡುತ್ತಿದೆ."ನಮ್ಮ ಊರಿನ ಮಹಿಳಾ ಆರೋಗ್ಯ ಸಮಿತಿಯ ಅಧ್ಯಕ್ಷರೊಬ್ಬರು ಒಂದು ಸಾರಾಯಿ ಅಂಗಡಿಯನ್ನಿಟ್ಟಿದ್ದರು. ನಾವು ಎಲ್ಲರೂ ಒಟ್ಟಾಗಿ ಸೇರಿ ಅವರನ್ನು ಅಧ್ಯಕ್ಷ ಪದವಿಯಿಂದ ತೆಗೆದು ಹಾಕಿದೆವು. ಆದ್ದರಿಂದ ಅವರು ಸ್ವಲ್ಪ ಸಮಯ ಅಂಗಡಿಯನ್ನು ಮುಚ್ಚಿ ಮತ್ತೆ ಪ್ರಾರಂಭಿಸಿದರು. ನಾವು ಪೋಲೀಸರಿಗೆ ಕಂಪ್ಲೇಂಟ್ ಕೊಟ್ಟೆವು. ಆದರೆ ಅಧ್ಯಕ್ಷರು ಪೋಲಿಸರಿಗೆ ಲಂಚ ಕೊಟ್ಟು ಸುಮ್ಮನಾಗಿಸಿದ್ದಾರೆ. ಆದರೂ ನಾವು ಅಂಗಡಿಯನ್ನು ಮುಚ್ಚಿಸಲು ನಮ್ಮ ಹೋರಾಟವನ್ನು ಮುಂದುವರೆಸಿದ್ದೇವೆ."

ಮತ್ತೊಂದು ಸ್ವ-ಸಹಾಯ ಸಂಘವು ವರದಕ್ಷಿಣೆ ಸಮಸ್ಯೆಯಲ್ಲಿ ಮಧ್ಯಸ್ಥಿಕೆ ವಹಿಸಿದೆ. ''ನಮ್ಮ ಊರಿನ ಹೆಣ್ಣುಮಗಳೊಬ್ಬಳು ವರದಕ್ಷಿಣೆಯ ಕಾರಣಕ್ಕಾಗಿ ತವರಿಗೆ ಬಂದಿದ್ದಾಳೆ. ನಾವು ಅವರ ಅತ್ತೆ ಮಾವನವರ ಹತ್ತಿರ ಹೋಗಿ ಹುಡುಗಿಯ ತಂದೆ ತಾಯಿಗಳ ಹತ್ತಿರ ಕೊಡಲು ಏಕೂ ಉಳಿದಿಲ್ಲ ಎಂದು ಹೇಳಿ ಒಪ್ಪಿಸಲು ಪ್ರಯತ್ನಿಸಿದೆವು. ಆದರೆ ಅವರು ನಮ್ಮ ಮಾತು ಕೇಳಿ ತಯಾರಿರಲಿಲ್ಲ. ಈಗ ನಾವು ಆ ಹುಡುಗಿಯ ಗಂಡನ ಜೊತೆ ಮಾತನಡಬೇಕೆಂದು ಯೋಚಿಸುತ್ತಿದ್ದೇವೆ.''

3. ಗ್ರಾಮ ಪಂಚಾಯಿತಿ ಸದಸ್ಯರು :

ನಾವು ಮೊದಲು ಗ್ರಾಮ ಪಂಚಾಯತಿ ಆರೋಗ್ಯ ಸ್ಥಾಯಿ ಸಮಿತಿಯ ಸದಸ್ಯರನ್ನು ಸಂದರ್ಶಿಸಲು ಯೋಜಿಸಿದ್ದೆವು. ಆದರೆ ಈ ಸ್ಥಾಯಿ ಸಮಿತಿಗಳು ನಮಗೆ ಎಲ್ಲೂ ಕಂಡು ಬರಲಿಲ್ಲ. ಆದ್ದರಿಂದ ನಾವು 16 ಗ್ರಾಮ ಪಂಚಾಯಿತಿ ಸದಸ್ಯರನ್ನು ಸಂದರ್ಶಿಸಿದೆವು. ಇವರಲ್ಲಿ ಮೂರು ಜನರು ಪ್ರಾಥಮಿಕ ಹಾಗು ಅದಕ್ಕಿಂತ ಕಡಿಮೆ ಓದಿದವರಾಗಿದ್ದು ಉಳಿದವರು ಕಡಿಮೆ ಎಂದರೆ ಮಾಧ್ಯಮಿಕ ಶಿಕ್ಷಣವನ್ನು ಪೂರೈಸಿದ್ದಾರೆ. 6 ಜನ ಸದಸ್ಯರು ಉಳಿದ ಸಮಿತಿಗಳಿಗೂ ಅಂದರೆ ಹಾಲು ಉತ್ಪಾದಕರ ಸಹಕಾರ ಸಂಘ, ಯುವಕ ಸಂಘ, ಹಾಗು ವ್ಯವಸಾಯ ಸಹಕಾರ ಸಂಘಗಳಿಗೂ ಸದಸ್ಯರಾಗಿದ್ದಾರೆ.

ಗ್ರಾಮ ಪಂಚಾಯಿತಿ ಚಟುವಟಿಕೆಗಳೆಂದರೆ ಹಳ್ಳಿಯಲ್ಲಿನ ಸೌಲಭ್ಯಗಳನ್ನು ಉತ್ತಮಪಡಿಸುವುದು. ಅಂದರೆ ನೀರು ಹಾಗೂ ವಿದ್ಯುತ್ ಸೌಲಭ್ಯವನ್ನು ಒದಗಿಸುವುದು. ಆರೋಗ್ಯ ಚಟುವಟಿಕೆಗಳ ಬಗ್ಗೆ ಕೇಳಿದಾಗ ಅವರು ಹಳ್ಳಿಯನ್ನು ಸ್ವಚ್ಛವಾಗಿಟ್ಟುಕೊಳ್ಳುವುದನ್ನು ಬಿಟ್ಟು ಬೇರೆ ಯಾವುದೇ ಆರೋಗ್ಯಕ್ಕೆ ಸಂಬಂಧಿಸಿದ ಚಟುವಟಿಕೆಗಳನ್ನು ಕೈಗೊಂಡಿಲ್ಲ ಎಂದು ಹೇಳಿದ್ದಾರೆ. ಬಹಳಷ್ಟು ಸದಸ್ಯರು ಆರೋಗ್ಯ ಕಾರ್ಯಕರ್ತರೊಡನೆ ತಮಗೆ ಯಾವುದೇ ಸಂಪರ್ಕವಿಲ್ಲ ಎಂದು ತಿಳಿಸಿದ್ದಾರೆ. ಆದರೆ ಆವರಿಗೆ ಆವರ ಚಟುವಟಿಕೆಗಳನ್ನು ಕೈಗೊಳ್ಳಲು ಯಾವ ರೀತಿಯ ಸಹಾಯದ ಆವಶ್ಯಕತೆ ಇದೆ ಎಂದು ಆವರು ತಿಳಿಸಿದರೆ ಆದರಂತೆ ಮಾಡಲು ಸಿದ್ದರಿದ್ದೇವೆ ಎಂದಿದ್ದಾರೆ.

ಆವರು ಸದಸ್ಯರಾಗಿರುವುದರಿಂದ ಆವರಿಗೆ ಯಾವ ರೀತಿಯ ಪ್ರಯೋಜನವಾಗಿದೆ ಎಂಬುದರ ಬಗ್ಗೆ ಕೇಳಿದಾಗ ಎಲ್ಲ ಸದಸ್ಯರು ತಮಗೆ ವೈಯಕ್ತಿಕವಾಗಿ ಯಾವುದೇ ಪ್ರಯೋಜನವಾಗಿಲ್ಲ ಆದರೆ ಊರಿನ ಪ್ರಯೋಜನಕ್ಕಾಗಿ ನಾವು ಕೆಲಸ ಮಾಡುತ್ತಿದೇವೆ ಎಂದು ಹೇಳಿದ್ದಾರೆ.

4. ಶಾಲಾ ಸುಧಾರಣಾ ಸಮಿತಿ (ಎಸ್.ಬಿ.ಸಿ) :-

ಸರ್ಕಾರದ ಆದೇಶದಂತೆ ಎಲ್ಲಾ ಹಳ್ಳಿಗಳಲ್ಲಿಯೂ ಒಂದೊಂದು ಶಾಲಾ ಸುಧಾರಣಾ ಸಮಿತಿ ಇರುವುದು ಕಂಡು ಬಂದಿವೆ. ಪ್ರತಿ ಸಮಿತಿಯು ಕನಿಷ್ಟ 7 ಸದಸ್ಯರನ್ನು ಹಾಗೂ ಗರಿಷ್ಟ 15 ಸದಸ್ಯರನ್ನು ಹೊಂದಿವೆ. ಈ ಶಾಲಾ ಸುಧಾರಣಾ ಸಮಿತಿಗೆ ಆ ಶಾಲೆಯ ಮುಖ್ಯೋಪಾಧ್ಯಾಯರು ಕಾರ್ಯದರ್ಶಿ ಮತ್ತು ಆ ಊರಿನ ಚುನಾಯಿತ ಸದಸ್ಯರು ಅಧ್ಯಕ್ಷರಾಗಿದ್ದಾರೆ. ಅಂಗನವಾಡಿ ಕಾರ್ಯಕರ್ತರು ಹಾಗೂ ಆ ಊರಿನಲ್ಲಿ ಚಟುವಟಿಕೆಯಿಂದಿರುವ ಮತ್ತು ಶಿಕ್ಷಣದಲ್ಲಿ ಆಸಕ್ತಿ ಇರುವವರು ಇದರ ಸದಸ್ಯರಾಗಿದ್ದಾರೆ. ಆದರೆ ಎಲ್ಲಾ ಸಮಿತಿಗಳೂ ಕಡ್ಡಾಯವಾಗಿ ಮಹಿಳೆಯರನ್ನು, ಹಿಂದುಳಿದ ವರ್ಗದವರನ್ನು, ಅಲ್ಪ ಸಂಖ್ಯಾತರನ್ನು ಮತ್ತು ಅಂಗವಿಕ ವಿದ್ಯಾರ್ಥಿಗಳ ಬಗ್ಗೆ ಆಸಕ್ತಿ ಇರುವವರನ್ನು ಹೊಂದಿದೆ. ಈ ಸಮಿತಿಯ ಚಟುವಟಿಕೆಗಳಿಗಾಗಿ ರೂ. 50- 100 ರಷ್ಟು ವಿರ್ಜಿ ಮಾಡವ ಸಾಮರ್ಥ್ಯವಿರುವವರನ್ನು ಸಮಿತಿಯ ಸದಸ್ಯರನ್ನಾಗಿ ಆಯ್ಕೆ ಮಾಡುತ್ತೇವೆ ಎಂದು ಸದಸ್ಯರು ತಿಳಿಸಿದ್ದಾರೆ.

ಸಂದರ್ಶಿಸಿದ 8 ಸದಸ್ಯರಲ್ಲಿ ಮೂರು ಸದಸ್ಯರು ಮಹಿಳಾ ಆರೋಗ್ಯ ಸಮಿತಿಗೆ ಹಾಗೂ ಗ್ರಾಮ ಪಂಚಾಯಿತಿಗೂ ಸದಸ್ಯರಾಗಿದ್ದಾರೆ. ಈ ಎಲ್ಲಾ 8 ಸದಸ್ಯರೂ ಕಡಿಮೆ ಎಂದರೆ ಪ್ರಾಥಮಿಕ ಮಟ್ಟದ ಶಿಕ್ಷಣವನ್ನು ಹೊಂದಿದ್ದಾರೆ. ಈ ಸಮಿತಿಯ ಸದಸ್ಯರು ಶಾಲೆಯ ಸುಧಾರಣೆಗೆ ಸಂಬಂಧಿಸಿದ ಚಟುವಟಿಕೆಗಳನ್ನು ಕೈಗೊಳ್ಳುತ್ತಾರೆ. ಉದಾ :- ಹೈಸ್ಕೂಲ್ ಸೌಲಭ್ಯಕ್ಕಾಗಿ ಪ್ರಯತ್ನ , ಶಾಲೆಗೆ ಕಾಂಪೌಂಡ್ ಕಟ್ಟಿಸುವುದು, ಶಾಲೆಗೆ ಸುಣ್ಣ ಬಣ್ಣ ಬಳಿಸುವುದು, ಶಾಲೆಗೆ ನೀರು ಮತ್ತು ವಿದ್ಯುತ್ ಸೌಲಭ್ಯ ಒದಗಿಸುವುದು, ಬಡಮಕ್ಕಳಿಗೆ ಪುಸ್ತಕಗಳನ್ನು ವಿತರಿಸುವುದು, ಸ್ಪರ್ಧೆಗಳನ್ನು ಏರ್ಪಡಿಸುವುದು ಇತ್ಯಾದಿ. ಕೆಲವು ಶಾಲಾ ಸುಧಾರಣಾ ಸಮಿತಿ ಸದಸ್ಯರು ಶಾಲೆಯ ಕೌಂಜಾಲಯಗಳನ್ನು ಕಟ್ಟಿಸಿರುವುದಾಗಿಯೂ ಹೇಳಿದ್ದಾರೆ. ಬೇರೆ ಕೆಲವು ಸಮಿತಿಗಳು ಶಾಲೆಯ ಸುಧಾರಣೆಗಾಗಿ ಹಣವನ್ನು ಸಂಗ್ರಹಿಸುತ್ತಿವೆ. ಒಂದು ಶಾಲಾ ಸುಧಾರಣಾ ಸಮಿತಿಯ ಶಾಲೆಯ ಆವರಣದಲ್ಲಿದ್ದ ಒಂದು ಮರವನ್ನು 3000/- ಕ್ಕೆ ಹರಾಜು ಹಾಕಿ ಆ ಹಣವನ್ನು ವಿದ್ಯುತ್ ಸಂಪರ್ಕ ಪಡೆಯುವುದಕ್ಕಾಗಿ ಉಪಯೋಗಿಸಿವೆ ಹಾಗೂ ಆ ಊರಿನವರಿಂದ ಹಣವನ್ನು ಸಂಗ್ರಹಿಸಿ ಆದರ ಬಡ್ಡಿಯ ಹಣದಿಂದ ವಿದ್ಯುತ್ ಬಿಲ್ಲನ್ನು ಕಟ್ಟುತ್ತಿವೆ.

ಈ ಸಮಿತಿಯ ಸದಸ್ಯರಾಗಿದ್ದರಿಂದ ಆವರಿಗೆ ವೈಯಕ್ತಿಕವಾಗಿ ಯಾವುದೇ ರೀತಿಯ ಪ್ರಯೋಜವಾಗಿಲ್ಲ ಆದರೆ ಊರಿನ ಮತ್ತು ಶಾಲೆಯ ಅಭಿವೃದ್ಧಿಗಾಗಿ ಕೆಲಸ ಮಾಡುತ್ತಿರುವುದಾಗಿ ಹೇಳಿದ್ದಾರೆ. ಈ ಶಾಲಾ ಸುಧಾರಣಾ ಸಮಿಗಳ ಹಣಕಾಸಿನ ಮೂಲದ ಬಗ್ಗೆ ಕೇಳಿದಾಗ ಈ ಸಮಿತಿಗಳಿಗೆ ಕಳೆದ ಎರಡು ವರ್ಷಗಳಿಂದ ಡಿಪಿಇಪಿ ಯು ಶಾಲೆಗೆ ಸುಣ್ಣ ಬಣ್ಣಕ್ಕೆ ಹಾಗೂ ಶಾಲೆಯ ಅಭಿವೃದ್ಧಿಗೆ ಸಂಬಂಧಿಸಿದ ಯಾವುದೇ ಚಟುವಟಿಕೆಗಳನ್ನು ಕೈಗೊಳ್ಳಲು ರೂ. 2000 ಮಂಜೂರು

ಮಾಹುತ್ತಿದ್ದು ಇನ್ನು ಮೂರು ವರ್ಷಗಳವರೆಗೆ ಮಾತ್ರ ಇರುತ್ತದೆ ಎಂದು ಹೇಳಿದ್ದಾರೆ.

ಯುವಕ ಸಂಘಗಳು :

ಯುವಕ ಸಂಘಗಳು ಎಲ್ಲಾ ಹಳ್ಳಿಗಳಲ್ಲೂ ಕಂಡು ಬಂದಿಲ್ಲ. ರಾಜಕೀಯವಾಗಿ ಸಂಪರ್ಕ ಹೊಂದಿದವರನ್ನು ಮತ್ತು ಹಳ್ಳಿಯ ಚಟುವಟಿಕೆಗಳಲ್ಲಿ ಆಸಕ್ತಿ ಹೊಂದಿರುವವರನ್ನು ಯುವಕ ಸಂಘಗಳ ಅಧ್ಯಕ್ಷರಾಗಿ ಆರಿಸುತ್ತೇವೆ ಎಂದು ಸದಸ್ಯರು ಹೇಳಿದ್ದಾರೆ. ಪ್ರತಿಯೊಂದು ಸಂಘದಲ್ಲೂ ಸದಸ್ಯರ ಸಂಖ್ಯೆ 20 ರಿಂದ 100ರವರೆಗೆ ಕಂಡು ಬಂದಿದೆ. ಈ ಸಂಘಗಳಿಗೆ ಸೇರುವವರ ಹಾಗೂ ಬಿಟ್ಟು ಹೋಗುವುವರ ಸಂಖ್ಯೆ ಹೆಚ್ಚು. ಏಕೆಂದರೆ ಬಹಳಷ್ಟು ಯುವಕರು ಕೆಲಸಕ್ಕಾಗಿ ಹಳ್ಳಿಯನ್ನು ಬಿಟ್ಟು ಹೋಗುತ್ತಾರೆ ಅಥವಾ ಆಸಕ್ತಿಯನ್ನು ಕಳೆದುಕೊಳ್ಳುತ್ತಾರೆ.

ಕೆಲವು ಸಂಘಗಳು ಕೇವಲ ಹೆಸರಿಗೆ ಮಾತ್ರವಿದ್ದು ಯಾವುದೇ ಕಾರ್ಯಗಳು ನಿರ್ವಹಿಸುತ್ತಿಲ್ಲ ಮತ್ತೆ ಕೆಲವು ಸಂಘಗಳು ಕಾರ್ಯ ನಿರ್ವಹಿಸುತ್ತಿದ್ದರೂ ರಿಜಿಸ್ಟರ್ ಆಗಿಲ್ಲದಿರುವುದು ಕಂಡು ಬಂದಿದೆ. ಯುವಕ ಸಂಘಗಳ ಪ್ರತಿ ತಿಂಗಳು 25 ರೂ.ಗಳನ್ನು ಎಲ್ಲಾ ಸದಸ್ಯರಿಂಲೂ ಸಂಗ್ರಹಿಸುತ್ತವೆ. ಬಹಳಷ್ಟು ಯುವಕ ಸಂಘಗಳು ಕ್ರೀಡಾ ಚಟುವಟಿಕೆಗಳನ್ನು ಕೈಗೊಳ್ಳಲು ಮತ್ತು ಊರಿನ ಪ್ರಮುಖ ಹಬ್ಬಗಳ ಆಚರಣೆಯನ್ನು ಕೈಗೊಳ್ಳಲು ರಚಿಸಲ್ಪಟ್ಟಿವೆ. ಬೇರೆ ಕೆಲವು ಸಂಘಗಳು ಸ್ವಾತಂತ್ರ್ಯ ದಿನಾಚರಣೆಯಂದು ಶಾಲಾ ಮಕ್ಕಳಿಗೆ ಪುಸ್ತಕಗಳನ್ನು ಪೆನ್ನುಗಳನ್ನು ಹಾಗೂ ಸಿಹಿ ತಿಂಡಿಗಳನ್ನು ಹಂಚುತ್ತವೆ. ಶಾಲೆಯಲ್ಲಿ ಧ್ವಜಕಟ್ಟೆಯನ್ನು ಕಟ್ಟುವುದು, ಹಳ್ಳಿಯಲ್ಲಿನ ಕಸದ ತಿಪ್ಪೆಗಳನ್ನು ಸ್ವಚ್ಛಗೊಳಿಸುವುದು, ಇತ್ಯಾದಿ ಕಾರ್ಯಗಳನ್ನು ಕೈಗೊಂಡಿವೆ.

ಇತರ ಸಮಿತಿಗಳು :-

ಇತರ ಸಮಿತಿಗಳಾದ ಹಾಲು ಉತ್ಪಾದಕರ ಸಹಕಾರ ಸಂಘ, ವ್ಯವಸಾಯ ಸಹಕಾರ ಸಂಘ ರೇಷ್ಮೆ ಬೆಳೆಗಾರರ ಸಹಕಾರ ಸಂಘ, ಇತ್ಯಾದಿಗಳ ಸದಸ್ಯರನ್ನು ಸಂದರ್ಶಿದಾಗ ತಿಳಿದು ಬಂದ ಅಂಶವೆಂದರೆ ಈ ಯುವ ಸಮಿತಿಗಳೂ ಆರೋಗ್ಯಕ್ಕೆ ಸಂಬಂಧಿಸಿದ ಚಟುವಟಿಕೆಗಳನ್ನು ಕೈಗೊಂಡಿಲ್ಲ. ಆದರೆ ಅವರನ್ನು ಕೇಳಿದಲ್ಲಿ ಅವರು ಚಟುವಟಿಕೆಗಳನ್ನು ಬೆಂಬಲಿಸುವುದಾಗಿ ಹೇಳಿದ್ದಾರೆ. ಉದಾ :- ಹಾಲು ಉತ್ಪಾದಕರ ಸಹಕಾರ ಸಂಘದ ಅಧ್ಯಕ್ಷರನ್ನು ಭೇಟಿಮಾಡಿದಾಗ ಅವರು ಪ್ರತಿ ವರ್ಷ ಬೋನಸ್ ಕೊಟ್ಟ ನಂತರ ಉಳಿದ ಸ್ವಲ್ಪ ಹಣವನ್ನು ಉಳಿತಾಯ ಮಾಡುತ್ತಿರುವುದಾಗಿಯೂ ಈ ಹಣವನ್ನು ಆರೋಗ್ಯ ಚಟುವಟಿಕೆಗಳೂ ಸೇರಿದಂತೆ ಸಾರ್ವಜನಿಕರ ಹಿತಾಸಕ್ತಿಗೆ ಬಳಸಿಕೊಳ್ಳಬಹುದು ಎಂದು ಹೇಳಿದ್ದಾರೆ.

ನಾವು ಸಂದರ್ಶಿಸಿದ ಈ ಎಲ್ಲಾ ಸಮಿತಿಯ ಸದಸ್ಯರುಗಳು ತಮಗೆ ವಿಕೇಂದ್ರೀಕೃತ (ಸಿ. ಎನ್. ಎ) ಯೋಜನೆಯ ಬಗ್ಗೆ ಯಾವುದೇ ಮಾಹಿತಿ ಇಲ್ಲ ಎಂದು ತಿಳಿಸಿದ್ದಾರೆ.

ಸಂತಾನೋತ್ಪತ್ತಿ ಮತ್ತು ಮಕ್ಕಳ ಆರೋಗ್ಯ ಕಾರ್ಯಕ್ರಮದಲ್ಲಿ ವಿಕೇಂದ್ರಿಕೃತ ಯೋಜನೆ

(ಸಿ.ಎನ್.ಎ. ಅಪ್ರೋಚ್)

. ಭಾರತದೇಶದಲ್ಲಿ ಕುಟುಂಬ ಯೋಜನೆ / ಕುಟುಂಬ ಕಲ್ಯಾಣ ಕಾರ್ಯಕ್ರಮಗಳು ಕಳೆದ 30 ವರ್ಷಗಳಿಂದಲೂ ಫಲವತ್ತತೆಯನ್ನು ಆದಷ್ಟು ಬೇಗ ಕಡಿಮೆ ಮಾಡುವ ಏಕೈಕ ಉದ್ದೇಶ ಹೊಂದಿದ್ದಾಗಿತ್ತು. ಈ ಅಂತಿಮ ಉದ್ದೇಶವನ್ನು ಸಾಧಿಸಲು ಗರ್ಭನಿರೋಧಕ ಪದ್ಧತಿಯಲ್ಲಿ 'ಗುರಿಗಳು', ಆಶ್ರಿತರಿಗೆ ಮತ್ತು ಸಲಹೆ ನೀಡುವವರಿಗೆ 'ಪ್ರೋತ್ಸಾಹಧನ'ವನ್ನು ನಿಗಧಿ ಪಡಿಸುವ ನಿಟ್ಟಿನಲ್ಲಿ ಕಾರ್ಯಕ್ರಮ ರೂಪು ಗೊಂಡಿದ್ದಾಗಿರುತ್ತದೆ. ವಿವಿಧ ರಾಜ್ಯಗಳಲ್ಲಿ ಗುಣಾತ್ಮಕ ಸೇವೆಯ ಕೊರತೆಯಿಂದಾಗಿ ಸಂತಾನ ನಿರೋಧಿ ಶಸ್ತ್ರಚಿಕಿತ್ಸೆ ಉತ್ತಮ ರೀತಿಯಲ್ಲಿ ನಡೆಯುತ್ತಿದ್ದರೂ ಜನನ ದರದಲ್ಲಿ ಹೆಚ್ಚಿನ ಒದಲಾವಣೆ ಕಂಡುಬಂದಿಲ್ಲ. ಈ ಕಾರಣದಿಂದ ಭಾರತ ಸರ್ಕಾರವು ಏಪ್ರಿಲ್ 1996ರಲ್ಲಿ ಸಂಖ್ಯಾಧಾರಿತ ಗುರಿಗಳನ್ನು ತೆಗೆದು ಹಾಕಿ ವಿಕೇಂದ್ರಿಕೃತ ಯೋಜನೆಗಳನ್ನು ಆಳವಡಿಸಿಕೊಂಡಿತು. ಈ ವಿಧಾನದ ಉದ್ದೇಶಗಳೆಂದರೆ,

★ ಕುಟುಂಬ ಯೋಜನೆಗೆ ಬದಲಾಗಿ ಸಂತಾನೋತ್ಪತ್ತಿ ಮತ್ತು ಆರೋಗ್ಯ ಸೇವೆಗಳಿಗೆ ಪ್ರಾಮುಖ್ಯತೆ ಕೊಡುವುದು.

★ ಸೇವೆಗಳ ಗುಣಮಟ್ಟವನ್ನು ಹೆಚ್ಚಿಸುವುದು.

★ ಸಮುದಾಯದ ಭಾಗವಹಿಸುವಿಕೆ ಹಾಗೂ ಫಲಾನುಭವಿಗಳ ತೃಪ್ತಿಯನ್ನು ಹೆಚ್ಚಿಸುವುದು.

ಈ ವಿಧಾನದಲ್ಲಿ ಆರೋಗ್ಯ ಕಾರ್ಯಕರ್ತರು ತಮ್ಮ ಸಮುದಾಯದ ಅವಶ್ಯಕತೆಗಳನ್ನು ಗಮನಿಸಿ ಯೋಜನೆಯನ್ನು ತಯಾರಿಸುತ್ತಾರೆ. ಈ ಯೋಜನೆಯನ್ನು ತಯಾರಿಸಲು ಅವರು ಮೂರುಅಂಶಗಳನ್ನು ಗಮನದಲ್ಲಿಟ್ಟುಕೊಳ್ಳುತ್ತಾರೆ.

1. ಕ್ಷೇತ್ರದ ಅವಶ್ಯಕತೆ : ಉಪಕೇಂದ್ರ ವ್ಯಾಪ್ತಿಯಲ್ಲಿರುವ ಎಲ್ಲಾ ಕುಟುಂಬಗಳು ಆರೋಗ್ಯ ಕಾರ್ಯಕರ್ತರಿಂದಲೇ ಸೇವೆ ಪಡೆದ ಪಕ್ಷದಲ್ಲಿ ಅವರು ನೀಡಬೇಕಾದ ಸೇವೆಯ ಅವಶ್ಯಕತೆಯನ್ನು ಕ್ಷೇತ್ರದ ಅವಶ್ಯಕತೆ ಎನ್ನುತ್ತಾರೆ.

2. ಸ್ವಯಂ ಬೇಡಿಕೆ : ಪುನರುತ್ಪತ್ತಿ ವಯೋಮಾನದ ಮಹಿಳೆಯರ ಸಮೀಕ್ಷೆ ಮಾಡಿ ಸಂತಾನೋತ್ಪತ್ತಿ ಮತ್ತು ಮಕ್ಕಳ ಆರೋಗ್ಯ ಸೇವೆಗಳ ಬೇಡಿಕೆಯನ್ನು ನಿರ್ಧರಿಸುವುದು.

3. ಕಳೆದ ವರ್ಷದ ಸಾಧನೆ :

ಆರೋಗ್ಯ ಕಾರ್ಯಕರ್ತರು ಈ ಮೂರು ಅಂಶಗಳನ್ನು ಲೆಕ್ಕಾಚಾರ ಮಾಡಿ ಗ್ರಾಮ ಪಂಚಾಯಿತಿ ಸದಸ್ಯರು, ಮಹಿಳಾ ಆರೋಗ್ಯ ಸಮಿತಿಯ ಸದಸ್ಯರು, ಶಾಲಾ ಶಿಕ್ಷಕಿಯರು, ಅಂಗನವಾಡಿ ಕಾರ್ಯಕರ್ತರು,ಮುಂತಾದ ಸಮುದಾಯ ಪ್ರತಿನಿಧಿಗಳೊಂದಿಗೆ ಚರ್ಚಿಸಿ ಪ್ರಸ್ತುತ ವರ್ಷದ ಯೋಜನೆಯನ್ನು ತಯಾರಿಸಬೇಕು.

ಉಪಕೇಂದ್ರಮಟ್ಟದಲ್ಲಿ ಲೆಕ್ಕಾಚಾರ ಮಾಡಿದ ಯೋಜನೆಯನ್ನು ಕ್ರೋಢೀಕರಿಸಿ ಪ್ರಾಥಮಿಕ ಆರೋಗ್ಯ ಕೇಂದ್ರ ಮಟ್ಟದಲ್ಲಿ ಸಮಗ್ರ ಕಾರ್ಯಯೋಜನೆಯ ಲೆಕ್ಕಾಚಾರ ಮಾಡಬೇಕು. ಇದೇ ರೀತಿ ಜಿಲ್ಲೆ, ರಾಜ್ಯ ಮತ್ತು ರಾಷ್ಟ್ರಮಟ್ಟದಲ್ಲಿ ಲೆಕ್ಕಾಚಾರ ಮಾಡಿ ಯೋಜನೆಯನ್ನು ರೂಪಿಸಬೇಕು.

ಗುರಿ ಹೊಂದಿದ ಕಾರ್ಯಕ್ರಮಕ್ಕೆ ಮತ್ತು ಸಮುದಾಯ ಆಗತ್ಯ ನಿಗದಿ ವಿದಾನಕ್ಕೆ ಇರುವ ವ್ಯತ್ಯಸಗಳು

ಗುರಿ ಹೊಂದಿದ ಚಟುವಟಿಕೆಗಳು	ಸಮುದಾಯ ಆಗತ್ಯಗಳ ನಿಗದಿ ಮಾಡುವ ವಿಧಾನ
1. ಗುರಿ ಹೊಂದಿದ ಪದ್ಧತಿಯಲ್ಲಿ ಗುರಿ ಸಾಧಿಸಲು ಹಣದ ಆಮೀಷ ತೋರಿಸಲಾಗುತ್ತಿತ್ತು ಮತ್ತು ಗುರಿಯನ್ನು ಉತ್ತೇಕ್ಷೆಗೊಳಿಸಲಾಗುತ್ತಿತ್ತು.	1. ಗುಣಾತ್ಮಕ ಸೇವೆಗಳಿಂದ, ಸ್ವಯಂ ಬೇಡಿಕೆ ಉಂಟಾಗಿ, ಗುರಿ ಸಾಧಿಸಲಾಗುತ್ತಿದೆ.
2. ಸೇವೆಗಳನ್ನು (ಕುಟುಂಬ ಕಲ್ಯಾಣ ಮತ್ತು ತಾಯಿ ಮಕ್ಕಳ ಆರೋಗ್ಯ ಸೇವೆಗಳು) ಬೇರೆ ಬೇರೆಯಾಗಿ ಒದಗಿಸುವುದು.	2. ಸಂತಾನೋತ್ಪತ್ತಿ (ಕುಟುಂಬ ಕಲ್ಯಾಣ + ಶಿಶು ಉಳಿವು ಮತ್ತು ಸುರಕ್ಷಿತ ತಾಯ್ತನ + ಜನನಾಂಗ ಮಾರ್ಗದ ಸೋಂಕು + ಲೈಂಗಿಕದಿಂದ ಪ್ರಸಾರವಾಗುವ ರೋಗಗಳು + ಏಡ್ಸ್ – ಕೇಂದ್ರ ಬಿಂದುವಾಗಿ ಫಲಾನುಭವಿಯ ಕುಟುಂಬ ಕಲ್ಯಾಣ ಮತ್ತು ಆರೋಗ್ಯ ರಕ್ಷಣೆ.
3. ಕೇಂದ್ರಿಕೃತ ಯೋಜನೆ (ಮೇಲ್ಮಟ್ಟದಿಂದ ಕೆಳಮಟ್ಟಕ್ಕೆ).	3. ವಿಕೇಂದ್ರಿಕೃತ ಯೋಜನೆ.
4. ಸಾಧನೆಯನ್ನು ಹೆಚ್ಚು ಹೆಚ್ಚಾಗಿ ತೋರಿಸುವುದು.	4. ಸಾಧನೆಗಳ ಸುಳ್ಳು ಅಂಕಿಗಳನ್ನು ಕೊಡುವ ಅವಶ್ಯಕತೆ ಇರುವುದಿಲ್ಲ.
5. ಸಮುದಾಯದ ಸಹಭಾಗಿತ್ವ ಇರುವುದಿಲ್ಲ ಅಥವಾ ಸ್ವಯಂ ಪ್ರೇರಿತವಾಗಿರುವುದಿಲ್ಲ.	5. ಸಮುದಾಯದ ಸ್ವಯಂ ಪ್ರೇರಿತ ಅಥವಾ ಸ್ವಯಂಸ್ಫೂರ್ತಿಯ ಸಹಭಾಗಿತ್ವವಾಗಿರುತ್ತದೆ.
6. ಗುರಿ ಸಾಧಿಸುವುದು ಮಾನದಂಡವಾಗಿತ್ತು.	6. ಜನರ ಬೇಡಿಕೆಯ ಪ್ರಮಾಣ, ಫಲಾನುಭವಿಗಳ, ತೃಪ್ತಿಯೇ, ಮಾನದಂಡವಾಗಿದೆ.
7. ಕೆಲಸವು ಮೇಲ್ಮಟ್ಟದಿಂದ ನಿರ್ಧರಿಸಲ್ಪಡುತ್ತದೆ.	7. ಕಾರ್ಯಕರ್ತರು ಕೆಲಸವನ್ನು ಸಮುದಾಯದೊಂದಿಗೆ ಕೂಡಿ ನಿರ್ಧರಿಸುತ್ತಾರೆ.
8. ಗುರಿಗಳು ನಿಜವಾದ ಮುಖ್ಯವಾದ ಚಾಲನಾ ಶಕ್ತಿಗಳು	8. ಸೇವೆಗಳನ್ನು ಹೆಚ್ಚಿಸುವುದು, ಪೂರೈಸಲ್ಪಡದ ಸ್ವಯಂ ಬೇಡಿಕೆಗಳ ಪ್ರಮಾಣ ಕಡಿಮೆ ಮಾಡುವುದು, ಗುಣಾತ್ಮಕತೆ ಮುಂತಾದವುಗಳು ಕಾರ್ಯಕ್ರಮದ ಚಾಲನೆಯ ಶಕ್ತಿಗುಣವಾಗಬೇಕು.

ವಿಕೇಂದ್ರೀಕೃತ ಯೋಜನೆಯಲ್ಲಿ ಸಮುದಾಯದ ಭಾಗವಹಿಸುವಿಕೆ: ಆರೋಗ್ಯ ಕಾರ್ಯಕ್ರಮದಲ್ಲಿ ಒಂದು ಪ್ರಯೋಗ

ಹುಣಸೂರು ತಾಲ್ಲೂಕಿನ ಸಮೀಕ್ಷೆಯಿಂದ ತಿಳಿದು ಬಂದ ಅಂಶಗಳು

ಫೌಂಡೇಷನ್ ಫಾರ್ ರಿಸರ್ಚ್ ಇನ್ ಹೆಲ್ತ್ ಸಿಸ್ಟಮ್ (FRHS)
ಮತ್ತು
ಆರೋಗ್ಯ ಮತ್ತು ಕುಟುಂಬ ಕಲ್ಯಾಣ ಇಲಾಖೆ, ಕರ್ನಾಟಕ

ಹುಣಸೂರು ತಾಲ್ಲೂಕಿನ ಸಮೀಕ್ಷೆಯಿಂದ ತಿಳಿದು ಬಂದ ಅಂಶಗಳು

ಪೀಠಿಕೆ

FRHS ಸಂಸ್ಥೆಯು ಆರೋಗ್ಯ ಮತ್ತು ಕುಟುಂಬ ಕಲ್ಯಾಣ ಇಲಾಖೆ, ಕರ್ನಾಟಕದ ಜೊತೆಗೂಡಿ ಆರೋಗ್ಯ ಸೇವೆಗಳನ್ನು ಯೋಜಿಸುವಲ್ಲಿ ಮತ್ತು ಪರಿಶೀಲಿಸುವಲ್ಲಿ ಸಮುದಾಯದ ಭಾಗವಹಿಸುವಿಕೆಯನ್ನು ಹೆಚ್ಚಿಸಲು ಎರಡು ವರ್ಷಗಳ ಒಂದು ಯೋಜನೆಯನ್ನು ಕೈಗೊಂಡಿದೆ.

ಯೋಜನೆಯ ಉದ್ದೇಶಗಳು:

ಈ ಯೋಜನೆಯ ಉದ್ದೇಶವೇನೆಂದರೆ ಆರೋಗ್ಯ ಸೇವೆಗಳನ್ನು ಯೋಜಿಸುವಲ್ಲಿ, ಜಾರಿಗೊಳಿಸುವಲ್ಲಿ ಹಾಗೂ ಪರಿಶೀಲಿಸುವಲ್ಲಿ ಸಮುದಾಯದ ಭಾಗವಹಿಸುವಿಕೆಯನ್ನು ಹೆಚ್ಚಿಸುವುದು.

ಈ ಯೋಜನೆಯು ಗ್ರಾಮ ಮಟ್ಟದ ಸಮಿತಿಗಳು ಈ ಕೆಳಕಂಡ ಕಾರ್ಯಗಳನ್ನು ಕೈಗೊಳ್ಳಲು ಪ್ರೋತ್ಸಾಹಿಸುವುದು.

1. ವಿಕೇಂದ್ರೀಕೃತ ಯೋಜನೆಯಲ್ಲಿ ಭಾಗವಹಿಸುವಿಕೆ.
2. ಸಮಸ್ಯೆಗಳನ್ನು ಗುರುತಿಸಿ ಆವುಗಳಿಗೆ ಪರಿಹಾರ ಕಂಡುಕೊಳ್ಳುವುದು.
3. ಸರ್ಕಾರದ ಆರೋಗ್ಯ ಸಿಬ್ಬಂದಿಯ ಜೊತೆಗೆ ಸಂಪರ್ಕವನ್ನು ಹೆಚ್ಚಿಸುವುದು.

ಯೋಜನೆಯನ್ನು ಕೈಗೊಳ್ಳುವ ಮೊದಲು FRHS ಸಂಸ್ಥೆಯು ಹುಣಸೂರು ತಾಲ್ಲೂಕಿನಲ್ಲಿ ಸಮೀಕ್ಷೆಯನ್ನು ಕೈಗೊಂಡು ಮೂರು ಮೂಲಗಳಿಂದ ಮಾಹಿತಿಯನ್ನು ಸಂಗ್ರಹಿಸಿದೆ.

1. ಕುಟುಂಬಗಳ ಸಮೀಕ್ಷೆ : ಸಂತಾನೋತ್ಪತ್ತಿ ವಯೋಮಾನದ ಆರ್ಹ ಮಹಿಳೆಯರ ಸಂದರ್ಶನ.
2. ಎಲ್ಲಾ ಉಪಕೇಂದ್ರಗಳ ಸಮೀಕ್ಷೆ ಹಾಗೂ
3. ಗ್ರಾಮ ಮಟ್ಟದ ಸಮಿತಿಗಳ ಸದಸ್ಯರ ಸಂದರ್ಶನ.

ಈ ಸಮೀಕ್ಷೆಗಳಿಂದ ಕಂಡು ಬಂದ ಅಂಶಗಳನ್ನು ಈ ಕೆಳಕಂಡಂತೆ ವಿವರಿಸಲಾಗಿದೆ.

ಹುಣಸೂರು ತಾಲ್ಲೂಕಿನಲ್ಲಿ ಸಮೀಕ್ಷೆಯಿಂದ ಕಂಡುಬಂದ ಅಂಶಗಳು. ಈ ತಾಲ್ಲೂಕಿನಲ್ಲಿ ಆಯ್ಕೆ ಮಾಡಿದ 35 ಹಳ್ಳಿಗಳಲ್ಲಿನ ಸಂತಾನೋತ್ಪತ್ತಿ ವಯೋಮಾನದ 1058 ಮಹಿಳೆಯರನ್ನು ಹಾಗೂ ಮೂರು ವರ್ಷದೊಳಗಿನ 320 ಮಕ್ಕಳ ಮಾಹಿತಿಗಳನ್ನು ಆದರಿಸಿದೆ. ಈ ಕೆಳಗಿನ ಪಟ್ಟಿಯಲ್ಲಿ ಹುಣಸೂರು ತಾಲ್ಲೂಕಿನ ಸ್ಥಿತಿಗತಿಗಳನ್ನು ರಾಜ್ಯ ಮಟ್ಟದಲ್ಲಿ ನಿರ್ಧರಿಸಿದ ಸಂತಾನೋತ್ಪತ್ತಿ ಮತ್ತು ಮಕ್ಕಳ ಆರೋಗ್ಯ ಸೇವೆಗಳ (RCH) ಗುರಿಯೊಂದಿಗೆ ಹೋಲಿಸಲಾಗಿದೆ. ಈ ಹೋಲಿಕೆಗಳು RCH ಸೇವೆಗಳಲ್ಲಿನ ಕೊರತೆಗಳನ್ನು ಗುರುತಿಸಿ ಆವುಗಳನ್ನು ವಿಕೇಂದ್ರೀಕೃತ ಯೋಜನೆಯ ಮೂಲಕ ಸುಧಾರಿಸಲು ಸಹಾಯಕವಾಗುವುದೆಂದು ನಿರೀಕ್ಷಿಸಲಾಗಿದೆ.

ಪಟ್ಟಿ 1 : ಸಂತಾನೋತ್ಪತ್ತಿ ಆರೋಗ್ಯ ಸೂಚಿಗಳ ಪ್ರಗತಿ.

ಕ್ರ. ಸಂ	ಸೂಚಕಗಳು	ಹೂಣಸೂರು 2000 (%)	RCH ಗುರಿಗಳು (%)
1	ಎಲ್ಲಾ ಕುಟುಂಬ ಯೋಜನೆ ವಿಧಾನಗಳ ಬಗ್ಗೆ ತಿಳಿದಿರುವ ಮಹಿಳೆಯರು	14	90
2	ಯಾವುದಾದರು ಆಂತರ ವಿಧಾನದ ಬಗ್ಗೆ ತಿಳಿದಿರುವ ಮಹಿಳೆಯರು	68	90
3	ಕುಟುಂಬ ಯೋಜನೆ ವಿಧಾನದ ಬಳಕೆ : ಶಸ್ತ್ರ ಚಿಕಿತ್ಸೆ	71	60
4	ಕುಟುಂಬ ಯೋಜನೆ ವಿಧಾನದ ಬಳಕೆ: ಆಂತರ ವಿಧಾನಗಳು	2	15
5	ಕುಟುಂಬ ಯೋಜನೆ ವಿಧಾನಗಳ ಅಗತ್ಯ ಇರುವವರು	16	10
6	ಕುಟುಂಬ ಯೋಜನೆ ವಿಧಾನಗಳ ಬಳಕೆಯಿಂದಾಗುವ ಆರೋಗ್ಯ ತೊಂದರೆಗಳ ಬಗ್ಗೆ ಮಾಹಿತಿ ಇರುವವರು.	11	80
7	ಕುಟುಂಬ ಯೋಜನೆ ವಿಧಾನಗಳ ಬಳಕೆಯಿಂದ ಉಂಟಾದ ಆರೋಗ್ಯ ತೊಂದರೆಯ ಬಗ್ಗೆ ತಿಳಿಸಿದ ಮಹಿಳೆಯರು	34	10
8	ಈ ತೊಂದರೆಗಳಿಗೆ ಚಿಕಿತ್ಸೆ ಪಡೆದವರು	70	90
9	ಜನನಾಂಗಗಳ ಮಾರ್ಗದ ಸೋಂಕು / ಲೈಂಗಿಕ ಸಂಪರ್ಕದ ಸೋಂಕುಗಳ ಬಗ್ಗೆ ತಿಳುವಳಿಕೆ ಇರುವ ಮಹಿಳೆಯರು	59	90
10	ಹೆಚ್.ಐ.ವಿ.ಸೋಂಕಿನ ಬಗ್ಗೆ ತಿಳುವಳಿಕೆ ಇರುವ ಮಹಿಳೆಯರು	62	90
11	ಜನನಾಂಗಗಳ ಮಾರ್ಗದ ಸೋಂಕಿನ ರೋಗ ಲಕ್ಷಣವನ್ನು ಹೊಂದಿದವರು	20	10
12	ಜನನಾಂಗಗಳ ಮಾರ್ಗದ ಸೋಂಕಿಗೆ ಚಿಕಿತ್ಸೆ ಪಡೆದ ಮಹಿಳೆಯರು	39	90

ಈ ಪಟ್ಟಿಯಿಂದ ತಿಳಿದುಬಂದ ಅಂಶವೇನೆಂದರೆ ಬಹಳಷ್ಟು ಮಹಿಳೆಯರು ತಮಗೆ ಪುರುಷರ ಶಸ್ತ್ರ ಚಿಕಿತ್ಸೆಯ ಬಗ್ಗೆ (55 %) ಮತ್ತು ನಿರೋಧ್‌ಗಳ ಬಗ್ಗೆ (87 %) ತಿಳಿದಿಲ್ಲ ಎಂದು ಹೇಳಿದ್ದಾರೆ. ಇದಕ್ಕೆ ಕಾರಣ ಪುರುಷರ ವಿಧಾನಗಳ ಬಗ್ಗೆ ತಮಗೆ ತಿಳಿದಿದೆಯೆಂದು ತೋರಿಸಿಕೊಳ್ಳಲು ಸಂಕೋಚಪಟ್ಟುಕೊಂಡಿರಬಹುದು.

ಅವರ ಈ ಸಂಕೋಚ ಪ್ರವೃತ್ತಿಯನ್ನ ತೆಗೆದುಹಾಕಿ ಸರಿಯಾದ ನಿರ್ಧಾರಗಳನ್ನು ತೆಗೆದುಕೊಳ್ಳುವಂತೆ ಮಾಡುವ ಅಗತ್ಯವಿದೆ.

ಮೂರನೆ ಒಂದರಷ್ಟು ಮಹಿಳೆಯರು ಕುಟುಂಬ ಯೋಜನೆಯ ವಿಧಾನಗಳ ಬಳಕೆಯಿಂದ ತಾವು ಆರೋಗ್ಯ ತೊಂದರೆಗಳಿಂದ ಬಳಲುತ್ತಿರುವುದಾಗಿ ಹೇಳಿದ್ದಾರೆ. ಈ ಸಂಖ್ಯೆಯು ಬಹಳ ಅಧಿಕವಾಗಿದೆ. ಆರೋಗ್ಯ ಕಾರ್ಯಕರ್ತರು ಮಹಿಳೆಯರ ಆರೋಗ್ಯವನ್ನು ಗಮನಿಸಿ ಅವರಿಗೆ ಸರಿಹೊಂದುವಂತೆ ಕುಟುಂಬ ಯೋಜನೆ ವಿಧಾನದ ಬಳಕೆಗೆ ಸಲಹೆ ನೀಡಬೇಕು. ಆದರೆ ಈ ಅಂಶದ ಕೊರತೆಯು ಕಂಡುಬಂದಿದೆ. ಶೇ.90 % ರಷ್ಟು ಮಹಿಳೆಯರು ಕುಟುಂಬ ಯೋಜನೆಯ ವಿಧಾನಗಳ ಬಳಕೆಯಿಂದಾಗುವ ತೊಂದರೆಗಳ ಬಗ್ಗೆ ತಮಗೆ ತಿಳಿದಿಲ್ಲವೆಂದು ಹೇಳಿದ್ದಾರೆ.

ಇದರಿಂದ ತಿಳಿದುಬರುವುದೇನೆಂದರೆ ಗುಣಾತ್ಮಕ ಸೇವೆಗಳಿಗೆ ಗಮನ ಹರಿಸಿವುದು ಅತ್ಯವಶ್ಯಕ.

ಬಹಳಷ್ಟು ಮಹಿಳೆಯರು AIDS ಬಗ್ಗೆ ಹೆಚ್ಚು ತಿಳಿದುಕೊಳ್ಳಲು ಬಯಸಿವ್ದಾರೆ. ಅವರ ಬಗ್ಗೆ ಅವರು ಕೇಳಿವ್ದರೂ ಕೂಡ ಅವರಿಗೆ ಹೆಚ್ಚಿನ ವಿವರಗಳು ತಿಳಿದಿಲ್ಲ. ಆರೋಗ್ಯ ಕಾರ್ಯಕರ್ತರಿಂವಾಗಿ ಜನನಾಂಗಗಳ ಮಾರ್ಗದ ಸೋಂಕಿನ ಬಗ್ಗೆ ಅವರು ತಿಳಿದುಕೊಂಡಿದ್ದಾರೆ (26 %). ಎರಡನೇ ಮೂಲವೆಂದರೆ ಸ್ನೇಹಿತರು ಮತ್ತು ಸಂಬಂದಿಕರು (20 %) ಶೇ. 9 ರಷ್ಟು ಮಹಿಳೆಯರು ನೀಲಿಕಾರ್ಡ್ ನ ಮೂಲಕ ತಿಳಿದುಕೊಂಡಿದ್ದಾರೆ.

ಜನನಾಂಗಳ ಮಾರ್ಗದ ಸೋಂಕಿನ ಲಕ್ಷಣಗಳನ್ನು ಗುರುತಿಸಲು ಮತ್ತು ಅದಕ್ಕೆ ಚಿಕಿತ್ಸೆ ಪಡೆಯಲು ಮಹಿಳೆಯರಿಗೆ ಸಹಾಯದ ಅವಶ್ಯಕತೆಯಿದೆ.

ಪಟ್ಟಿ 2: ಮಹಿಳೆಯರು ಹೇಳಿದಂತೆ ಕುಟುಂಬ ಯೋಜನೆ ವಿಧಾನಗಳ ಅನುಕೂಲಗಳು ಮತ್ತು ಅನಾನುಕೂಲಗಳು.

ಕ್ರ. ಸಂ.	ವಿಧಾನ	ಪ್ರಮುಖ ಅನುಕೂಲ	ಪ್ರಮುಖ ಅನಾನುಕೂಲ
1	ಸ್ತ್ರೀಯರ ಶಸ್ತ್ರ ಚಿಕಿತ್ಸೆ	ಒಂದೇ ಸಾರಿ ಮಾಡಿಸಿಕೊಳ್ಳಬಹುದಾದ್ದರಿಂದ ಅನುಕೂಲ (51 %)	ಕಿಬ್ಬೊಟ್ಟೆ ನೋವು, ನಿಶ್ಶಕ್ತಿ (18 %)
2	ಪುರುಷರ ಶಸ್ತ್ರ ಚಿಕಿತ್ಸೆ	ಯಾವುದೇ ಅನುಕೂಲವಿಲ್ಲ (64 %)	ಮಡಿಮ ಹಾಕುವವರಿಗೆ ಅಪಾಯ (20%)
3	ಕಾಪರ್-ಟಿ (IUD)	ಶಸ್ತ್ರ ಚಿಕಿತ್ಸೆಗೆ ಹೆದರುವ ಮಹಿಳೆಯರಿಗೆ ಅನುಕೂಲ ವಿಧಾನ (46%)	ರಕ್ತ ಸ್ರಾವ, ಗಡ್ಡೆ ಆರೋಗ್ಯ ತೊಂದರೆಗಳು (20%)
4	ಗರ್ಭನಿರೋಧಕ ಮಾತ್ರೆಗಳು	ರಕ್ತ ಸ್ರಾವದ ತೊಂದರೆಯಿಲ್ಲ (26%)	ಆರೋಗ್ಯ ತೊಂದರೆಗಳು (6%)

ಬಹಳಷ್ಟು ಮಹಿಳೆಯರು ಪುರುಷರ ಶಸ್ತ್ರ ಚಿಕಿತ್ಸೆಯ ಬಗ್ಗೆ ಭಯವನ್ನು ಹೊಂದಿದ್ದಾರೆ ಮತ್ತು ಕಾಪರ್ -ಟಿ (IUD) ಬಗ್ಗೆ ತಪ್ಪು ಭಾವನೆಯನ್ನು ಹೊಂದಿದ್ದಾರೆ.

ಈ ವಿಧಾನಗಳ ಬಗ್ಗೆ ಹೆಚ್ಚಿನ ತಿಳುವಳಿಕೆ ನೀಡುವ ಅಗತ್ಯವಿದೆ.

ಪಟ್ಟಿ 3 : ತಾಯಿಯ ಕಾಳಜಿಯ ಪ್ರಗತಿಯ ಸೂಚಕಗಳು

ಕ್ರ. ಸಂ.	ಸೂಚಕಗಳು	ಹುಣಸೂರು (%)	RCH ಗುರಿ (%)
1	ಗರ್ಭಿಣಿ ಪರೀಕ್ಷೆ ಮಾಡಿಸಿಕೊಂಡ ಮಹಿಳೆಯರು	93	100
2	ಮೂರು ಅಥವಾ ಹೆಚ್ಚು ಭಾರಿ ಗರ್ಭಿಣಿ ಪರೀಕ್ಷೆಗಳಿಗಾಗಿ ಭೇಟಿ ನೀಡಿದವರು	81	100
3	16 ವಾರದೊಳಗೆ ಪ್ರಥಮ ಪರೀಕ್ಷೆ ಮಾಡಿಸಿಕೊಂಡವರು	69	60
4	ಗರ್ಭಿಣಿಯರ ಅಪಾಯಕಾರಿ ಲಕ್ಷಣಗಳ ಬಗ್ಗೆ ತಿಳುವಳಿಕೆ ಇರುವವರು	51	90
5	ಅಪಾಯಕಾರಿ ಲಕ್ಷಣಗಳನ್ನು ಅನುಭವಿಸಿದವರು	58	15
6	ಹೆರಿಗೆಯ ಸಮಯದಲ್ಲಿ ತೊಂದರೆ ಅನುಭವಿಸಿದವರು	24	10
7	ಹೆರಿಗೆಯ ನಂತರ ತೊಂದರೆ ಅನುಭವಿಸಿದವರು	44	15
8	ಸಂಸ್ಥೆಯಗಳಲ್ಲಿ ಆದ ಹೆರಿಗೆಗಳು	32	50
9	ತರಬೇತಿ ಹೊಂದಿದ ಸಿಬ್ಬಂದಿಯವರಿಂದ ಮನೆಯಲ್ಲಿಯಾದ ಹೆರಿಗೆಗಳು	12	33

ಬಹಳ ಕಡಿಮೆ ಸಂಖ್ಯೆಯ ಮಹಿಳೆಯರು ಗರ್ಭಿಣಿ ಪರೀಕ್ಷೆಗಳನ್ನು ಮಾಡಿಸಿಕೊಂಡಿಲ್ಲ. ಏಕೆಂದರೆ ಅದು ತಮಗೆ ಅಗತ್ಯವೆನಿಸಿಲ್ಲ ಎಂದು ಹೇಳಿದ್ದಾರೆ (65%). ಗರ್ಭಿಣಿಯರಿಗೆ ಬರುವ ಅಪಾಯಕಾರಿ ಲಕ್ಷಣಗಳ ಬಗ್ಗೆ ಮಹಿಳೆಯರಿಗೆ ತಿಳಿದಿಲ್ಲ.

ಇದರ ಬಗ್ಗೆ ಅವರಿಗೆ ತಿಳುವಳಿಕೆ ನೀಡುವುದು ಅಗತ್ಯ. ಇದರಿಂದಾಗಿ ಅವರು ತಮ್ಮ ಬಗ್ಗೆ ತಾವೇ ಕಾಳಜಿ ವಹಿಸಬಹುದು

ಪಟ್ಟಿ 5: ಪ್ರಸವ ಪೂರ್ವ ಕಾಳಜಿಯ ಗುಣಮಟ್ಟ

ಕ್ರ. ಸಂ.	ಪ್ರಸವ ಪೂರ್ವ ಆರೈಕೆಯ ಸೇವೆಗಳು.	ಹುಣಸೂರು (%)	RCH ಗುರಿ (%)
1	ತೂಕ ಮಾಡಿಸಿಕೊಂಡವರು	64	95
2	ರಕ್ತದೊತ್ತಡ ಪರೀಕ್ಷಿಸಿಕೊಂಡವರು	81	95
3	ಕಬ್ಬಿಣಾಂಶದ ಮಾತ್ರೆಗಳನ್ನು ತೆಗೆದುಕೊಂಡವರು	84	100
4	ಧನುರ್ವಾಯು ಚುಚ್ಚುಮದ್ದನ್ನು ತೆಗೆದುಕೊಂಡವರು.	92	100
5	ಸಂಪೂರ್ಣ ಗರ್ಭಿಣಿ ಪರೀಕ್ಷೆ ಮಾಡಿಸಿಕೊಂಡವರು.	74	90
6	ಸುರಕ್ಷಾ ಹೆರಿಗೆ ಚೀಲವನ್ನು ಉಪಯೋಗಿಸಿ ಮನೆಯಲ್ಲಾದ ಹೆರಿಗೆಗಳು.	12	90
7	ಜನನವಾದ ತಕ್ಷಣ ಎದೆ ಹಾಲು ಕುಡಿಸಿದವರು	32	95
8	ತೂಕ ಮಾಡಲ್ಪಟ್ಟ ಶಿಶುಗಳು.	21	95

ಮನೆಗಳಲ್ಲಾದ ಹೆರಿಗೆಗಳ ಸಂಖ್ಯೆ ಅಧಿಕ ಹಾಗೂ ಸುರಕ್ಷ ಹೆರಿಗೆ ಚೀಲವನ್ನು (DDK) ಉಪಯೋಗಿಸಿದವರ ಸಂಖ್ಯೆ ಕಡಿಮೆ. ಸರ್ಕಾರದಿಂದ ಸುರಕ್ಷಾ ಹೆರಿಗೆ ಚೀಲ (DDK) ಸಿಗದಿದ್ದಲ್ಲಿ ಮಹಿಳೆಯು ಮುಬಾರಿಯಲ್ಲುವ DDK ಯನ್ನು ತಡೆಯಬಹುದೇ? (3-4 ರೂ ಗಳು).

ಮಗುವಿನ ಜನನವಾದ ತಕ್ಷಣ ಎದೆ ಹಾಲು ಕುಡಿಸುವುದರ ಮಹತ್ವದ ಬಗ್ಗೆ ಮಹಿಳೆಯರಿಗೆ ತಿಳುವಳಿಕೆ ನೀಡುವ ಅಗತ್ಯವಿದೆ. ಮನೆಯಲ್ಲಿ ಜನಿಸಿದ ಮಗುವನ್ನು ತಕ್ಷಣ ತೂಕ ಮಾಡಲು ಹೇಗೆ ಸಾಧ್ಯ?.

ಪಟ್ಟಿ 6: ಶಿಶು ಕಾಳಜಿಯ ಸೇವೆಗಳಲ್ಲಿನ ಪ್ರಗತಿ.

ಕ್ರ. ಸಂ.	ಸೂಚಕಗಳು	ಹುಣಸೂರು (%)	RCH ಗುರಿ (%)
1	ಅತಿಸಾರ ಭೇದಿಯ ಸಮಯದಲ್ಲಿ ORS ಕೊಡುವ ಬಗ್ಗೆ ತಿಳಿದಿರುವವರು.	47	90
2	ತೀವ್ರ ಉಸಿರಾಟದ ಸೋಂಕು ಮತ್ತು ನ್ಯುಮೋನಿಯಾದ ಲಕ್ಷಣಗಳ ಬಗ್ಗೆ ತಿಳಿದಿರುವವರು.	62	90
3	ಸಂಪೂರ್ಣ ಚುಚ್ಚು ಮದ್ದನ್ನು ಹಾಕಿಸಿದವರು.	96	100
4	ಕನಿಷ್ಠ ಒಂದು ಬಾರಿ ವಿಟಮಿನ್ 'ಎ' ಹಾಕಿಸಿದವರು.	85	95

ಗುರಿಗೆ ಸಂಬಂಧಿಸಿದಂತೆ ಮಹಿಳೆಯರ ತಿಳುವಳಿಕೆ ಕಡಿಮೆ, ಚುಚ್ಚುಮದ್ದಿನ ಸೇವೆಗಳು ಮಕ್ಕಳಿಗೆ ತಲುಪುತ್ತಿವೆ. ಇದೇ ವಿಧಾನವನ್ನ ನಾವು ಇತರ ಸೇವೆಗಳನ್ನು ಉತ್ತಮಪಡಿಸಲು ಬಳಸಿಕೊಳ್ಳಬಹುದೇ?.

ಮತ್ತು ಸಮುದಾಯದ ಮಹಿಳೆಯರು ಇದರ ಇತರ ಸದಸ್ಯರಾಗಿರಬೇಕೆಂದು ಸೂಚಿಸಲಾಗಿತ್ತು. ಮಹಿಳಾ ಆರೋಗ್ಯ ಕಾರ್ಯಕರ್ತರು ಈ ಸಮಿತಿಗಳನ್ನು ರಚಿಸಿ ಇದರ ಸಭೆಗಳನ್ನು ನಿಯಮಿತವಾಗಿ ನಡೆಸಿ ಆರೋಗ್ಯ ಕಾರ್ಯಕ್ರಮಗಳನ್ನೂ ಜಾರಿಗೊಳಿಸಲು ಸಹಾಯವನ್ನೂ ಪಡೆಯಬೇಕೆಂದು ನಿರೀಕ್ಷಿಸಲಾಗಿತ್ತು.

ಯೋಜನೆಯ ಉದ್ದೇಶಗಳು. :

ಈ ಯೋಜನೆಯ ಉದ್ದೇಶವೇನೆಂದರೆ, ಆರೋಗ್ಯ ಸೇವೆಗಳನ್ನು ಯೋಜಿಸುವಲ್ಲಿ, ಜಾರಿಗೊಳಿಸುವಲ್ಲಿ ಹಾಗೂ ಪರಿಶೀಲಿಸುವಲ್ಲಿ ಗ್ರಾಮಮಟ್ಟದ ಸಮಿತಿಗಳ ಭಾಗವಹಿಸುವಿಕೆಯನ್ನು ಹೆಚ್ಚಿಸುವುದು.

ಈ ಯೋಜನೆಯು ಗ್ರಾಮ ಮಟ್ಟದ ಸಮಿತಿಗಳು ಈ ಕೆಳಗೆ ಕಂಡ ಕಾರ್ಯಗಳನ್ನು ಕೈಗೊಳ್ಳಲು ಪ್ರೋತ್ಸಾಸಹಿಸುವುದು

1. ವಿಕೇಂದ್ರಿಕೃತ ಯೋಜನೆಯಲ್ಲಿ ಭಾಗವಹಿಸುವಿಕೆ

2. ಸಮಸ್ಯೆಗಳನ್ನು ಗುರುತಿಸಿ ಅವುಗಳಿಗೆ ಪರಿಹಾರ ಕಂಡುಕೊಳ್ಳುವುದು.

3. ಸರ್ಕಾರದ ಆರೋಗ್ಯ ಸಿಬ್ಬಂದಿಯ ಜೊತೆಗೆ ಸಂಪರ್ಕವನ್ನು ಹೆಚ್ಚಿಸುವುದು.

ಯೋಜನೆಯನ್ನು ಕೈಗೊಳ್ಳುವ ಸ್ಥಳ :-

ಈ ಯೋಜನೆಯನ್ನು ಹುಣಸೂರು ತಾಲ್ಲೂಕಿನಲ್ಲಿ ಕೈಗೊಳ್ಳಲಾಗುವುದು. ಈ ಯೋಜನೆಯು ಎಷ್ಟರ ಮಟ್ಟಿಗೆ ಯಶಸ್ವಿಯಾಗಿದೆಯೆಂದು ತಿಳಿದುಕೊಳ್ಳಲು ಇದನ್ನು ಟಿ.ನರಸೀಪುರ ತಾಲ್ಲೂಕಿಗೆ (Control block) ಹೋಲಿಸಲಾಗುವುದು. ವಿಕೆಂದರೆ ಈ ಎರಡೂ ತಾಲ್ಲೂಕುಗಳು ಬಹಳಷ್ಟು ಅಂಶಗಳಲ್ಲಿ ಸಮಾನವಾಗಿವೆ.

ಯೋಜನೆಯನ್ನು ಜಾರಿಗೊಳಿಸುವ ವಿಧಾನ :

ಯೋಜನೆಯ ಚಟುವಟಿಕೆಗಳನ್ನು ಜಾರಿಗೊಳಿಸುವಲ್ಲಿ ಅನುಕೂಲ ಮಾಡಲು ಹಾಗೂ ಪುನರಾವಲೋಕನ ಮಾಡಲು (Project Implimentation Committee (PIC) (ಯೋಜನೆ ಕಾರ್ಯಗತ ಸಮಿತಿ) ಯನ್ನು ರಚಿಸಲಾಗುವುದು. ಈ ಸಮಿತಿಯಲ್ಲಿ ಆರು ಸದಸ್ಯರಿರುತ್ತಾರೆ. ಇವರಲ್ಲಿ ನಾಲ್ಕು ಸದಸ್ಯರು ಸರ್ಕಾರಕ್ಕೆ ಸೇರಿದವರು ಮತ್ತು ಇಬ್ಬರು ಸದಸ್ಯರು FRHS ಗೆ ಸೇರಿದವರಾಗಿರುತ್ತಾರೆ.

ಸರ್ಕಾರದ ಕಡೆಯಿಂದ ಇಬ್ಬರು ರಾಜ್ಯದ RCH ಅಧಿಕಾರಿಗಳು, ಜಿಲ್ಲಾ ಆರೋಗ್ಯ ಅಧಿಕಾರಿ ಹಾಗೂ ಒಬ್ಬರು ಜಿಲ್ಲಾ ಪಂಚಾಯಿತಿ ಅಧ್ಯಕ್ಷರಾಗಿರುತ್ತಾರೆ. ಸಮಿತಿಯ ಪ್ರಗತಿಯನ್ನು ಪುನರಾವಲೋಕಿಸಲು ಈ ಸಮಿತಿ ಆಗಾಗ್ಗೆ ಸಭೆ ಸೇರುತ್ತದೆ.

ಎರಡು ಪ್ರಾಥಮಿಕ ಆರೋಗ್ಯ ಕೇಂದ್ರಗಳಿಗೆ ಒಬ್ಬರಂತೆ ಏಳು ಜನ Community Facilitators (CF) ಗಳನ್ನು ಈ ಯೋಜನೆಯು ಹುಣಸೂರು ತಾಲ್ಲೂಕಿನಲ್ಲಿ ನಿಯೋಜಿಸುವುದು. ಇವರು ಮುಖ್ಯ ಸಂಯೋಧಕರು ಹಾಗೂ PIC ಯ ಮಾರ್ಗದರ್ಶನದಲ್ಲಿ ಕೆಲಸ ಮಾಡುವರು. CF ಮತ್ತು ANM ರವರು ಗ್ರಾಮ ಮಟ್ಟದ ಸಮಿತಿಗಳ ಜೊತೆ ಸೇರಿ ಕಾರ್ಯ ನಿರ್ವಹಿಸುವರು.

ಯೋಜನೆಯ ಚಟುವಟಿಕೆಗಳು ಈ ಕೆಳಕಂಡ ಪ್ರಗತಿಯ ಸೂಚಕಗಳಿಗೆ ಅನುಸಾರವಾಗಿ ನಿಯಮಿತವಾಗಿ ಪರಿಶೀಲಿಸಲ್ಪಡುತ್ತವೆ.

1. ಕಾರ್ಯನಿರತ ಗ್ರಾಮ ಮಟ್ಟದ ಸಮಿತಿಗಳ ಸಂಖ್ಯೆ

2. ಸ್ಥಳೀಯ ಸಂಪನ್ಮೂಲಗಳನ್ನು ಸಜ್ಜುಗೊಳಿಸುತ್ತಿರುವ ಗ್ರಾಮ ಮಟ್ಟದ ಸಮಿತಿಗಳ ಸಂಖ್ಯೆ.

3. ಉತ್ತಮ ಸಾಧನೆಯನ್ನು ಹೊಂದಿರುವ ಹಾಗೂ ಚೆನ್ನಾಗಿ ಕಾರ್ಯ ನಿರ್ವಹಿಸುತ್ತಿರುವ ಉಪಕೇಂದ್ರಗಳ ಸಂಖ್ಯೆ.

4. ವಿಕೇಂದ್ರಿಕೃತ ಯೋಜನೆಯಲ್ಲಿ ಭಾಗವಹಿಸುತ್ತಿರುವ ಗ್ರಾಮ ಮಟ್ಟದ ಸಮಿತಿಗಳ ಸಂಖ್ಯೆ.

CF ಗಳು ಗ್ರಾಮಮಟ್ಟದ ಸಮಿತಿಗಳಿಗೆ ಪ್ರಾರಂಭದಲ್ಲಿ ತಿಂಗಳಿಗೊಂದು ಬಾರಿಯಂತೆ, ನಂತರ ಆದರ ಪ್ರಗತಿಯನ್ನು ಪುನರಾವಲೋಕಿಸಲು 2-3 ತಿಂಗಳಿಗೊಂದು ಬಾರಿಯಂತೆ ಭೇಟಿ ನೀಡುವರು ಹಾಗೂ ಇವರು ಆರೋಗ್ಯ ಚಟುವಟಿಕೆಗಳಿಗೆ

ಸಂಬಂಧಿಸಿದ ಮಾಹಿತಿಗಳನ್ನು ನೀಡಿ, ಆವರು ಬೆಂಬಲ ನೀಡಬಹುದಾದ ಕ್ಷೇತ್ರಗಳನ್ನು ಗುರುತಿಸಲು ಸಹಾಯ ಮಾಡುವರು.

ಯತಸ್ಸು ಪಡೆದ ಅನುಭವಗಳನ್ನು ಮತ್ತು ಸಮಸ್ಯೆಗಳನ್ನು ಕುರಿತು ಚರ್ಚಿಸಲು ತಾಲ್ಲೂಕಿನ ವಿವಿಧ ಗ್ರಾಮಮಟ್ಟದ ಸಮಿತಿಯ ಪ್ರತಿನಿಧಿಗಳು ಆಗಾಗ್ಗೆ ತಾಲ್ಲೂಕಿನ ಪ್ರಮುಖ ಕಾರ್ಯಸ್ಥಾನದಲ್ಲಿ ಭೇಟಿಯಾಗುವರು.

ಯೋಜನೆ ಮೌಲ್ಯ ಮಾಪನ :

ಯೋಜನೆಯ ಮೌಲ್ಯಮಾಪನದಲ್ಲಿ ಈ ಕೆಳಗಿನ ಸೂಚಕಗಳನ್ನು ಉಪಯೋಗಿಸಲಾಗುತ್ತದೆ.

1. ಪೂರ್ಣವಾದ ಪ್ರಸವ ಪೂರ್ವ ಸೇವೆಗಳನ್ನು ಪಡೆದ ಗರ್ಭಿಣಿ ಮಹಿಳೆಯರ ಸಂಖ್ಯೆ.
2. ತರಬೇತಿ ಹೊಂದಿದ ಆರೋಗ್ಯ ಸಿಬ್ಬಂದಿಗಳಿಂದ ಕೈಗೊಂಡ ಹೆರಿಗೆಗಳ ಸಂಖ್ಯೆ.
3. ಕುಟುಂಬ ಯೋಜನಾ ವಿಧಾನಗಳನ್ನು ಆವರ ಅಗತ್ಯಗಳಿಗನುಸಾರವಾಗಿ ಉಪಯೋಗಿಸುತ್ತಿರುವ ದಂಪತಿಗಳ ಸಂಖ್ಯೆ.
4. ತಾಯಿ ಮತ್ತು ಮಕ್ಕಳ ಆರೋಗ್ಯದ ಬಗ್ಗೆ ಸಂಪೂರ್ಣ ಅರಿವು ಇರುವ ದಂಪತಿಗಳ ಸಂಖ್ಯೆ.
5. RTI & STI ಗಳ ಬಗ್ಗೆ ಸಂಪೂರ್ಣ ಅರಿವು ಇರುವ ದಂಪತಿಗಳ ಸಂಖ್ಯೆ.

ಯೋಜನೆಯ ಮೌಲ್ಯಮಾಪನ ಮಾಡಲು ಮಾಹಿತಿಗಳನ್ನು ಎರಡೂ ತಾಲ್ಲೂಕುಗಳಲ್ಲಿ ಮೂರು ಮೂಲಗಳಿಂದ ಸಂಗ್ರಹಿಸಲಾಗುವುದು.

1. ಕುಟುಂಬ ಸಮೀಕ್ಷೆ
2. ಎಲ್ಲಾ ಉಪಕೇಂದ್ರಗಳ ಸಮೀಕ್ಷೆ
3. ಆರೋಗ್ಯ ಸಿಬ್ಬಂದಿ ಹಾಗೂ ಸಮುದಾಯದ ನಾಯಕರ ಜೊತೆಗೆ ವಿವರಣಾತ್ಮಕ ಸಂದರ್ಶನ.

ಮುಂದಿನ ಮೂರು ತಿಂಗಳಲ್ಲಿ ಕೈಗೊಳ್ಳಲಾಗುವ ಕಾರ್ಯಗಳು.

1. ಕುಟುಂಬಗಳ ಸಮೀಕ್ಷೆ - ಆಗಸ್ಟ್ - ಸಪ್ಟಂಬರ್ ತಿಂಗಳಲ್ಲಿ
2. PICಯ ಸಭೆ - ಸೆಪ್ಟಂಬರ್ ತಿಂಗಳ ಕೊನೆಯಲ್ಲಿ
3. ಯೋಜನೆಯ ಪ್ರಾರಂಭ - ಆಕ್ಟೋಬರ್ ತಿಂಗಳಲ್ಲಿ

DRAFT

CONFIDENTIAL

WORLD HEALTH ORGANIZATION

SPECIAL PROGRAMME OF RESEARCH, DEVELOPMENT
AND RESEARCH TRAINING IN HUMAN REPRODUCTION

TASK FORCE ON VACCINES FOR FERTILITY REGULATION

Project Number: 91904

Project Title: Phase II clinical trial of a prototype anti-hCG vaccine

INFORMATION BROCHURE AND CONSENT FORM

BROCHURE
20.09.1991

NOTICE

YOU ARE CONSIDERING PARTICIPATION IN A PHASE II CLINICAL TRIAL OF AN ANTIFERTILITY VACCINE.

IN ORDER FOR YOU TO REACH A DECISION ON WHETHER OR NOT TO TAKE PART IN THIS STUDY, IT IS IMPORTANT THAT YOU UNDERSTAND WHAT THE VACCINE IS, HOW IT IS BELIEVED TO WORK, AND WHAT IS INVOLVED FOR THE PARTICIPANTS IN THE TRIAL.

THIS BROCHURE HAS BEEN PREPARED IN ORDER TO PROVIDE YOU WITH THIS INFORMATION. IT HAS BEEN WRITTEN IN THE FORM OF ANSWERS TO QUESTIONS LIKELY TO BE ASKED BY INDIVIDUALS WHO VOLUNTEER TO BE IN THE STUDY.

PLEASE READ THIS BROCHURE CAREFULLY AND ASK ANY ADDITIONAL QUESTIONS THAT MAY OCCUR TO YOU. YOU ARE FREE TO ASK QUESTIONS AT ANY TIME BEFORE AND DURING THE STUDY.

IF YOU DECIDE TO PARTICIPATE, YOU WILL BE ASKED TO SIGN THE STATEMENT ON THE LAST PAGE OF THE BROCHURE. THIS STATEMENT SAYS THAT YOU HAVE BEEN GIVEN SUFFICIENT TIME TO READ THIS BROCHURE, THAT YOU UNDERSTAND ITS CONTENTS, THAT YOU HAVE RECEIVED SATISFACTORY ANSWERS TO ANY AND ALL QUESTIONS YOU MAY HAVE ASKED, AND THAT YOU ARE PARTICIPATING IN THE TRIAL OF YOUR OWN FREE WILL.

SHOULD YOU DECIDE TO WITHDRAW FROM THE STUDY, FOR ANY REASON AND AT ANY TIME, YOU ARE FREE TO DO SO WITHOUT IN ANY WAY AFFECTING YOUR FURTHER MEDICAL CARE.

1. HOW ARE NEW DRUGS AND VACCINES DEVELOPED?

The development of new drugs and vaccines is a long and expensive undertaking often requiring more than ten years and many millions of dollars. It can be divided into two major parts - the preclinical stage, involving animal experiments and laboratory tests, followed by the clinical stage, involving testing of the new preparation in human volunteers. Both the preclinical and clinical stages of new drug and vaccine development have the following two principal objectives.

The first objective is to determine that the new preparation is safe and does not produce any side effects which would make it unacceptable for human use.

The second objective is to determine that the new preparation is effective in that it prevents, cures or alleviates illness and disease, or, in the case of a new family planning method, provides protection against unwanted pregnancy.

2. WHY ARE CLINICAL TRIALS NECESSARY?

Laboratory animals do not always respond to a drug or vaccine in the same way as humans. Therefore, however carefully the preclinical animal experiments and laboratory tests are designed and carried out, it is necessary at some time in the development of all new drugs and vaccines to prove how safe and effective they are in humans. These tests are called clinical trials and are carried out only when all of the safety and efficacy studies and laboratory tests referred to above have been satisfactorily completed and when the information obtained has been submitted to, and approved by, the appropriate national regulatory authorities in the country in which the clinical trials are to be conducted.

3. WHAT ARE CLINICAL TRIALS?

Clinical trials are usually carried out in the following four phases.

Phase I:

A Phase I clinical trial is the first time the new drug or vaccine is tested in humans. The main objective of a Phase I clinical trial is to determine the safety of the preparation. Great care is taken, therefore, to ensure that the volunteers are exposed to the lowest possible risk.

The purpose of a Phase I clinical trial of a new method of birth control for women is to test the safety of the preparation, and to confirm that the drug or vaccine is "processed" by the body in the expected manner. Therefore, these studies are done in healthy volunteers who are infertile because they have previously elected to be surgically sterilized.

Volunteers in these Phase I trials will receive no direct benefit from their participation. Since they have already been surgically sterilized, they are unlikely to be candidates for the new vaccine once it becomes available for the general public as a method of birth control. Participation in a Phase I clinical trial serves only to benefit others.

Phase II:

A Phase II clinical trial is the first time the new drug or vaccine is tested for efficacy (effectiveness) in humans. In the case of a new method of birth control, therefore, a Phase II trial is carried out with healthy, fertile volunteers. The principal objective is to obtain information on how effective the new preparation is in preventing pregnancy, as well as to obtain additional information on possible side effects associated with its use.

If the new drug or device works as intended, Phase II trial volunteers will benefit from the protective effect of the new method during the course of the trial. It is possible that the volunteers who take part in a Phase II clinical trial might be future users of the new preparation when it eventually becomes available for general use. The role of Phase II clinical trial volunteers is, therefore, different to that of Phase I trial volunteers.

Phase III:

If the results of the Phase II trials indicate that the drug or device is effective and does not produce any unacceptable side effects, Phase III clinical trials are started. Phase III trials also involve healthy, fertile volunteers and are designed to generate additional information on the efficacy and safety of the preparation when it is used by a larger number of individuals and over a longer period of time. The participants in Phase III clinical trials will benefit from the protective effect of the new method during the course of the trial. It is possible that the volunteers who take part in a Phase III clinical trial might be future users of the new preparation when it eventually becomes available for general use. The role of Phase III clinical trial volunteers is, therefore, similar to that of Phase II trial volunteers.

Phase IV:

Phase IV clinical trials are usually carried out when the new drug or vaccine has been licensed for general use. These trials involve monitoring of side effects and efficacy of the preparation when it is used by the general population.

4. WHAT ARE VACCINES AND HOW DO THEY WORK?

Healthy people have an immune system that protects them against 'foreign' materials - such as bacteria, viruses and other micro-organisms - that enter or come into contact with the body and can cause illness and disease.

When a person's immune system detects this foreign material, it produces an immune response consisting of antibodies and immune cells. These antibodies and immune cells circulate in the body and neutralize or destroy the foreign material, and, at the same time, provide lasting protection if the person comes into contact with the same mat later on. However, there is a delay between exposure to the foreign material and the production of a sufficient level of immunity to provide protection. Sometimes this delay can lead to illness, and, in the case of the more serious diseases, even death.

Vaccines have been developed in order to overcome the health risks caused by this delay. A vaccine contains molecules which mimic the foreign material but which are not capable of causing disease. These molecules are recognized by the immune system which responds by producing an immune response which persists, sometimes for many years, and which provides pre-existing protection should the vaccine recipient come into contact with foreign micro-organisms or materials at a later date.

5. WHAT IS AN ANTIFERTILITY VACCINE?

Antifertility vaccines are like any other vaccines, except that they are designed to protect the recipient against unwanted pregnancy rather than disease. Antifertility vaccines, therefore, are not directed against foreign materials but against molecules produced by the body and which are needed for successful reproduction. Some antifertility vaccines can be directed against a woman's eggs, or a man's sperm, to prevent fertilization. Other antifertility vaccines can be directed against a hormone, such as hCG, which is needed for pregnancy to occur.

6. WHAT IS HCG?

HCG stands for human chorionic gonadotrophin. It is a hormone that is first produced by the egg after it has been fertilized by a sperm and before it attaches to, and burrows into, the wall of the womb to begin a pregnancy. This process of attachment and burrowing is known as

implantation. The main role of HCG is to stimulate the ovary to continue its production of another hormone, progesterone. Progesterone is needed for implantation to be successfully completed and without it pregnancy will not occur.

7. WHAT IS AN ANTI-HCG VACCINE AND HOW DOES IT WORK?

The anti-hCG vaccine to be used in this trial consists of a small piece, or peptide, of hCG which has been manufactured in the laboratory. In order that the immune system will see the peptide as a foreign material, it is chemically attached to another molecule, diphtheria toxoid, and a small amount is injected into the muscle of the buttock in a thick, creamy suspension. Also included in the vaccine is another chemical, called an adjuvant, whose role is to further stimulate the immune response.

After injection of the vaccine, the recipient's immune system produces antibodies and immune cells against hCG that circulate in her body and protect her, temporarily, from becoming pregnant.

It is not known exactly how the vaccine works (this is the subject of ongoing research). However, there are a number of ways in which the vaccine might work. For example, a few days after an egg is fertilized by a sperm and has started to divide, it begins to secrete hCG. The pre-existing antibodies and immune cells produced by an anti-hCG vaccine could either:

(a) inhibit the cells in the fertilized egg which produce hCG and thereby prevent its production and release into the blood, and/or;

(b) neutralize the hCG after it has been released into the blood and thereby prevent it reaching the ovary and maintaining progesterone production.

Whatever the mechanism, the result is that the ovary is not stimulated to produce progesterone. Without progesterone, implantation of the fertilized egg cannot be completed and a normal menstrual period occurs.

8. FOR HOW LONG WOULD THE ANTI-HCG VACCINE REMAIN EFFECTIVE?

This anti-hCG vaccine has been designed not to produce a long-lasting or permanent antifertility effect. Information from a Phase I clinical trial with this anti-hCG vaccine shows that it is likely to provide protection against pregnancy for at least three months and perhaps as much as six months or more. This means that at the end of this time the immune response produced by the vaccine will drop and the woman should again be able to become pregnant. If she chooses to continue practising birth control, she could either receive another injection of the vaccine which should provide a second period of protection expected to be of similar duration to the first or select an alternative method of her choice.

Further research is being carried out to produce a range of anti-hCG vaccines with different durations of efficacy. This would allow individuals to select a vaccine to suit their own needs from a range offering protection for a few months or for one or more years.

9. WHY IS AN ANTI-HCG VACCINE AN ATTRACTIVE METHOD OF FAMILY PLANNING?

An antifertility vaccine is considered to have a number of advantages over some of the currently available methods of birth control.

(a) It does not involve the use of hormonal steroids such as those contained in birth control pills or injectable contraceptives. Although these steroid based preparations are given in very small amounts and find a high level of acceptability in a large segment of the contracepting population, they do pose significant health problems to a small proportion of women in certain high-risk groups. In a slightly larger proportion of

women, they may cause annoying but not dangerous side effects such as irregular menstrual periods or lack of menstruation. No such menstrual disturbances were seen in the preclinical studies in baboons and in the Phase I clinical trial of the anti-hCG vaccine.

(b) The vaccine does not involve the insertion of a foreign object, such as an intrauterine device (IUD), into a woman's uterus.
While the IUD is a very good method of birth control for many women, in some it increases the likelihood of pelvic infection or heavy menstrual bleeding. No such risk is associated with the vaccine.

(c) The vaccine appears to be more effective than some other methods.
In preclinical studies in baboons, the antifertility efficacy of the vaccine was found to be in excess of 95%. This is more effective than most barrier methods, rhythm, or withdrawal. It is not yet known what the efficacy of the anti-hCG vaccine will be in fertile women - one of the objectives of this Phase II trial is to obtain this information. However, from the information obtained so far it is likely that the vaccine will be at least as effective as the contraceptive pill in those women who generate an adequate immune response to the vaccine.

(d) The vaccine would be easy to use.
It is possible that the duration of protection offered by the vaccine can be adjusted to the child-bearing plans of the woman. During the period of protection provided by the vaccine, the woman would not have to take a pill every day, or use a barrier method or withdrawal with every act of intercourse. Frequent visits to a family planning clinic would not be needed although this would depend on the duration of effect of the particular vaccine selected and the nature of the side effects detected in clinical trials.

10. WHAT IS THE CURRENT STAGE OF DEVELOPMENT OF THE ANTI-HCG VACCINE?

The hCG vaccine to be tested in this Phase II clinical trial has been under development for the past 15 years. During this time it has been studied for efficacy (ability to prevent pregnancy) in baboons and for safety (lack of side effects) in several different types of animal and in women volunteers in a Phase I clinical trial.

Animal studies

As mentioned at the beginning of this brochure [see Question 1], the purpose of the animal studies is two-fold, to determine the safety of the vaccine, and to determine the antifertility efficacy of the vaccine.

The animal safety studies that have been carried out include injecting mice, rats, rabbits and baboons with the complete vaccine and its individual components. No sign of any adverse side effects where seen in these studies even when the vaccine was given in amounts that were many times the amount to be given to women and on a more frequent basis than is being proposed for the clinical trials.

Laboratory animals, such as mice, rats and rabbits, do not produce chorionic gonadotrophin (CG). CG is a hormone produced only by monkeys, apes and humans. The animal efficacy studies were carried out, therefore, in baboons which, like the human, require CG for the fertilized egg to implant in the womb and for pregnancy to become established. As indicated earlier in this brochure [see Question 9 (c)], female baboons immunized with the anti-hCG vaccine had a pregnancy rate of less than 5% compared with a pregnancy rate of 70% in nonimmunized baboons. Occassionally, immunized baboons became pregnant when their immune response was not adequate to provide protection. Every time this happened, the pregnancy continued normally, no miscarriages occurred, and normal babies were born. Similar results were obtained in other studies in which a different type of anti-hCG vaccine was used to immunize rhesus monkeys and bonnet monkeys. However, when marmosets, a smaller monkey, were immunized with this second type of anti-hCG vaccine, they exhibited a higher-than-average rate of miscarriages as their immune response to hCG began to decline.

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Phase I clinical trial

The Phase I clinical trial of the anti-hCG antifertility vaccine was carried out in 1986 and 1987 with women who had previously chosen to be sterilized before volunteering to take part in the trial. A total of 42 women took part in the trial and were assigned to five different dose groups.

Each woman received two injections of the vaccine at an interval of six weeks and provided frequent blood and urine samples for measuring anti-hCG antibody levels and for conducting a large number of laboratory tests. In addition, each volunteer received thorough physical examinations and was carefully monitored for side effects throughout the study.

A few of the women developed temporary soreness at the injection site, and a few had muscle aches lasting up to 48 hours after the injections. However none of the women considered these side effects serious enough to withdraw from the study and no other significant adverse effects were seen.

Women from all of the vaccine dose groups developed antibodies to hCG at levels that were estimated to provide protection against pregnancy. These levels lasted for at least three months in the low dose group and up to six months in the higher dose groups. However, since these women had previously been sterilized, it was not possible to determine if these antibody levels actually were capable of providing protection against pregnancy in these individuals.

11. WHAT ARE THE GOALS OF THIS PHASE II CLINICAL TRIAL?

The principal objective of this Phase II trial is to see whether the antibodies produced by the vaccine will prevent pregnancy. In addition, further information will be collected about side effects associated with the use of the vaccine.

12. WHO IS ELIGIBLE TO PARTICIPATE IN THIS CLINICAL TRIAL?

Healthy women between the ages of 18 and 39 who have had at least one pregnancy are eligible. All participants should have regular menstrual periods, be engaged in a steady sexual relationship with a man who is capable of fathering a child, and be using an IUD or barrier methods of contraception as their sole method of family planning. They should not be breast-feeding, nor taking certain medications, nor have a history of severe allergies. Women who choose to participate will be thoroughly screened for these and other conditions which might make them ineligible for inclusion in the study. A total of up to 250 participants will be needed for the Phase II trial.

13. WHAT WILL PARTICIPATION IN THIS CLINICAL TRIAL INVOLVE?

Women who choose to participate in this Phase II clinical trial will be interviewed and given a physical examination including a gynecological examination. A Pap smear will be taken and laboratory tests will be carried out. These tests require the provision by the participant of a urine specimen and the drawing of a blood sample from a vein in the arm.

If a women meets all screening criteria, she will be given a diary in which to record her menstrual cycles, the dates of sexual intercourse, and any changes in her general health. She will come to the clinic once every month for three months for interviews and the drawing of blood samples.

She will then be given three injections of the vaccine, at intervals of four and six weeks. Each injection will be given into the buttocks and will be preceded by a brief physical examination and a skin (prick) test.

Following injection, all participants in this trial will need to visit the clinic twice each month for a period of approximately 6 months. At each of these visits, participants will be interviewed and a blood sample taken. A urine sample will need to be provided on some occasions.

When a participant's anti-hCG antibody levels rise above the level estimated to provide protection against pregnancy, she will be advised to have her IUD removed (or to stop using condoms). When her antibody levels fall below the estimated efficacy level, or after six months, whichever comes earlier, all women will be given the option of recommencing contraception.

After the first year, participants will be monitored at three-monthly intervals for another year. This monitoring will involve an interview and the provision of blood and urine samples.

All participants have the right to withdraw from the study at any time and for any reason without in any way affecting their future medical care.

14. WHAT ARE THE POTENTIAL RISKS AND PROBLEMS THAT MIGHT BE ENCOUNTERED?

There are three types of risks and problems that must be considered:

Side effects

Temporary soreness at the injection site and muscle aches were experienced by some of the women taking part in the Phase I clinical trial; it is likely that the same events may occur in this Phase II clinical trial. Although no other significant side effects have been seen in the animal and human studies carried out with this vaccine so far, it is possible that a new side effect could become apparent as the number of women receiving the vaccine increases. It is not possible to predict whether such an event will occur or what type of side effect it might be. If a number of women develop serious side effects, the physician in charge of the trial may decide to stop it.

Any woman who takes part in the trial and who develops a side effect will be offered the appropriate treatment for it.

Irreversibility

Due to expected individual variations in the immune responses produced by the vaccine, anti-hCG antibodies may persist longer in some vaccine recipients than in others and, in some cases, the antibodies may last indefinitely. Although this has not been seen in the animals studies or in the Phase I clinical trial human studies, it remains a theoretical possibility.

Failure

It is possible that the vaccine may fail to protect some women against pregnancy even though they had produced what was considered to be an adequate immune response. Although no adverse effects on fetal development of antibodies to hCG were seen in animal studies, it is not known what the effects, if any, will be in the human. If pregnancies occur, two options will be available to the volunteer. One will be to continue with the pregnancy; the other option will be to have the pregnancy terminated at a very early stage. Whichever option is chosen, the women involved will be offered the appropriate care.

If two or more participants become pregnant with antibody values above a level calculated to be effective, the Phase II trial will be stopped and all participants will be advised to recommence using their previous or an acceptable alternative method of birth control.

15. WHAT ARE THE BENEFITS OF PARTICIPATION?

Participants will receive a very thorough medical screening prior to their inclusion in the Phase II trial. In the Phase I trial, medical conditions were found in several prospective trial participants that had not previously been diagnosed. This allowed them to obtain preventative treatment for conditions that might have caused serious illness at a later date.

By taking part in this t[illegible] articipants may benefit personally from the antifertility effects of t[illegible] accine during the efficacy stage of the study and will be performing an important role in the development of a new method of birth control that may benefit women throughout t[illegible] ld.

16. WILL PARTICIPANTS BE COMPENSATED?

Participants will be reimbursed for travel expenses, child care, time lost from employment, and other trial-related expenses. However, no payments will be made as an inducement to take part in the trial.

17. WHO HAS ACCESS TO THE CLINICAL TRIAL RECORDS?

All records are kept strictly confidential with access limited to trial personnel. When results of the study are published, data will be presented in a summarized fashion that will not permit identification of individual participants. Information generated in this Phase II trial will be retained for many years, so that contact can be re-established with volunteers at a later date.

18. WHO SHOULD BE CONTACTED IF QUESTIONS OR PROBLEMS ARISE DURING THE TRIAL?

Should you require further details about the trial, either before, during or after the study, you may contact ..... (tel. no. and ext.)

STATEMENT OF INFORMED CONSENT TO PARTICIPATE IN THE TRIAL

You are invited to participate in a study entitled "Phase II clinical trial of a prototype anti-hCG vaccine". The purpose of the study is to see if a new preparation (anti-hCG vaccine) is effective in preventing pregnancy in fertile women. The study will also collect information about side effects of the vaccine in women who volunteer to participate. An anti-hCG vaccine promises to have fewer side effects, to be more convenient to use, and to be a more effective method of birth control than many other current methods.

The procedures of the study are as follows. All women who volunteer will be interviewed. They will have a physical examination, which includes a pelvic examination, drawing of a blood sample from a vein in the arm, giving a urine sample, and other routine medical tests.

Participation in the study will take place over a two-year period. If you are eligible to participate, you will be given a diary to fill out. In this diary you will be asked to record your menstrual cycles, the dates you have sexual intercourse, and any changes in your health. You will then come to the clinic once each month for three months to be interviewed again and to have blood samples taken and will be asked to provide urine samples.

Following a brief physical examination, the vaccine will be injected into your buttocks. The injections (no more than three) will be given at intervals of five weeks and seven weeks. During the following 18 months, you will come back to the clinic for follow-up visits twice each month during the maximum six months of the efficacy stage and at three-monthly intervals thereafter. At these visits you will be interviewed and a blood and sometimes a urine sample will be taken.

When medical tests suggest that the vaccine is effective in preventing pregnancy, you will be advised to stop using your current method of birth control. You will be informed when the tests suggest that the vaccine is no longer effective so that you can start using another method of contraception.

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Risks and side effects of participation are as follows. Some soreness may occur in the place where the vaccine is injected. The soreness will disappear after a short time. Some women who participated in an earlier study of the vaccine felt muscle aches. There are no other known side effects of the anti-hCG vaccine, but there is a possibility that new side effects may appear. There is a small risk of soreness and bruising whenever blood is drawn, but those side effects are minor and temporary. You will be offered appropriate medical treatment for any side effects that occur in the course of the study.

There may be some differences among women in the length of time the vaccine will remain effective. Although there are no known cases in which the vaccine has remained effective indefinitely, there is a very small possibility that this may happen to you.

There is a possibility that the vaccine may fail to protect some study participants against pregnancy. If that happens to you, you may freely choose to continue with the pregnancy or to have the pregnancy terminated at a very early stage. Whatever choice you make, you will be offered appropriate care in accordance with local medical practice.

The benefits of this research are as follows. Your general health may benefit from the thorough medical examination and monitoring you will receive before and during the study. The benefit to others in the future is the development of an alternative method of birth control that may be more effective and have fewer side effects than some currently available methods.

The alternatives to participation are as follows. You may choose not to participate in the research and continue to use your current method of birth control or use another appropriate method available at your family planning clinic.

Your participation in this study is entirely voluntary and you are free to withdraw at any time and for any reason without prejudicing your future medical care.

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IMPORTANT NOTE TO THE PARTICIPANT

DO NOT SIGN THE STATEMENT BELOW UNTIL YOU HAVE MET FOR THE SECOND TIME WITH THE INTERVIEWER, YOU HAVE DISCUSSED ANY QUESTIONS YOU HAVE ABOUT THE STUDY, AND YOU HAVE RECEIVED SATISFACTORY ANSWERS TO ALL OF YOUR QUESTIONS.

I, ..., have been given adequate time to read this brochure and feel I understand its contents. I have had the opportunity to ask questions about the study and I am satisfied with the answers I have received to all of my questions. I understand that my participation in this research study is completely voluntary and that I have the right to withdraw at any time and for any reason and that my withdrawal will not affect my rights to future medical care.

I hereby consent to participate in this trial.

.....	.....
Signature of participant	Date
.....	.....
Signature of investigator	Date
.....	.....
Signature of witness	Date
.....	.....
Name of witness	Relationship to study

This study conforms to the requirements stated in The World Medical Association Declaration of Helsinki.

All records will be kept strictly confidential and no participant in the study will be identified by name in any published reports.

Participants will be reimbursed for travel expenses, child care, time lost from employment, and other trial-related expenses. However, no payments will be made as an inducement to take part in the trial.

(88). Animal experiments have linked several drugs given to male mammals before mating to decreased birthweight and survival of the offspring (89). These include Niophrine, Methadone, Propoxyphone, Thalidomide and Caffeine. Cyclophosphamide, a cytotoxic drug was shown to cause behavioural damage in the offspring of male rats treated before mating (28).

1.5 Investigating Reproductive Hazards

In this review, results from a wide variety of research methods have been used. These have involved studies on people exposed to hazardous materials: epidemiological studies and experimental studies where cell cultures or whole animals have been exposed. Experimental studies are a means of testing chemicals without waiting for the damage to be done to exposed people but there is much controversy about how reliable the various animal experiments are for predicting reproductive hazards. For example, thalidomide rarely induces malformation in rats or mice but is a proven human teratogen (some even argue that it is the only proven human teratogen). Conversely aspirin for which there is good evidence that is not a human teratogen is a strong teratogen in rodent species. On balance, animal data can be assumed as a useful predictor of hazard to humans. Immense amounts have been written on the various methods used and it is not proposed to attempt to do justice to the complexity of the different test systems here or the range of epidemiological methods used in evaluating the (wide) range of adverse reproductive outcomes. References 1, 4, 14, 91-98, represent just a few of the recent references summarising and discussing methodology for evaluating reproductive hazards.

1.5.1 Epidemiology

In this section a few of the considerations in epidemiological study design will be outlined; a short questionnaire for following up an example of miscarriage clusters is provided; the main types of animal test summarised and their use for extrapolation considered and mutagenicity tests in both people and experiments are outlined.

Below, some of the weaker and stronger points in epidemiological studies are briefly reviewed. However, first a general word needs to be said about the interpretation of epidemiological studies which result in 'negative' or 'positive' results. A positive finding is usually considered as one where there is a 'statistically significant' association between the exposure and the ill effect (low birthweight, risk of miscarriage etc.). To be statistically significant, such a finding should occur by chance alone with a probability of less than 5% (the most common criteria used is 5%). A negative finding is one that does not meet the above criteria, that is, no significant association has been detected.

A study may yield negative results because no true hazard exists but other reasons may also account for the failure to reach statistical significance, such as poor study design, the high risk group being swamped by a larger group of non-exposed, or insufficient study size. This last is a very common reason why studies are inconclusive. They have 'failed to find a hazard' but importantly, if they are not very large, they have also failed to rule out the possibility of some hazard existing. In general terms, larger studies should be given more credence, assuming that their advantage in size is not outweighted by poorer quality design or data collection. Consistency between independent studies is important too, as is evidence of an increasing risk with increasing exposure for studies with positive associations. However, because of the fairly stringent requirements of statistical significance, given studies of comparable quality, positive findings should be taken more seriously than negative ones. One positive and one negative do not 'balance out'.

While doubts remain about the reliability of experimental evaluation in the prediction of human risk, epidemiological studies remain the most sound source of evidence of reproductive hazard. Studies fall into two basic designs, the cohort study where reproductive function is compared between groups each with similar exposure or type of employment and the case-control study where rates of past exposure are compared between sets of 'cases' (such as parents of malformed children) and controls (for example parents of healthy children). In either study design data can be drawn from routinely collected medical or employment records, or can be collected by interviewing or examining the individuals. The interview method is better because more complete data can be obtained but is potentially more subject to bias. Bias is one of the major pitfalls in conducting epidemiological studies, and can take several forms.

For example, a study of spontaneous abortion and chemical exposure at work may take the form of interviewing women exposed to the chemical about their past pregnancies and miscarriage and making a comparison with another set of women not exposed. The percentage agreeing to cooperate may differ between the two groups and the exposed women with a history of reproductive problems may be expected to be more likely to participate if they know about the suspected hazard. Furthermore, women who have had a miscarriage may remember more accurately their exposure to potential risk factors, or may be prompted to remember these things more completely by an interviewer who knows their reproductive history. Finally, the two groups may differ in respect of some other risk factor which would either serve to exaggerate or obscure the association between the chemical exposure and miscarriage rates. This latter problem, the presence of 'confounding factors' can be adjusted for in the analysis if detailed information is available on the potential confounding factors.

Examples of these risk factors which can confound surveys of occupation and reproduction include those mentioned earlier in this chapter: social class, smoking, alcohol, some pharmaceutical drugs and so on. For example, studies suggest that the risk of miscarriage may be as much as doubled by cigarette smoking. i.e. the miscarriage rate amongst smokers would tend to be twice the rate amongst non-smokers. In a study of the effects of say anaesthetic gases or solvent exposure on miscarriage risk if the 'exposed' population also smoked more than the comparison or control population, this would make the effect the 'relative risk' seem larger than it really was. However, the size of this exaggerating effect is always smaller and usually much smaller than the size of the risk of the confounding factor. This can be illustrated in an example.

Assuming that smokers have twice the miscarriage risk of non-smokers, if the group exposed to the suspected hazard contains 70% smokers against the average of 40% smokers in the comparison group, what then is the size of the confounding effect? Such a difference in smoking habits would give the 'exposed' group a miscarriage risk 1.21 times the non-exposed due to the (confounding) effects of smoking alone. An effect but not very dramatic. Thus, if a relative risk of 2 or more is reported, it would have to be a very strong confounding factor to account for it (90).

Given that bias has been minimised, a problem which plagues many studies is insufficient size. If the study is small, covering say a hundred pregnancies with one or two malformations and a dozen miscarriages, it would probably be too small to detect a risk (unless that risk were massive). Conversely, if no significant results were achieved, it would be too small to rule out a hazard in fact being present. Case control studies are more powerful than cohort studies in investigating the causes of rare events such as congenital malformations because the size of a cohort needed to get sufficient numbers of cases would be larger than most occupational groups or would be prohibitively expensive. It may in all types of study be difficult to disentangle the actual causes when people are exposed to a mixture of substances.

Large studies are needed to investigate the causes of the full range of adverse reproductive outcomes, but in many cases, initial investigations can be limited to studies of infertility, abnormal sperm count and morphology, menstrual irregularities and miscarriage. These outcomes have the advantage in having the potential for detecting effects in relatively small occupational groups because none of the effects are very rare. They each have methodological problems, for example getting cooperation from men to provide sperm samples, or women with a history of infertility or miscarriage being more likely to be still employed (rather than full time mothers) resulting in apparently high infertility rates in any employed group. Miscarriage as a measure of reproductive damage has particular advantages in that it is the most likely result of teratogenic damage to the embryo in early pregnancy or genetic damage at or before conception (via either parent). In the next section an example is given of the use of a questionnaire for following up a suspected occupational miscarriage risk.

1.5.2 Questionnaire Methods

The amount of systematic investigation into reproductive health among workers is quite inadequate. Sometimes groups of workers may be worried that they may face a reproductive hazard either because of hearing from newspaper reports of other groups of workers experiencing reproductive problems or reports of animal tests. Alternatively a number of pregnancies among colleagues at work may go badly wrong, ending in miscarriage or a malformed child, such 'clusters' can give rise to fears that some aspect of work may be responsible. Until large scale surveys have been carried out, it is not possible to know whether or not a hazard is present. As awareness spreads of possible reproductive hazards, the problem of how to respond to equivocal evidence will loom large. Few pregnant women will want to gamble with their pregnancy even if the evidence of a risk is weak. On the other hand if faced with an unsympathetic employer (especially in small workplaces with limited possibilities of temporary job transfers) pregnant women will be faced with the choice of the stress (and reduced income) of having to resign from their jobs or the stress of keeping on the job worried that there may be a risk. Such stress may of itself pose a threat to a healthy pregnancy. Thus there is an urgent need to gather more information on the true extent of reproductive hazards. One such method is to use questionnaire surveys to gather information about pregnancy outcome. At the end of this section is an example of a questionnaire and covering letter. It has been drafted to respond to fears about VDU safety because ASTMS has received inquiries on this topic, but this is just to illustrate the specific use of such questionnaires.

It is not advisable to use it in areas where people are not already aware of and concerned about some potential risk, for fear of causing unnecessary alarm. Its function would usually be to put into perspective either a cluster of miscarriage or to investigate fears that there may be a problem. It is a crude initial investigation and can only give approximate answers. Such questionnaires need to be tailored to particular circumstances and the example given here is for investigating miscarriage and VDUs. An example of a covering letter is also given but the survey would have to include meetings to explain the purpose of the survey in order to get good response rates. If everybody already knows what the suspected risk is then the letter should be straightforward and the highest response rate should be sought, as in the example given. It is preferable though, to minimise bias, to have it as a 'general health survey' with a most general introduction letter. The survey will be severely limited unless a high percentage (at least three quarters of the group being looked at) takes part. Secondly a 'control group', not exposed to the suspect hazard should also take part and similarly be encouraged to participate to a high degree. However, the 'control group' should be similar in other respects - age, social class, hours of work, sitting rather than standing etc. Such surveys are vulnerable to bias - a higher response rate in the 'exposed' group; better memory of exposure in the group with miscarriage and if carried out in response to a 'cluster', the cluster itself starts the survey off

with a known built-in excess number of miscarriages. However, in spite of the potential sources of bias, it can be a useful first attempt to evaluate the size of the problem. Larger more systematic surveys may be undertaken later. Because of the potentially severe pitfalls, advice from union health and safety officers or sympathetic researchers familiar with carrying out such surveys, should be sought.

Other questions, including malformations or infertility could be included but many questions can reduce the response rate. Other questionnaires could be re-worded and used for assessing fertility and miscarriage late in the wives of exposed male workers. Miscarriage is a good choice because it is much more common than other reproductive adverse effects and so an effect would be more likely to be picked up from a fairly small number of pregnancies. Two other fairly common outcomes can also be evaluated from the questionnaire - low birthweight and 'irregular periods' though the latter is the most subject to differences in women's individual perception. However, in spite of miscarriage being fairly common generally (10-15% of all known pregnancies end in miscarriage), small numbers of pregnancies can yield inconclusive results. For example, to detect with some certainty a doubling of miscarriage risk, approximately 200 pregnancies are needed to be observed in the exposed group and 200 in the comparison group. (More exactly, to be 95% certain of detecting a doubled risk, i.e. getting a statistically significant excess number of miscarriage, requires a study population of this size). Smaller study sizes can still detect a risk, but are less likely to. The smaller the study size, the more the chance that risks will go undetected (or less likely that spurious non-significant positive results will occur). Pregnancies before and after the period of exposure can be included in the control group. If the age distribution of the pregnancies varies between exposed and non-exposed groups this must be allowed for in the analysis by comparing miscarriage rates within age groups e.g. under 25, 25-35 and 35+. Strictly speaking, the comparison should also allow for differences in the 'parity' - the number of previous children (or pregnancies) - in the exposure groups. Many women who have had children will have left work to look after them so the population of people left in work may be slightly biased in favour of those who have had some difficulty. This can be reduced by including recent past employees, but only if they can all be included (rarely possible).

If it has proved impossible to get sufficient numbers of non-exposed pregnancies to make an effective comparison, as a rough yardstick one expects 10-15% of all pregnancies to end in miscarriage. Therefore, if the number of miscarriage exceeds 20% this may be cause for concern. With small numbers of pregnancies, less than 100, 20% miscarriage could easily be due to chance and so it cannot be taken as evidence of a definite hazard. In surveys such as this the number of miscarriage may be high because of the presence of one or two women who have suffered several miscarriages each. Evidence of an environmental risk is stronger if miscarriage incidence is spread across the group rather than concentrated in a few individuals.

1.5.3 EXAMPLE QUESTIONNAIRE SURVEY ON VISUAL DISPLAY UNITS AND MISCARRIAGE

Introductory Letter

There have been several reports of apparently high numbers of miscarriage amongst VDU operators. There is no firm evidence that VDU's cause miscarriage, but it is not possible to say that they do not because the right studies have not been carried out. This short survey is designed to see if there is any evidence justifying a complete survey of the VDU operators here.

Please help us by completing this questionnaire and returning it. YOUR ANSWERS WILL BE STRICTLY CONFIDENTIAL AND NO INDIVIDUAL WILL BE IDENTIFIABLE FROM THE GROUPED RESULTS.

We are doing the survey because some members have noted the numbers of miscarriage amongst VDU operators. **The survey will only work if you all complete a questionnaire,** so please help us and yourselves by completing yours. Thank you for your help.

How to Answer the Questions

Please tick the relevant answer or complete in writing. If you have never been pregnant, only answer questions Q1, Q2, Q3, Q4 and Q5. For the questions on pregnancy please answer each question for each miscarriage or child. If you cannot remember the relevant details or don't know them just write that in. If you don't know the exact date or age give an approximate date. If you find that there is not enough room to write a full answer, please add another sheet of paper with your extra information.

Q.1 What is your full date of birth? Day..... Month..... Year.....

Q.2 Are you working with VDUs, or have you in the past? Yes..... No.....

Q.3 If YES, please give the following details:

(i) name of job on VDU .....

(ii) brief description of VDU work (including hours of use each day)

.....

.....

Q.4 Since starting work with VDUs have you noticed any changes in your health e.g.

(i)	more headaches?	Yes	No .....
(ii)	more eye-strain?	Yes	No .....
(iii)	more backache?	Yes	No .....
(iv)	irregular periods?	Yes	No .....
(v)	other changes or improvements to your health?		

.....

.....

Q.5 Have you ever been pregnant? Yes ..... No .....

If you have not been pregnant, you have now completed the questionnaire. Please return it. Thank you for your help.

Q.6 Please give the approximate date of getting pregnant and results of all your pregnancies by ticking the appropriate box.

Pregnancy No.	Date (year & month if poss.)	Miscarriage	Birth	Termination
1				
2				
3				
4				
5				
6				

Q.7 Please answer the questions below for each pregnancy.

PREGNANCY

	1	2	3	4	5	6
(i) Did you have a positive pregnancy test? (Yes or No)						
(ii) Was your job the same as at the beginning of your pregnancy? (Yes or No)						
(iii) If No, please describe it, or the differences to the Q.3 answer (e.g.less hours.)						
(iv) How many weeks into the pregnancy did you work?						
(v) Did you change your job during the pregnancy? (Yes or No)						
(vi) If Yes, what did you change to and when (i.e. at how many weeks)?						
(vii) How long was the pregnancy? (i.e. how many weeks before the miscarriage, birth or termination)						
(viii) What was the birthweight? (in pounds or kilos)						

1.5.4 Experimental Tests

The main experimental tests on animals are conducted on rats or mice, rabbits to a lesser extent and much less frequently on cats, dogs or monkeys and are as follows. In teratogenicity tests animals are exposed during embryogenesis and the offspring are evaluated for lethal effects or growth retardation and malformations. Effects on offspring behaviour may also be investigated. Effects on male or female reproductive function may be evaluated separately by observing effects on sperm production in males or oestrous cycle in females. The effects on the whole reproductive cycle can be observed by exposing one or both parents from before conception and for a more complete evaluation continuing the exposure through two or three generations. At each generation the number of offspring, their size and development would be evaluated. Short term tests for teratogenicity have also been developed including the exposure of chick embryos or rodent limb buds and observing effect of exposure on development but they are less reliable for prediction than whole animal studies.

A problem encountered in some animal studies is that various effects on reproduction including reduced fertility, embryolethality and the induction of malformation may be a general response to debilitating effects on the adult animals of the toxic chemicals. The most powerful evidence of reproductive effects is where they occur in the absence of other adult toxicity. The hazards for which there is evidence of reproductive harm in humans are usually matched by evidence from animal experiments (14). Almost all of the 15-20 known or suspected human chemical teratogens give positive results in animal teratogenicity evaluations (98). However, a number of substances, especially drugs which have undergone more extensive testing, appear to have no effect in humans but marked effects in some animals (97). Differences in biochemistry between different species would lead one to expect divergent responses between different species to the same chemical. Thus there is no guaranteed animal test of reproductive function that predicts effects on people. However, such evidence as exists now points to the value of animal tests in general for predicting such effects. A recent international meeting of experts convened by the World Health Organisation to address this question concluded:-

> 'The literature on experimental studies in animals indicates that they are valuable for predicting the impairment of specific aspects of reproductive function. For example, the adverse effects of 1,2-Dibromo-3-chloropropane on the testes were reported in animals before the effects were recognised in men.
>
> Comparison of the limited data available on the effects of chemicals on both animals and humans indicates that in general humans are no less sensitive than animals to adverse effects on their reproductive systems'.

Reference: WHO Regional Office for Europe. Working Group on the Effects of Occupational factors on Reproduction. Summary Report 11 August 1983.

We may conclude that in the absence of good quality epidemiological data pointing to the safety of a particular substance, if there is evidence of reproductive hazard in animals (preferably in the absence of adult toxicity and repeated in more than one species) then a similar hazard should be expected in exposed people. Animal experiments may be able to define a threshold, or no effect level but in attempting to extrapolate a 'safe' dose for people it should be borne in mind that humans have been found to be in general more sensitive than animals to reproductive toxins usually by a factor of at least ten (14).

1.5.5 Genetic Damage

There is a connection between genetic damage and reproductive hazard. The high percentage of chromosomal abnormalities in spontaneous abortuses and the evidence linking paternal exposure to mutagens to increased risk of spontaneous abortions and malformations point to a causative role of mutagenic damage in the development of both lethal and teratogenic effects. Further a high percentage (80%+) of mutagens have been shown to be teratogenic in animal experiments (99). Whether or not a mutagen will be a germ cell mutagen, affecting sperm or egg cells, depends on whether it reaches the germ cells, as does whether or not it could act as a teratogen depends on whether it can cross the placenta. However, there is a good reason for suspecting that any mutagen (causing either point mutations or damage to chromosomes - more precisely a clastogen) may pose a reproductive hazard. There are various experimental systems for detecting mutagens from bacterial mutagen tests like the Ames test to dominant lethal tests in fruit flies or rats. The latter test assess the embryolethal effects of paternal exposure to a mutagen and indicates that the chemical has reached the sperm cells.

In addition there are several tests of the presence of chromosomal damage that are used to assess occupational exposure to mutagenic substances. Some involve the observation of damage to chromosomes, usually in lymphocytes - blood cells. Others specifically look at damage to sperm cells and may offer good potential for predicting reproductive hazard. One, the YFF test involves counting the number of sperm cells with an extra Y chromosome by means of using a dye which shows up the Y chromosome as a fluorescent dot under ultraviolet light. Another, picks up mutations in a protein found on sperm tails, so called LDH-X variants. This latter test is very new and its reliability for monitoring mutagenic effects in people has not been evaluated.

The number of mutagens identified in the battery of tests that have been used to identify them is really quite large and is not reproduced here. Many of them may turn out to be germ cell mutagens and teratogens as well as carcinogens (which is well established as a correlate of mutagenicity). Mutations it should be remembered need not have an immediate effect. Recessive mutations may wreak some havoc in two or more generations from now. Although not given the same degree of seriousness as evidence of teratogenicity or carcinogenicity, the very minimum response to evidence of mutagenicity should be an awareness that they may pose severe reproductive hazards.

NATIONAL COMMUNICATION STRATEGY FOR REPRODUCTIVE & CHILD HEALTH PROJECT

-o-

GOVERNMENT OF INDIA
MINISTRY OF HEALTH & FAMILY WELFARE
DEPARTMENT OF FAMILY WELFARE
IEC DIVISION

CONTENTS

INTRODUCTION:

In 1997, the Government of India launched its new Reproductive and Child Health (RCH) program. This program. represents a marked shift in the Government's policy, moving as it does, from its past pre-occupation of meeting sterilization targets, to the introduction of a decentralized participatory planning process based on community needs assessment. The countrywide RCH program. covers an extended range of services for unwanted fertility, maternal health, RTI/STI infection, child health and adolescent health. The new paradigm embodied in the RCH program. echoes the deliberations of the International Conference on Population and Development (ICPD) held in Cairo in 1994.

Information, Education and Communication (IEC) has always been a significant component of the Government of India's family welfare program. The accent, so far, has been on awareness generation about the program and service facilities, with the presumption that this would ensure increased utilization. However, it is now evident, that the time for awareness generation is past. If change in behavior is desired, a specific program that promotes behavior change will be required.

In order to achieve the objectives set out for the National Population Policy 2000, also, it has been stated that family welfare messages must be clear, focused and disseminated everywhere, including the remote corners of the country, and in local dialects.

The Ministry of Health and Family Welfare, Government of India, started the process of defining the strategy for communication of the country's RCH program last year. The Ministry invited experts from the fields of communication, management, obstetrics and gynecology, pediatrics, training, international donor agency representatives and NGO partners to deliberate with Government officials on articulating a strategy for communication which would advance the new paradigm for reproductive and child health care. A new strategy that would make the leap from awareness generation to behavior change, from being instructive to being empowering, and from taking the generic approach and to taking the individualized approach.

Such shift in emphasis would require localized communication efforts so that diverse needs of different audiences in varied socio-cultural contexts can be meaningfully addressed. It would require decentralized planning to facilitate better quality and access, and interaction with audiences to improve service delivery as well.

As a first step, it is proposed to change the name of the IEC Division in the Ministry of Health and Family Welfare to 'Communications' Division. This is essential so that the focus shifts from information dissemination and awareness generation to communication for behavior change. This is as per the recommendations of the Media Advisory Group of MOHFW and accepted by the Ministry.

The RCH paradigm shift – towards client – centered, demand driven services – needs strategic communication to work as a tool to create demand for quality services. The

communication challenge for RCH is one of demand creation and this requires understanding of media opportunities, professional procedures and use of marketing approaches.

The communication managers need to identify the "demands" that need to be created among priority audiences, research the social norms that act as barriers as well as opportunities and bring in the enabling factors in terms of professionalism and structural change in communication management. What follows is the Communications Strategy that has been evolved through many consultations and discussions among experts and with State level IEC/Communications officers.

The first part of this strategy lays down the goal and main strategy tenets and suggests an operational framework for communications at the Central, State and District levels. The latter part identifies the major behavior change objectives that have to be achieved for the success of the RCH program.

PART – I

Stratetic Framework for Communication for the Reproductive and Child Health Programme

Goal :

The goal of the communication strategy for the RCH Programme is to

encourage individuals, families and communities to make informed decisions concerning reproductive and child health through a programme of health communication which facilitates behaviour change.

This will be achieved in a systematic and participatory manner through capacity building of all partners and convergence of services among different sectors.

Changes in Strategy direction :

A general consensus emerged on the direction that the new communication strategy for RCH should take, in order to meet its stated goal. The time horizon within which this strategy is expected to be valid is 7 – 10 years and will thereafter require review. Mid-course corrections will be required from time to time.

The key tenets of the strategy are :

1. *Interpersonal communication* for behaviour change will be the mainstay at the field level, and will encourage greater dialogue on issues of reproductive and child health between individuals within families and communities;

2. *Advocacy interventions* based on normative research, including through the use of mass media, will be needed to promote societal change with regard to behaviour norms on RCH issues;

3. This will require *decentralization of some responsibilities for IEC to States and districts* from the Centre and consequently the articulation of new roles for each of the three levels;

4. There will be need for increased *engagement with the NGO and private sector* for social mobilization and IEC for RCH;

5. As roles change, there will be a critical need for *capacity building at all levels* to undertake the newly defined tasks and enhance the image of RCH functionaries.

Components of the new framework:

The changing attributes of the IEC strategy for RCH within the country will require a change in responsibilities for IEC actions at the Central, State and District levels of Government.

The role of *Central Government* in advocacy of national population and women and child issues will gain importance. The Central Ministry will take the lead in estabilishing necessary capacity building and research capability support to the States. *States* will assume greater responsibility in addressing State specific societal behaviour norms as well as for planning support for district based efforts in IPC and local publicity. They will also ensure support for communication efforts undertaken by self-governing urban areas within their boundaries. *Districts* will become the natural focus for convergence of Government and non-governmental efforts for behaviour change through participatory planning, and inter-personal communication. They will also assume the lead in initiating local (rural and small town) publicity efforts within the context of RCH objectives and goal.

The Central, State and District administrations will perform complementary roles within IEC to permit service providers and frontline workers to achieve their goal of delivery of demand driven, quality RCH services.

Responsibilities of districts:

The changed responsibilities for IEC at the district level will enable frontline workers to respond to identified RCH needs of individuals within the community, facilitating the *use of community specific, local knowledge and practices to promote behaviour change*. They will actively work to *influence the normative behaviour of local communities (including small urban communities)* through the involvement of local self-government and opinion leaders within the area.

The action plan of districts will make provisions for :

- Timely distribution of IEC materials
- Utilization of folk media and other local channels of communication
- Convergence of the efforts of related Departments and
- Enhancement in the capabilities of relevant staff within the district.

The district, will thus be the Central point for the development of an *appropriate and flexible action plan* to support the communication needs of the community. The plan will be backed by the *development of capacity to undertake supportive supervision and monitoring, and simple tracking techniques* to assess progressive changes in the knowledge, attitudes, beliefs and practices (KAPB) among the communities.

Responsibilities of States:

In the new organization of responsibilities,k the States will take charge as an important focus of IEC activity. On the one hand, States will be responsible for facilitating IEC actions by districts and self-governing urban communities. The development of *State plans would be informed by the plans* of its constituent communities. The States *will monitor actions undertaken by them and track the effects* of such actions on the changing picture in response to delivery of RCH services and communication efforts.

On the other hand, States will develop *plans* to also –

- Timely distribution of materials
- Draw together State-local expertise from Government and non-governmental sectors in the areas of research studies, training, health care, advocacy and management support.
- Undertake a concerted State specific communication campaign for population and women and child health issues and other components of RCH.
- Converge the efforts of relevant Departments.
- Enhancement in the capabilities of relevant staff within the State.

The State will thus, become the hub of specific campaigns to address the communication needs of its populace. The plan will be backed by the *development of capacity to undertake supportive supervision and monitoring , to contract agencies for* KAPB studies, media tracking and evaluation and to support production of materials which address the specific needs of communities local to the State.

The State will also co-ordinate its plans within the national policy framework for IEC in RCH and with directions indicated by Government of India, from time to time.

Responsibilities of the Centre:

The Centre will take responsibility for the *overall policy development process* for IEC within RCH with the full involvement of and co-ordination with State administrations. The Centre will have oversight of IEC actions undertaken by the States and *will monitor actions undertaken by States and track the effects* of such actions on the changing picture in India in response to delivery of RCH services and consumer education.

On the other hand, Centre will develop *plans* to –

- Undertake concerted communication campaigns to draw attention to such population and maternal and child health issues which require changes in societal behaviour norms.
- Undertake approaches to introduce newer concepts of issue (such as concerns within gender sensitivity, adolescent health) to national attention.
- Draw together national expertise from Government, voluntary and private sectors in the areas of research studies, training, health care, advocacy and management support.
- Converge the efforts of relevant Departments.
- Support a clearinghouse for issues related to population and women and child health and other components of RCH, which will be a resource for research and materials development within States and Districts.
- Enhance the capabilities of relevant staff within the Central Ministry.

The Centre will thus assume responsibility for *development of appropriate capacities at State level, development of capabilities within the Central unit to contract agencies for* KAPB studies, media tracking and evaluation and to *support centrally sponsored mass media efforts* which address overarching issues within population and reproductive and child health.

PART – II

THE RCH COMMUNICATIONS CHALLENGE

There are three principal components of the RCH programme:

- Meeting Unmet need for Contraception;
- Improving Maternal Health; and
- Raising Chances of Child Survival.

Achieving improvements in maternal and child health, in meeting unmet need for contraception and creating a need among couples with less than 2 children are seen as milestones to ensure that India's population is stabilized.

In order to achieve the goals of the RCH Programme, the communication interventions have to introduce behavioural change by addressing social norms, cultural pattern and create a supportive environment.

Matrix of Behaviour Change Objectives

RCH Issue	Indicators (objectives) of Expected Behavior Change	Barriers to Behavior Change: Communications Challenges	Opportunities to trigger change	Communications Priority
Unwanted Fertility	Arrest fall in contraception use in some States ***	Social and religious disapproval	Availability of easier, safer methods	Inform and motivate regarding availability of both spacing and terminal methods, especially in those states with fall in use ***
a) Unmet need for contracepti on	Effective contraceptive coverage by 75% couples ** Increased use of contraception among couples with less than two children **	Perceived costs/risks of contraception Husband's lack of support and/or fertility preference	NSV for men Improved husband-wife communication	Reach out to men about NSV and male responsibility ** Focus on spacing between first and second child **
b) Unsafe abortion	Drop in Illegal abortions *	Social stigma, fear and lack of counseling/guidance		Widely publicize legal provision and hazards of illegal abortion ** Promote counseling And reach out to adolescents **
	Address son preference * End Illegal Abortions *	Ambivalence towards further child-bearing		Promote gender equality* Promote responsible parenthood*

RCH Issue	Indicators (objectives) of Expected Behavior Change	Barriers to Behavior Change: Communications Challenges	Opportunities to trigger change	Communications Priority
Maternal Health	Reduce Maternal Mortality/ Morbidity**	No perception of pregnancy as a time for special care. Skewed gender relations	Motivate service providers through RCH training Reach out and involve private practitioners	Communicate essential ANC schedule*** Communicate risks and dangers of pregnancy and importance of early registration***
a) High Maternal Mortality	At least 3 ANC visits during pregnancy** Reduce delivery by untrained persons**	Inadequate knowledge of risks during pregnancy Care-seeking behavior not internalized	Address RH issues with women's self-help groups, MSS etc	Inform about availability of ANC and other services and timings to pregnant women, husbands and other members of family***
b) High Maternal Morbidity	Universalize registration of pregnancies in all districts* Improve registration of pregnancy in remote and tribal areas*	Lack of information regarding available facilities and service delivery Inadequate service delivery staff and lack of motivation	Improved husband-wife communication Involvement of community in primary health care through PRI	Motivate service providers, women's groups and other community groups to early registration of pregnancy**

	Strengthen Male Involvement* Improve maternal nutrition** Reduce nutritional anemia among pregnant women**	Lack of knowledge and concern Negative cultural norms and dietary practices during pregnancy	Address RH issues and family responsibility to men's gatherings/groups	Build on men's approval of family planning** Reach out to young unmarried men** Counter myths and negative cultural and dietary practices**
c) Adolescent Reproductive Health	Increase knowledge and awareness on RH issues among adolescents** Delay age at marriage*	Cultural Norms	Non-formal education and health camps for adolescents	Improve knowledge and awareness of RH issues among adolescents** Engage community on issues of early marriage, women's health and status in the family*
d) RTI/ STI Care	Make RTI/STI a public health priority among medical practitioners** Increase in number of cases reported and treated*	Lack of knowledge and perception of illness among women Indifference and misapprehension among medical practitioners	Peer education through women's groups Address issues with medical associations Family Health Camps	Bridge the knowledge gap among private practitioners*** Encourage husband-wife communication on RH issues**

RCH Issue	Indicators (objectives) of Behavior Change	Barriers to Behavior Change: Communications Challenges	Opportunities to trigger Change	Communications Priority
Child Health	Reduce/eliminate neo-natal mortality (focus on girl-child)*** Eliminate incidence of polio***	Lack of information regarding risk and failure to recognize danger signs and promptly seek care Lack of information regarding availability of service Lack of motivation	Care givers respond to issues that relate to the health of their children.	Inform and educate mothers on risks and danger signs and availability of services*** Persuade family and community to end unequal treatment of girls and boys**
a) IMR rising in some districts	Reverse drop in IMR***	Lack of information and motivation De-motivated staff		Motivate service providers*** Motivate family and community on child survival risks and availability of essential services***
b) Drop in immunization coverage	Arrest drop in immunization coverage*** Universalize registration of births** Increase percentage coverage of measles immunization**	Failure to complete the schedule within time-frame Lack of information regarding necessity of registration		Widely publicize information on complete immunization schedule*** Motivate service provider and community to register births in remote (poor) areas*

c) Child care, especially new-born care	Increased number of children with severe ARI being treated and reported** Diarrhea treatment and prevention***	ARI not seen as risk to child survival Girls get less care and attention than boys Failure to hydrate sick child adequately		Improve knowledge-base of service provider and community regarding risks of ARI ** Communicate home-based treatment of diarrhea*** Address issue of equal treatment to girls and boys with couples and families**

*** Immediate ** Medium term * Long term

Notes on the Matrix

1. Column 1 represents the broad areas of concern in the {National} RCH Programme.

2. Based on the data from NFHS 1 & 2 and RCH Household Surveys the RCH Programme objectives and/or expected behaviour change indicators are set down for the broad areas of concern in Column 2.

3. The Barriers to Behaviour Change and Opportunities to trigger Behaviour Change (Column 3 & 4) are based on empirical evidence from various studies across the country on prevalent social and cultural practices. Regional variations which may be there have not been highlighted.

4. An attempt has been made to order priorities for Communications in terms of Behaviour Change that need to be addressed urgently (within one year) and those that will require some more time to become effective (3-4 years). Certain societal, normative issues like preference for sons and early marriage of girls need to be addressed at a deeper level of social and cultural values which change slowly over a long period of time.

5. While the results of the Communications endeavour in the three cases may show up at different points in time, the effort has to be initiated simultaneously. The communications planners have to ascertain the relative cost-effectiveness of the suggested interventions and allocate budgets and assign responsibilities for designing messages and message delivery accordingly.

6. While the National RCH Communications Strategic Framework has outlined the roles of the Districts, States and the Centre, the behaviour change issues are to be addressed at all levels. The Centre may be better placed to take up the long-term societal issues or advocacy interventions (policy issues) through mass media in a cost-effective manner. The States are more suited to address regional specificities and plan campaigns accordingly. Similarly, Districts are in a better position to match communications with service delivery (supply side factors) and reach out to individuals, families and the community through IPC, traditional folk and other local media channels, and, group interactions/processes.

7. It is understood that all effort at different levels should support one another and there should be no dissonance in the messages that go out from different sources.

8. In the 5 States (Rajasthan, Madhya Pradesh, Bihar, Orissa and Uttar Pradesh) where the problems are acute and urgent action is required, the Centre shall provide additional financial and technical support in planning and execution of Communications activities.

9. This paper is based on discussions, research and other background material which is available with MOHFW.

Briefing Kit

Population & Reproductive Health Facts on India

UNFPA
United Nations
Population Fund
INDIA

HOW DO I USE THE KIT?

What is advocacy? Advocacy is the promotion of public debate and the influencing of public opinion on a particular issue on a sustained basis through various audiences and channels.

The United Nations Population Fund (UNFPA), fully endorses the principles and recommendations of the Programme of Action of the International Conference on Population and Development (ICPD), held in Cairo in 1994. The Cairo document, ratified by more than 180 countries of the world, puts quality of life and welfare of individuals at the centre stage of development.

UNFPA promotes and invests in reproductive health and population programmes and encourages advocacy in these areas to multiply the positive impact of these programmes on the quality of life for both men and women. The briefing kit prepared by UNFPA, India can be used as in many situations. Here are some suggestions:

a) For Elected Leaders :
   i. Include the issues contained in the briefing kit in your public speeches
   ii. Relate these issues to your constituencies
   iii. Address them in your party's mandate
   iv. Monitor them in your area of responsibility

b) For Teachers/Instructors in Adult Education :
   i. Organise debates, essay competitions and group discussions around these issues
   ii. Propagate these issues among the teacher community
   iii. Raise these issues during parent-teacher meetings
   iv. Develop primers and material for neoliterates based on the information included in fact sheets
   v. Generate discussions on these issues during group meetings in community

c) For Media Persons :
   i. Understand the issues contained in the briefing kit
   ii. Reflect these issues in your features (articles, electronic media stories, etc.)
   iii. Relate these issues to field-level coverage

d) For Policy-makers :
   i. Assess whether or not the local policies/programmes address these issues
   ii. Initiate discussions on these issues with the community
   iii. Allocate more resources and attention to the issues mentioned in the kit

e) For Corporate sector :
   i. Include interventions for addressing these issues in welfare programmes
   ii. Promote private sector participation through available channels

f) For NGOs :
   i. Include advocacy initiatives/service delivery programmes on these issues in organisation's mandate
   ii. Empower community in monitoring the progress

The key to successful advocacy is a solid basis of empirical fact. This briefing kit meets that need by summarising fact on key issues as they pertain to the Indian context. The kit serve as a quick introduction to many topics on population, reproductive health and gender. Each individual sheet in the briefing kit highlights, one specific issue in this broad area. Each sheet is designed to help people engaged in advocacy to marshall facts and figures in order to create convincing presentations.

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IMPORTANT NOTE

UNFPA
United Nations Population Fund

Briefing Kit

Population & Reproductive Health Facts on India

Message from Dr. Michael Vlassoff, UNFPA Representative, India

The United Nations Population Fund (UNFPA) is the world's largest multi-lateral funding agency for population and development. The major share of UNFPA's assistance focuses on reproductive health including family planning. UNFPA's assistance to India began in 1974 and has increased continuously since then. India is the largest recipient of UNFPA assistance in the world. The current programme proposes to spend $100 million during 1997-2002.

In line with the International Conference on Population and Development (ICPD) held at Cairo in 1994, UNFPA emphasizes expanding choice to meet the changing reproductive health needs of individuals and couples over their entire life span. UNFPA-supported programmes are designed in collaboration with national governments to operationalise the Programme of Action endorsed by the ICPD.

UNFPA recognizes that, with the ICPD paradigm shift, there is a need for a better understanding of reproductive health issues, demographic trends and their linkages to sustainable development. Several issues impacting on reproductive health status and quality of life require serious advocacy initiatives in order to mobilize society, change attitudes and trigger appropriate actions.

The briefing kit in your hands is an effort towards meeting the need for information to build a better understanding of reproductive health and population issues in the Indian context. Each fact sheet provides an overview of one specific topic along with up-to-date information and a succinct analysis. Some comparative data from other countries are also included. Hopefully, the fact sheets will stimulate a more informed debate on policy and programmatic options at many different levels in Indian society.

UNFPA believes that good advocacy begins with good information. I sincerely hope that the kit will be useful in broadening the participation of stakeholders in the crucial task of achieving population stabilization in India through provision of quality reproductive health services.

New Delhi
July 11, 2000

Michael Vlassoff
UNFPA Representative

INTERNATIONAL CONFERENCE ON POPULATION AND DEVELOPMENT - THE PROGRAMME OF ACTION

ICPD....

The international conference on Population and Development (ICPD) was held at Cairo, Egypt, during September 1994. Delegations from 179 countries took part in negotiations to finalise a Programme of Action on population and development for the next 20 years.

The Programme of Action

The Programme of Action, endorsed by almost 180 countries, represents the international consensus on population and development issues. The POA recommends a set of important population and development objectives, including both quantitative and qualitative goals that are mutually supportive and are of critical importance to these objectives. Countries have been guided by the POA in planning appropriate policy changes and programmatic responses. In nutshell the POA calls for:

- **Raising** quality of life for all people through population and development policies and programmes that seek to eradicate poverty, sustain economic growth in the context of sustainable development to achieve sustainable patterns of consumption and production, and to develop human resources and guarantee all human rights including the right to development.
- **Achieving** equality and equity between men and women and enable women to realise their full potential, to involve women fully in policy and decision-making processes, including establishing mechanisms for women's equal participation and representation at all levels of political and public life, and enabling men to take the full responsibility for their sexual and reproductive behaviour as well as in their social and family roles.
- **Supporting** the institution of family, contributing to its stability and taking into account plurality of its forms; promoting equality of opportunities for family members, especially women and children; and mobilizing socio-economic support and more effective assistance to indigent families.
- **Facilitating** demographic transitions in countries where there is imbalance between demographic growths and socio-economic and environmental goals, so as to make progress towards stabilisation of the world population.
- **Striving** to make reproductive health accessible through the primary health care system to all individuals of appropriate ages as soon as possible and no later than 2015. This will require actions to increase accessibility, availability, acceptability and affordability of health care services and facilities, with special emphasis on child survival, women's health and safe motherhood, and HIV/AIDS prevention.
- **Fostering** a more balanced distribution of population in urban and rural areas by promoting economic, social and gender-equitable sustainable development.
- **Addressing** root causes of migration, by taking appropriate measures with respect to resolution of conflicts, promotion of peace and reconciliation, respect for human rights and territorial integrity and sovereignty, so that remaining in one's country becomes a viable option for all people.

- **Stressing** the importance of valid, reliable, timely, culturally relevant and internationally comparable population data for policy and programme development, implementation, monitoring and evaluation.
- **Emphasising** the importance of sustained national commitment for making population and development programmes successful.
- **Increasing** commitment to and stability of international financial assistance as well as domestic resources in the field of population and development.
- **Promoting** effective partnerships between governments, NGOs, local community groups and the private sector in the discussions and decisions on the design, implementation, co-ordination, monitoring and evaluation of programmes related to population, development and environment.

ICPD + 5: In 1999, the international community engaged in a five-year review of the Programme of Action. The process was undertaken with a view to assess progress made till date, examine the obstacles remaining and produce practical recommendations aimed at making the ICPD's twenty-years goals as reality. The five-year review showed that implementation of the recommendations of the Programme of Action had made good progress. Many countries had taken steps to integrate population concerns into their development strategies. A broad-based definition of reproductive health had been accepted by an increasing number of countries and steps are being taken to provide a comprehensive range of services. In many countries civil-society organisations are contributing to the formulation and implementation of policies, programmes and projects on their own or in partnership with Governments as well as the private sector. The five- year review also emphasised the need for services for prevention and treatment of HIV/AIDS as an integral component of reproductive health programmes at the primary health care level. To accelerate the implementation, it was agreed that Governments should make every effort at the highest political level to mobilise financial resources required from all sources.

A set of key actions for the further implementation of the Programme of Action was adopted by the Special Session of the UN General Assembly and, in particular, added benchmarks in areas that had not been specified with quantitative goals in the Programme of Action. These include:

- At least 95 per cent of young men and women aged 15-24 years should have access to information, education and services necessary to develop the life skills required to reduce their vulnerability to HIV infection.
- By 2005, where the maternal mortality rate is very high, skilled attendants will assist at least 40 per cent of all births, 50 per cent by 2010 and at least 60 per cent by 2015.
- Reduction in the gap between contraceptive use and the desire to space or limit families by at least 50 per cent by 2005, 75 per cent by 2010 and 100 per cent by 2050.

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REPRODUCTIVE HEALTH APPROACH

The Approach...

The International Conference on Population and Development has, in its Programme of Action, adopted principles placing individual needs and choices at the centre of the reproductive health agenda. States are called upon to observe the principles of gender equality and equity, and women's empowerment while providing universal access to reproductive health care without any form of coercion or discrimination.

The reproductive health approach is central to the paradigm shift. In essence, the approach:

- Places individuals and couples (i.e. clients) at the centre of efforts to improve family health. It focuses on assisting individuals to meet their personal reproductive goals. This means people have ability to reproduce and regulate their fertility, women are able to go through their pregnancies and bear children safely, the outcomes of pregnancies are successful in terms of the survival and wellbeing and couples are able to have sexual relationships free of fear of pregnancies or contracting infections.
- Emphasizes on provision of quality services in meeting essential reproductive health needs.
- Focuses on decentralized planning and management, as operating at the local level will allow greater coordination and cooperation across sectors, which is often not possible at the central level.

In operational terms the reproductive health approach entails...

- Service delivery mechanisms that cater for articulated client's needs, not based on targets imposed from the top or decided arbitrarily by the service providers. The emphasis is on bottom-up planning based on the client's needs. Subsequently, monitoring implementation of these plans on the basis of selected indicators will help in assessing the performance of service providers.
- Establishing standards for provision of quality reproductive health services, measuring adherence, improving quality, all working towards client satisfaction. It is envisaged that emphasis on quality will also boost utilisation of services and thus meet unmet demand for health services. Clients' perspectives on quality should also be taken into cognisance in order to foster accountability in the system.
- Strengthening capacities for decentralised programme management. Devolution of financial and administrative powers to the local level is already underway in the country. Decentralised programme planning, implementation, monitoring and evaluation are likely to be more responsive to the needs of the clients, be more resource efficient and be firmly rooted in the socio-cultural milieu, compared to top-down monolithic programme management practiced in the past. This will also entail strengthening of programme management capacities. Right to information and transparency in public systems is also likely to be fostered.

REPRODUCTIVE HEALTH APPROACH (Contd...)

Operationalisation of the reproductive health approach: concerns and priorities

- District and facility-level public health management is quite weak in planning and budgeting. There is a multiplicity of institutions at district-level to manage several schemes/projects and programmes.
- Motivation to perform is considerably lacking. Measurement of quality is perceived by Government personnel to be a threat. The morale of field functionaries is quite low. They do not feel as part of the process of change and have little sense of ownership.
- Implementation of service delivery plans pre-supposes adequate staff, buildings, equipment, drugs and other supplies. Decentralization should be coupled with authority to use available resources flexibly for better productivity.
- Improvements in the reproductive health are probably best achieved by a mix of public and private efforts. Subsidies should be targeted at the poor to make services affordable.
- User fees are increasingly common in developing countries. While they can generate resources and spur efficiency, these should be carefully evaluated and implemented with caution.
- The State of Kerala has made the pioneering move to formally devolve 40 per cent of development funds in favour of Panchayati Raj Institutions at the block level. There is need for more informal debate and mobilization of the people around relevant issues so as to fully operationalize the various provisions of 73rd and 74th constitutional amendments.

QUALITY OF CARE FOR REPRODUCTIVE HEALTH

Whither Quality?

Quality of care has emerged as a central issue in reproductive health. The ICPD Programme of Action states "Reproductive health programmes must make significant efforts to improve quality of care". Access to good quality reproductive health services has been seen as a key element in enabling individuals and couples to attain a measure of control over their health and for ensuring the well being of their families. It is increasingly recognised now that quality leads to client satisfaction. As a first step towards ensuring quality, removing method-specific contraceptive targets has been hailed as a turning point. The challenge to shift the programme focus from merely increasing coverage to quality is, however, formidable.

Commonly accepted as quality services are those services that meets the needs of clients. While the client perspective focuses on individuals, the providers and managerial perspectives are equally important. Access for quality reproductive health services should be also seen within the framework of reproductive rights.

What are the common concerns?

- A critical reason for under-utilization of services is that clients perceive the quality of services to be too poor to merit use. Perception of quality influences clients' decision-making regarding utilization or non-utilization of a specific service from a particular source. As per the NFHS findings utilisation of antenatal services remains abysmally low in many states. In the state of UP only 31 per cent pregnant women received any ANC outside their home.

- Another key component affecting quality is the attitude of the service providers. Insensitive treatment and stigmatising behaviour on the part of service providers is a major barrier in utilisation of services. The attitude of health functionaries is often patronising, distant or bordering on unfriendly, thus increasing the "psychological costs" of services to unaffordable levels.

- Many studies have shown that major reasons for not accepting contraception includes fear of side effects, limited access, and lack of knowledge about contraceptives. Informed decision-making a hallmark of quality is seriously compromised in such situations.

- Frequency and duration of client-provider interactions also influence service quality. Any barrier (e.g., distance, rushed provider, language) is detrimental to service quality. The usual lack of audio-visual aids during these interactions diminishes the effectiveness of communication.

- Quality of care is often considered unaffordable for programmes with scarce financial resources. However, programmes lacking in quality are extremely costly, because they waste human and physical resources. Investments in quality are actually cost-effective in achieving better health outcomes.

QUALITY OF CARE FOR REPRODUCTIVE HEALTH (Contd...)

- Lack of basic facilities at the health-care institutions (e.g. water supply, cleanliness, and availability of toilets and electricity) affects client satisfaction. Similarly, inadequate attention for ensuring privacy remains a major concern.
- Technical knowledge and competence on the part of service providers is of crucial importance for achieving better quality, as sound technical expertise leads to reduced incidence of side effects associated with particular procedures/contraceptives.
- Client follow-up mechanisms need to be in place for maintaining quality of care. Preliminary findings from the NFHS II survey indicate that a significant proportion of children were only partially immunised because of high drop out rates. This results in wasted resources and a false sense of protection among parents.
- An ICMR multi-centre study in 1989 covering 398 Primary Health Centres in 199 districts revealed shortages of female paramedics (19 per cent fewer Lady Health Visitors and 6 per cent ANMs), further compounded by their being unevenly distributed with respect to population. Shortages of essential drugs ranged from 4 to 31 per cent. There were poorly equipped labour rooms (25 per cent), operating theatres (16 per cent) and wards (54 per cent). Assessment of the family planning component revealed deficiencies in updating records (75 per cent), in screening and preoperative care of clients (up to 72 per cent), in ensuring privacy (14 per cent) and sterilisation of equipment (60 per cent).These findings reinforce the view that a large-scale provision of additional inputs is required to address these gaps.
- A study of sub-centres during 1996-97 in the state of Rajasthan indicated that 30 per cent of sub-centres are not housed in the own buildings, 37 per cent were without electricity, 41 per cent without water supply and 57 per cent without space for conducting deliveries.
- Method-specific targets, coupled with variable client incentives, have been most significant hurdles in improving the quality of family welfare services in the past. Lack of any appreciation for importance of quality of care in public systems has resulted in violation of laid down standards in the past.
- Failure to monitor and reward quality has been a major lapse in the family welfare programme. Non-availability of standards, protocols, manuals and recording systems have contributed to non-measurement of quality.
- Improvement in quality begins with a process of defining frameworks, setting standards, measuring deviations, diagnosing causes of such deviations and taking corrective actions.

GENDER INEQUALITIES AND REPRODUCTIVE HEALTH

Despite the advances made by Indian women since Independence, the life of an average Indian women from birth through infancy, childhood, adolescence, marriage, motherhood and widowhood is a long battle against discrimination and deprivation. The complex socio-cultural determinants of women's health and nutrition have cumulative effects over their life time. Gender inequalities in India stem from three important sources: differences in men's and women's economic roles (and power), cultural traditions restricting movement and autonomy, and marriage and family practices.

The empowerment of women and the achievement of gender equality and equity are pivotal for the improved reproductive health. Increasing access to education, health and economic participation will lead to greater female autonomy and thereby create an enabling environment for faster decline in population growth and accelerated socio-economic development.

Gender Inequalities

One indicator used to assess women's status is the population sex ratio. The sex ratio in India has seen a downward trend throughout the 20th century, reaching 927 woman per 1000 men in the 1991 census. There is a case of around 50 million missing females in India that needs explanation. Adverse sex ratio can be attributed to number of factors, most striking being preference for sons in many areas of India. Determination of sex of the foetus for the sole purpose of female foeticide (abortion of the female foetus) common in many parts of India despite being a criminal offence under Prenatal Diagnostic Technique (Regulation and Prevention of Misuse) Act, 1994.

Discriminatory child-care practices in certain areas also leads to impaired growth and development of the girl child.

Education inequalities between females and males are pronounced. Though school enrolment rates are rising, high drop-out rates for girls still continue to be a cause for concern. Girls have lesser chances of being admitted to school and have higher chances of dropping out from school. Recent data show that 59 per cent of girls are retained in the primary education, compared to 62 per cent of boys.

Although mean age at marriage for girls is rising, a significant number of girls are still married off below the statutory age at marriage (i.e. 18 years) through arranged marriages. Women are forced to have children soon after marriage in order to prove their fertility and their worth.

Adolescent marriage is synonymous with adolescent fertility. Teenage pregnancies are not safe. Adolescent mothers are twice as likely to die from complications during pregnancy as are women 20 years or older.

Malnutrition, frequent pregnancies and infections contribute to a high maternal mortality ratio in India, estimated at 407 maternal deaths per 100,000 births in 1997. The extent of maternal mortality is an indicator of disparity and inequity in access to appropriate health care and nutrition services for women.

GENDER INEQUALITIES AND REPRODUCTIVE HEALTH (Contd...)

Women and Violence

Violence against women is any gender-based act or conduct that results in, or is likely to result in, physical, sexual and psychological harm or suffering to women. This includes threats of such acts, and all forms of coercion or arbitrary deprivations of liberty in both public and private spheres. Available statistics from around the globe suggests that one out of every three women has experienced violence in an intimate relationship at some point in her life.

- According to a survey during 1998, spanning seven Indian cities and covering both rural and urban populations, 45 per cent of women have been subjected to at least one incident of physical or psychological violence in their life time. Women are most at risk of violence from men they know.
- Gender violence cuts across all socio-economic groups and regional variations.
- Violence leads to high-risk pregnancies with adverse outcomes. Sexual violence also results in unwanted pregnancies and sexually transmitted infections.
- In India today:
  - One dowry death takes place every 102 minutes
  - A rape occurs every 54 Minutes
  - Molestation occurs every 38 Minutes
  - A crime against a woman occurs every seven minutes (National Crimes Record Bureau).
- Nearly 7,000 complaints of domestic violence against women are reported annually in Delhi. Barely 10 per cent of these complaints are translated in to first information reports.
- The disability adjusted life years (DALY) of women in the age group 15-44 lost due to domestic violence and rape is estimated to be 9.5 million years.

Violence against women impairs or nullifies the enjoyment by women of human rights and fundamental freedoms.

Women's Empowerment

Women's empowerment is the process by which unequal power relations are transformed and women achieve greater equality with men. At the Goverment level, this includes the extension of all fundamental social, economic and political rights to women. On the individual level, this includes the processes by which women gain inner power to express and defend their rights and greater self esteem and control over their lives so crucial for positive reproductive health.

FAMILY PLANNING

Family Planning is a Rights Issue....

The reproductive rights framework recognises the right of men and women to be informed and to have access to safe, effective, affordable and acceptable methods of family planning of their choice. These rights stem from recognition of the basic right of all couples and individuals to decide freely and responsibly the number, spacing and timing of their children and to have information and means to do so. It is important that quality reproductive health programmes are in place so as to help individuals and couples in realisation of these rights. Inaccessibility of quality services denies couples the ability to achieve their personal reproductive intentions on one hand, and on the other hand is likely to delay the goal of population stabilisation, so crucial for improving the quality of life.

Unmet Demand

- Unmet demand for contraception has been estimated to be 30 per cent. National level surveys (e.g., NFHS II) indicate that unmet demand (currently married women who want no more children but are not using a method of contraception), both for limiting and spacing, continues to remain high in many states. In the state of UP, 38 per cent of couples have expressed unmet demand for limiting and nearly 18% want to postpone birth of their next child for another two years, but are still not using any contraceptive method.
- Nearly two in five couples in the reproductive age currently use a method of contraception. Amongst users, nine-out of ten couples are protected by the female sterilisation method. As a result, young and low-parity women remain unprotected from repeated and closely spaced pregnancies: only 16 per cent of women below 30 years of age practice contraception.
- Male participation in accepting responsibility for contraception is woefully negligible. Programme statistics show that only 1.9 per cent of total sterilization acceptors adopted vasectomy in 1997.

Health Benefits

- Reducing the number of unintended pregnancies promotes reproductive health mainly by reducing the number of times a woman is exposed to the risk of childbearing in adverse circumstances.
- Unintended pregnancies also affects children's health, because often these pregnancies occur disproportionately, among women in high-risk categories including very young, the old, those with short pregnancy intervals, and those with many births. About 37 per cent of live births occurred within two years of a previous live birth (1992).

FAMILY PLANNING (Contd...)

Access and informed decision making

- Though there is nearly universal knowledge about limiting methods (e.g.,female and male sterilization), knowledge about spacing methods is inadequate and patchy. Lack of knowledge breeds and perpetuates myths and misconceptions.
- Access to contraceptives appears to be limited, especially in rural areas. Non-availability of service provider denies access to dependable sources of contraceptive supplies so crucial for certain spacing methods e.g., oral contraceptive pills). Alternative service delivery systems (commercial, social marketing, community-based distribution) are yet to make an impact in remote rural areas.
- Follow-up care for family planning acceptors is extremely important, especially for spacing methods. Lack of proper follow up, especially for the management of side effects leads to high rates of discontinuation.

Per cent of currently married women (15-49 years) using modern contraceptive methods

State	Contraceptive Prevalence Rate	Oral Pill	IUD	Condom	Female Sterilization	Male Sterilization
Rajasthan	40.3	1.5	1.2	3.1	30.8	1.5
West Bengal	66.6	9.2	1.4	2.9	32.0	1.8
Bihar	24.5	1.1	0.5	0.7	19.2	1.0
Gujarat	59.0	1.5	3.1	3.5	43.0	2.3
Andhra Pradesh	59.6	0.5	0.6	0.7	52.7	4.3
Sikkim	53.8	9.5	5.6	1.5	22.4	2.4
Tamil Nadu	52.0	0.3	2.5	1.5	45.2	0.8
Goa	47.5	0.9	1.9	4.9	27.8	0.4
Uttar Pradesh	28.1	1.2	1.0	4.2	14.9	0.7
MadhyaPradesh	44.3	1.0	0.8	2.9	35.7	2.2

Source: (NFHS-2 Survey)

Expanding Choices

- Experiences from other parts of the world indicate that introduction of a new contraceptive method increases overall contraceptive use significantly. In general, the range of contraceptives should accommodate the diverse needs of limiters, spacers, breastfeeding mothers and those requiring prevention of sexually transmitted diseases.
- No scalpel vasectomy is new technique for performing vasectomy. The incidence of side effects and complications is much less as compared to conventional vasectomy. No stitches are required and the procedure is faster and less intrusive.
- Use of oral contraceptive pills, as emergency contraception appears safe and effective for women who need a backup to regular contraceptive use. Though not a substitute for regular contraception, emergency contraception is an appropriate choice for women who are victim of coercive sex, who have occasional sex or who experience rupture or slippage of condoms.

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Population & Reproductive Health Facts on India

SAFE MOTHERHOOD

A Neglected Tragedy

Worldwide nearly 600,000 women die every year as a result of complications arising out of pregnancy and childbirth. The tragedy is that these women die not from diseases but during the normal life enhancing process of procreation. Safe motherhood is seen as a human rights issue and there is increasing recognition that it is possible to reduce maternal mortality significantly with limited investment through effective policies and programmes.

Problem at a glance

- It is estimated that India, which contains about 15 per cent of the world's population, accounts for nearly 20 per cent of maternal deaths. Nearly 1,12,000 maternal deaths are estimated each year in India. Improved maternal care could save the lives of these women and allow them to lead productive lives.
- Four mothers die for every 1000 live births each year in India. There are vast regional and rural-urban differences. For example, in the state of Uttar Pradesh seven mothers die for every 1000 live births whereas in Kerala the ratio is only one fourth as high.

Selected Maternal Mortality Ratios in India

Kerala	87
Bihar	451
Madhya Pradesh	498
Rajasthan	607
Uttar Pradesh	707
Orissa	739

Source: SRS 1997

The Maternal Mortality Ratio (MMR) is defined as the number of maternal death (during pregnancy, childbirth and the purperial period) per 100,000 live births. By comparison MMR is 6.1 in Japan, 8.3 in USA and 5.4 in Germany.

Maternal Mortality Ratios In Asia

Sri Lanka	30
China	115
Thailand	200
Pakistan	340
Indonesia	390
India	407
Bangladesh	850
Nepal	1500

- Every five minutes a woman dies as a result of a complication attributable to pregnancy and childbirth in India.
- It is estimated that for each woman, who dies as many as 30 other women develop chronic, debilitating conditions, which seriously affect quality of life.

SAFE MOTHERHOOD (Contd...)

Determinants of the tragedy

- Lack of access and inadequate utilisation of essential emergency obstetric services is a crucial factor. In India, skilled personnel attend only 35 per cent of deliveries. In some districts only 5-10 per cent deliveries are attended by skilled personnel.
- It is estimated that nearly 7 million induced abortions takes place annually in India. For each legal abortion, it is estimated that another 10 illegal abortion take place but go unrecorded. Studies indicate that nearly 12 per cent of all maternal deaths are attributable to abortion-related complications. Anemia is the underlying cause for 20 per cent , toxemia for 13 per cent, purperial sepsis for 13 per cent and bleeding during pregnancy for 23 per cent maternal deaths.
- Average weight gain during pregnancy is around 6.5-7 kg, in India, while average weight gain for women in Thailand and Philippines is close to 9 kg, and 12 kg in developed countries. Anemia among women in India is rampant. For instance, around 55 per cent of women were found anemic in the state of Madhya Pradesh in one recent survey.
- Maternal mortality is high in those states where fertility is high, simply because women there are having more births. Maternal mortality is also high in those states where children are born to very young women to older women and to women who have multiple, closely spaced pregnancies.
- The lack of male participation results in poor utilisation of prenatal, natal and postnatal services by pregnant women. Several reports indicate that men do not give much importance to the health problems of women. Either they are unaware about the importance of seeking preventive care or they are simply indifferent.
- Women need support in obtaining access for essential obstetric care. Raising awareness of the need for women to reach emergency care without delay if complications arise during pregnancy is particularly critical. Studies have shown that in 25 per cent of maternal deaths family members were not aware of the seriousness of woman's condition and took no action towards obtaining assistance.
- A diet that provides sufficient calories and micro-nutrients is essential for a pregnancy to be successfully carried to term. Proper nutrition will reduce the likelihood of a pregnant woman experiencing serious complications during pregnancy and childbirth.
- Prevention of unwanted pregnancy through effective contraceptive use is the most cost-effective of all interventions. Enabling women to choose whether, when, and how often to have children is central to safe motherhood. Reducing the likelihood of a woman getting pregnant by providing quality family planning services would make a significant impact on maternal mortality.
- Prevention and management of unsafe abortions are key interventions for safe motherhood. All women deciding in favour of terminating their pregnancy as per the provisions of the Medical Termination of Pregnancy act have, access to quality abortion services.

Empowering Women

- Strategies to empower women and enhance their choices need to be put in place. This means promoting women's understanding of their needs and assertion of their rights in general and reproductive rights in particular, fostering community education about pregnancy and childbirth, and making health services more responsive to the needs of women. Such interventions will go long way in helping women seek services with confidence and without delay.

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Population & Reproductive Health Facts on India

ABORTION

Complications attributable to unsafe abortion are a major public health problem facing women in developing countries. Unsafe abortions are a leading cause of maternal mortality and contribute significantly to the maternal morbidity. In India, abortion is legal and women are legally able to access safe abortion services from trained medical providers at certified facilities.

What is abortion?

Abortion is termination of pregnancy before the foetus becomes viable or capable of living independently (extra-uterine), which has been defined by the World Health Organization as twenty-two weeks menstrual age. Abortion may be spontaneous and induced. Spontaneous abortions, (sometimes called miscarriages) occur at the rate of approximately one in every fifteen pregnancies. Induced abortion is a deliberate termination of pregnancy, and may be legal or illegal.

Magnitude of problem

- While the prevalence of abortion in India is unknown, the most widely cited figures suggest that around seven million abortions taken place annually.
- As per service statistics compiled by the Government of India, about one million abortions are performed annually under the MTP act.
- Around six million illegal abortions are performed by a variety of medical and non-medial practitioners, most of whom are unqualified/untrained and induce pregnancy termination at uncertified places using dubious methods. Illegal providers can include trained doctors and nurses, "Indian Systems of Medicine" practitioners, traditional birth attendants and village health care workers and even elderly women in villages.
- The six states that have highest numbers of abortions mirror the states that have fewest facilities as per norms. These states are Assam, Bihar, Madhya Pradesh, Orissa, Uttar Pradesh and West Bengal.
- Indian women seek abortion throughout the reproductive period. Adolescents, both married and unmarried seeks abortion services in significant numbers. A substantial number of unwanted pregnancies among adolescent's result from forced sexual intercourse.
- As adolescents have less access to reproductive health information and services compared to older married counterparts, they are more likely to delay recognizing pregnancy and seeking care. They are more likely to seek care from unsafe providers.
- India's second trimester abortion rate, i.e. those of foetuses 12 to 20 weeks old, is thought to be among the highest in the world. It is estimated that over 10 per cent of all abortions in India are second trimester abortions. Women in the second trimester are more likely to access illegal providers as it is difficult to obtain legally. The risk of complication following second trimester abortion is much higher for physiological reasons.

ABORTION (Contd...)

- Common methods of abortion used by the illegal providers include both vaginal and oral methods. Sticks, roots, herbs and foreign bodies are introduced in the vagina to induce abortion. Orally ingested abortificients include indigeneous and homeopathic medicines, choloroquine tablets and high dose progestrogens and estrogens, papaya, carrot seeds, etc. Abdominal message, witchcraft and heat application is also used to induce abortion.
- The main complications that can occur during induced abortions are excessive bleeding due to injury of the genital organs and incomplete abortion. Post-abortal infections are also very common especially if abortions are induced in unhygienic settings. Where safe abortion services are not available or accessed, treating abortion-related complications may consume a significant amount of the available health service resources including medical staff time and supplies.
- In the Indian cultural context, sexuality, reproduction and abortion are sensitive issues and are not discussed openly. It is widely believed that abortion is a sin and even today only a small proportion of Indians are aware that abortion is legal. According to a ICMR multi-centric study, 31 per cent women in Tamil Nadu and 75 per cent in Uttar Pradesh and Haryana believed that abortion is illegal.

The Reasons for Seeking Abortions

The reasons why women in India abort are many and varied. The principle underlying reason, of course, is unwanted pregnancy.

- Financial reasons, too many children, becoming pregnant after too short a birth interval, health problems during pregnancy, pregnancy at older age, becoming pregnant too soon after marriage, suspecting husband's infedility, extra-marital pregnancy and pregnancy on account of rape or incest are all conditions that can lead to unwanted pregnancy.
- Sex-selective abortions are also commonly sought. Strong son preference and easy availability of cheap prenatal diagnostic techniques have resulted in increased use of prenatal sex-determination tests even among rural poor. Many private clinics offer both sex determination and abortion services. Despite the Prenatal Diagnostic Techniques Regulation and Prevention of Misuse) Act 1994, the practice is rampant.
- It is clear that for the most women, the most proximate determinant of unwanted pregnancy is lack of access to appropriate contraception.
- Contraceptive failure can also lead to unwanted pregnancies, and these can be aborted legitimately. However, reports indicating a high proportion of women requesting on account of contraceptive failure may well be exaggerations, as contraceptive failure is one of the reasons whereby a women can legally request an abortion.

REPRODUCTIVE TRACT INFECTIONS

Reproductive tract infections (RTIs) including sexually transmitted infections (STIs) were not recognised as a problem until recently. Research conducted in the India over the past decade to document the magnitude of reproductive morbidity in India, has made these infections more visible and brought them onto the reproductive health agenda. Concerns about the spread of the HIV epidemic and recognition of the role that RTIs plays in the transmission of HIV have also drawn attention to the problem. Men also experience RTIs, particularly STIs, but the prevalence and the consequences for women are much more severe.

What are Reproductive Tract Infections?

RTIs include a variety of bacterial, viral and protozoal infections of the lower and upper reproductive tract of both sexes. Many RTIs are sexually transmitted. RTIs originate in the lower reproductive tract and in absence of treatment can spread to the upper reproductive tract (i.e. the womb, the fallopian tubes and the ovaries).

What are the common causes of RTIs?

- Latrogenic infections, which are related to inadequate medical procedures, such as unsafe abortions, unclean deliveries and other diagnostic and therapeutic procedures.
- Endogenous infections, which may be associated with inadequate personal, sexual and menstrual hygiene practices.
- Sexually transmitted infections (STIs)

Magnitude of the problem

Nationwide estimates for the prevalence of RTIs are not available in India. However an annual incidence rate of 5 per cent is generally accepted. All community-based prevalence studies that have been conducted in India indicate that rates of RTIs are very high.

- In a study conducted among women in two villages in Maharashtra, the prevalence of clinically diagnosed RTIs was 46 per cent of the women surveyed.
- In other studies conducted in four different sites (rural West Bengal and Gujarat, and urban Baroda and Mumbai), the prevalence of RTIs ranged from 19 to 71 per cent.
- In a study conducted in rural Karnataka, over 70 per cent of women had clinical or laboratory evidence of RTIs.
- Men suffer from RTIs as well. A substantial proportion of men does have problems such as uretheritis and genital infections.

REPRODUCTIVE TRACT INFECTIONS (Contd...)

Consequences

There is substantial unmet need among women and men for the treatment of these infections. There is a culture of silence regarding RTIs, as women do not discuss such illnesses even with their husbands. Similarly, access of Indian women and men to non-stigmatising health services in the public sector is a major problem.

Untreated, RTIs and / STIs take their greatest toll through complications resulting from the spread of microorganisms from the point of infection to another part of the reproductive tract or other organs of the body.

- A major complication, infertility is a source of psychological distress and family disruption.
- Other complications, such as ectopic pregnancy (pregnancy outside the uterus) and cervical cancer, represent significant causes of mortality.
- Some infections may cause fetal wastage or affect child survival by causing pre-term deliveries, low-birth weight babies or by infecting newborns during delivery.

The relationship between RTIs and HIV/AIDS

- First, RTI and HIV infections are associated with the same risk behaviour that is unprotected sexual intercourse with multiple partners. Thus, the same measures that prevent STIs also prevent sexual transmission of HIV.
- Secondly, the presence of RTI has been found to facilitate the acquisition and transmission of HIV. A ten fold increase in the risk of HIV transmission has been associated with infections that cause genital ulcers, such as syphilis, chancroid and herpes. The risk associated with diseases causing discharge, especially gonorrhea, chlamydial infection, trichomoniasis and bacterial vaginosis, is increased by a factor of four.
- There is mounting evidence that some RTI pathogens are more virulent in the presence of HIV- related immuno-deficiency.

Prevention of RTIs

RTI prevention intervention requires three levels of action:

- Primary prevention - preventing the acquisition of infection through safe sex practices, clean deliveries, abortions and other procedures and genital hygiene.
- Secondary prevention - early diagnosis and treatment of established infections, screening for asymptomatic infections and mass treatment approaches.
- Tertiary prevention - Minimizing the adverse consequences of such infections.

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INFERTILITY

Women's status in India still primarily rests on her success in bearing children. Infertility is almost always considered to be wife's problem - as the possibility that the husband is not fertile is seldom considered Infertility is usually a major disaster for the women who may face divorce and ostracisation as a result. Since the reproductive health approach envisages helping couples in achieving their reproductive intentions, it is appropriate that efforts are made to address the problem of infertility.

What is Infertility

Infertility refers to a diminished (or absent) capacity to produce offspring where the possibility of achieving conception is not completely ruled out. A couple is considered infertile if one year of unprotected coitus of average frequency does not result in pregnancy.

- Primary infertility occurs when a woman has never conceived, despite cohabitation and exposure to pregnancy.
- Secondary infertility occur when a woman has previously conceived but is subsequently unable to conceive despite cohabitation. An extended definition of infertility includes women who can conceive but cannot carry a pregnancy to full term, that is, women who suffer repeated or habitual spontaneous abortions.

Magnitude of Infertility

Globally, the number of infertile couples is estimated to be 60-80 million. Between 8 and 12 per cent of couples around the world have difficulty conceiving a child at some point in their lives. The prevalence of primary infertility in India is given as 3 per cent and secondary as 5 per cent. Thus currently there are estimated to be 8-10 million infertile couples in India.

Causes of Infertility

Around 38 per cent of infertility is due to female causes, 20 per cent due to male causes and 27 per cent due to causes in both partners. No clear-cut cause can be ascertained in the remaining 15 per cent of couples.

A common cause of infertility in women is occlusion of the tubes that carry the egg from the ovary to the womb. The very high prevalence of asymptomatic and untreated reproductive tract infections in women results in scarring of the tubes leading to obstruction. Tuberculosis of genital organs is also very common in India which results in tubal occlusion. If proper cleanliness is not observed during abortion or after delivery, disease-causing germs migrate to the womb and reach the tubes which may also cause occlusion.

Worldwide, there seems to be a core of about 5 per cent of couples who suffer from anatomical, genetic, endocrinological and immunological problems that cause infertility. Hormonal levels also influence the production of eggs in the women and any disturbance in hormonal production leads to an-ovulatory cycles, when the egg is not produced and/or released from the ovary. Sometimes congenital abnormalities affecting the reproductive organs may also impact on the fertility status of women.

INFERTILITY (Contd...)

Knowledge of the male contribution to infertiiity lags behind knowledge of the female contribution. The leading causes include genital tract infections, varicocele, testicular atrophy and hormonal abnormalities. The causes of male infertility, as reported in WHO studies, show that in India as many as 73 per cent of infertile men had no demonstrable cause of infertility. Infections in the prostate gland was the most common cause of infertility (8.8 per cent).

Perceived causes of infertility are different. According to a community-based study in rural Gujarat, women are usually blamed for infertility. Excessive "heat' in the body, consumption of "hot food", haunting by evil spirits, the evil eye, prior use of contraceptive methods and Karma from past lives result in infertility.

Influencing Factors

Factors known or strongly suspected to affect the probability of conception include:

- Age of the woman: age effects do not begin until a woman reaches her late 30s.
- Lack of understanding of reproductive biology: Coital timing and frequency can affect the probability of conception.
- Exposure to heat: Men working in occupations where a lot of heat is generated or wear tight undergarments [may experience diminishing the quantity and motility of sperms. Exposure to potentially toxic substances in the diet or environment such as arsenic or pesticides, work in the semi-conductor industry, mining, and exposure to lead are suspected contributors to infertility.
- There may be societal pressure on young couples to prove fertility immediately after marriage. Sometimes the couples seek treatment from self-styled experts in infertility management, only leading to serious complications which may render them infertile for rest of their lives.
- Socio-cultural factors: for example, close consanguine marriages

A high level of infertility may often drain the limited resources of the health care system. However, many conditions contributing to infertility are preventable. Foremost among these is preventing sexually transmitted diseases. Unfortunately, men seldom feature in investigations for the management of infertility. Although there is a proliferation of new reproductive technologies promising "test tube babies", the simpler option of adoption is yet to become popular.

Under the MTP Act, termination of pregnancy can be sought under the following conditions:

Termination of Pregnancy is permissible up to 20 weeks duration, if opinion is formed by the one registered medical practitioners(for pregnancies up to 12 weeks) and by two registered medical practitioners (for pregnancies up to 20 weeks) in good faith:

- continuation of pregnancy would involve a risk to the life of the pregnant women or grave injury to her physical/mental health.
- there is substantial risk that the child would suffer from physical or mental handicaps.
- pregnancy resulting from rape or contraceptive failure.
- actual or reasonable foreseeable socioeconomic environment could lead to risk of injury to health of mother.

Furthermore, the procedure shall not be performed in any place other than a hospital established or maintained by the Government or a clinic approved for this purpose.

Why women seek illegal abortions?

- Ignorance about dangers of unsafe abortions.
- Urge for secrecy due to stigma attached to abortions.
- Lack of access to certified facilities.
- Lack of privacy and confidentiality.
- Insistence by service providers to accept family planning as a condition for performing abortion.

Sometimes women have no choice about the provider. Inadequate care, lack of privacy and confidentiality drive many women to seek abortion services from illegal sources.

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Population & Reproductive Health Facts on India

DEMOGRAPHIC TRENDS

India's population has crossed one billion on May 11, 2000. The population of India quadrupled during the 20th century.

Though there has been a slight decline in population's growth the rate in the decade 1981-90, as compared to the previous decade, it was much less than expected. The growth rate estimated for 1997 is 1.83 per cent.

India consists of 25 states and seven union territories. The states vary enormously in size and population. At one end of the spectrum is the mountainous state of Sikkim with a population of 0.47 million in 1996, and at the other end, the state of Uttar Pradesh with an estimated population of 160 million. There are only four other countries in the world - China, USA. Indonesia and the rested India itself-which have populations that exceed the population of Uttar Pradesh. The states vary not only in their geographical size and population count but also in terms of population density, socio-economic conditions, cultural practices, social norms regarding marriage, the status of women in society, and many other factors that influence the living conditions of the people, especially the reproductive health of women, and men, of children.

Fertility Scenario

- The crude birth rate has been declining slowly in India. For 1998, CBR has been estimated to be 26.4 births per 1000 population, down from 36.9 in 1971.
- The total fertility rate(TFR), which represents the average number of children a woman would bear if she experienced current fertility rates throughout her reproductive years is estimated at 3.3 children per women. In 1971 it stood at 5.2 children per women.
- Child-bearing in India is concentrated among younger women. More than three fourths of total fertility is contributed by mothers aged 15-29 and 23 per cent is accounted for by births to adolescent women aged 15-19.
- There are wide variations in fertility levels and trends among the states (see graphs). Using 1997 SRS data, Tamil Nadu (2.0), Kerela (1.8), and Andhra Pradesh (2.5) have TFRs below 2.5 children per women, i.e., close to the replacement level of fertility (2.1). Uttar Pradesh (4.8) has the highest fertility among the states of India.
- The median interval between births is 32 months. One in every eight birth occurs within 18 months and 27 per cent occurs within 24 months. These are high-risk pregnancies which lead to depletion of the mother's body, low-weight births and higher levels of infant mortality.

Age at Marriage

- Marriage is an universal phenomenon in India. Nationally, 39 per cent of women aged 15-19 and 95 per cent of women age 25-29 are married. The percentage of women in 15-19 married is more than 50 per cent in Bihar and MP as compared to 3 per cent in Goa.
- The mean age at marriage has increased steadily over time in India 16 years in 1961 to 20 years in 1992-93 for females and from 22 years to 25 years in the same period for males.
- According to the Child Marriage Restraint Act of 1978, the minimum legal age at marriage in India is 18 years for women and 21 years for men. A large majority of women are not aware of the legal minimum age at marriages and child marriages continue to take place in rural India in large numbers. According to a 1992 survey, at age 15-19 more than 50 per cent of women in Madhya Pradesh and Bihar were already married, compared with only 3 per cent of women that age in Goa.

Infant Mortality and Child Mortality Rates

- Infant mortality refers to the probability of an infant surviving up to age one year. The IMR declined in India from 101 per thousand live births during 1978-82 to 72 in 1998.
- The infant mortality rate is higher in rural areas than in urban areas and declines sharply with increasing education of the mother

Infant Mortality Rates, 1998 (infant deaths per 1,000 live births)

	Rural	Urban	Total
India	77	45	72
Tamil Nadu	58	40	53
Uttar Pradesh	89	65	85
West Bengal	56	41	53
Madhya Pradesh	103	56	97
Kerala	15	17	16

Source: SRS 1998

- The child mortality rate (deaths of children aged 1-4 age group per 1000 children) has declined to 23 in 1997 from 52 in 1971. Despite this decline, one in every nine children in India dies before reaching age five.
- Mortality risks are higher among infants born to women under age 20 and where birth intervals are less than 24 months.

Contraceptive Prevalence

- Knowledge of family planning in India is still from being universal. Although knowledge of one contraceptive method (usually sterilization) is nearly universal, general knowledge of say four or more methods is still very low.
- Knowledge of sterilization is high, but knowledge of modern non-permanent spacing methods (IUD, pills, injectables and even condoms) is surprisingly low. For instances, in the 1999 NFHS-2 survey in Andhra Pradesh, only 74 per cent of women knew about IUDs, 78 per cent about oral pills and 75 per cent about condoms.
- Almost one-quarter of currently married women do not know any modern temporary methods. Knowledge about where to obtain contraceptives is also very limited.
- In India 44 per cent of currently married women aged 15-49 practice family planning.
- Despite women's strongly expressed desire to space their children, modern spacing methods are still not popular because of low effective access to them and poor images.
- If the current unmet need for contraception -which is around 30 per cent- can be met through programmatic interventions, then India's total fertility rate can be brought to 2.1 children per women (replacement level) by 2010.

- Worldwide, the number of cities with a 1-5 million inhabitants increased from 75 in 1950 to 327 in 1995 and is expected to reach 463 by 2015. In India, in 1991 there were 19 such cities. In 2015 there will be 22 cities of this size. Eight cities will be over five millions by 2015 in India.

Population size and Growth

The following table depicts the UN projections regarding the age composition of population in a few selected countries. India still has a young population, lowering its productive potential.

Age Composition (percentage) of selected populations in 2000

	Population aged 0-14	Population aged 15-59	Population aged 60+
India	33.3	54.1	12.6
China	24.9	58.2	16.9
Brazil	28.8	58.3	12.9
USA	21.5	49.6	28.9
Germany	15.5	44.9	39.6

Source: World Population Prospects, United Nations (1998)

If current trends continue, India may overtake China in 2045 to become the most populous country in the world.

UN Population Projections for 2000 and 2050: India and China (billions)

	Low variant projection	Medium variant projection	High variant projection
India (2000)	1.01	1.01	1.02
India (2050)	1.22	1.53	1.90
China (2000)	1.28	1.28	1.28
China (2050)	1.25	1.48	1.55

Source: World Population Prospects, United Nations

Briefing Kit

Population & Reproductive Health Facts on India

POPULATION AND ENVIRONMENT

The population-environment linkage is not a simple relationship, but a complex, multi-dimensional one. Population acts through such variables as social organisation, government policy, dominant technology and personal consumption behaviour. The connections are complex, indirect, and variable by location and time.

India's population is expected to be one billion by May 2000. It took sixty years for the population to double from 1901 to 1961. The next doubling took little over thirty years. This clearly implies that the Indian population has grown exponentially in the last few decades. If current trends continue, India may overtake China in 2045 to become the most populous country in the world. The large population base continues to challenge and constrain efforts for sustainable development. India's current annual increase of population of almost 16 million is large enough to neutralise efforts to conserve the resource endowment and environment.

Let us examine the impact of population growth on natural resources highlighting population and environment linkages.

Water Resources

- About 200 million people in India do not have access to safe drinking water and nearly 1.5 million children under 5 die each year due to water-borne diseases. The country loses 200 million person-days of work each year because of water-borne diseases.
- Eighty per cent of domestic water demand is met through ground water sources. There are more than 8.5 million electric and diesel pumps drawing ground water across the country. Water tables have been falling in many areas of India. Falling water tables increase the salinity, arsenic and fluoride pollution rendering water unsafe for drinking purposes.
- There are reports that ground water resources in some districts of West Bengal have been contaminated with arsenic. Survey findings from the affected districts indicate that about 1.75 million people consume arsenic-contaminated water and around 0.2 million were suffering from arsenic-related diseases.
- The impact of habitation on contamination of water reservoirs is very well documented, leading to an increased burden of morbidity and mortality in communities served by these water sources.
- Rapid industrialization is considered to be central to economic development and improved prospects for human well-being. Routine discharge of effluents from industries in to water sources, however, have severe consequences on quality of water.
- Demand for water is increasing rapidly due to agricultural, industrial and population growth. The average consumption of water per person is now 680 cubic meters per year for all uses. This is projected to double by the year 2050.

POPULATION AND ENVIRONMENT (Contd...)

Forests

- In the decade of the 1980s, India lost forest cover at the rate of almost 1.5 million hectares per year. Currently no more than 10-15 per cent of country is forested and much of this remaining forest is degraded.
- The per capita forest availability is only 0.08 hectares in India which is very low compared to situation in other countries - Indonesia 0.85 hectares, Malaysia 1.45 hectares and United States 1.2 hectares.
- Indigenous populations, earlier farming in villages, have shifted from fertile to the fragile areas for cultivation due to severe pressures on land.
- Dependence on forest areas for household fuel and timber needs, and supplementing income by sale of fuel wood and other minor forest produce has caused biotic pressures. Women have to spend long hours in trekking for fuel, and other daily needs.

Land Resources

- With a growing population, the pressure on land is intense in India. With 16 per cent of world population, India has just have 2.4 per cent of world land area. As the rural population grows, average farm size falls considerably. The population density has increased from 77 in 1901 to 274 person per square kilometer in 1991.
- The average size of land holding in India is shrinking. The average size of all land holdings has gone down from 2 hectares in 1976 to 1.57 hectares in 1990.

Average size of land holding In India (Hectares)

1976	1980	1985	1990
2.00	1.84	1.69	1.57

- Pesticides use has risen constantly in India and nearly 70 per cent of pesticides used in India have been banned or severely restricted for agricultural use in other countries.

Energy

- 40-50 per cent of total energy consumption in India is accounted for by households. The bulk of the energy consumed by households consists of such traditional fuels of fuelwood, animal dung and crop residues, which contributes to domestic air pollution and impacts on health.

Air

- Quality of air has deteriorated considerably in India's urban areas as population has grown at a rapid pace. Inhalation of polluted air has serious health effects, including respiratory, cardiac and nervous disorders.
- In most of the 23 India cities with a million plus population, levels of suspended particular matter are dangerously higher than the limits recommended by WHO. Vehicles are a major source of pollution.

ADOLESCENT REPRODUCTIVE HEALTH

Adolescents constitute an important segment of society. Yet until recently, the special needs of this group have not been sufficiently addressed. There is increasing recognition now that reproductive health needs of the adolescents have to be articulated in terms of information and services so that they can make informed choices leading to improvement in their health status.

Who are adolescents?

Adolescence is a period of physical, psychological and social maturity from childhood to adulthood extending from the onset of puberty to the attainment of full reproductive maturity. "Adolescence" has been defined as including those between 12 and 19 years of age, "youth" as those between 15 and 25, and "young people" as a term that covers both age groups. Adolescent reproductive health refers to physical and emotional well being of adolescents and includes their ability to remain free from unwanted pregnancy, unsafe abortions, sexually transmitted infections including HIV/AIDS and all forms of sexual violence and coercion.

Why the focus on adolescents?

- In India, adolescents account for one fifth of the population. With an estimated 200 million population in this age group, constitute a significant group meriting separate attention. Adolescents represent a major potential human resource for the overall development of a nation.
- In the past, adolescents have been largely neglected in both health and family planning programmes. Most programme interventions are aimed at married adolescents. The needs of unmarried adolescents are not recognised and hence not catered for.
- Actions taken during adolescence can affect a person's life, opportunities, education and health status.

Adolescents in India : Issues at glance

- In India, the legal age at marriage is 18 years for females and 21 years for males. Nonetheless, early marriage continues to be the norm. There is some evidence of decline in adolescents marriages, but regional variations continue to persist. In the states of Rajasthan, Bihar, Madhya Pradesh and Uttar Pradesh more than 50 per cent of girls are married before they are 16 years old. On the other hand, the increase in the age of marriage, despite regional differences, has led to an extended period of adolescence, leading to a new set of concerns related to sexual norms and behaviour.
- Adequate nutrition is critical for adolescents. The major measure of nutritional or health status is the daily average intake of energy and proteins against the recommended daily intake (RDI). While all ages and both sexes fall short of the RDI, the difference is greater for adolescent girls, suggesting the continuation of the bias that begins even before birth. The most visible manifestation of nutritional deficiency is the high prevalence of anaemia and stunting among adolescent girls. The situation is worsened with pregnancy and often results in obstetric risks and reproductive failures.

ADOLESCENT REPRODUCTIVE HEALTH (Contd...)

- Adolescent fertility rates are high in India. As per NFHS-I survey findings (1992), the age specific fertility rate (15-19 years) is 116 births per 1000 women of that age. By comparison, the corresponding rates in Japan and the United States are only 2 and 19 per cent respectively.
- Nearly 23 per cent of all births in India occur to adolescents mothers in the age group 15-19 years.
- Infants born to teenage mothers are at higher risk of low birth weight, pre-maturity and stillbirths. Incidence of obstetric complications is also very high among adolescent mothers.
- The magnitude of adolescent sexual activity is significant, and is higher in boys than girls. There is under-reporting of non-marital relationships by adolescent girls due to fear of social disapproval. Therefore, the magnitude of the pre-marital sexual activity is not known. Commercial sex workers usually serve as partners for first-time sexual encounters.
- Knowledge of sexual and reproductive issues is extremely poor amongst adolescents. In some studies, 50 per cent of female adolescents did not know about menstruation, and their limited knowledge was based on social factors (such as not being permitted to cook) rather than the actual physiological changes.
- Invariably, information on sexual and reproductive issues sought from peers can be misleading and inaccurate. Parents and teachers play a minor role in giving information, and are usually reluctant to impart such information.
- Sexual and reproductive decision-making by adolescents is constrained by age and gender factors. Adolescent women have little choice on whom and when to marry, and are usually not in a position to negotiate contraceptive use. Service providers also tend to be judgmental while catering to needs of the adolescents. This varies slightly with age, with an older wife more likely to make such decisions.
- Unwanted pregnancies and induced abortions are a common feature in India. Induced abortions are often sought at uncertified places and performed by untrained providers thus jeopardising the life of women. Risk further increases when abortions occur in the second trimester, which is the case for the majority of adolescent pregnancies.
- Young people are at greater risk of contacting sexually transmitted diseases including HIV/AIDS due to the early onset of sexual activity, reluctance to use barrier methods, and frequency of partner change.
- It is estimated that most drug users in India are between the ages of 16 and 35, but the actual use of drugs may begin at an early age, sometimes as young as 10 years. In the North- eastern states, drug abuse among young people has become a major social problem, threatening the social fabric and structures of society.
- The available data indicate that a high incidence of rape occurs in the 10-16 year age group. Sexual abuse appears to be prevalent in India.
- Trafficking of adolescent girls is a problem that can be traced to poverty, migration, tourism and low levels of education. The Central Social Welfare Board survey in 1991 indicated that 40 per cent of commercial sex workers were inducted when they were less than 18 years old. The problems of young girls in prostitution and the demand for young girls is linked to social and cultural held beliefs relating to virginity (it is commonly believed that sex with a virgin is a cure for STDs including HIV/AIDS) and gender relations.

MALE RESPONSIBILITY

As population programmes are making the transition towards becoming comprehensive reproductive health programmes, one of the most important items on the agenda is the issue of men. Chapter IV of the Programme of Action endorsed during the International Conference on Population and Development (ICPD) says that in most societies men exercise preponderant power in nearly every sphere of life, ranging from personal discussions on the size of families to the policy and programme decisions taken at the level of Government" and therefore men are key to bringing about gender equality. Putting men on the agenda is not at all in contradiction to the promotion of women's empowerment.

What is male responsibility?

There is no universally accepted understanding of what it means to include men; rather, a variety of interpretations exist of the concepts of 'male involvement' and 'male responsibility'. Men are involved in reproductive health through their multiple roles as sexual partners, husbands, fathers, family and household members, community leaders, and gatekeepers to health information and services. Including men as partners has a variety of meanings. There are many different ways to involve men appropriately and constructively in reproductive health. The universal concern must simply be that the calculation is one of addition, not subtraction: that is, in adding services for men, we must ensure that women's needs are not sacrificed or jeopardised in any way.

Why men now?

- Men do have reproductive and sexual health needs of their own. Studies indicate that a significant proportion of men have problems related to sexual dysfunction, infecundity and other urological problems.
- With HIV/AIDS and other Sexually Transmitted Infections now spreading faster among women than among men, attention has been focused on the health consequences of men's sexual behaviour. Also, prevention of HIV/AIDS largely depends on condom use (besides abstinence and fidelity).
- Millions of pregnancies are unintended, and each year many thousands of women die as a result of these pregnancies which could be prevented through increased contraceptive use. Contraceptive use must often be negotiated with the male partner.
- There is now greater recognition that men make decisions that affect women's reproductive health as well as their own.
- Including men in reproductive health programmes could contribute to more equitable relations between partners and improved communication regarding reproductive goals.

Current Scenario

- National level survey findings indicate that unmet demand both for limiting and spacing methods of contraception continues to remain high in many states. In Uttar Pradesh, 87 per cent of women with unmet need said that the decision to use contraception ultimately rests with the husband.
- Male participation in accepting responsibility for contraception is woefully negligible. As per programme statistics, over 97 per cent of sterilisations are tubectomies.

- Reproductive health services for men remain inadequate. Many services in hospitals and clinics focus primarily on female clients, sometimes to the exclusion of men.
- According to some studies conducted in rural Uttar Pradesh, the majority of the men were not aware of their wives' pregnancies, antenatal care received, pre and post-natal complications or reproductive problems. The reason for this lack of awareness was limited nature of inter-spousal communication, and little involvement of men in matters that they considered purely of interest to women.
- Indian men do engage in risky sexual behaviour and thus do transmit infections to their spouses. Men do have a somewhat "liberal" attitude towards pre or extra-marital sex. Further, men do not consistently protect themselves and their partners while engaging in sex with commercial sex workers and rarely while engaging in sex with their spouses.
- A large proportion of men who live in monogamous marriages tend to abuse women both emotionally and physically.
- According to the study done in Uttar Pradesh 9 per cent of men reported having a sexually transmitted disease, but only 45 per cent of them had consulted an expert for treatment.

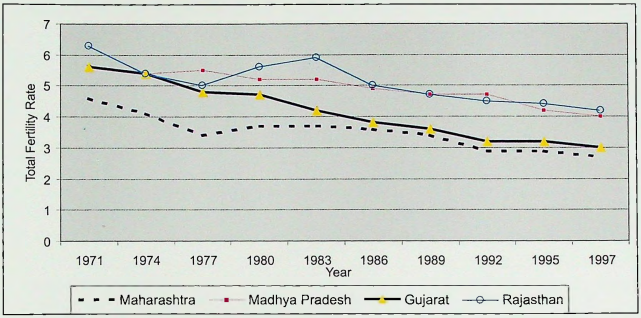
Socio-cultural Obstacles

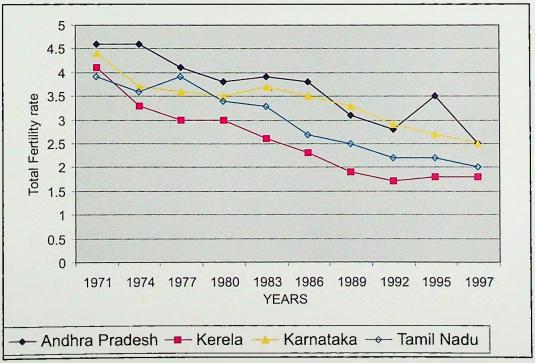
- Men perceive the practice of discussing and sharing decision-making on family size and contraceptive use as a personal loss of control.
- Society sanctioned roles, which strictly segregate roles and responsibilities by gender, discourages husband-wife communication particularly on reproductive health.
- Traditional beliefs may conflict with men's participation in reproductive health.

Lack of Services and Provider Bias

- The assumption that men are disinterested in family planning, or are not of concerned for their wives has resulted in services not generally being men-friendly.
- In the area of service delivery for reproductive health, programmes have traditionally focused on women via maternal and child health programmes.
- There is very scanty information on men's knowledge, attitudes and practices with respect to their reproductive health goals, sexual behaviour and fatherhood.
- Applied to the management of reproductive health programmes, the goal should be to redress the biases that have evolved in the staffing of services. This has led to men dominating the upper levels of the bureaucracy and women being largely absent from the higher paying roles where decision-makers' opinions shape the philosophy of the programme.
- Also, the past orientation of many service providers placed the responsibility for contraceptive decisions solely on women and impeded efforts to promote male responsibility in family planning decisions. This provider bias favouring female methods may have also deterred contraceptive use by men.

TRENDS IN THE TOTAL FERTILITY RATE





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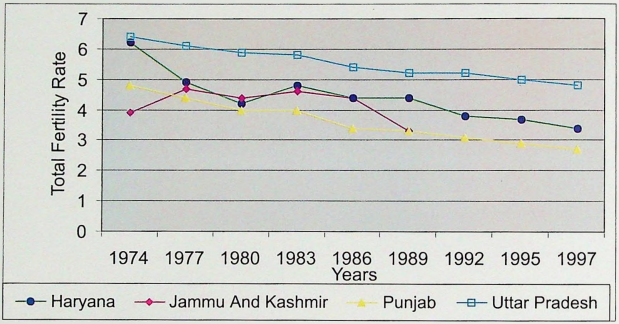

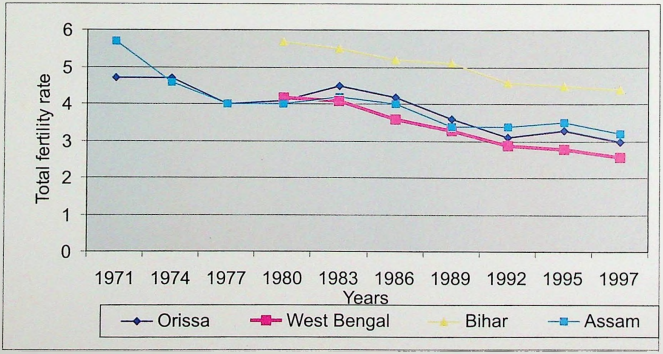

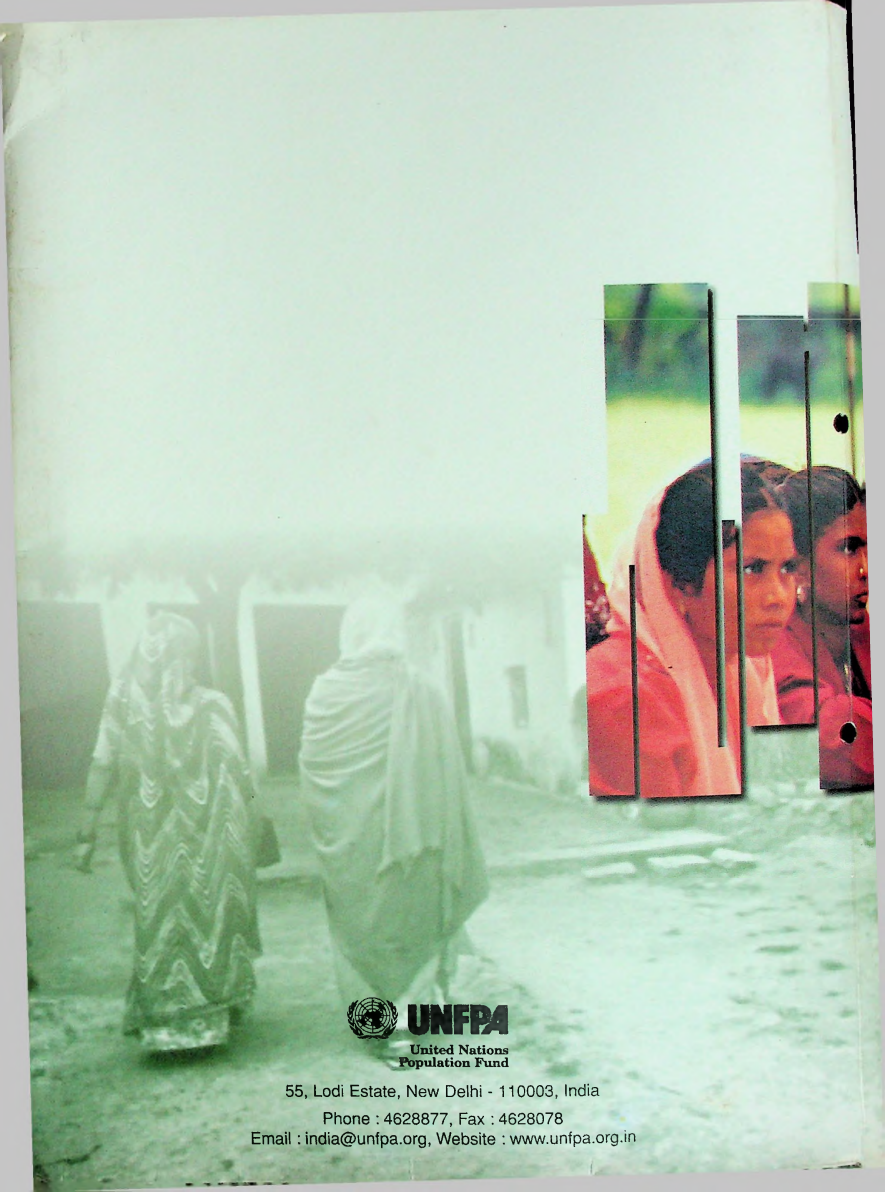

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HH-6

Cehat

सेहत

Report of the Regional Consultation on Responding to the Target Free Approach

Held in Pune on January 31 & February 1, 1997

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Centre for Enquiry into Health and Allied Themes (C E H A T)

The Centre for Enquiry into Health and Allied Themes, CEHAT is a non-profit research collective/organisation set up with the primary objective of conducting research on topics of relevance to the health and well-being of the disadvantaged and the poor. It functions as an interface between progressive and pro-people movements and academic expertise.

CEHAT represents the outcome of a long process of debate and discussions on the increasing need to create a structure which could in a disciplined manner enquire into the many troubling questions thrown up by and within people's movements and provide a data base and well-substantiated answers. Some of these topics may involve quantification and estimation, for instance, the volume of resources wasted on irrational drugs. Others may extend, deepen and influence currently applied norms of medico-legal jurisprudence such as research on domestic violence, torture or rape. Some may impinge on medical ethics and may raise further questions as in explorations of the responsibility of the medical community towards patients. Studies and surveys on women's experience with abortion or contraception or their perceptions of health and illness will seek to inform mainstream analyses, while those on psycho-social trauma of populations forcibly displaced or the concept of social wage and what it implies, will reveal what is hidden even as they influence the process of change towards a more sustainable and equitable society.

How we function

On principle, CEHAT does not regard society either as a ground for experimentation or as unexplored terrain for data-gathering for intellectual exercises. Given this, all CEHAT's projects endeavour to create space for the participation of people in the study without compromising on academic rigour. All CEHAT's projects include ethics committees and are committed to return the results of research to participants and respondents, in an appropriate manner.

OBJECTIVES

1. Conduct research and action-research on topics of importance or interest from the point of view of people's movements in the country.
2. To interact with progressive movements, in related areas, such as women's groups, trade unions and campaigns or organisations involved in human rights issues and provide research inputs.
3. To identify research priorities in health at local, national or international levels, the findings of which will directly or indirectly benefit oppressed, marginalised or silent sections in society.

The emphasis in CEHAT is on a democratic and participatory mode of decision-making. An external social audit group periodically evaluates CEHAT's performance in collective management and the relevance of research directions of the centre.

At present CEHAT functions on a project to project basis. At some point in the future, a corpus fund will be raised to ensure a degree of continuity in the institution. At all points of time CEHAT will aim to provide its staff with a just pay on scales comparable to UGC scales, and a participatory and conducive work environment.

CEHAT is a research activity of ANUSANDHAN TRUST whose trustees are Dr. Amar Jesani (who presently coordinates the activities of CEHAT), Dr. Anant Phadke, Dr. Anil Pilgaonkar, Dr. Dhruv Mankad, Ms. Manisha Gupte, Dr. Mohan Deshpande, Ms. Padma Prakash, Mr. Ravi Duggal and Dr.Vibhuti Patel. The trustees have multidisciplinary academic training and experience in the fields of medicine, economics, sociology, journalism, biochemistry and microbiology. Most of them are currently engaged in full-time research in health and related issues and women's studies.

REPORT OF THE REGIONAL CONSULTATION ON RESPONDING TO THE TARGET-FREE APPROACH

CEHAT
Centre for Enquiry into Health and Allied Themes
January 31 & February 1, 1997

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ACKNOWLEDGMENTS

We thank all the participants for their valuable contributions, thereby making the regional consultation meet a success. We are grateful to the Health-Watch network for sponsoring this meeting. We would like to convey our thanks to BAIF (Bharatiya Agro Industries Foundations) for making available their premises for the meeting. We are grateful to all those who looked after the nitty-gritty of organising, without whose unfailing and sustained efforts the meeting would not have been such a comfortable affair. We take this opportunity to thank Ms. Maya Nadar for providing her secretarial assistance for the meeting. We express our gratitude to Dr. Sharadini Rath for shouldering the responsibility of writing this report and to all those who have facilitated the report writing by their articulate, and prompt comments on the interim report, helping us out to bring out this report for wider dissemination.

PREFACE

Women's health has for too long been seen within the narrow confines of maternity. The family on the one hand pushes women to produce sons and the government health services on the other hand coerce women to limit the size of the family through provider controlled and long acting (or terminal) methods of contraception. Maternity is over-valued in Indian society to the extent that childless women are stigmatised, deserted and are rendered more vulnerable to violence and bigamy on the husband's part. The State, with an overt bias towards population control treats fertility as a disease with poor women as it's carriers.

No wonder then, that the public health services reflect these biases too. In the first place, the public health infrastructure is poor, the personnel inadequately trained, resources including drugs and equipment rarely available - even at primary health centres. Poor developmental infrastructure such as lack of pliable roads and transport services make these (often ill-placed) services even more inaccessible. Linking vital services such as abortion or childbirth with sterlisation or contraceptives adds insult to injury for most poor women. The private sector, with it's expensive and often irrational (or even harmful) treatment then becomes the 'choice' for most people who incur vast amounts of debt for the much needed curative services.

In this light, the Indian government's attempt towards humanising the family planning campaign by making it target-free is a welcome step. It is certainly a better thing to do than coercing people into permanent methods of contraception (remember the Emergency?). For over two decades now the women's movement as well as health activists have demanded that targets be removed from the family planning campaign and in a sense, this official move will certainly give some respite to community based health workers, especially the over-worked Auxiliary Nurse Midwife (ANM) as well as to women in the reproductive age group.

Having said this much, one needs to examine the reasons and the strategies of the government visa a visa the target free approach. With women becoming vocal over the years through being organized by women's groups and Non-Governmental Organisations (NGOs) it is now hardly possible to launch an anti-woman campaign without creating an uproar. To supplant it, an 'unmet need' of contraception has been identified among Indian women and the launching of a soft approach in contraception is expected to work better at this stage than coercion ever will. The basic fact that population policies (whether pro or anti-natalist) are in themselves eugenic and de-humanising or that women have many other unmet needs as well, (such as poor access to legal rights, to housing or decent jobs, for example) is not the main political debate, now. Giving the population policy a human face by linking it to development is the current slogan.

Whatever the reason be, the fact that reproductive health needs of women are being articulated in government and NGO quarters is in itself a positive sign. The role of progressive groups would be to create pressure for expanding the existing policy on reproductive and child health into a much broader policy on women and health that encompasses other vital and hitherto neglected areas such as work and health, emotional health, violence, abuse, medico-legal jurisprudence, impoverisation and so on. A demand for answerability within the public sector and regulation of the private sector so as to make health care universally available to every one would have to be raised once more.

Rather than accept 'packages' of health care, it would be worthwhile to press for a comprehensive public health policy that provides good quality health care for all people, including women, irrespective of their capacity to pay. In real terms it would mean an overhauling and reinforcement of the existing health care infrastructure and making it accessible in physical and financial terms for all Indian people. Gender sensitivity within such a policy which takes serious cognizance of the special needs and socio-economic position of women is a must.

With a view to debate and clarify some of the above issues, CEHAT, being a founder member of the 'Health Watch' network, decided (in collaboration with 'Health Watch') to organise a consultation with health activists, NGO representatives and Government officials from Maharashtra-Goa region for two days in Pune. Though the participants came from varying backgrounds and experiences, they agreed on certain basic issues - namely that the target free approach as defined in the government manuals was inadequate and that reproductive health services would not be of much value unless they were contextualised within the broader frame-work of people's right to basic health care in India, of which women's health concerns would be an integral part.

We have great pleasure in circulating this report to all of you who have been concerned with issues related to women and health. The dialogue that started in this consultation needs to be strengthened in a way that the target-free approach is certainly not abandoned by the state in a haste, and that the myopic definition of 'women and health' evolves beyond the understanding of maternity and fertility.

Ms. Manisha Gupte.

Member, Governing Board,
CEHAT.

Introduction

Participants at the regional meeting of health workers, researchers, and activists from Maharashtra and Goa deliberated upon the merits and implications of the Target Free Approach (TFA) to Reproductive and Child Health (RCH) put in place by the Ministry of Health and Family Welfare since April 1996, at a two-day meeting which concluded on February 1, 1997. This consultation was jointly organised by the Centre for Enquiry into Health and Allied Themes (CEHAT) and Health Watch.

It was felt that the new `target--free' approach to reproductive and child heath care marks a much needed and long awaited first step towards a complete revamping of health policy. This approach tries to move away from counting sterilisations as an indicator of reproductive health, to providing real reproductive health care through the public health services.

However, there was a strong consensus that the new policy as outlined in a manual to be used by public health functionaries at various levels falls far short of taking care of real health care needs of people, and women in particular. It continues to think of reproductive health and `family planning' synonymously, while virtually ignoring most rational reproductive health indicators. It makes no efforts to offer good quality curative care. As a result, while abandoning the target approach is appreciated, it is highly unlikely to make any real difference in this essential area of health in the present form.

It would be far more rational to integrate reproductive and child health into a comprehensive package for delivering quality basic health care to the people. Such a health package should be available to all, independent of their ability to pay and must take into account the socio--economic conditions of communities while delivering care. Given women's poor access to health care, there might still be the need to have a special women's health programme within such a package, but it should be considerably more comprehensive than simply taking care of their reproductive health in the `family planning' mode.

The participants also came up with criticisms and suggestions for improvements in the development of human resources, the training and other needs of health workers, public health infrastructure, the quality of the care it delivers, and ways to evaluate its efficiency and effectiveness.

All these deliberations and recommendations are reported in detail in the following sections.

Major Topics

Reproductive and Child Health approach and health care

The strongest criticism of the RCH programme was that a separate and stand--alone reproductive and child health package was the wrong policy to follow. There must be a basic package of comprehensive health care available to all, which covers not population control driven targets, but addresses the basic health care needs, such as curative care for common diseases, dental care, mental health, occupational health, for both men and women. Such care must be provided with an acknowledgment and understanding that social and cultural factors affecting men and women are different, and therefore there must be gender sensitivity in the care as well. In this regard, many times the view was expressed that a special programme for women's health needs still remains necessary since they have been excluded from such care for far too long, having had only their reproductive capacity under the lens. In fact, even within the purview of reproductive health mostly women have been targeted, only during their child-bearing years, and only from the viewpoint of population control. This must change. It must be recognised that women have reproductive health care needs that fall outside the limits of family planning and child care, and as long as these are not treated by a routinely accessible and efficient system, there is little chance of having a healthy population, small or large. Right to basic health care must be made fundamental and it must be made available to all irrespective of people's ability to pay.

A large number of suggestions were made to concretise this view of a comprehensive health policy. A list of services which should be covered in such a programme was as follows:

. general practitioner/family physician services for personal health care,
. first referral hospital care and basic specialist services (paediatrics, gynaecology and obstetrics, general medicine and surgery, occupational and mental health, dental services and ophthalmology, special diagnostics),
. immunisation services for vaccine preventable diseases,
. maternity services for safe pregnancy, abortion, delivery and post-natal care,
. pharmaceutical services, including laboratory services, surveillance and control of major diseases with the aid of continuous surveys, information management and public health measures,
. contraceptive services,
. health education and information,
. ambulance services.

There was discussion of the referral system. It was pointed out that with the rapid growth of the private sector in both rural and urban areas, coupled with insufficient public services, most first contact care was handled by this sector. An estimated 1.2 million qualified and as many unqualified doctors were involved. This is an important area of consideration for the state in designing the comprehensive health system. However, the integration of the private practitioner into a health care package must be well regulated under the single umbrella of a national health authority. There should be rationalisation of resource distribution, an efficient referral system and insurance plans available.

state in designing the comprehensive health system. However, the integration of the private practitioner into a health care package must be well regulated under the single umbrella of a national health authority. There should be rationalisation of resource distribution, an efficient referral system and insurance plans available.

In a study on factors affecting health seeking and utilisation of curative care, it was presented that even in rural areas, private care was preferred at first contact. This was based on a perceived notion that the quality of this care was better than that in the Primary Health Centres (PHCs). Also, socially and economically dominant groups used private care, while deprived and marginalised communities used the PHCs, only because they could not afford private care. At the PHC level it was found that the ANMs were so burdened with family planning work that they hardly provided any curative care, leaving the underprivileged communities with no choices for such services. It was felt that the now defunct Community Health Volunteer scheme should be reinstated to un-burden the ANM and rationalise the contact between communities and the PHC that serves them.

Regarding finances, it was pointed out that in the existing system of health care, the distribution of resources between urban and rural was rather skewed. 15 percent of the budget of the health ministry goes towards family planning, and 40 percent towards hospitals and medical care. However, 80 percent of the 15 is spent in rural areas while 85 percent of the 40 in urban. An estimate based on current use and an average morbidity rate of 2 percent suggests that Rs.500--600 per capita needs to be spent in order to give quality basic health care. This is about four times the present spending. It was pointed out that utilisation of such a universal care package will be high initially, rising geometrically, and then fall and level off as health needs reduce to optimal levels.

In order to do a needs assessment study for planning resources, it was pointed out that much of the first contact care in the private sector was completely undocumented. In rural areas where people were using PHCs, the driving agenda of population control and family planning under which the public health workers operated meant that there was no information about general health care needs from this area either. Such studies need to be done in order to identify priority health care areas specific to communities. NGOs should contribute by taking up such studies.

Health care for women

This topic pervaded all the discussions. This section gives an overview of the breadth of concerns studied and expressed. Details of recommendations for improvements within the target free approach and the RCH programme are given in subsequent sections. As mentioned in the previous section, there was a strong feeling among many participants that even within a structure such as a comprehensive basic health package, there was a necessity for a women's health programme. Such a programme must be aimed at expanding the health services available to women a great deal. There was broad consensus on the details of what such services should include. It was felt that the planned RCH package must incorporate these to make it effective in the long term.

It was agreed that instead of devising family planning policies, the need of the day was to empower women to take charge of their basic health care, with efficient and accessible support from the state system. If this was done, family planning would become a matter of rational, but personal choices. Lowering of birth rates would then follow as the natural consequence.

Given the stated policy of the ministry to abandon population control targets, there was a very strong need to put into place assessments of women's reproductive health indicators based on a broad picture of the social, economic, and health environs of women. That such a picture can be very complex was stressed in several presentations.

A study of women as disadvantaged in access to health care, with specific reference to abortion presented the view that the woman suffers from her ability to bear children in both spheres; the family and the state. The state sees her fertility as something that must be regulated, and she gets selective services and counseling according to that aim. So she never has the freedom of informed choice in planning her reproductive life. However, maternal mortality is very high and flies in the face of the stated policy. Even within the family, her ability to bear children, and sons in specific, only gives her security of sorts without ever giving her real control over when and how she wants to have them, and she remains dispensable.

If she is infertile for some reason, she becomes virtually invisible to the state, but suffers greatly at the hands of family and community, and is proven to be dispensable.

With so much emphasis being placed on their fertility alone, women are often seen to be unable to seek care for gynaecological illnesses that are not directly related to pregnancy. This is even more understandable since the public health workers at PHCs are known to be callous, insensitive, and often intimidating. This is especially true of abortion services. The quality of care indicator changes according to the social and economic status of the women. Unmarried women have even less power of bargaining and must seek such abortions in the expensive private sector. There is also the frequent demand for the husband's signature. This is not included in the Medical Termination of Pregnancy (MTP) Act. Its an interpretation governed by the existing social values, which makes it even more difficult for women to get such services on demand. Further, women are pushed to accept provider controlled and invasive contraception following an MTP. This further reduces women's access to safe abortions.

There are absolutely no services available for occupational health problems, domestic abuse alleviation and mental health. Older women are deemed to be permanently fit, and no counseling is done about menopause and its side effects.

Given such complex social and economic constraints on the care of the reproductive health of women, there were a number of issues which the participants agreed must be taken into account to make the RCH programme effective. The following outlines an expanded reproductive health package.

. Safe child bearing, with access to appropriate health services.
. Care of gynaecological disorders.

- Access to safe and affordable abortion services.
- Capability to reproduce (infertility).
- A safe sex life without fear of disease, coercion and unwanted pregnancy.
- Safe, effective, affordable and acceptable methods of family planning, with informed choice being emphasized.
- Special attention to adolescents, girls and boys.
- Mental health.
- Domestic violence issues.
- Occupational health, including housework.

There must be efforts made to raise awareness within the community about these, including how to spot symptoms and where care for them may be sought. Legal rights and wrongs must be clear regarding age of marriage, abortions, etc. The right to informed choice must govern all such efforts of education. Special efforts need to be made to bring women into the circle of health care, given their poor access. Service providers must be aware of cultural constraints on adolescents seeking care for gynaecological problems.

Recommendations regarding Target Free Approach

The following sections deal with recommendations that were suggested by the participants for improving health care in the target--free approach as outlined in the manual. There was repeated discussion on what exactly 'removing targets' entails. The view was expressed that as far as providing clear unambiguous guidelines to the care providers at various levels of service was concerned, there had to be indicators of some sort. They must be used to both motivate the health workers, as well as evaluate their performance. The meeting was informed that Maharashtra was trying to put in 'target free targets' by making up their own manual. It stressed self--generated targets, set up by community representatives and health workers together. This would take into account their specific health needs in their social and cultural contexts, instead of being imposed on them in a top down fashion. Sterilisation targets have been put at the end of the list and current evaluation is being done comparative to last year, without any demand on meeting those levels.

It was also pointed out that health workers who have been trained for the past four decades in chasing sterilisation targets were not going to be able to make a fast transition to not having them. So what should the new targets be, if any? What roles should various public health workers play in the new system? How should they be evaluated? There were detailed discussions on these questions and the following sections present them, along with specific recommendations.

The human workforce

The ANM turned out to be the fulcrum around whom revolved all the changes in human resource management that were required if the system was to serve the purpose of broad based provision of reproductive health care. Research presented showed a dismal state of affairs as far as the ANM's position in the system, both state and social, was concerned.

It was found that the TFA assumed that the ANMs are independent and confident planners. However, on close examination it was found that most ANMs operate under no professional supervision. They are usually women from disadvantaged classes. This makes them vulnerable in both ways, the sexual and the social. They have no bargaining powers in either contexts in times of pressure. Most of the times they are stationed in villages away from their homes and cannot take advantage of family support in times of need, nor can they count on social support from their environs. They do outreach programmes to identify care needs and travel extensively among surrounding villages. This raises the issue of their security and comfort. They also work with very poor infrastructure at the subcentre, while they are held responsible for its performance. ANMs typically take care of child and reproductive care work, and as such are seen more as dai's than as trained medical personnel. On the other hand their men co-workers as the Multi-Purpose Workers (MPWs), tend to be seen as `doctors', even though they do the same amount of curative care as the ANMs. They are mostly malaria workers, collect TB slides, chlorinate wells, and so on. So the ANM is marginalised both socially and professionally, while having the maximum responsibility on her shoulders in terms of running the subcentre, in which the MPWs have no share.

It is also on the ANM's shoulder that the entire grass-root implementation of family planning policy has rested for all these years. Finally, it is her performance in pushing contraceptives and doing immunisations that reflects in the targets being monitored. Now that these targets are being removed it is imperative that she be given a clear job description. Some of the suggestion made for improving the ANM's role are as follows :

. The role of the ANM has to be substantially strengthened. She must be given clear responsibilities in terms of the care she is to provide. The strongest consensus on this point was that she should not be asked to do `family planning' work, but should simply take care of family health in general, more specifically women's reproductive system morbidities and child care. In fact, she can maintain family registers of health histories. They can be used both as means of monitoring her work, and also to draw a complete health picture of the rural families. At this point in time, no such data is available.
. In order that she is able to carry out these duties efficiently she must be backed up by a more curative care oriented subcentre than what exists now. She must be trained to look for symptoms of gynaecological morbidities and in cases where she cannot treat them, be able to refer them to PHCs with the confidence that they will be treated promptly and properly. This is a vital link in making her position within the community strong. People must have confidence that she is indeed the link between them and quality care at larger centres.
. She must have team support from the MPWs. Outreach work should be done more by the now defunct Community Health Volunteers(CHVs), rather than having the ANM traveling over large geographical areas. The CHV scheme should be re--examined and re--instated. While outreach work is necessary for identifying care needs, this work is best suited to the CHVs since they can do it for their own respective villages. It gives them the advantage of being physically and socially accessible within the community. It also makes them accountable to the community. The ANM cannot, and should not be asked to, do this work for a large number of villages.
. The ANM must be motivated by prospects of promotion. If it is found that she cannot be promoted to higher posts within the medical care set up, she should be considered for

managerial positions. Stagnating her in the same position for years will breed indifference to the work she must do, along with discontent.

. In the new TFA, she should be encouraged to interact with the community to find priority areas of health care needs and set up targets to improve the health picture in that locality. For all this, she needs training in leadership, communication, and personality development.

. If the ANM is to be the first and most accessible link between the people and the state health system, she must be given the necessary tools, both medical and human, to sustain that position effectively. Along with responsibilities, the ANM's decision-making power has to be
substantially strengthened.

Among other suggestions for improving the efficiency of the health workers, there was a lot of emphasis placed on re-training. It was felt that from the ANM/MPW upward, including the Medical Officers (MOs), the District Health Officers (DHOs), and all the managerial staff at the PHCs and RHs, needed gender sensitivity training. It is not correct to assume that all illnesses, even those outside of the reproductive system of the woman, affect men and women similarly. As pointed out in an earlier section, the woman is very constrained in socio-economic ways as men are not and needs appropriate consideration when providing care. The health workers must be made aware of it and given training to deal with the situations.

MOs and DHOs should be given periodic re-training in diagnostic skills using medical college hospitals. RHs should have a regular woman gynaecologist on a visiting basis. It was also felt that there should be an effort made to attract women to take up jobs as MO/DHOs. Incentives such as seat reservation in local schools for their children could be offered. In general, the presence of professional women in the state medical care system should be greatly enhanced.

Another area of discussion was the inclusion of the private sector into the health system. Although it was agreed that this was a good idea, there was apprehension expressed that this would be done in haste, without doing a thorough study of the quality and range of care that they provide and how it should be regulated in a collaboration with the state. Such a study is absolutely necessary. Professional bodies with consumer groups and the government should evolve standards and accreditation systems before any effort is made to integrate the private sector in the RCH programme.

Infrastructure, quality of care, and evaluation

The ramshackle state of the public health infrastructure was reflected in a study of drug supply in Satara district. Various PHCs and RHs were surveyed. It was found that no one single drug was available in the PHCs throughout the year. Only about 3 percent of the total supply was available on a regular basis, and 55 percent were effectively not available. The situation in the RHs was not noticeably better, 38 percent of the drugs being available only very irregularly. The total supply to the public sector was about 56 lakhs, while an estimate of the use by private sector was about 21 crores, which is closer to the estimate of drug requirement in this area for an extrapolated morbidity load. This shows very strongly that

there is no facility for curative care, even for common ailments, within the public health system. The entire budget and supply is geared for immunisations and family planning/contraception activities. This trend continues in the TFA manual. The manual mentions only some 7-8 drugs to be supplied to PHCs, while the drug kit is supposed to have some 80-90 drugs. There seems to be complete confusion on this issue. As a national health policy this goes against common sense. Poor people in rural areas must have basic curative care access to their PHCs, not just for contraception and family planning.

While drug supply is one aspect of the issue of access, other severe problems regarding infrastructure were pointed out by participants. All these directly affect the quality of care issue. Physical locations of PHCs serving a given geographical area was of great importance. If people have to spend an entire day traveling back and forth to the PHC, the incentive for doing so is going to be very low, and quacks and other unqualified 'doctors' will then be used. Reliable state transport services which are extremely necessary as a back-up to utilisation of public health facilities are also not available in remote rural and tribal areas. If only 15 people from each village go to the PHC every day, the existing state bus service will not be sufficient. Universal access to basic health care must be the guiding principle in planning these resources, backed up with development infrastructure.

It was felt that this bad planning for infrastructure also reflects the poor state of data collection for both need assessment, and the quality of care being provided . There is no data on the former, since public health has been synonymous with family planning and contraception. General health care has been dealt with on 'campaign' basis once in a while for mostly highly communicable diseases such as tuberculosis, leprosy, etc. However, even care for these is not available on a regular basis, much less for other common ailments. The evaluation of the quality of care is again family planning oriented, with health workers being asked to fill out forms with this focus. Unfortunately this policy continues even in the new manual of the TFA.

With this background, the participants came up with strong recommendations for improving the infrastructure, with the help of relevant data collection based on rational indicators of health, that would then help the care providers at the PHCs and RHs improve their quality of care.

. Since all infrastructural changes can be made only on the basis of data on need assessments, this should be started immediately. What data should be collected from which health functionary and how should it be used? Collection of sensitive and intimate information about people's lives or about NGOs/social action groups raises ethical and political concerns since this data is centralised, globalised, and used to draw conclusions for the purposes of policy making that then directly affect the services being provided at grass root level.
There was also consensus among the participants that there was too much data being collected. This issue raised concern among participants because excessive data collection would create resentment among people as their time and energy would be unnecessarily consumed . Even the ANM was asked to provide so much data that there was little time left for her to actually do health care work. Since it was agreed that the basic function of the PHC was to provide basic curative care, it was felt that maintaining family health registers would give far more information about health needs in a community than only keeping

records of contraception and other family planning indicators. This data can then be pooled together at the district levels for planning finances, drug supplies, training requirements for personnel and infrastructural changes. This means that such data needs to be processed fast. Decentralising this process will help tremendously in a fast response to the health needs of a community. Updating of this kind should be a continuous process, instead of being done once in several years.

. There needs to be rationalisation of both the drug supply to PHCs, and their locations. Locations should be governed by time taken by the community being served to access the PHC, and not by the political clout of a particular village. The drug supply should be based on the health needs of each locality. Curative care for common ailments should be available on a regular basis, rather than in fits and starts.

. What indicators should be used to survey both the health picture of a community, and the performance of its care provider? The most strong recommendation was that these indicators should be evolved with the consensus of the community. Mahila Mandals, panchayats and other bodies within the villages should be involved in the process. They should be asked both about their care needs, as well as how they are being served in their alleviation. User reports should be collected on a regular basis. Removing population control targets should not leave the health providers with the feeling that there is no more work to be done. They should be motivated to set up their own targets with the help of the community and be evaluated on that basis.

. Women's reproductive health indicators should be evolved keeping in mind, as outlined in the section on Women's Health, that they have morbidities other than those related to child--bearing, and that care seeking for these is a strong function of their social and economic status. If regular data is collected for all these even at the level of family registers, it would be possible to draw correlated pictures for health needs of women in different socio--economic and age strata. Again, their access should also be taken into consideration by updating outreach programmes and providing them with spaces in which to discuss these issues without feeling either pressured or threatened.

. All these tie directly back into the issue of training of health care providers. It should be made gender sensitive and this is a point on which there should be regular evaluation, especially from the user's point of view.

. The whole system of infrastructure, along with evaluation, and assessments of health needs should have in place some measures to assess and apportion responsibilities in case of failure. That something does not work should not be reduced to a piece of paper which is nobody's responsibility. There should be clear guidelines for taking care of such situations promptly.

It was felt at various stages of the discussion that provision for trained and motivated personnel who are actively involved in the health issues of the community is the minimum necessity of the infrastructure. It is not a good idea to ask them to fill out forms for indicators that have been prepared with the national agenda of family planning in mind. No single community can be forced to tow a national policy to the exclusion of their other, most often, more immediate and demanding health needs. Empowerment of the communities to have a say in the health services they require is of primary importance. For this, a revamping of data collection, its decentralisation, fast processing, and subsequent planning of resources both material and human is now a pressing need.

Concluding Remarks

The target free approach came in for a great deal of detailed scrutiny in this meeting. Both its policy level foundations and its implemetational effectiveness were thoroughly examined. The main broad issues on which there was consensus are the following.

- Public health workers must be used to provide basic curative care which is client oriented. They must not be used to chase population control targets, or family planning agendas of various sorts.
- The reproductive and child health package should be part of a general basic health care plan, whose driving aim should be to have a healthy population, not a 'family planned' population that does not even have access to basic curative care for common ailments. The operative word in health policy should be health, family planning being a part of it, instead of being the other way round.
- Women's health must be taken out of the family planning bracket and put firmly into a more comprehensive health plan. Their needs must be assessed in terms of their socio-economic situation and care delivery must be appropriately tailored.
- Decentralising the need assessment system will be so much more logical if such a health policy was put in place. This can then be used to make the delivery of health care far more rational in terms of both; what people need and how efficiently they can access it.

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C) Women's health

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(PC.15) *"Women's role in decision making in abortion: Profiles from rural Maharashtra",* Gupte Manisha, Bandewar Sunita, Pisal Hemlata. Paper tabled in XIV International Conference of the Social Science and Medicine at Peebles, Scotland, September 2-6, 1996.

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Please return to V. BENJAMIN CHC

medico friend circle

Ravi Duggal, Convenor.

Bldg. 4, Flat 408, Vahatuk Nagar,
Amboli, Andheri(W), Bombay - 400 058.

Date : 17.6.'94

To All mfc members and sympathisers

Dear friend,

Greetings from the new convenor's office ! On 31st March 1994 Manisha's tenure as the mfc convenor ended and I have stepped into her shoes.

Manisha conveys her thanks for the affection and cooperation she received from all friends during her convenorship.

My convenorship coincides with my new job which involves a lot of travel, especially in the states of Rajasthan, Gujarat, Maharashtra and Andhra Pradesh. This means both, that all friends must provide the necessary support to the convenor's office more actively than before, as well as must be more tolerant if there are delays in communication ! But this also means that wherever I am travelling and I know about mfc friends in that area I will make a special endeavour to meet them. Please make a note of the new mfc address at the top right hand corner.

My immediate agenda for the remaining part of the year is :

1. Increase members of our friend circle, for which all of you must put in some effort. If your own membership is due for renewal, please send in your money order/demand draft immediately in the name of 'medico friend circle'.

2. Increase the number of subscribers for the mfc bulletin, especially life-subscriptions. If most of you can become life-subscribers (only Rs.300/- for individuals and Rs.500/- for institutions) it will be good for the bulletin's health in the long run. Please also encourage your interested friends to become subscribers/life-subscribers.

3. Finally, the agenda for the 'Annual Meet' of 1994/95 has to be worked out. For this I need your suggestions immediately.

I close with my best wishes and a hope that with your support and affection we can together strengthen the role that mfc can play in the health movement.

In solidarity,

Ravi

Ravi Duggal
mfc Convenor.

Encl : 1. Report of the Annual Meet
2. List of Participants.

REPRODUCTIVE HEALTH: STATE, SOCIETY AND FEMINIST PERCEPTIONS
XX ANNUAL MEET OF THE MEDICO FRIEND CIRCLE

In February 1983 the medico friend circle made a pioneering attempt at defining the problematic of the relationship of women with the medical system, a relationship which was becoming increasingly tense in the context of a emerging women's movement. For most of the participants, within the mfc and outside it, the meeting has always stood out as having been fraught with somewhat desperate attempts at arriving at a minimum understanding, at finding a common language which could address both the concerns of a burgeoning feminist movemnt and a progressive medical fraternity critically aware of the limitations of medicine and its practice. A report of the evaluation of the meet (compiled painstakingly by Mira Sadgopal) points out that among the major drawbacks was firstly, the lack of a common orientation among participants, and secondly, the lack of an attempt to clarify the issue of what sexism actually is and to lay out generally acceptable assumptions as well as to delineate areas of controversy between the expected participants points of view. Much has happened in the decade after that meet. But it would seem from this meet that we have at last found a language, an understanding of the different perspectives which inform people's point of view. The focus of the meet evolved out of our common concern about the different meanings that were being given to the concept of reporductive health. We felt that there was a need to define through dialogue and discussion why our understanding of reproductive health was different from the way it was being projected now. To arrive at a common platform from which we could discuss, we decided to devote an entire day of the three day meetto discuss social construction of reproductionand how different agencies, the state, society,and feminists have perceived it. Swatija presented a discussion paper written by the forum for women's health. What do we mean by reproductive health ? While biology mediates and determines the man-woman relationship, reproduction is very much a social construct and an understanding of reproductive health moves between these two arenas of pour lives. When we talk of reproduction, the first issue that comes to mind is a woman's fertility,cycle which has for ages generated awe. And yet this biological phenomenon has received a social construct--and reproduction has been identified as a woman's responsibility. by the same logic, the expression of sexuality is also tailored to suit the definion of normality prevalent in society. thus normal sexuality is heterosecuality leading to reproduction and to the begetting of a male child thus in order to control a woman's fertility her sexuality and its expressionm had to be tailored . Automatically, contraception becomes a woman's responsibility. At the other end, all sorts of sexual abuse of women gets condoned because these get associated with a man's virility which is'normal'. Following from this a woman's reproductive health gets defined only as awomen's health in their role as reproducers within marriage. All other aspects of women's lives are totally negated and so, by definition the health of a large number of women who do not fall in this 'normal' category gets neglected.

In reality women are producers and reproducers and therefore the contradictions of their lives as producers must necessarily comprise a component of women's reproductive health. Similarly, we have to define reproductive health to include the health of women in all age and status groups in society such as the very old and the very young. the widows, the unmarried/or the unmarriageable.

Science, medicine and health care system have contributed to and adopted society's notions of reproductive health and have in consequences neglected a large area of the health of women. this norm has also further strengthened the trend to intervene in normal processes of the human body to manipulate and change the fertility status incorporating the same anti-woman biases . this also influences the type of research which is done. for instance, while the phuysiology of reproduction is researched, th ebiochemical and other changes which occur inthe course of reprocution are not so well understood.

A consequence of this is that in our minds today, questions of contractption controlling fertility and handling infertility have become questions of technology of getting the right method, with the social aspects becomeing secondary. This understanding pervades the entire biomedical sphere as well as the programmes such as family planning and MCH programmes. This invasive attack of technoogy together with the taking over by the state of all the terminology and concepts with which women have begun to unite and to redefine themselves are detrimental to women empowerment and must be critically understood. We have to look and redefine reprocuctive health in a way which empowers women.

Also contributing to the discussion were two background papers : one published in the mc bulletin (August-December 1993)by Veena Shatrugna and the other in the EPW (December 18, 1993) by Padma Prakash. Veena's paper reports on a study exploring the relationship between women's work for income, access and utilisation of health care and women's health status and comes up surprising findings.For instance, that incomes alone do not affect women's utilisation of health care facilities even though working for an income increases women's morbidities. This cannot be tackled unless the roots of women's illness and the social construction of gender changes such that the man-woman roles and expectations change along with socio-economic status. Padma's paper presented a background to the evolution of the new reproductive health being

proposed as a model for women's health, what it comprises and the consequences of its implementation for women's health. The presentation was followed by parallel group discussion aimed at arriving at an understanding some of the issues raised in Swatija's paper. Not surprisingly, the discussion were wide ranging depending on the composition and the inclination of the group. And while the reporting of the groups at the end of the session could hardly be said to have contributed to a general clarity on the various issues, it was apparent that participants took off whatever particular glasses that they normally wore to consider issues anew and come to terms with the tensions within the given dominant social construction of reproduction and hence of sexuality or man-woman relationship and of women's staus. It would be impossible to capture the nuances and the depth of discussions in some of the groups. Here we touch upon the more concrete points of discussion: construction of manhood'womanhood; concept of normalcy related to reproduction and sexuality; role of science and technology in structuring these gender roles; impact of medicalisation and commoditisation on gender roles and relationships, social class as a factor in the social construction of gender.

The given stereotypes we internalise and are conditioned into accepting are of the woman as being non-aggressive, nurturing and men as being aggressive. These stereotypes are institutionalised not only in day to day living but in academic enquiry as well. For instance, in economics these stereotypes of 'natural family' have led to concepts of subsistence family wage which accept as correct the unequal distribution within the family. Or for instance, the concept of minimum wages which are unequal for men and women. The internalisation of these stereotypes has lead to a disastrous lack of appreciation of women's bodies being different. Medicine assumes that women are different only in relation to the sex organs and to an extent their psychlogical make-up., but when it comes to diseases in general, it is always assumed that the course is the same in man and woman and therefore the intricacies of how a certain therapy works is also the same. For instance, there are studies which now show that perhaps the effect of certain drugs may be very different in mane and women. But these roles are not sturctured by biology. Biology is a convenient tool to reinforce social norms. More important than biology is the social class which is at the root of the construction of normalcy. The construction of normalcy puts a burden on women. As Manisha Gupte's background paper (mfc bulletin, Auugust-December 1993) pointed out women are fso often plagued by questions of whether they are normal: is white discharge normal ? Is a menstrual cycle of more or less than 28 days normal ? If I don't have sons am I normal ? and so on. Whereas there are so many millions of women who are outside the realm of 'normal' the deserted, post- menopausal, infertile, the depressedk the single, the lesbian, those without sons, sex workers, the self-confident, the dark skinned the polygamous and so on. These strong notions of normalcy now operationalise and justify the use of technology to attempt to alter, what is thoughht of as being her destiny. For instance, childlessness previously a social phenomenon is now a medical problem with a technical solution. Contraception is increasingly a medical issue with little comprehension of the social aspects whuch leads to the development of contraceptives which put low value on women'ssocio-psychological factors. This brought up the question of science and technology and their role in reinforcing the norm. There were strong opinions expressed in most of the groups on this topic. While there is an increasing dissatisfaction and disillusionment with the fact that tecnnology is being sought to be used as a substittue for social action, the corrolary which seems to be arising that all technology per se must be rejected cannot be accepted. For instance, ultrasound, has had a tremendous impact on medical advances. Appropriate technology which is culturally and practically more compatible is often ignored in favour of high tech and super specialised applications. As an illustration, the neglect of herbal medicine and older methods. Moreover, the use of technology once it is developed cannot be looked at as a matter of individual choice, because the developmental costs of any technological innovation are borne by society.

Another issue that was raised was whether men and women behave in the same way vis a vis technology ? Is technology itself not designed with a bias against women ? Does the social organisation required for the incorporation of technology itself favour men rather than women ? There is also the issue of technology abuse especially with reference to minorities and the under class. The preofessional class is more sympathetic to the middle class so the use of technology for women of this class is bound to be different than in the case of poor women. The question of whether technnology itself discriminates expectedly led to very vocal opinions in most groups.

With this as a background the meet went in for group discussion on the following topics: Contraception; Maternal and Child Health; Infertility, in the first half of the second day and Abortion,Population Policy, Sexualityand Menopause-HRT in the second half. Group reports are included elsewhere. Here we will pick out the highlights of these discussions.

Contraception: An important concern is the increasing trend towards discussing contraception as if it were only a technical\medical issue. The urgent need to focus attention on the socio-cultural factors which determine contraceptive practices and inform a whole range of issues concerning contraception.(See Sundari Ravindran's paper in EPW November 13-20, 1993) It is within this framework, issues such as the female bias in contraceptive research, the increasing tendency to view contraception as a female problem, a and yet at the same time promote the use of contraceptives which are not women-controlled , the de-emphasising of non-hormonal methods of contraception, such as for instance barrier methods, the

unethical clinical trials of long acting contraceptives (see background paper in mfc bulletin August December 1993) need to be examined. Moreover the gender bias in promoting contraception also leads to distortions . for instance, advertisements for male methods (condoms) focus on sexual pleasure while those for female methods on responsibility and protection. Further, the promotion of condoms today is linked not so much with women's health as protection for the male in the face of the real or imaginary threat of AIDS and as a means of controlling numbers A cautionary note was sounded on how feminists too were becoming caught up in a reductionist view of the human body and focus exclusively on women's reproductive functions and organs to the detriment of a process towards developing an alternative view of what women's health constitutes

Maternal and Child Health: Two important issues which were highlighted were the concern over the fact that the maternal mortality rate had not shown significant improvement and second, the unreliability of data on either maternal mortality or maternal morbidity. What are the reasons for maternal deaths ? Are they due to high risk factors, socio-economic factors including nutrition, lack of ante natal care or lack of supportive medicare ? Or were they extraneous to the state of pregnancy and its outcome ? Several studies, notably the Columbia University study and collective experience at the field level indicates that the availability institutional facilities for delivery is a crucial factor in preventing maternal deaths. Availible SRS data indicates that states and districts which have a high proportion of institutional deliveries (Punjab, Kerala, Ratnagiri district in Maharashtra) also a decline in maternal mortality rates. But the solution is not to put all efforts into providing institutional care. In fact the provision of institutional care without (a) adequate knowledge about the possible risks of pregnancy and what is to be done in an emergency, or in other words education (b) a concern for the pregnant women's health and not just the health of her baby or in other words a better social status for women and (c)reliable and efficient means of communication and transportation and the means to use these or in other words adequate infrastructural socio-economic development would be counterproductive because facilities would remain unutilised while women would continue to die from lack of facilities. In the west maternal and child health services comprise good obstetric care, high risk approach and a well developed ANC component. This is not so in the third world. The long debate that ensued on what aspects of maternal and antenatal care are the most crucial or what should be emphasised over others are indicative of changing perceptions on MCH programmes. The government's proposal to cut down on maternity benefits for the fourth child and onwards came in for sharp criticism from all sides.

Infertility: Discussioons on infertility centred around an effort to understand fertility and motherhood. Does a woman have a personal need to have a biological child or is the desire for motherhood socially defined? Parenthood was determined by people's capacity to love and care for others and was not determined by blood ties. Infertility was socially constructed: for instance, women who do not fall into the category of marriage may be fertile yet be considered 'infertile'in the eyes of society. On the other hand infertility is seen as a consequence of a woman's behaviour in the past. Women's ownershipof material resources or the lack of it was a factor in determining how womanliness itself becomes defined in terms of a woman's capacity to bear children. Another factor in defining infertility is the medical system which is gender insensitive: just as it pushes women to limit the size of their families regardless of their own desires and needs, it is also unconcerned with the anguish of women who have not been able to conceive. What role does and should technology play in the treatment of infertility and what stand can we take on research on technology for treating infertility ? No consensus emerged on this issue, but a common understanding was that in the context of lack of resources for so many clearly relevant areas of health care, research on such technology cannot be considered a priority concern.

Abortion: What are the factors which make a woman decide to go oin for an abortion ? to suggest that it is the lack of safe contraception does not make for a full understanding of the forces which operate. A major underlying factor is the unequal and often distorted man-woman relationship, one consequence of which is men's insensitivity towards abortion. In the Indian context abortion, the services available and why women go in for it cannot be understood except in the context of the history of the legalisation of abortion in the country. (See Amar Jesani and Aditi Iyer's background paper published in the EPW, November 27 1993). The legalisation in India was not an outcome of women's needs or the demands of the women's movement. It was consequent upon the state's need to limit population growth Legalisation, has meant especially in tge recent context of the growth of private sector in health care, has meant commercialisation of the service such that there is little regualtion on their quality.This has further lead to the increasing insensitivity with whcih women 'patients' are dealt with where they feel humiliated and shamed. On the issue of foetal right it was felt that this cannot be considered a civil right and abortion is a woman's right. Even though this right has been coferred on women without their demanding it, every effort should be made to preserve it. the need of the hour is to provide women-centtred abortion centres though this should not lead to a sort of ghettoisation but to a changed perception of the need for such services.

Population Policy: Increaingly in the current context, the need for population control is being projected as a primary factor in ensuring women's health. In reality the emphasis on population control policy infact derails all other programmes making the situation all the worse for women. For example, with the focus on reducing numbers, the lack of people's access, especially

women's to resources is sidelined this danger is highlighted in the case of Tamil Nadu. To talk of women's reproductive rights has no meaning in the context of the complete lack of survival rights for women has no meaning. (see Malini Karkal's paper in mfc bulletin August-December 1993) It is only if these: that is, education, employment, food, child care, and a better social status in society are ensured that women's reproductive health can be a matter of special concern. For instance, in Kerala the fact that there are few births among women in the ages 15-19 is attributable to better education and also leads to better health, perhaps. Sri Lanka has been able to bring down birth rates because of a policy which ensures that women have access to education and employment.

The basic philosophy of population policies being encouraged in third world countriesy has been that the poor are eugenically inferiour and therefore should not be allowed to breed. India has been in the forefront not only in adopting population policy but in implementing it throught a state family planning programme and has contributed significantly to the growth of demography as a serious discipline (See mfc bulletin May-July 1993). Unfortunately these are not achievements we should be proud of. Today the situation is such that demographers are defining people's needs, setting targets for family size etc without taking into account sociological, cultural economic factors which determine family size. While contraceptives, safe, effectiveand women controlled are a widely felt need, a directly or indirectly coercive family planning programme directed only at controlling numbers will shift the focus awayf from issues of development. The statements being circulated by different groups on the population policy were mentioned but not discussed at length.

Sexuality: Only in recent years, especially in the context of the reproductive health agenda is sexuality ebeing sought tobe defined and explored. Thw way women perceive sexuality is probably very different from the way a patriarchal society seeks to define it and its expression. For instance, activities which give sensual pleasure such as singing and dancing are also expressions of sexuality. Unfortunately the expression of sexuality becomes narrowly defined even as a girl is growing up: society places certain limits on her movements and places taboos on some types of expression, and restricting others. Society hs conferred different limits of expression of sexuality for men and women. For example it is permissible for a man to be or to aspire to be polygamous, but not for a woman who is supposed to remain chaste for her husband and remain faithful. As a logical follow through of this is the fact that homosexuality is considered aberrant behaviour and not to be tolerated. But whether in heterosxiual relations or homosexual, there was always a power relation involved which is rooted in the way society is organised. A major part of the discussion focussed on the fact that progressive and left movements had never examined the issue very seriously or challenged existing notions. Women who come into these groups often expecting a more enlightened gender sensitive attitude, have had to contend with the same patriarchal notions of man-woman behaviour and constraints on the expressions of sexuality as they have to outside these movements. It is only in more recent times that women from these movements have asserted themselves and sought to highlight the often exploitative relationships which have developed within the movement. From this is coming about a newer understanding.

Menopause and HRT: With the current emphasis the focus of health interventions appears to be entirely on women in the reproductive age group. However, with an ageing population and the lower mortality among women in the older age group, there will be a growing number of older women who will have special health needs. While a lot of problems are common to both men and women, there is a dearth of information on older women and their social, cultural and physical needs. Ther has for instance been very little documentation of women entering menopause, although these expenences may be very different from that of an older generation when a larger proportion lived in extended or joint families. the health needs of older women are increasingly being defined as being osteoporosis, depression etc which are dealt with at the primary health care level by prescribing hormone replacement therapy or tranquilisers. However, they may infact need access to simple surgical facilities to resolve problems such as incontinence, prolapse of the uterus and specialist services such as oncological for detecting and treating cervical cancers, etc. And yet no comprehensive change is occurring in the primary health care set up to reflect the changing needs of the population consequent upon the changing demographic charecteristics.

The discussion were thus in the nature of explorations rather than focussed and in-depth. What the meet brought out most emphatically is the dearth of an alternative comprehension of what constitutes women's health, what are women's health and medicare needs and how best these can be met. A beginning perhaps can be made with Thelma Narain's background paper in the mfc bulletin August-December 1993) Unless we arrive at an understanding of these, we will fall into the trap of merely critiquing policies and programmes which are motivated by a different agenda, and be reduced to offerring limited alternatives within a framework which is neither gender sensitive nor even pro-people.

Compiled by Padma Prakash. Group reports by Nagmani Rao, Aditi Iyer, Annie George, Swatiji, Padmini Swaminathan, Asha Vadhera.

Resolutions passed/Stands taken at the medico friend circle annual meet on Reproductive Health in January 1994 at Sevagram, Maharashtra

Population Policy

We oppose the population policy primarily because:

a. Its basic premise is that we are overpopulated and therefore need to control our population which in turn means almost solely, control of birth rate.;

b. Translation of this premiseinto policies to control the bodies the fertility and the lives of women because it is women who bear children;

c. Population policies have in-built eugenic ideologies through the process of selection of the ones who have the right to survive. In India translation of this ideology consists in targetting particular populations such as the dalits, tribals, minorities and the poor in general, who bear the brunt of population control policies;

d. Population policies represent and endorse the interests and lifestyles of over-consumption in the countries of the north as well as of the elites in the third world. These lifestyles are built on a growth model that is directly responsible for severe environmental degradaton in most parts of the world which have in turn, undermined people's security and livelihoods. We reject the prevalent notion that the so-called third world's overpopulation has a causal connection with environmental degradation.

e. Birth control mechanisms have over the period become so complex and hi tech that control over bodies have passed into the hands of population controllers apart from becoming the sites of questionable and dangerous research.

f. Population policies are dilinked from socio-economic development: the budget for population policy at the national level has increased substantially at the expense of general health policies. Budget cuts have also charecterised the minimum needs programme which directly affect the poor in the rural areas.

We demand respect for the integrity of women's bodies and restoration of control over their bodies. Women's basic needs for food, education, health and work should be addressed on their own merit. Meeting women's needs, including the need for contraception and the like should be de-linked from population policy including these expressed as apparent humanitarian concerns for women.

Women should have access to safe contraception and legal abortion under broader health care. These needs can only be met if all life is respected and accorded dignity.

For all these reasons we state that we oppose population control policies in all forms. Also there cannot be a feminst population control policy. Our voices cannot be used to legitimise an anti- women, anti-poor, anti-nature policies.

Abortion Services

1. Abortion should be placed on the agenda of the health sector as an essential part of the entire women's health package (women's health package = health education of women about their own bodies, sensitisation of men to gender issues in women's health, health services for women through their entire life cycle).

2. Health and women activist groups should activel campaign for accessibility to 'quality' abortion services (quality sensitive, safe, women-centred, confidential, non-hierarchical, non-patriarchal, humane).

3. Abortion services should be provided as a part of a comprehensive women-controlled women's health programme.

4. The practice of inserting CuTs immediately after MTPs especially in government health facilities should be stopped.

5. Mushrooming of commercial and assembly line abortion facilities should be opposed and regulatory mechanisms effectively enforced.

Barrier Methods

Awareness about and availability of barrier contraceptives like the diaphragm and condoms must be ensured by the government through the public health systems, other government and non- government agencies and the media. Use of such low-hazard effective contrceptive methods will also help in minimising the spread of sexually transmitted diseases including

AIDS. Hence we endorse barrier methods as opposed to the new hazardous hormonal and immunological methods. Support to both women and men to use barrier methods successfully requires educational inputs for which the government must ensure the necessary infrastructure and budgetary allocation. the government must hold responsibility for ensuring quality control of barrier contraceptive products.

Access to Health Care

The access of the Indian people to health care is grossly inadequate. The reasons, we feel are:(i) Unanswerability of public health services. (ii) Overemphasis by the public health services on population control.(iii) Increasing dominance of the unregulated private health sector, which further aggregate inequities. (iv) Privatisation (v) Very low investment of resources in the public health sector and the skewed concentration of existing resources in favour of urban areas.

Taking into account the poor health status of the Indian people, we strongly assert people's right to universal access to rational and humage health care as defined and demanded by the people. This access should be irrespective of the capacity to pay. We propose that conducive conditions for equitable access be created through: (i) Increased investment by the state in the health sector, and more so for the underserved areas; (ii) redistribution and reallocation of resources away from the target-oriented and population control centred programmes towards those which reflect the real needs and concerns of the people, especially of women. (iii) Understanding women's health concerns beyond the narrow confines of maternity. (iv) Halting the alarming rate of privatisation of public health services. (v) Regulation of the private health sector and making it accountable in terms of rational and affordable medical care.

In the final analysis we feel that only a conscious, articulate and sustained pressure from the people will ensure that the state addresses these concerns. the role of all pro-people and secular movements in attaining this goal is crucial.

Maternity Benefits

We understand that there is new legislation before various state and central governments directed at withdrawing many entitlements including the Maternity Benefits Act from the third child onwards. We see this as a retrogressive effort at population control and also one among a series of such measures that are going to be heralded to withdraw whatever little benefits that women and disadvantaged sections like the rural and urban poor, tribals dalits and minorities get from the state.

We strongly feel that maternity benefits must be made universally available to all women, irrespective of their parity. In fact the scope of presently available maternity benefits must increase in quality and quantity to ensure the health of the mother and for the survival of the child. most Indian women work in the ounorganised sector and have no access to basic human rights at the workplace including maternity benefits. The need to provide these basic rights to all women workers is crucial.

We cannot allow maternity benefits to be withdrawn from the few women in the organised sector where trade unions have fought hard to win access. We insist that it is the duty of the Indian state to provide improved maternity benefits including child rearing facillities to all women.

Further we strongly oppose infringement on human rights in the name of disincentives in population control programme.

Maternal Care

Maternal care programmes in India are planned to cater to the needs of pregnancy, childbirth and peurperium through a structure including various levels of health workers and dais. This is desirable though in reality it falls short of what is planned. Apart from weak implementation, two other problems can be recognised with this approach: a) the focus of

maternal care tends to take for granted other aspects of women's health. b) the thinning out of efforts put into various 'tasks' of maternal care has effectively prevented provisions of safe and effective obstetric services. This is because of an assumption that antenatal care alone automatically ensures a normal pregnancy outcome, which is not true, especially as regards maternal death.

In order to reduce maternal deaths, it is necessary toensure tha all women have access to affordable and effective obstetric care which can cover emergency situations as well. This must be located in the context of good primary health care facilities.

Sex Education

The moulding of attitudes from childhood to adulthood relating to body and self requires an entirely new perspective which could replace the existing perspective of the sex education curriculum. This perspective would address the aspects of male-female sexuality and healthy man-woman relationship. This should find an important place in our schools and colleges and other avenues of education, including media.

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Rationalisation of Antenatal Care

Vincent De Brouwere

Background

The history of modern Antenatal Care began early twentieth century. Britons attribute the initial conception of ANC to John William Ballantyne in 1901. Australians attribute it to Wilson in 1910 (Oakley, 1984) and North-Americans to their *Instructive District Nursing Association* of the *Boston Lying-In Hospital*, in 1901 (Kessel, 1987). The Ministry of Health of the United Kingdom has set up the standard package of ANC in 1929. This package will remain essentially the same up till now, even if sometimes a new technique has been added or updated. The 'principles' of such ANC package have been described by the MOH as follows (Memorandum on minimum standards in antenatal care: 'Ante-natal Clinics: their conduct and scope', 1929):

1. to predict 'difficult labour' from examination in pregnancy;
2. to detect and treat toxaemia;
3. to diagnose/treat/prevent infection (e.g. dental, cervical);
4. to diagnose and treat vaginal discharges;
5. to ensure 'the closest co-operation' between the clinic and all persons in charge of pregnancy care;
6. to recognise 'the educational effect of a well-organised clinic'.

The ANC clinic schedule consisted in an average of twelve visits of which a medical doctor should have attended three.

In the beginning of the 1930s, ANC is questionned because maternal mortality showed no diminishing trend. Browne and Aberd (1932), then F. Neon Reynolds highlighted (in a letter to *The Lancet*, on 29 December 1934) that "80 per cent of maternal deaths were due to conditions (sepsis, haemorrhage, shock) not detectable antenatally". The answer was not a randomised controlled trial. The answer, from the promoters of ANC, was to go ahead because one had not given a fair trial to ANC to prove its effectiveness. The arguments for explaining such a poor impact on maternal mortality were: (1) an insufficient proportion of the pregnant women attending for antenatal care; (2) not enough antenatal visits, (3) an inadequate standard of care. At this time (1935) in England, the ANC coverage (for at least one visit) was on average 50% (73% in towns and 17% in rural areas).

In the 1960s, the individual assessment of risk factors in ANC became a routine procedure. Confidential enquiries about maternal deaths carried out in the United Kingdom showed and quantified, as soon as 1955-57, the maternal risk related to maternal age and parity (Lawson and Stewart, 1967).

Extrapolation to developing countries was considered reasonable, although no epidemiological study has been performed in such a context. Since the early 1950s, antenatal care has been promoted in developing countries (OMS, 1952). It was considered as one of the most effective strategies to decrease child and maternal mortality together with, at the end of the 1960s, family planning, and then, in the 1970s, the training of traditional birth attendants.

Modern justification: the risk approach

Rise and fall of the risk approach: the evidence-based filter

End of the 1970s, WHO published "An approach to maternal and child health care based on the concept of risk" (OMS, 1978). And, in 1984, its methodological and conceptual extension: "The risk approach in health care, with special reference to maternal and child health, including family planning" (Backett et al., 1984). The 1980s were the years of enthusiasm for this new paradigm called "risk approach". Actually, it was not exactly a "new" paradigm, but what made it new was the tuning of the method to quantify the risk. The risk approach seeks to use information about risk to prevent a variety of adverse outcomes (that is, illness, injury and death) through the application of a strategy at many levels of care. It was assumed that once a risk was identified, women were referred to the appropriate facility where one could take charge of the problem. Developing countries would have thus a decision making tool available, a decision making tool simple enough to be delegated to the poorly qualified health worker. Great! The hope was that using this tool it could be possible to reduce the number of women to be referred, thanks to this screening tool, and safely take charge of the others. And doing so, it would be possible to reduce maternal and perinatal morbidity and mortality at low cost.

In the beginning of the 1990s, about ten years later, WHO published the Rooney report "Antenatal care and maternal health: how effective is it?" (Rooney, 1992). This report observed quite officially that we know very little about the effectiveness of the procedures promoted in antenatal care. She noted "performance of programmes based on risk approach has been questioned, particularly where resources are rare []. It is possible that the risk approach allows the health workers to recognise women who need specific care during labour or delivery, but this needs to be carefully evaluated. We currently don't know exactly what is the performance of such a system in developing countries and we urgently need to carry out careful studies on a large scale to assess the results as well for women as for children".

Bases of risk approach

A risk factor has been defined as any ascertainable characteristic or circumstance of a person or group of persons that is known to be associated with an abnormal risk of developing or being especially adversely affected by a morbid process (WHO, 1973). In the field of MCH, one can observe that pregnancy and delivery present a risk of morbidity and mortality for the mother and the child. The concept of high risk comes from the observation that the risk of dying or to have adverse outcome (sequels) is neither homogeneously nor randomly distributed in the population of pregnant women and their babies. Most women deliver without any problem or sequel and their babies are healthy. A small proportion of these women and of those children will experience adverse outcome. The question is to know whether it is possible to identify those women before the fatal event happens and whether it is possible to avoid the fatal event (and how?). The assumption in the risk approach is that the answer is positive: some women have indeed a higher risk to develop problems and that it is possible to identify the characteristics or risk factors (related to a biological or environmental problem or both). Of course, conceptually speaking, this makes sense only if one can prevent this risk to become a problem. In other words, risks actually are identifiable before the predicted event happens.

Two schools are in competition. One states that a pregnancy can only be labelled as normal retrospectively, after the delivery, when one can prove that mother and child are healthy (all pregnant women are at risk) (Papiernik, 1995). The other states that pregnancy and delivery are natural events that can take place at home without any intervention but under surveillance by a professional (midwife or general practitioner) (Akrich and Pasveer, 1996; Enkin, 1993). In the first statement, all the women should deliver in hospital under a more or less sophisticated technical surveillance. In the second statement, women who are not identified at risk are encouraged to deliver at home under the surveillance of a professional (to identify possible complications during labour or after delivery, and refer the women in due time).

But is it really possible to separate, in an efficient and easy way, the true positives (those women who will experience a problem during the pregnancy or delivery) from the true negatives (those who won't experience any problem)? I would add, in a context where the referral hospital is poorly accessible (geographically or financially), that is in most developing countries.

Figure 1. Screening for risk: cut-off points in a continuous variable

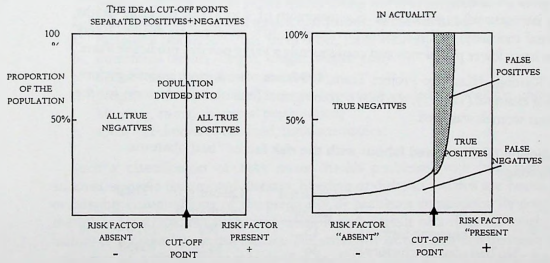
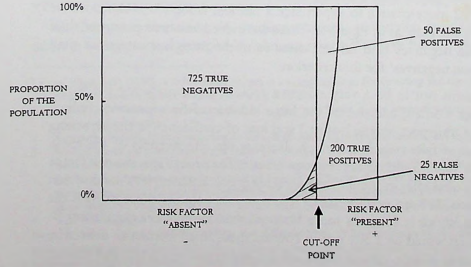


Figure 2. Screening for risk: "trade-offs" between false positives and false negatives (hypothetical data from table)



In the example given above (Figure 2 from Backet et al., 1984), categories come from hypothetical data (Table 1).

Table 1. The balance of false positives and false negatives in the use of risk factors in preventive medicine

	Unwanted outcome		Totals
Risk factor	Present +	Absent -	
Present +	200 true positives	5 false positives	250
Absent -	25 false negatives	725 true negatives	750
Totals	225	775	1000

This means a prevalence of the problem of 22.5%, a sensitivity of 89%, a specificity of 94% and a positive predictive value of 80%. There exists no single maternal health problem that gives an adverse outcome in 22.5% of the cases. All the possible problems (not including iatrogenesis) together lead to a maximum of 1 to 2% of maternal deaths (natural maternal mortality) and a maximum of about 10% of perinatal deaths. Every single problem has a lower prevalence and consequently a lower positive predictive value.

Data from Kasongo (Kasongo Project Team, 1984) can offer a more realistic picture. In the following example (Table 2), the best screening tool (bad obstetric history) for the non-primiparous women was used.

Table 2. Prediction of obstructed labour with the risk factor "bad obstetric history" in Kasongo

	obstructed labour	Labour not obstructed	Total
Bad obstetric history	15	141	156
No bad obstetric history	36	3422	3458
total	51	3563	3614

Prevalence goes down to 1.4%, sensitivity to 29% and the positive predictive value to around 10%. The relative risk however is high (9.2), meaning that a woman with a 'bad obstetric history' has 9.2 more chance to experience a blocked labour. It is not possible to graphically represent the data, as in Figure 2. There are indeed less 'true positives' than 'false positives' or 'false negatives' and far less cases from the three last categories than the total number of 'true negatives' for this criterion.

The relative risk seems not to be a very effective tool. When considering the whole population of pregnant women, because of the huge number of false positives (which have a cost in terms of transport, stay in hospital and loss of confidence in the screening by the population) and of false negatives (which decrease the effectiveness of the tool). The positive predictive value could however become better for a more specific risk factor at the expense of the global effectiveness of the screening. For instance, let's assume that among 1,000 nulliparous, 100 are smaller than 150 cm and that among these women the proportion of blocked labour is 15 times more frequent than in the taller population (> or = 150). In this case, it would be a pity not to counsel these small women to deliver in, or near, the hospital, even if only 15% of them will actually experience a blocked labour. We can also play a little bit more with the criterion, according to the trade-off we want

between false negatives (who are failures for the system's effectiveness) and false positives (who increase cost). One can increase the specificity of the sign and decrease the cut-off point for the height to 147 cm. The positive predictive value would become higher (i.e. 40%) at the expense of a loss in sensitivity. For smaller women, one can wonder if it is still a risk or if it is already an obvious health problem (polio sequels, pelvis fracture, rickets, etc.).

The definition of "risk" and of "risk factor" is not easy in practice. The criteria used to identify women at high risk may be structured according to two types of classification (Phuapradit et al., 1990):

1. relationships between risk factors and adverse outcomes; these are of three kinds:

a. *causative*, triggering of pathological process; for example, maternal malnutrition and low birthweight, placenta praevia, and fetal death from anoxia, or first trimester rubella infection and congenital malformations.
b. *Contributory*, such as grand-multiparity predisposing transverse lie, and prolapse of the umbilical cord.
c. *Predictive*, or associative in the statistical sense; for example, a woman with previous fetal loss is at geater risk of losing her next pregnancy.

2. biological, medical and social conditions; these include:

a. biological risk factors (age, birth order, birth interval)
b. nutritional factors (height, weight, weight gain)
c. health care utilisation (antenatal care)
d. pregnancy complications (anaemia, hypertension, diabetes mellitus, antepartum bleeding, twins, abnormal presentation)
e. social conditions (work load, birth attendance)

Such a classification of risks mixes 'health problems' with 'risk factors'. Severe anaemia, sexually transmitted diseases, bleeding or diabetes mellitus **are** health problems, or possibly complications of the pregnancy or problems complicated by pregnancy. On the other hand, age, height (except when it is the result of a disease), weight, obstetric history or multiparity are risk factors. The sensitivity of risk factors is generally low, while sensitivity of complications is high (Rohde, 1995). Some authors propose then to drop risk factors and to invest only in two strategies. The first is complications case-finding and the second education. The latter is supposed to help women to early identify complications in order – and this is a condition – to make the decision to go to a well equipped emergency obstetric care unit (Bhatia, 1993; Maine et al., 1991; Yuster, 1995).

All these considerations on predictive values, sensitivity, specificity of risk factors, taken in isolation or regrouped in "scoring systems[1]", have been explicitly formulated by

[1] From Phuapradit (1990), a risk scoring system is a simple method for detecting and classifying pregnant women at risk. Steps used to develop risk-scoring system are as follows.

1. collect risk factors that influence health of mother and foetus during pregnancy from previous studies, journals and theoretical papers.
2. Categorise the risk factors according to the criteria based on biological, medical and social conditions.
3. Scoring marks are given to each risk factor according to its severity and its effect on pregnancy and labour on the basis of measurements of the actual risks in the same population. Those with the highest score are at greatest risk for the defined adverse outcome. In case of multiple risk factors the score for each factor is added and the cut-off point above which the mother is referred is arbitrarily given. However, this point must always be lower than the score given to a single risk factor which is known to be associated with a major risk adverse outcome.
4. Test for validity of the score and the scoring criteria.

Note: 1) due to different health problems and different levels of health personnel, the development of risk-scoring system should be individually tailored in different communities, and simple to be used by the PHC workers. 2) pregnancy is a dynamic process. Complications may occur anytime during pregnancy, labour and puerperium. Health care providers should screen expectant mothers at proper time setting. 3) the cut-off point of the risk factors must be

the creators of the risk approach and by the maternal health epidemiologists (Backett et al., 1984; Golding and Peters, 1988). The study, more and more systematic, of the public health interventions with the help of RCT (randomised controlled trials), made people aware of the absence of validity studies or of the poor validity of the classical content of ANC set up 70 years ago. This new awareness has had the effect of challenging the usefulness of ANC as a screening tool for maternal health programmes (Fortney, 1995; Akalin and Maine, 1995; Maine et al., 1991). If the risk-scoring systems appear to be not effective to identify needs in the maternal health field, what can developing countries implement in order to rationalise the allocation of their scarce resources? Rooney (1992): "Effectiveness of a risk-scoring system in its most restricted meaning should be evaluated by its power to screen women at high risk from those at low risk, that is by its sensitivity, its specificity and its positive predictive value. But, in order to set up an effective public health strategy, there are still some other conditions to be met:

a) primary screening should concern the whole population;
b) screening should include the main causes of morbidity and mortality;
c) if a high risk is identified, appropriate measures (i.e. referral to hospital) should be taken;
d) appropriate care should be available at referral level;
e) women at risk should reach the referral level and have the motivation to do it"

All the authors seem to agree at least on one point, the necessity to have a well-equipped second level service able to take charge of emergency obstetric care. The referral criteria would have to be decided according to the accessibility of the referral level. If there is no access, it makes no or little sense to provide ANC at FLHS: it would just make the women aware of risks that cannot be overcome (ethical issue). Listening to the community and negotiating with women the place of delivery could be a second recommendation.

Where are we now?

Assessing effectiveness of antenatal care that is provided in an ANC consultation is something tricky. First, one has to clarify what ANC means and what is the content of the package offered. It is in principle a standard package, but practically this is something very different from one context to another (content and quality, reliability and effectiveness). Moreover, studies that make a difference between the impact on mother and the impact on child are rare (MacDonagh, 1996). Still rarer are studies that use RCT designs on big enough sample size. That is why during many years people believed that ANC was an independent variable influencing positively the outcome of pregnancy (either for child or for mother in terms of perinatal mortality rates, Apgar scores and maternal mortality and morbidity rates).

Current objectives of antenatal care

The goal of ANC generally consists in preventing morbidity and death of the mother and her baby and in promoting maternal and child health. In practice, the current literature proposes the following objectives (Llewellyn-Jones, 1994):

The aims of ANC are to ensure that:

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appropriately chosen, taking into account the balance between the serious outcome of the false negative readings and the inconvenience and waste of resources on false positives.

- The mother reaches the end of the pregnancy as healthy as, or even healthier than she was before she became pregnant.
- Any physical or psychological problems arising during the pregnancy are detected and treated.
- Any complication of pregnancy is either prevented or detected early and managed adequately.
- The mother gives birth to a healthy baby.
- The mother has the opportunity to discuss her anxieties and fears about the pregnancy.
- The mother is informed about any proposed procedures, the reason for the procedure and the probable outcome.
- The couples are prepared for the birth and for child rearing, including receiving information about diet, child care and family planning.

These aims are beautiful and comprehensive but difficult to implement in developing countries. When resources are scarce, one should clearly define each of the procedures he/she wants to choose, but also the rationale of the choice, the expected benefit, the feasibility and the cost. In the evaluation of the procedures, one has to take into account the series of tasks that leads to a health benefit. Identifying a risk has little sense if there is no way to refer.

Content of ANC package

Again, setting up an ANC package is only justified if there is an effective referral system, that is an accessible and effective obstetric care unit (able to perform C-section, blood transfusion, a place where obstetric skills exist and where appropriate drugs and equipment are available and affordable). So, the priority is to make such referral system operational.

What then could be the content of ANC? Regarding the current state of the art, the ANC package should be oriented towards two main axes:

- Education of pregnant women
- Identification and early treatment of vulnerable diseases and complications and, if relevant, the assessment of individual risk.

Education of pregnant women

Diminishing anxieties and fears about pregnancy (hygiene, nutrition, sexual intercourse during pregnancy, taboos, etc.) and promoting "good" attitudes that are culturally acceptable.

This can be done only if the health personnel listen to the women. This listening and simple answers (common sense) to anxiety help to create confidence. Such relationship will be useful if a complication occurs, so that the health personnel will be able to convince the woman to make the necessary effort to go to the referral level.

Educating pregnant women for early recognition of complications during pregnancy and childbirth.

During education sessions (individual or in groups), the health worker will describe and explain signs and symptoms of problems that may occur during pregnancy or childbirth. This might be part of a programme aimed at helping women to rapidly get treatment in case of complication. This programme can be enlarged to the whole

community, including non-pregnant women and family decision-makers (head of family, mother-in-law, traditional birth attendant, healers, etc.). Besides the identification of signs, it is also important that women know what to do in case of complication (where to go) and why. For instance, in case of bleeding, the information would be to rapidly go to the hospital with two people ready to give blood (except if a blood bank is available in hospital). ANC consultation is an adequate place to deliver such messages.

Identification and early treatment of diseases and complications[2]

Anaemia

Severe anaemia in pregnancy may be one cause of heart failure and may increase the risk of dying from haemorrhage. In developing countries, it is estimated that two-thirds of women are suffering from anaemia and that anaemia is often the underlying cause of maternal mortality (Royston and Armstrong, 1989; WHO, 1993). The cause of anaemia is multifactorial: nutrition deficiency of iron and folate, malaria, sickle cell disease, intestinal parasites, infections, blood loss and poor economic conditions.

Routine administration of iron and folates to all pregnant women prophylactically may prevent development of anaemia in large numbers of those with frank or borderline iron deficiency, or correct mild anaemia in many. There is, however, a paucity of well-conducted studies demonstrating this effect or an improvement in outcome for mother or infant. The potential for benefit will depend on iron deficiency prevalence. Haemoglobin levels can rise between 0.4 and 0.7 g/dl per week on a dose of 120 mg ferrous salt with 5 mg folate, so that moderate iron deficiency anaemia may theoretically be corrected by oral therapy in women attending for ANC in the second trimester. Unfortunately, difficulties to implement an effective programme are numerous. Causes of anaemia are multifactorial, drugs (in so high quantity) are expensive, supply should regularly (without shortage) attain the peripheral level, women should have attended ANC early in their pregnancy, they should be compliant, etc. (Mongella, 1995; Sarin, 1995; Mac Donagh, 1996). That is probably why there is very little evidence that supplements are effective in improving the outcome of pregnancy for mother or baby.

Even if the iron and folate can be offered, screening for moderate or severe anaemia is still indicated, since women with more than mild anaemia need additional investigation and treatment. At present, for many rural women this is only done by inspection of conjunctivae and mucous membranes, if at all. The sensitivity and specificity of clinical diagnosis with these methods have been shown to be poor. Reliable tests exist to detect anaemia and investigate its cause, including the technology standard in industrialised countries, the Coulter counter, but it is difficult to provide accurate diagnosis for the whole pregnant population.

Research has shown malaria to be responsible for severe anaemia especially in primigravidas, reducing the tolerance of haemorrhage and prolonged labour (Brabin 1991; Reuben 1993). In areas with a high prevalence it is recommended that malaria prophylaxis be given in conjunction with iron and folate as this has been found to be a successful intervention (Brabin 1991; Greenwood et al., 1992).

[2] Most of the content of this part comes from Acharya, MacDonagh and Rooney (including large pieces of texts).

Haemorrhage

The role of ANC in preventing or ameliorating the effects of this emergency is limited since it depends on prompt treatment (medical and surgical at referral level) of its cause to prevent further bleeding and replacement of blood loss to maintain the circulation. Detection of those at risk of serious bleeding is theoretically feasible but is not so in practice because it will only be beneficial if adequate delivery services are available to and used by women. Even education of pregnant women has no clear benefit: traditional interpretation of bleeding significance and traditional remedies may delay women from seeking help. Moreover, Bhatia (1993) has shown that in India, for 22.2% of maternal deaths, the family was just not aware of the gravity of the problem. However, it is easy to attribute to cultural barriers what are often failures to provide adequate services or to make them accessible. Several risk factors for postpartum haemorrhage are known[3] (but poorly efficient) and no direct assessment of the effectiveness of risk screening in preventing death from haemorrhage in developing countries has been published (Acharya, 1995).

Hypertensive disorders of pregnancy (HDP)

HDP comprise hypertension during pregnancy, eclampsia and preeclampsia. There is some evidence that HDPs are one of the main causes of maternal and perinatal mortality in the world. The incidence is not precisely known but where it was observed, it varied a lot from one setting to another (10 to 1.3 per 10.000 pregnancies in Britain; in developing countries, Koblinsky, 1992, found 5.4 to 33.2% of women presenting a diastolic blood pressure over 90 mm Hg during pregnancy). Very little is known about the natural history of preeclampsia. Lethality goes from 7 to 25% in Africa, where it was described, while it was only 1.4% in Sweden (Duley, 1990). This shows that it would be possible to influence lethality.

The best means to detect preeclampsia is to measure the blood pressure. However, the measurement of blood pressure, as a screening test for eclampsia, is flawed and there is a problem of defining the limits. It means that some women with high blood pressure will never experience a preeclampsia while others with a normal blood pressure will suddenly present an eclampsia. The pre-clinical state of preeclampsia has been defined as a blood pressure reading of 140/90 mm Hg but it has been suggested that in developing countries, where women start pregnancy undernourished, the diastolic limit should be reduced. As with routine weighing, there are intrinsic systematic and random errors in recording blood pressure; but there are also errors due to the transient nature of blood pressure that requires frequent readings. In Aberdeen, results obtained a sensitivity of 71%, specificity of 95%, and a positive predictive value of 40% for preeclampsia during pregnancy, labour and the puerperium (Hall et al., 1980).

Nulliparous women are twice as likely to develop preeclampsia compared to multiparous mothers, and the risk is particularly high at extremes of ages. History of previous preeclampsia increases the risk, compared to those who have not. Risk is also higher with a positive family history, obesity or excessive weight gain in pregnancy. However, none of these factors alone or in combination confidently predict development of HDP.

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[3] A history of previous PPH was found to be associated with a relative risk of 1.6 of recurrence, but only 6.3% of those with a history suffered PPH in the index delivery (Chng et al., 1980).

Dependent oedema is common in normal pregnancy (80% of oedema can be found in normotensive women and oedema alone has no prognostic or diagnostic value (Hussain, 1995)), but generalised oedema is a sign of preeclampsia. Women with generalised oedema should be rapidly referred to a centre where blood pressure and proteinuria can be measured and treatment arranged. The potential of this strategy is not clear, but may be limited in view of the low screening sensitivity found in a WHO collaborative study of proteinuria and oedema[4] (Golding et al., 1988; Golding and Shenton, 1990) and the problems of assuring referral and transport.

Once identified there is still no clearly defined treatment schedule or effective intervention to prevent preeclampsia from becoming eclampsia. Rest in hospital might have an indirect beneficial effect by putting women at risk of progression to a more serious stage of HDP within the reach of medical care. The proportion who might benefit in this way cannot be quantified at present, nor its inverse, the proportion who would be admitted to hospital unnecessarily. Overviews of trials of various hypertensive drugs, including diuretics, betablockers, hydralazine and methyldopa, indicate that antihypertensive treatment does not prevent increase in blood pressure when given to women with mild and moderate hypertension. Dietary restrictions and diuretics have not been found to be effective. Sedation has been successful to prevent eclampsia but it requires good technical expertise. However neither the effects on the development of proteinuria nor the final outcome for mother and infant are clear, and further trials are needed on a scale large enough to determine them. In summary, even though there is no clear-cut documentation of effectiveness, women with preeclampsia and eclampsia appear to experience better outcomes when they have access to and use of professional care. This may be an indication of effectiveness of ANC to prevent mortality from HDP.

Puerperal sepsis and urinary infections

In puerperal sepsis, ANC plays a limited role in the reduction of maternal mortality. Health education to promote clean delivery in the home, distribution of 'clean delivery kits' directly to pregnant women and promotion of delivery by trained attendants might prevent some infection. Education might also lead to better recognition of the importance of symptoms and signs of infection after delivery and earlier care seeking. However the crucial factors giving rise to unclean delivery are probably more related to poverty and lack of any alternative facilities than to ignorance, and thus the effect of health education alone is likely to be small. In addition, the potential of referral for institutional delivery based on assessing likely risk of infection at delivery is probably slight.

One of the most successful interventions in pregnancy in developing countries has been the introduction of tetanus toxoid immunisation to pregnant women to prevent maternal and neonatal tetanus resulting from infection at delivery. But it can be performed outside the ANC clinics.

STDs during pregnancy may have serious consequences on maternal and child health. Screening and treatment of syphilis has been found effective in the endemic regions. Screening and presumptive diagnosis of gonorrhoea followed by treatment seems to reduce foetal morbidity. Ophthalmic drops in the eyes of new-born is an

[4] This study using only oedema and proteinuria to screen for preeclampsia found a sensitivity of 43% for detecting diastolic hypertension and 35% for eclampsia. Another study, testing for proteinuria, found 25% false positives and 6% false negatives using urine stixs (Enkin et al., 1989).

effective means to prevent gonorrhoea conjunctivitis (and blindness as a complication).

Treatment of symptomatic urinary infections should be included in the ANC package since it has been proven effective (Rooney, 1992). Seeking bacteria in urine in non-symptomatic women during pregnancy – if possible during the first trimester -, followed by the treatment of positive cases (short course treatment) has also proven its efficacy through RCT (less cystitis, pyelonephritis, premature delivery, low birth-weight). The benefit of integrating such screening in the ANC package will depend on the local prevalence of non- and symptomatic urinary infections in the pregnant women population.

Obstructed labour

Obstructed labour is usually due to cephalo-pelvic disproportion (CPD) or malpresentation. As a matter of fact, such a diagnosis is made when labour lasts more than 24 hours (in primiparas). Solution is usually a major obstetrical intervention (caesarean section, symphysiotomy, internal version, craniotomy and when too late a laparotomy for breach repair or a hysterectomy).

Strategies for primary prevention of CPD are designed to improve nutrition of girls so that they reach their full growth potential and behaviour modification of women to delay their first birth until they are fully mature. These include contraception and delayed marriage. Such factors combined with education and improved economic opportunities for women, are obviously outside the scope of ANC. However, there is some encouraging evidence that malaria prophylaxis and iron and folate supplementation for very young primigravidae may increase their own growth during pregnancy (Harrison et al., 1985).

All nulliparas might be regarded as high risk (no obstetric history). However, the majority of these women will not experience a prolonged labour or obstruction, and a more specific test, with higher predictive value is needed where specialist delivery services are scarce. Hofmyer (1989) reviewed studies about risk factors all around the world and concluded that, though short stature, small foot size and very young age are undoubtedly correlated with risk of cephalo-pelvic disproportion and caesarean section rates, they are poor discriminatory tools. A WHO collaborative study of maternal anthropometry and pregnancy outcomes (Kelly et al., 1996) showed that weights taken at pre- or early pregnancy and 5 or 7 lunar months were useful indicators of low birth-weight and intra-uterine growth retardation (IUGR) risk and provide warning of the need for intervention. However the ability of the study indicators to predict pre-term births is very limited. Moreover, the identification of IUGR at a so late stage of pregnancy does not let time enough to improve foetal growth with food supplementation to the mother (if it could be supplied). Neither maternal height or arm circumference emerges as effective indicators for any of the foetal outcomes in this analysis. The ability of the study indicators (height, weight, arm circumference, weight for gestational age, body mass index for the gestational age, weight gain in the interval) to predict the three maternal outcomes (pre-eclampsia, post-partum haemorrhage and assisted delivery) was much weaker.

There is, however, some evidence that experienced examiners can identify women with severely contracted pelvis, but insufficient data are available to assess the reliability of clinical examination in identifying women at high risk of obstructed labour, or its effectiveness as part of an ANC. Even the reliability of roentgenography

and ultrasound pelvimetry to predict CPD remain in doubt[5], leaving little scope for antenatal screening to improve outcome by arranging delivery appropriate to risk, unless reliable screening tests that combine acceptable levels of sensitivity and specificity can be established.

Transverse and oblique lie, with their various risks to mother or infant, should be easier[6] to detect than breech, even with very moderate skill or training, but insufficient reliable data were found with which to evaluate this. In the current state of knowledge, women with these presentations near term must be advised to give birth in a fully equipped referral health facility. The problem is to set up such a referral facility and to make the women use it.

Conclusion

Despite consensus from studies of different designs in favour of ANC, reservations about the extent of its true effectiveness – as a screening tool – must remain for several reasons. In places where it is lacking, delivery services are also likely to be poor and the information system unreliable. In industrialised countries, comparison of outcomes among women who did and did not receive ANC or who first attended late versus early in pregnancy, have been shown to be confounded by socio-economic factors, education, desire for pregnancy, maternal age and the factors influencing the outcome of pregnancy. In developing countries there is likely to be further confounding with distance from, access to and utilisation of other health services including those for delivery. No studies have been identified which control adequately for these factors.

Even high quality ANC cannot be a substitute for adequate emergency access to obstetric services. Antenatal surveillance can have little impact if services do not exist to manage the clinical problems identified. Priority should definitely be oriented to improve the referral level and its access and to ensure delivery surveillance with qualified personnel who can refer women in time. Qualified personnel can do a lot in the management of emergency obstetric at peripheral level (oxytocics, antibiotics, placenta removal).

This does not mean that we have to stop ANC. ANC is indeed effective in the following situations:

- treatment of anaemia, prevention of malaria;
- screening for hypertensive disorders of pregnancy;
- first treatment (at FLHS) and referral of severe pre-ecclampsia;
- active case-finding and treatment of STD's (except AIDS) and urinary infections;
- prevention of tetanus with immunisation.

ANC clinics may also be a privileged place where pregnant women have the opportunity to express their anxieties and receive special attention (listening and counselling) either from health professionals or from other pregnant women. ANC might be an opportunity for the health professionals to create a relationship so that women put trust in the personnel and will be compliant in case of emergency referral. In the "Ten years after Safe Motherhood Conference" in Sri Lanka (annexe 1), ANC objectives have been reoriented in this way.

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[5] A comparison of abdominal palpation and ultrasound found very little difference between the two methods, both produces over 50% false positives (Tew, 1990).

[6] However, nurses in Kasongo over-diagnosed transverse lie since only 50% of the so-called transverse lies needed an intervention (Dujardin et al., 1995).

Lots of research questions on effective ANC interventions remain to be answered in order to decrease maternal and perinatal morbidity and mortality. However, for the first time since its creation about 90 years ago, an inventory of the evidence-based interventions is now available and a list of questions to be answered is proposed.

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Annex 1. Specific function of ANC: the Colombo report (October 1997)

Report of the working group "*Prenatal care and risk assessment*", Technical consultation on Safe Motherhood, 18-23 October 1997

The aim:

Antenatal care aims to promote and facilitate entry into the health care system for all women, to ensure a good continuum of high quality care.

The objectives:

1. To establish a true relationship between the woman and the health care provider
2. To offer the right information and initiate a dialogue which enables:
   - The provision of psychological and social support
   - Planning for pregnancy follow-up and birth (person, place, transport, etc.)
   - Women to maintain and improve their health (nutrition, etc.)
   - women, families and their community to identify and act on danger signs
3. To provide prophylactic treatment (tetanus, iron, etc.)
4. To detect and correctly manage existing pathologies (STD's, etc.)
5. To identify women with special needs (nulliparous, adolescents, poor obstetric history, etc.) and ensure appropriate action (specific follow-up, referral, etc.)

The recommendations:

The working group recommends the adoption of the following principles for planning ANC programmes:

1. existing policies must be reoriented to provide for a fundamental reordering of the way in which current ANC services are provided and advocated
2. ANC services must be part of a total package of Reproductive Health Services, not a "Stand alone" intervention.
3. The essential package of ANC must include ALL the elements listed in the objectives, adapted to local circumstances and resources.
4. QUALITY rather than QUANTITY should guide ANC programme design: i.e. content which has a known potential for real impact on women's health, rather than numerous routine visits.
5. Services should be provided as close to where the women live as possible (health centres, home visits, outreach clinics, etc.)
6. Evaluation of ANC programmes must focus on quality and coverage, not on impact on mortality.

*Annex 2. Evidence-based effective interventions in ANC (*from Rooney, 1992*; WHO/MSM/92.4)*

Trouble/stage	Test or treatment	Effect
Prevention of anaemia	Systematic supplementation with iron and folates	Decreases or prevents fall in haemoglobin concentration. Reduces percentage of anaemic women
	Malaria chemopropylaxis	Reduces percentage of women becoming anaemic. May diminish low birth-weight. May improve growth in very young primiparae.
Screening and study of anaemia	Test with copper sulphate	Screening of women below a defined cut-off point
	Colorimetric tests	Estimate of Hb concentration
	Red cells residue	Measure of haematocrit
	Counting red cells	For diagnosis of type of anaemia
	Microscopic blood film	Diagnosis of type of anaemia and type of malaria
Treatment of anaemia due to iron deprivation	Iron per os	May increase Hb from 0.4 to 0.7 g/dl per week
	Iron IM and IV	Same increase of Hb. Avoid compliance problems, but necessitates trained personnel and appropriate equipment for the injections IM and IV. Risk of anaphylaxis.
	Transfusion of concentrated blood	Immediately increases Hb level, but has the risk of transfusion: infection, fluid overload, need of appropriate equipment and competence.
Screening and treatment of hypertensive disorders of pregnancy	Measurement of blood pressure with a sphygomanometre	Screening of hypertension – most sensitive test for pre-eclampsia
	Urine analysis (sample taken in "mid stream")	Screening of proteinuria – indicator of pre-eclampsia if associated with hypertension.
Treatment of severe preeclampsia	Referral to specialised care at second level	Treatment of the disease. Reduces lethality.
Treatment of eclampsia	First primary care/support care – to let respiratory tract free and to prevent injuries during crises	Reduces lethality
	Identification and rapid referral to a well equipped second level	Reduces lethality
	Inducing delivery	The only final treatment

Screening for infection	Serological screening for syphilis	Identifies non-symptomatic cases. If associated with effective treatment, follow-up and active case-finding in contacts, it reduces foetal deaths and maternal and infant morbidity.
	Microbiological screening for gonorrhoea	Identifies non-symptomatic cases. If associated with effective treatment, follow-up and active case-finding in contacts, it reduces foetal deaths and maternal and infant morbidity.
	Looking for bacteriuria	Identifies non-symptomatic cases. An appropriate antibiotic treatment prevents pyelonephritis, prematurity and low birth-weight.
Primary prevention of infection	Immunisation against tetanus of pregnant women or of women in reproductive age	Tetanus prevention for mother and new-born.

The other interventions have not been proven to be effective.
Rooncy proposes a list of possibly effective interventions (about 10 pages), needing further research, in the same book.

Standard answer

Exercise 1.

New attendants for IUD is 4% (deemed too low).

Hypotheses

1. Figure is under-estimated

1.1.1. bias in the recording: some of the IUD are inserted in another public health service, outside the area of your HC (and thus are not counted for your population)

1.1.2. bias in the recording: some of the IUD are inserted in non-governmental facilities or by private practitioners (and thus not counted for your population)

1.1.3. the figure of the New Attendants, during the trimester, is low but the prevalence is high. You are supposed to have achieve an optimal proportion of IUD new attendants

1.1.4. the figure is low because you had a shortage in you IUD supply

2. Figure is actually low

2.1. women think that IUD is not a safe method (acceptability): it can fall during hard work in the fields. Or they don't like it for many reasons to be investigated.

2.2. the nurse does not like to insert IUD and women do not accept to go elsewhere.

Looking for the cause

Hypothesis 1.1: seek information in the other facilities that insert IUD:

- Is the origin of the women precisely recorded?
- If yes, how many come from your area?
- If not, is the proportion of IUD inserted in this health facility significantly more important than in the others? In other words, may the higher number of IUD's observed be explained by catching women from other areas?

Hypothesis 1.2: seek the information in private practices, drugstores and in NGO driven health services. This way is rather tricky and often figures are not reliable. That is why you have to carry out such a data collection once you have rejected all the other hypotheses.

Hypothesis 1.3: measure prevalence of women with an IUD with the information from the FP registers (cumulated number of women to whom an IUD has been inserted and who did not abandon).

Hypothesis 1.4: direct information: used resources (stock=0) and direct information from the health worker in charge of the drugs supply.

Hypothesis 2.1: the only source of information is the dialogue with the community (asking the question to women when they come at the health centre) and the personnel. If the health workers don't believe in IUD (just check how many health workers - wives or members - have an IUD among those who are under FP methods), they won't be able to convince women to have an IUD inserted.

Hypothesis 2.2: direct information from the health worker in charge. Additional information: where is the nearest health facility that inserts IUD?

Now, let's imagine that the following hypotheses have been confirmed: lack of confidence in the IUD and no means to presently insert IUD in the health facility under study.

Possible solutions

One way may be for the health worker in charge of the health centre to re-discuss with the personnel the technical effectiveness of IUD, in order to diminish the fear of IUD in the personnel's minds. It would be helping if it were possible to present "good" figures from other health centres with population of similar characteristics (proof that actually it is possible to achieve better results). A dialogue with the community will be longer and more difficult since people are less sensitive to "scientific" arguments. Basis for confidence is a good relationship between community and health workers on one hand, and on the other hand, a clear and correct information.
Making IUD insertion more accessible will depend on resources availability and on the potential efficiency of decentralising IUD insertion. It will thus depend on the average possible number of IUD insertions per month. This in turn will depend on the target population size and on IUD acceptability. If the health worker in charge of the health centre is interested to increase the number of IUD insertions, he/she can learn the method and see whether the supply will induce some demand in the population... Results should be assessed 6 months later for instance.

Exercise 2: Too many diarrhoea cases referred

Hypotheses

1. the need is not actual:
1.1: the strategy is too sensitive (many false positives due to referral criteria too sensitive).
1.2: the health worker in charge does not comply with the instructions because he/she is just unable to screen children who should be referred from the others.
1.3: the health worker in charge did not respect the instructions because there was a shortage of rehydratation salts.
2. The need is real

Looking for the cause

Hypothesis 1.1: direct information from the one in charge of the HC. If the mothers went to the referral level, analyse the referral letters and the counter-referral letters. What type of treatment did the children receive at referral level?
Hypothesis 1.2: supervision
Hypothesis 1.3: direct information from the health worker in charge.
Hypothesis 2: analysis of the referral and counter-referral letters percentage of children who needed hospital (for whom a more sophisticated technique has been necessary)?

Possible solutions

If hypothesis 1.1 has been confirmed, re-write more specific instructions on referral criteria.
If hypothesis 1.2 has been confirmed, the problem may be at the level of the instructions: re-write them with more specific criteria of referral. Or the problem is at the level of the health worker in charge: if yes, supervision and training to make him/her able to screen symptoms and apply correctly the referral criteria.
If hypothesis 1.3 has been confirmed, one should solve supply shortage, analysing at what level it occurred. In any way, alternative solutions for rehydration salts should be proposed.
If hypothesis 2 has been confirmed, the problem becomes a problem of health coverage. First thing to check is to know whether this situation is exceptional or not (re-read former reports). Then, one should measure the proportion of children who arrive at the referral hospital. And for those who attained it, defining the percentage of those who needed hospital care or who died during the transfer or in the health facility. It becomes necessary to envisage the decentralisation of a more sophisticated technique in order to reduce the number of referrals.

Exercise 3.

Problem:

ANC coverage is too low

Hypotheses

Hypothesis 1: Figures are under-estimates.
Hypothesis 2: Accessibility is low
Hypothesis 3: Acceptability is insufficient
- 3.1. because the consultation is carried out by a man (or awful personnel)
- 3.2. because the quality of care is perceived as weak.
- 3.3. Because criteria for referral are too sensitive (inefficiency).

Looking for a possible cause

Hypothesis 1: re-calculate coverage with another denominator: the number of children immunised with BCG. But even if the coverage increases a little, it would not be significant in most of the cases (except if denominators given by MOH are very bad).
Hypothesis 2: make a comparison of coverage according to the area. Near (where women are supposed to attend ANC in HC) versus far (where women are supposed to be covered by mobile clinics). Or make a comparison between Urban and Rural. It would be interesting to desegregate according to the villages and calculate recruitment rates by village (distance bias). But it will cost and you should have a denominator large enough.
Hypothesis 3.1: comparison of coverage according to the gender (most often, mobile clinics are carried out by a male nurse). But you have to take into account the distance bias and the quality of care delivered by such nurse. Dialogue with mothers will help to identify what is precisely the problem.
Hypothesis 3.2: information on the way women are welcome can be get through supervisions and through dialogue with mothers and the staff (schedule for consultations, room where the consultation takes place in mobile clinics, relationship with the health worker). Information on the perception of the usefulness of ANC by women could be collected through dialogue with mothers and with TBA's. Information about quality of care would be collected through supervisions and analysis of ANC cards (effectiveness of criteria for risk identification and referrals; number of problems solved at ANC consultations; false negatives; what happened for the referred cases?). If the referral level has no means to deal with severe complications, women would be aware of that and their decision to not attend ANC may be appropriate.
Hypothesis 3.3: information about the inefficiency of the strategy would be collected through analysis of ANC cards: number of women who needed a sophisticated technique for delivery (caesarean section, vacuum extraction, forceps) among those who were referred. It would be interesting to measure the positive predictive value of each of the risks proposed as criterion for referral.

It is probably a set of multiple factors that explains a so low coverage and not only a single factor. We shall assume, however, in this simulation that the acceptability is the only one: women refuse to attend ANC provided by a man.

Possible solution

In this case, the theoretical solution is obvious, but not necessarily its implementation. Female nurses are often reluctant to carry out outreach clinics. You should mobilise additional resources (car or appropriate transport) and re-organise the tasks between the health workers.
The way to monitor the progress after your intervention is obvious: coverage of ANC in outreach clinics.

A (very) few recommendations

First, check if data are reliable. Then, reject "external" hypotheses (shortage of supply, absence of health personnel, under or over estimates).
Analysis of rates is important but you also need "absolute" figures in order to interpret your rates. 25% of diarrhoea referred is a high proportion but has no meaning if you have only 1 referred out of 4 children.
Comparison between health facilities is interesting and important since it gives you a picture of the best possible. But you have also to compare a single HC according to time in order to understand trends.

Exercise 3.

Problem:

At the end of the year, you receive reports from your HC. You observe that very few women have attended ANC.
What could be your hypotheses?
Look for the most probable hypothesis: what will be the data you need to confirm your hypotheses?
What could be the necessary information to monitor progress, once you have implemented a solution?

Report from your HC's: see table below. "Near" means less than 5 km. Population living in this radius are supposed to attend ANC in the HC. "Far" means more than 5 km and women living far are supposed to attend ANC through outreach activities.

Table. ANC programme: number of women and coverage, district X, year 1990

	Distance between HC and hospital	Inhabitants			Number of expected pregnancies			Number of women attending at least 1 ANC (coverage)		
		Urban	Rural		Urban	Rural		Urban	Rural	
			near	far		near	far		near	far
HC1	1	30,000	5,000	0	1,050	175	0	420 (40%)	42 (24%)	0
HC2	2	70,000	10,000	0	2,450	350	0	735 (30%)	49 (14%)	0
HC3	20	0	5,000	15,000	0	75	525	0	18 (10%)	21 (4%)
HC4	30	0	6,000	10,000	0	210	350	0	20 (10%)	14 (4%)
HC5	40	0	4,000	21,000	0	140	735	0	7 (5%)	8 (1%)
HC6	80	0	4,000	36,000	0	140	1,260	0	21 (15%)	0
Total		100,000	34,000	82,000	3,500	1,190	2,870	1,155 (33%)	157 (13%)	43 (1.5%)

To make a comparison: BCG coverage for children less than 1 year

	Children immunised with BCG in post-partum consultations		
	Urban	Rural	
		near	far
HC1	1,100	150	0
HC2	2,100	290	0
HC3	0	160	420
HC4	0	200	310
HC5	0	120	590
HC6	0	150	850
Total	3,200	1,070	2,170

NB: a Unicef survey showed that coverage rate for BCG was 98% in urban area and 95% in rural area.

Contraceptive Use and Annual Acceptors Required for Fertility Transition: Results of a Projection Model

John Bongaarts

Major fertility declines in developing countries are invariably accompanied by large increases in contraceptive prevalence and in the annual number of new acceptors. This article applies a target-setting model to make hypothetical projections of trends in prevalence and number of acceptors over the course of a full fertility transition. The sensitivity of these trends to variations in proximate determinants such as the marriage pattern and the duration of lactational amenorrhea, as well as in the discontinuation rate and the method mix, are examined. It is concluded that a contraceptive prevalence of around 75 percent is needed to achieve replacement-level fertility and that variations in proximate determinants other than contraceptive prevalence have only a modest effect on this result. On the other hand, trends in new acceptors are demonstrated to be very sensitive to discontinuation rate changes. As a consequence, it is generally difficult to draw conclusions about trends in fertility from trends in acceptors.

Many governments of developing countries consider fertility reduction to be an important component of their overall strategy for improving standards of living. Family planning programs aimed at increasing contraceptive prevalence are the most widely used approach to bringing about fertility reductions. Due to the keen national and international interest in the progress that is being made toward reducing fertility, extensive monitoring of trends in fertility and contraceptive use and acceptance has been and is being undertaken. The most widely available sources of such data are: (1) family planning program statistics, which typically include estimates of the annual numbers of acceptors of different contraceptive methods, and (2) single round surveys such as the World Fertility Survey (WFS) and Contraceptive Prevalence Survey (CPS), which measure, among other things, the current level of fertility and contraceptive prevalence by method and source.

In addition to the important role these data play in the monitoring and management of family planning programs, they have been used for evaluating the demographic impact of family planning programs and for target-setting (United Nations, 1979, 1982; Bogue, 1973; Nortman et al., 1978; Laing, 1982; Chandrasekaran and Hermalin, 1976; Ross and Forrest, 1978; Bongaarts, 1984a). However, these applications have, in general, been concerned with the short term—for example, a decade or less. Relatively few studies have examined the long-range dynamics of the interrelation between fertility and contraceptive use and acceptance over the full course of a fertility transition. It is the objective of this paper to analyze trends in family planning behavior from this broader perspective. Since empirical data covering complete transitions are not available, a recently developed target-setting model is used to project trends in prevalence and acceptance. To simplify the presentation, the transition in contraceptive use associated with a fertility transition is analyzed first; the second part of this paper discusses related trends in the number of acceptors.

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Contraceptive Prevalence Trends During the Fertility Transition

Major fertility declines in contemporary developing countries are invariably accompanied by large increases in contraceptive use. The fact that increased contraceptive use is indeed the principal cause of fertility declines is indicated by the high degree of correlation between population measures of fertility, such as the crude birth rate (CBR) or the total fertility rate (TFR), and contraceptive prevalence (Nortman, 1985; Bongaarts, 1984b). (Contraceptive prevalence equals the percent currently practicing contraception among married women of reproductive age, MWRA.) However, the prevalence of contraception is not the only proximate determinant of

fertility. The effectiveness of contraception varies among populations, in part due to differences in method mix and in part due to differences in method-specific effectiveness. Other factors being equal, the more effective contraception is, the less prevalence will be required to achieve a given reduction in fertility. Furthermore, other proximate determinants such as the marriage pattern, breastfeeding, and induced abortion also affect fertility. Although this has not occurred in reality, a population could in theory achieve replacement fertility without any practice of contraception by delaying marriage to a sufficiently late age or by aborting all but about two pregnancies. The overall relationships between the variables of interest for the present analysis are summarized in Figure 1.

Mathematical examples can help illuminate the effects of other proximate variables on the relationship between prevalence and fertility. For this purpose, a set of projections of contraceptive prevalence trends associated with prescribed declines in fertility are made for a hypothetical but not atypical developing country as it moves through the transition from high to low fertility. A 30-year period, 1980 to 2010, is assumed for the transition, and over its course the total fertility rate is assumed to drop from 7.0 to the replacement level of 2.1 births per woman. Even though a 30-year transition period is relatively short by historical standards, it was chosen because several contemporary developing countries (for example, Taiwan, Hong Kong, Singapore, Korea) have completed the fertility transition in about three decades, between the 1950s and 1980s. The methodology for projecting the contraceptive prevalence trend that accompanies this decline in fertility is described in Bongaarts (1984a) and Bongaarts and Stover (forthcoming).[1]

To facilitate comparisons of the different contraceptive prevalence projections that are made here, one "standard" projection is used as a reference. Table 1 presents the assumed trends in the other proximate determinants for this standard. The pre-transitional population is modeled after Pakistan (1973) and the post-transitional variables are similar to those of Hong Kong (1978). The choice of these two populations is to some extent arbitrary, but the use of data from actual populations was judged preferable to the use of entirely hypothetical data. In any case, the general findings given below are not affected significantly by these choices.

Figure 1 Overall relationships between contraceptive prevalence, fertility, and other proximate determinants

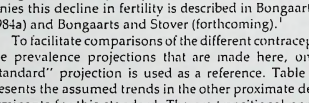


Table 1 Assumed values of fertility and proximate determinants at beginning and end of fertility transition, for standard projection of associated contraceptive prevalence

		Assumed values			
Year	TFR[a]	Age pattern of marriage and fertility	Duration of lactational amenorrhea (months)	Contraceptive effectiveness	Total induced abortion rate
1980	7.0	Pakistan, 1973[b]	12	0.9	0
2010	2.1	Hong Kong, 1978[b]	3	0.9	0

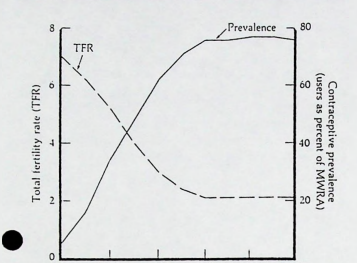
[a]Total fertility rate.
[b]See J. Bongaarts and S. Kirmeyer, "Estimating the impact of contraceptive prevalence on fertility: Aggregate and age-specific versions of a model," in *The Role of Surveys in the Analysis of Family Planning Programs*, edited by A. Hermalin and B. Entwisle (Liège: Ordina Editions, 1982).

As is typical of many developing countries with high fertility, Pakistan in 1973 had early and universal marriage and a long duration of lactational amenorrhea. In contrast, age at marriage in Hong Kong was high and duration of breastfeeding short, as is characteristic of developed countries. For simplicity, method effectiveness in this paper is kept constant at 0.9, and induced abortion is assumed absent throughout the standard projection. For the years between 1980 and 2010, linear interpolation is used to estimate all proximate variables except the total fertility rate, which is assumed to decline fastest in the middle of the transition. After the year 2010 all proximate variables are held constant.

Figure 2 plots trends in the total fertility rate from 1980 to 2030 and the contraceptive prevalence required in the standard projection to achieve the fertility decline from 7.0 to 2.1 births per woman over a 30-year period. As expected, contraceptive prevalence rises rapidly during the transition from a level of 5 percent in 1980 to 76 percent in 2010, when replacement fertility is achieved. This prevalence estimate is within the normal range of 65–80 percent typically found in developed countries with near-replacement fertility, short breastfeeding duration, relatively late marriage, and low abortion rates (United Nations, 1984). After 2010, prevalence remains virtually constant as fertility is assumed constant.

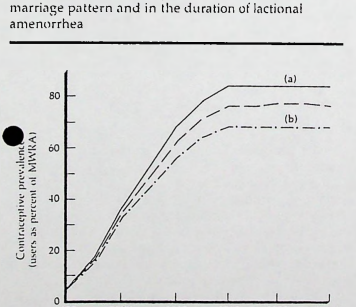
As already noted, the contraceptive prevalence needed to achieve a given reduction in fertility depends in part on contraceptive effectiveness and on other proximate determinants. To examine this dependency, a

Figure 2 Level of contraceptive prevalence required to achieve a prescribed decline in the total fertility rate for standard projection, 1980–2030



Note: For details, see text. MWRA = married women of reproductive age.

Figure 3 Contraceptive prevalence levels, 1980–2030, required to achieve a prescribed fertility decline under alternative assumptions about trends in the marriage pattern and in the duration of lactional amenorrhea



number of prevalence projections were made incorporating different assumptions about the other proximate determinants. Figure 3 plots the results of two alternative projections. The first one (a) is the same as the standard projection except that the marriage pattern is held constant at its pre-transitional level. In this case the prevalence level required to maintain replacement fertility is 84 percent, which is higher than the 76 percent in the standard projection because the constant marriage pattern adds no fertility-inhibiting effect. The second projection (b) in Figure 3 differs from the standard by holding the duration of lactational amenorrhea constant at 12 months throughout the projection period. As expected, the absence of a trend in the fertility-inhibiting effect of lactational amenorrhea results in a lower prevalence requirement for the prescribed fertility decline. At replacement fertility, the latter projection requires 68 percent prevalence compared with the 76 percent standard. A third projection with constant marriage pattern and lactational amenorrhea is not included in Figure 3 because it is virtually identical to the standard.

Alternative projections are also made to estimate the impact of variation in trends in induced abortion and contraceptive effectiveness. The effect of a rise in the induced abortion rate (from zero in 1980) on the required prevalence is summarized in the following:

Total induced abortion rate in 2010 (abortions per woman)	Contraceptive prevalence in 2010 (percent)
0.0	76 (standard)
0.5	72
1.0	68

Increasing or decreasing contraceptive effectiveness from its initial level of 0.9 affects required prevalence after the transition:

Contraceptive effectiveness in 2010	Required contraceptive prevalence in 2010
0.8	85
0.9	76 (standard)
1.0	69

These projections indicate that trends in the marriage pattern, duration of breastfeeding, induced abortion, and contraceptive effectiveness can have substantial effects on the contraceptive prevalence associated with fertility change as a population moves through the demographic transition. However, in none of the alternative projections does the prevalence level after the transition deviate more than 9 percent from the standard value of 76 percent. Clearly, at the end of the fertility transition different levels of the proximate determinants other than contraception affect fertility far less than con-

traceptive prevalence; achieving replacement level of fertility in the presence of changes in other proximate determinants still requires large increases in prevalence. These model findings are therefore consistent with empirical evidence that no population has achieved a fertility transition without a large rise in contraceptive use.

The results presented here focus on factors affecting prevalence levels at the end of the transition. No attempt is made to present a similar analysis of trends in the early phases of the transition, because a wide variety of patterns is possible. It should be emphasized that trends in prevalence and fertility in the first phase of the transition can deviate substantially from the standard plotted in Figure 2. It is even possible for a population to have a rising level of prevalence with temporarily constant fertility if, for example, lactational amenorrhea is declining simultaneously (see Bongaarts, 1986, for a discussion). Whatever the trends in fertility and proximate determinants are early in the transition, the above conclusions about prevalence requirements at the end of the transition are still valid.

Trends in Number of Users

Up to this point the discussion has focused on contraceptive prevalence, that is, the proportion practicing contraception among MWRA. For many purposes it is useful to know not just the proportions but also the actual number of (current) users. The number of users in each year is easily calculated by multiplying prevalence by the number of MWRA. To obtain the latter a standard population projection is needed; the projection used here assumes a total population size of one million in 1980.[2] The resulting trend in numbers of users can be summarized as follows. Between 1980 and 2010 the number of users grows from 7,700 to 234,400. This increase is substantially more rapid than the accompanying rise in prevalence (from 5 to 76 percent) because the number of MWRA more than doubles from 148,000 to 308,000 between 1980 and 2010. Furthermore, the number of users continues to grow after the year 2010 (reaching 300,000 in 2030) despite a constant prevalence, because the number of MWRA keeps growing. In general, therefore, the number of users increases more rapidly and for a longer period than contraceptive prevalence.

Trends in Contraceptive Acceptance During the Fertility Transition

Contraceptive use is initiated by contraceptive acceptance. A new acceptor is defined as a woman (or her husband) who starts using a contraceptive method. (Although seemingly straightforward, acceptor definitions do vary; see Laing, 1982, for a discussion of this problem. As is often done in existing writings on the subject, the terms "acceptor" and "new acceptor" are used interchangeably in the present paper.) The term (new) acceptor is clear-cut in the case of a sterilization or an IUD insertion, but it can also be applied to individuals who start using other methods such as the pill or the condom. An individual who discontinues a method, for example, to begin a planned pregnancy, and starts practicing contraception again at a later date is counted as a new acceptor. As a consequence, an individual can be an acceptor more than once during his or her lifetime.

In this section, the annual number of new acceptors needed to achieve a given trend in prevalence is examined. The link between numbers of users and acceptors depends directly on the rate of discontinuation of use following acceptance: the higher the discontinuation rate is, the more acceptors are needed. In the present exercise, the proportion of acceptors, $p(t)$, who are still using the method t years after acceptance, is assumed to be represented by a simple exponential decay curve:

$$p(t) = e^{-rt}$$

where r is the annual discontinuation rate.[3] According to this curve, the mean duration of use per acceptor is the inverse of the discontinuation rate r. For example, an annual discontinuation rate of 0.333 yields a mean duration of use of three years per acceptance. (Observed discontinuation patterns are slightly better represented by a modified exponential curve such as the one proposed by Mauldin., 1967, but the gain in accuracy in estimates of numbers of acceptors is too small to be of practical importance here.)[4]

To examine the impact of variations in discontinuation rates on the trends in acceptance, three projections are made of the annual number of acceptors needed to yield the contraceptive prevalence levels for the standard projection discussed in the previous section. The three projections differ as follows in their assumption of the annual discontinuation rate:

1 Low discontinuation: $r = 0.01$.
2 Medium discontinuation: $r = 0.333$.
3 High discontinuation: $r = 0.667$.

The low discontinuation rate corresponds roughly to what might be expected for sterilization acceptors, among whom discontinuation would result only from death and marital disruption. The medium discontinuation rate implies a mean use interval of three years that is not atypical for the IUD, and the high discontinuation rate, with an average use interval of 1.5 years, is compatible with the use experience of the pill or traditional methods in some populations.

The results of the three standard acceptor projections are plotted in Figures 4 and 5, Figure 4 presenting the data in absolute number of acceptors, and Figure 5 in terms of a rate, that is, acceptors per 1,000 MWRA.[5] As expected, the level of the discontinuation rate has a large effect on the required number (or rate) of acceptance.

Figure 4 Annual number of acceptors needed under high, medium, or low discontinuation rates to achieve required contraceptive prevalence levels for standard projection

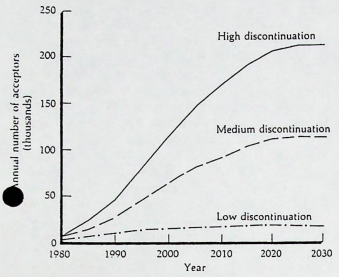
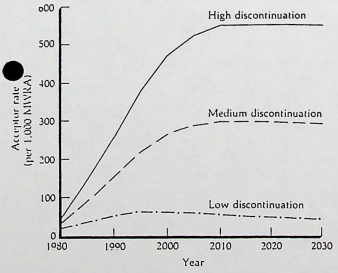


Figure 5 Annual acceptor rates per 1,000 married women of reproductive age (MWRA) needed under high, medium, or low discontinuation rates to achieve required contraceptive prevalence levels for standard projection



For example, as shown in Figure 4, after the year 2010 more than ten times as many acceptors are needed in the high as in the low discontinuation case. The corresponding acceptor rates (that is, number of acceptors per 1,000 MWRA) plotted in Figure 5 show proportionately similar differences between the projections as in Figure 4, except that acceptor rates are virtually stable after the year 2010 when both prevalence and fertility are constant.[6]

An intriguing feature of the low discontinuation projection is that the number of acceptors reaches a plateau around 2000 and the acceptor rate actually declines after that time even though prevalence is still rising. To study this finding in greater detail, it is necessary to decompose the acceptor trend into its three components.

Decomposition of Trends in Annual Numbers of Acceptors

Three factors determine the need for annual recruitments of acceptors—discontinuation, aging, and growth in users.

1 *Discontinuation* Since users can discontinue practicing contraception (either temporarily or permanently), additional acceptors are needed annually to make up for each year's loss of users.

2 *Aging* To maintain a given level of contraceptive use among MWRA, users who age past the end of the reproductive years (exactly age 45 in the present case) also have to be replaced by new acceptors.

3 *Growth in users* If an increasing number of users is required over time, then even in the absence of discontinuation or aging, additional acceptors will be needed to achieve this growth in contraceptive use.

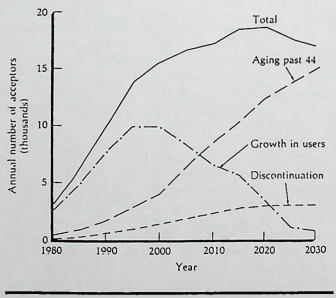
These components and their sum, the total number of acceptors, are presented in Table 2 for the high, medium, and low discontinuation projections in the standard case. Three features of these results are noteworthy. First, the level of the discontinuation rate does not affect the acceptor requirement attributable to growth in users or their aging. The only source of the substantial variation in total number of acceptors among the high, medium, and low projections is therefore the discontinuation component. Second, the trends in the aging and discontinuation components are proportional to the trend in the number of users, while the remaining component varies with the annual *growth* in the number of users. As a consequence, the latter reaches a maximum during the transition and declines to zero after the year 2030 as the number of users reaches a plateau. Third, the proportion of all acceptors that is attributable to each component varies greatly between the projections. With a high discontinuation rate, the discontinuation component dwarfs the other two, while with low discontinuation, the requirement due to growth in users predominates, at least before the year 2010 when fertility is declining. This explains why the total number of acceptors in the low discontinuation projection levels off much earlier than in the other projections (see also Figure 6).

This last phenomenon is of interest to family planning program administrators who may view with alarm

Table 2 Composition of required number of annual acceptors (thousands) with high, medium, and low discontinuation rates to achieve prevalence increases in standard projection, 1980–2030

Discontinuation rate and year	Acceptor total	Components of acceptor totals: Growth in users	Aging past 44	Discontinuation
High				
1980	6.0	2.5	0.4	3.1
1990	47.8	7.6	1.7	38.5
2000	116.3	9.9	4.0	102.3
2010	171.0	6.5	8.4	156.1
2020	208.7	3.5	12.2	193.0
2030	214.2	−0.8	14.8	200.2
Medium				
1980	5.0	2.5	0.4	2.1
1990	28.6	7.6	1.7	19.2
2000	65.0	9.9	4.0	51.1
2010	92.9	6.5	8.4	78.0
2020	112.1	3.5	12.2	96.3
2030	113.9	−0.8	14.8	100.0
Low				
1980	3.0	2.5	0.4	0.1
1990	9.9	7.6	1.7	0.6
2000	15.5	9.9	4.0	1.5
2010	17.1	6.5	8.4	2.3
2020	18.6	3.5	12.2	2.9
2030	16.9	−0.8	14.8	3.0

Figure 6 Components of annual number of acceptors for low discontinuation rates, standard projection, 1980–2030



a lack of growth in the numbers of sterilizations before the end of the fertility transition. The preceding analysis indicates that this can be expected to occur before either the prevalence level or the number of users has reached a maximum. In other words, an absence of growth in the number of sterilizations and a decline in the sterilization rate are consistent with an increase in prevalence of sterilization in populations that are approaching the end of the fertility transition.

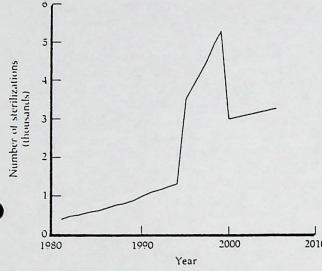
Effects of Changing Method Mix

The foregoing analysis examined acceptor patterns predicated on given discontinuation rates for all acceptors. While this simplified the analysis, actual populations use a variety of methods with different discontinuation rates. One consequence of this heterogeneity in methods is that the distribution of users by method is typically quite different from the distribution of acceptors by method. A simple mathematical example demonstrates this. Suppose that a population following the "standard" pattern of change in fertility and prevalence relies on three contraceptive methods with low ($r = 0.01$), medium ($r = 0.333$), and high ($r = 0.667$) discontinuation rates, respectively. Assume further that one-third of current users practice each of these methods. In that case, only 6.1 percent of all acceptors in the year 2010 will be initiating use of the low discontinuation method, while 62 percent will be accepting the high discontinuation method, despite the fact that prevalence levels of these methods are the same. The cause of this difference in method distribution between acceptors and current users is simply that many more acceptors of high than of low discontinuation methods are needed to maintain a given level of prevalence.

Not only do populations typically use more than one method, but the method mix tends to change over time. (Method mix refers here to the method distribution among users.) An important consequence of this change in mix is that it can have a drastic impact on the trend in the total number of acceptors of all methods combined. If there is a trend toward proportionately more use of low discontinuation methods, then the total number of acceptors will rise less rapidly over time than would be the case with a constant method mix. In fact, it is possible for the total number of acceptors to decline over time while the number of users rises. For example, assume that a population uses two methods, one with a low ($r = 0.01$) and one with a high ($r = 0.667$) discontinuation rate. Assume further that, over the course of the "standard" transition, the proportion with the high discontinuation method declines from 100 percent to 0 percent of all users and the proportion with the low discontinuation method rises from 0 to 100 percent between 1980 and 2030. In this admittedly extreme example, the number of acceptors of both methods combined would rise to a maximum in the year 1995 and decline thereafter, while the number of users rises throughout the 1980–2030 period. If, instead, the method mix had remained constant, then the number of acceptors would of course also have risen throughout the projection interval.

Another somewhat unexpected result of a change in method mix is that it can have a large impact on the

Figure 7 Annual number of sterilizations, 1980–2005, with percentage of sterilized users rising from 10 percent before 1995 to 20 percent after 1999



trend in the number of acceptors of a particular method. To illustrate this effect, we take again the standard projection and assume that by 1995, 10 percent of users have been sterilized. Suppose further that between the years 1995 and 2000 a special campaign is undertaken to raise the sterilization proportion among all users from 10 to 20 percent (for simplicity, this change is taken to be linear from 1995 to 2000). The annual number of sterilizations needed to raise prevalence in this way is plotted in Figure 7. Clearly, the number of sterilizations in the 1995–2000 period has to be much larger than an interpolation between the pre-1995 and post-2000 trends would suggest. The cause of this finding is that the rate of growth in the number of users between 1995 and 2000 is more than double the level that would prevail in the absence of the sterilization campaign. Since the growth component is the most important acceptor requirement factor for low discontinuation methods such as sterilization, it also more than doubles, yielding the elevated levels of acceptors during the campaign. It also is worth noting that the decline in acceptors in 2000 is not associated with a decline in prevalence. Only the rate of growth in users is slower after 2000 than before. In general, then, modest changes in method mix can be associated with rather volatile patterns of contraceptive acceptance.

Conclusion

The objective of this analysis was to examine general contraceptive use and acceptance trends that are required to bring about a transition in fertility in developing countries. The model projections of these variables indicated that contraceptive prevalence has to rise to approximately 75 percent of married women of reproductive age to reduce fertility to replacement level. Variations in trends in the other proximate determinants such as marriage, breastfeeding, induced abortion, and contraceptive effectiveness have, in general, only a modest impact on the prevalence trend needed to move fertility through the transition.

While there is a relatively close correspondence between declines in fertility and increases in contraceptive prevalence, this is not the case for the acceptor rates. Of course the number of acceptors has to rise to accomplish an increase in contraceptive prevalence, but in the later phase of the transition there is only a loose connection between acceptor and prevalence rates. Rising prevalence can be associated with declining acceptor rates. Two factors are responsible for this. First, the total number of acceptors required to achieve given increments in prevalence depends heavily on the average discontinuation rate, which in turn is a function of the method mix. A changing method mix can yield acceptor trends that change much faster or slower than the corresponding numbers of users. Second, the required number of acceptors in a given year depends both on the level and on the growth rate in the number of users. A declining rate of growth in users toward the end of the transition puts downward pressure on the numbers of acceptors. As a consequence of these fairly complex relationships between acceptance and use, it is rather difficult to draw simple conclusions about prevalence and fertility trends from trends in total numbers of acceptors. Since, furthermore, acceptor statistics are usually available only from official government program statistics that do not include private sector acceptance, these acceptor data do not generally give the total picture on acceptance. It is therefore often necessary to rely on survey-based prevalence measures to assess trends in overall contraceptive use.

References and Notes

1 The prevalence projections are made with the age-specific version of the target-setting model described in J. Bongaarts and J. Stover, "The Population Council Target-Setting Model: A User's Manual," *Center for Policy Studies Working Paper* (New York: The Population Council, forthcoming).

2 The population projection was carried out with the computer model developed by Shorter and Pasta; see F. Shorter and D. Pasta, *Computational Methods for Population Projections: With Particular Reference to Development Planning* (New York: The Population Council, 1974). Three inputs were required: (1) age structure in 1980, which was set equal to the one estimated for Pakistan (1970); see United Nations, "World population prospects as assessed in 1980," *Population Studies*, No. 78 (New York: Department of International Economic and Social Affairs, United Nations, 1981), (2) fertility trend and pattern, which was taken from Table 1, and (3) female mortality trend, expressed in life expectancy at birth, was assumed to rise from 50 years in 1980 to 75 years in 2010 and held constant thereafter.

3 It should be emphasized that r is not the same as the probability of discontinuing in a year after acceptance. This probability (d) equals $d = 1 - e^{-r}$, so that $r = -\ln(1-d)$.

4 To estimate the impact of using different discontinuation schedules, two sets of acceptor projections (corresponding to the standard user pattern in Figure 2) were made: the first set with the simple exponential $\exp(-rt)$ and the second set with the modified exponential $a\exp(-r't)$. Each set consisted of three projections with low, medium, and high discontinuation rates, respectively. The values for r and a used in this exercise were:

— low discontinuation: $r = 0.01$, $a = 0.99$;

— medium discontinuation: $r = 0.333$, $a = 0.90$,

— high discontinuation: $r = 0.667$, $a = 0.90$.

Corresponding values for r' were obtained from $r' = r \times a$, which yields the same mean duration of use per acceptor for both sets of projections at each level of discontinuation. The projection results for selected years are summarized as follows:

Discontinuation rate	Year	Simple exponential	Modified exponential
Low	1990	9.9	10.0
	2010	17.1	17.4
Medium	1990	28.6	29.5
	2010	92.9	94.6
High	1990	47.8	48.8
	2010	171.0	172.6

5 The total number of acceptors in year t is calculated as the sum of its three components: (1) growth in users—this component is estimated as $U'(t+1) - U'(t)$, the difference between the total number of users at the beginning of years $t+1$ and t, (2) discontinuation—the number of acceptors needed to replace users who discontinue in year t is estimated as $r \times U(t)$, where $U(t)$ is the total number of users in mid-year and r the average annual discontinuation rate, (3) aging past 44—this component is assumed to equal $0.2 \times U'(t, 40\text{–}44)$, i.e., one fifth of the users in age groups 40–44 at the beginning of each year.

6 A finding of Figure 4 that is at first, perhaps, puzzling is that the acceptor rate exceeds 500 per 1,000 MWRA for the high discontinuation rate after the year 2010. This level would appear to be inconsistent with a prevalence level of 76 percent. That these results are, in fact, consistent is easily demonstrated with a hypothetical example. Suppose in a hypothetical population the duration of contraceptive use before discontinuation is one year for all acceptors. In that case, the prevalence level would be equal to the acceptor rate if one ignores the "aging" and "growth in users" components of acceptor requirements. In the case in which $r = 0.667$ and prevalence is 76 percent, the acceptor rate needed to replace users who discontinue would be $1{,}000 \times 0.667 \times 0.76 = 507$.

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The Fertility-Inhibiting Effects of the Intermediate Fertility Variables

John Bongaarts

The term intermediate fertility variable was first introduced in the mid-1950s by Davis and Blake.[1] They proposed a set of 11 intermediate fertility variables defined as the factors through which, and only through which, social, economic, and cultural conditions can affect fertility. Although the Davis and Blake framework for analyzing the determinants of fertility has found wide acceptance, it has proven difficult to incorporate into quantitative reproductive models. Since the pioneering work of Henry in the early 1950s, a variety of models that incorporate sociobiological proximate determinants of fertility have been constructed.[2] Model builders now use a set of intermediate fertility variables that is different from, but closely related to, the Davis and Blake set. It is this new set that will be discussed here.

The objective of this paper is to demonstrate that differences in fertility among populations are largely due to variations in only four intermediate variables. In addition, estimates of the fertility effect of these factors and of the levels of general fertility, marital fertility, and natural fertility will be made for populations at various stages in the fertility transition.

Selecting the Important Intermediate Fertility Variables

The following is a complete set of intermediate fertility variables often encountered in reproductive models:

1 proportions married among females
2 contraceptive use and effectiveness
3 prevalence of induced abortion
4 duration of postpartum infecundability
5 fecundability (or frequency of intercourse)
6 spontaneous intrauterine mortality
7 prevalence of permanent sterility

Each of these seven intermediate variables directly influences fertility and together they determine the level of fertility. The first factor measures the extent to which women are exposed to regular intercourse (marriage is defined broadly to include consensual unions). The second and third factors measure the prevalence of deliberate marital fertility control, and the last four are the determinants of natural marital fertility.[3]

It is generally not necessary to devote the same effort to analyzing and measuring each of these intermediate variables because they are not of equal interest in studies of fertility levels and differentials. Two criteria can be applied to select the intermediate variables that deserve most attention. The first is the sensitivity of fertility to variations in the different intermediate variables. A variable is relatively uninteresting if large variations in it produce only minor changes in fertility. The second criterion is the extent of a factor's variability among populations or over time. A relatively stable intermediate variable can contribute little to explaining fertility differentials and is hence less important.

In Table 1 the seven intermediate variables are given an approximate rating for these two criteria, based on other studies of the relationship between these intermediate variables and fertility.[4] Fertility is least sensitive to variations in the level of intrauterine mortality and most sensitive to changes in the proportions married and the prevalence of contraception. Variability is lowest for the prevalence of sterility and the risk of intrauterine mortality. The overall rating, based on both criteria, indicates that four intermediate fertility variables—proportion mar-

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TABLE 1 Rating of intermediate fertility variables with respect to sensitivity of fertility and variability among populations

Intermediate fertility variables	Sensitivity of fertility to intermediate variables	Variability among populations	Overall rating
Proportions married	– – –	– – –	– – –
Contraceptive use	– – –	– – –	– – –
Prevalence of induced abortion	– –	– – –	– – –
Postpartum infecundability	– –	– – –	– – –
Fecundability	– –	– –	– –
Spontaneous intrauterine mortality	–	–	–
Permanent sterility	– –	–	–

– – – = High – – = Medium – = Low or absent

ried, postpartum infecundability, contraception, and induced abortion—are the most important ones in the analysis of fertility levels and trends. This conclusion, which will be confirmed quantitatively later in this paper, does not of course mean that the other factors are never important. For example, a population's fertility may be lower than expected if widespread venereal disease causes a high prevalence of sterility, or if fecundability is reduced substantially by prolonged spousal separations. Although less important than postpartum infecundability, fecundability also explains some of the variance in the natural marital fertility of historical populations.[5]

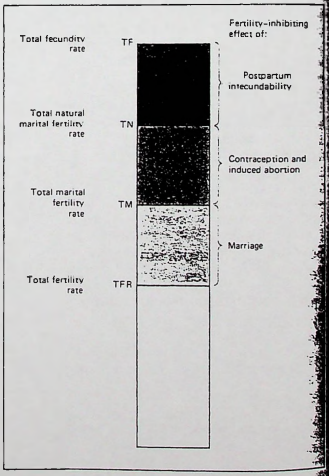
A Model Relating the Intermediate Variables and Fertility

A model relating fertility to the intermediate fertility variables is described in detail elsewhere[6] (a summary of the equations and an example of an application are provided in the Appendix). Only the model's basic concepts and variables will be outlined here.

In this model the four principal intermediate variables are considered inhibitors of fertility, because fertility is lower than its maximum value as a result of delayed marriage (and marital disruption), the use of contraception and induced abortion, and postpartum infecundability induced by breastfeeding (or abstinence). As is illustrated in Figure 1, four different types of fertility levels are identified from which the impact of the intermediate variables can be derived. With the inhibiting effects of all intermediate variables present, a population's actual level of fertility is observed, measured by the total fertility rate, TFR (the total fertility rate and other fertility rates in this paper include only legitimate births). If the fertility-inhibiting effect of celibacy is removed, fertility will increase to a level TM, the total marital fertility rate. If all practice of contraception and induced abortion is also eliminated, fertility will rise farther to level TN, the total natural marital fertility rate. Removing, in addition, the practice of lactation and postpartum abstinence further increases fertility to the total fecundity rate, TF. The total fecundity rate measures the combined effect of the remaining intermediate variables: fecundability, spontaneous intrauterine mortality, and permanent sterility. While the fertility rates TFR, TM, and TN vary widely among populations, the total fecundity rate is rather stable. The TF values of most populations fall within the range of 13 to 17 births per woman, with an average of about 15.3.[7] Lower values are found only in special circumstances—for example, if there is a high prevalence of diseases causing sterility or if prolonged spousal separations are common.[8]

The fertility effects of the four most important intermediate variables are measured in the model by

FIGURE 1 Relationships between the fertility-inhibiting effects of the intermediate variables and various measures of fertility



four indexes. The indexes can only take values between 0 and 1. When there is no fertility-inhibiting effect of a given intermediate variable, the corresponding index equals one; if the fertility inhibition is complete, the index equals zero.

The four indexes are defined as follows:

C_m = index of marriage (equals 1 if all women of reproductive age are married and 0 in the absence of marriage)

C_c = index of contraception (equals 1 in the absence of contraception and 0 if all fecund women use 100 percent effective contraception)

C_a = index of induced abortion (equals 1 in the absence of induced abortion and 0 if all pregnancies are aborted)

C_i = index of postpartum intecundability (equals 1 in the absence of lactation and postpartum abstinence and 0 if the duration of infecundability is infinite)

Each index (or set of indexes) by definition equals the ratio of the fertility levels in the presence and in the absence of the inhibition caused by the corresponding intermediate fertility variable(s):

$$C_m = \frac{TFR}{TM} \quad (1)$$

$$C_c \times C_a = \frac{TM}{TN} \quad (2)$$

$$C_i = \frac{TN}{TF} \quad (3)$$

It follows from these equations that:

$$TFR = C_m \times C_c \times C_a \times C_i \times TF \quad (4)$$

This simple equation summarizes the relationship between the total fertility rate and the intermediate fertility variables.

The indexes C_m, C_c, C_a, and C_i can be calculated with equations (1), (2), and (3) if measures of the fertility rates TFR, TM, TN, and TF are available (which is rarely the case). In most applications, the indexes are estimated directly from the following measures of the intermediate fertility variables:

$m(a)$ = age-specific proportions of women currently married

u = proportion of married women currently using contraception

e = average use-effectiveness of contraception[9]

TA = total induced abortion rate (abortions per woman)

i = mean duration of postpartum infecundability (in months)

The equations for calculating the indexes from these variables are given in Appendix 1 (note the minor change in the equation for C_c compared with the earlier version of the model).

Testing the Validity of the Model

It was concluded earlier that variations in fertility are usually due to variations in only four factors: the proportions married, contraceptive prevalence and effectiveness, the incidence of induced abortion, and the duration of postpartum infecundability. The remaining intermediate variables, generally much less important, were represented in the model by the total fecundity rate, which has values around 15.3 births per woman. The validity of these findings will now be tested by comparing the observed total fertility rates of different populations with the model estimates of total fertility rates obtained from the following equation (from equation (4), assuming TF = 15.3):

$$TFR = C_m \times C_c \times C_a \times C_i \times 15.3 \quad (5)$$

The testing procedure will be applied in 41 developing, developed, and historical populations, and involves four successive steps: estimation of the intermediate fertility variables; calculation of the indexes; estimation of the total fertility rates using equation (5); and a comparison of the model estimates of TFR with the observed TFRs to determine how well the four principal intermediate variables predict the fertility level of a population.

Table 2 presents the estimates of the intermediate variables, rather than including the entire $m(a)$ distribution, the values for TFR and TM are given, from which C_m is calculated with equation (1). The data are obtained from a variety of sources, including WFS surveys.[10] Estimates of the duration of postpartum infecundability were the most difficult to obtain, and indirect estimation procedures had to be applied in nearly all populations. For WFS countries, information about the average duration of breastfeeding was available[11] from which the infecundable interval was obtained with an equation presented elsewhere.[12] For the historical populations the infecundable interval was derived from the average difference between the interval from marriage to first birth and subsequent birth intervals.

From the data in Table 2, one can calculate the indexes C_m, C_c, C_a, and C_i with equations summarized in Appendix 1. The results are presented in Table 3. The total fertility rates can now be estimated

TABLE 2 Estimates of total fertility rate, total marital fertility rate, and intermediate fertility variables for selected populations

Populations	Total fertility rate	Total marital fertility rate	Prevalence of contraceptive use	Use-effectiveness	Total induced abortion rate	Duration of postpartum infecundability (in months)
Developing countries						
Bangladesh, 1975	6.34	7.43	0.08	0.82	—	18.61
Colombia, 1976	4.57	7.91	0.39	0.84	—	5.28
Costa Rica, 1976	3.69	6.46	0.64	0.86	—	3.60
Dominican Republic, 1975	5.85	9.74	0.32	0.89	—	4.76
Guatemala, 1972	7.05	9.74	0.03	0.87	—	14.18
Hong Kong, 1978	2.26	4.56	0.72	0.86	—	3.01
Indonesia, 1976	4.69	6.64	0.26	0.87	—	16.16
Jamaica, 1976	4.32	7.99	0.40	0.84	—	4.25
Jordan, 1976	7.41	9.95	0.24	0.84	—	6.50
Kenya, 1976	8.02	10.44	0.03	0.75	—	11.22
Korea, 1970	3.97	6.85	0.24	0.89	1.5	11.90
Lebanon, 1976	4.77	8.28	0.35	0.83	—	7.14
Malaysia, 1974	4.76	7.54	0.33	0.85	—	3.80
Mexico, 1976	6.73	9.40	0.29	0.86	—	5.28
Nepal, 1976	6.37	7.48	0.02	0.94	—	17.86
Pakistan, 1975	7.02	8.34	0.05	0.85	—	12.65
Panama, 1976	4.57	7.14	0.54	0.90	—	4.25
Peru, 1977	5.11	8.92	0.31	0.78	—	7.55
Philippines, 1976	5.01	8.17	0.35	0.78	—	7.55
Sri Lanka, 1975	3.93	6.58	0.32	0.84	—	14.39
Syria, 1973	7.00	9.59	0.22	0.87	—	5.90
Thailand, 1975	4.70	7.48	0.33	0.91	—	11.80
Turkey, 1968	5.60	7.37	0.35	0.80	—	5.90
Developed countries						
Denmark, 1970	1.78	3.21	(0.70)	0.96	0.269	(3.0)
Finland, 1971	1.61	3.13	(0.80)	0.96	0.284	(3.0)
France, 1972	2.21	4.26	(0.67)	0.94	0.093	(3.0)
Hungary, 1966	1.90	2.92	(0.67)	0.93	2.086	(3.0)
Poland, 1972	2.09	4.78	(0.60)	0.91	0.427	(3.0)
United Kingdom, 1967	2.38	3.91	(0.72)	0.95	0.039	3.01
United States, 1967	2.34	3.71	0.72	0.96	0.004	3.01
Yugoslavia, 1970	2.11	3.69	(0.62)	0.95	1.380	(3.0)
Historical populations						
Bavarian villages 1700–1850	(4.45)	11.89	—	—	—	4.9
Crulai Mar.* 1674–1742	5.60	9.59	—	—	—	11.2
Gratenhausen 1700–1850	(4.74)	10.73	—	—	—	11.3
Huttentes Mar. 1921–1930	9.50	12.96	—	—	—	9.0
Ile de France Mar. 1740–1779	6.10	12.08	—	—	—	9.6
Oschelbron 1700–1850	(5.06)	10.60	—	—	—	9.0
Quebec Mar. 1700–1730	8.00	12.72	—	—	—	9.2
Tourouvre au Perche Mar. 1665–1714	6.00	10.15	—	—	—	8.2
Waldeck villages 1700–1850	4.41	9.97	—	—	—	11.1
Werdum 1700–1850	(3.78)	9.37	—	—	—	12.7

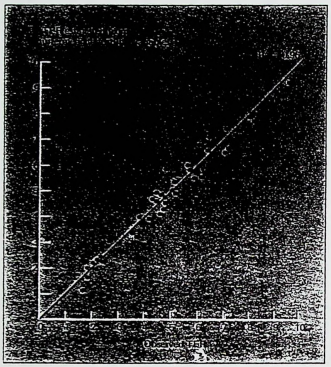
*Mar. = marriages NOTE: Figures in parentheses are approximate. SOURCES: See note 10.

TABLE 3 Estimates of the indexes of the intermediate fertility variables and model estimate of total fertility rates for selected populations

Populations	Index of marriage	Index of contraception	Index of abortion	Index of postpartum infecundability	Model estimate of total fertility rate
Developing countries					
Bangladesh, 1975	0.853	0.929	(1.0)	0.539	6.54
Colombia, 1976	0.578	0.646	(1.0)	0.841	4.80
Costa Rica, 1976	0.571	0.406	(1.0)	0.905	3.21
Dominican Republic, 1975	0.601	0.692	(1.0)	0.860	5.47
Guatemala, 1972	0.724	0.972	(1.0)	0.612	6.39
Hong Kong, 1978	0.496	0.331	(1.0)	0.930	2.54
Indonesia, 1976	0.706	0.756	(1.0)	0.577	4.71
Jamaica, 1976	0.541	0.637	(1.0)	0.879	4.63
Jordan, 1976	0.745	0.782	(1.0)	0.800	7.13
Kenya, 1976	0.768	0.976	(1.0)	0.673	7.72
Korea, 1970	0.580	0.769	0.82	0.658	3.81
Lebanon, 1976	0.576	0.686	(1.0)	0.780	4.72
Malaysia, 1974	0.607	0.697	(1.0)	0.897	5.81
Mexico, 1976	0.610	0.731	(1.0)	0.841	5.73
Nepal, 1976	0.852	0.980	(1.0)	0.550	7.02
Pakistan, 1975	0.785	0.955	(1.0)	0.642	7.37
Panama, 1976	0.640	0.475	(1.0)	0.879	4.09
Peru, 1977	0.573	0.739	(1.0)	0.759	4.92
Philippines, 1976	0.613	0.705	(1.0)	0.759	5.02
Sri Lanka, 1975	0.515	0.710	(1.0)	0.608	3.39
Syria, 1973	0.730	0.793	(1.0)	0.730	6.47
Thailand, 1975	0.628	0.676	(1.0)	0.660	4.29
Turkey, 1968	0.760	0.698	(1.0)	0.730	5.92
Developed countries					
Denmark, 1970	0.555	(0.274)	0.939	(0.930)	2.03
Finland, 1971	0.514	(0.171)	0.887	(0.930)	1.11
France, 1972	0.519	(0.320)	0.975	(0.930)	2.30
Hungary, 1966	0.617	(0.327)	0.564	(0.930)	1.62
Poland, 1972	0.437	(0.410)	0.884	(0.930)	2.26
United Kingdom, 1967	0.609	(0.261)	0.989	(0.930)	2.24
United States, 1967	0.631	0.254	0.999	(0.930)	2.27
Yugoslavia, 1970	0.572	(0.364)	0.751	(0.930)	2.22
Historical populations					
Bavarian villages 1700–1850	(0.374)	(1.0)	(1.0)	0.856	4.89
Crulai Mar.[a] 1674–1742	0.566	(1.0)	(1.0)	0.673	5.83
Grafenhausen 1700–1850	(0.442)	(1.0)	(1.0)	0.671	4.54
Huttenites Mar. 1921–1930	0.733	(1.0)	(1.0)	0.816	9.15
Ile de France Mar. 1740–1778	0.505	(1.0)	(1.0)	0.712	5.50
Oschelbron 1700–1850	(0.477)	(1.0)	(1.0)	0.727	5.31
Quebec Mar. 1700–1730	0.629	(1.0)	(1.0)	0.810	7.80
Tourouvre au Perche Mar. 1664–1714	0.591	(1.0)	(1.0)	0.749	6.77
Waldeck villages 1700–1850	(0.442)	(1.0)	(1.0)	0.676	4.57
Werdum 1700–1850	0.403	(1.0)	(1.0)	0.640	3.95

[a]Mar. = marriages. NOTE: Figures in parentheses are approximate. SOURCE: Equations in Appendix.

FIGURE 2 Observed and model estimates of the total fertility rates (TFR) of 41 populations



from the indexes using equation (5). These model estimates of TFR are given in the last column of Table 3.

A comparison of the model estimates with the observed TFRs reveals that there is good agreement between these two fertility levels (see Figure 2). In fact, the model estimates of TFR, and therefore the four principal intermediate fertility variables, explain 96 percent of the variation in the observed fertility rate. The standard error of the model estimate is 0.36, and in only two populations (Tourouvre au Perche and Malaysia) are the differences more than twice this standard error. Clearly, the earlier conclusion that proportions married, contraception, induced abortion, and postpartum infecundability are the most important intermediate fertility variables is supported by this finding. These results also confirm the general validity of the model.

The variance in fertility that is not explained by the four principal intermediate variables is due to several factors, including:

1 Errors in the measurement of the intermediate variables in Table 2.

2 Errors in the specification of the model. To arrive at a simple analytic model for the relationship between fertility and the intermediate variables, a number of simplifying assumptions had to be made. These assumptions make the model less than fully accurate.

3 Deviations from the total fecundity value of 15.3. The total fecundity rate is a function of the three intermediate variables not explicitly included in the model (i.e., natural fecundability, intrauterine mortality, and the prevalence of permanent sterility). As a consequence, the assumption that TF = 15.3 is only an approximation. As already noted, the normal range of TF is from 13 to 17 births per woman.

4 Errors in the observed total fertility rates. Since existing methods for measuring fertility are not perfect, it follows that the best available fertility estimates differ somewhat from the true rates.

5 Induced abortion is assumed absent except in the developed countries and in Korea (a low level of induced abortion common to all populations is allowed for in the estimate of TF = 15.3). If incorrect, this assumption results in an upward bias in the model estimates of TFR.

6 All births are assumed to be legitimate except in the developed countries, where the total fertility rates given in Table 2 are corrected to exclude illegitimate births. In the developing countries in which this assumption is incorrect, the observed TFRs are overestimated.

Although the overall fit of the model is quite good, the combined effect of these error components is sufficiently large to make equation (5) unsuitable for the accurate estimation of fertility levels. Errors exceeding 0.5 births per woman in the total fertility rate are not unusual, and other existing methods for estimating fertility are therefore preferable. The purpose of this equation is not to provide a new estimation method; instead, it gives an approximate breakdown of the contributions made by different intermediate variables to levels and trends in fertility.

The Transition in the Intermediate Fertility Variables

As a population moves through the transition from natural to controlled fertility there is, by definition, an increase in deliberate marital fertility control. This control is exerted primarily through a rise in contraceptive use, but in a number of populations the practice of induced abortion plays a major role. Accompanying the transition in the deliberate control of marital fertility are transitions in the other principal intermediate variables—marriage and postpartum in-

fecundability. As a consequence of these trends in the intermediate variables, important changes take place in the levels of natural marital fertility, marital fertility, and overall fertility.

In examining changes in these fertility measures over the course of the transition, it is unfortunately not possible to rely on time trends in individual populations because the necessary data are lacking. Instead a comparative analysis will be made here of contemporary populations at different points in the transition. The result will be an outline of a typical "synthetic" transition from the fertility behavior found in contemporary developing countries to that currently observed in developed countries. To provide a clearer picture of the trends in the intermediate variables, populations are divided into four transition phases according to the level of fertility:

I TFR over 6.0
II TFR 4.5–6.0
III TFR 3.0–4.5
IV TFR less than 3.0

The fertility of most populations in phase I is close to natural, while populations in phase IV have completed most or all of the fertility transition.

Estimates of the intermediate variables—the indexes C_m, C_c, C_a, and C_i—and of the total natural marital fertility rate, the total marital fertility rate, and the total fertility rate of groups of populations in each of the four transition phases are obtained by averaging the data of 31 developing and developed countries in Tables 2 and 3. The results are presented in Table 4 and Figure 3. (All estimates in Table 4 are sub-

FIGURE 3 Estimated average total natural marital fertility rates, total marital fertility rates, and total fertility rates of countries in different phases of the fertility transition

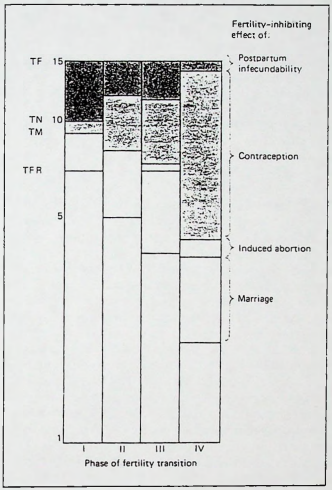


TABLE 4 Averages of measures of the intermediate fertility variables, the indexes, and the total, marital, and natural marital fertility rates for groups of populations in different phases of a synthetic transition

	Phase of fertility transition			
	I	II	III	IV
Prevalence of contraceptive use	0.10	0.35	0.40	0.69
Use-effectiveness of contraception	0.85	0.85	0.86	0.94
Total induced abortion rate	0.0	0.0	0.36	0.46
Postpartum infecundability	12.9	7.6	6.5	3.0
Index of marriage	0.780	0.627	0.551	0.550
Index of contraception	0.912	0.682	0.630	0.301
Index of induced abortion	1.000	1.000	0.961	0.887
Index of postpartum infecundability	0.649	0.780	0.763	0.930
Total fertility rate	7.03	5.03	3.86	2.06
Total marital fertility rate	9.08	8.08	7.05	3.80
Total natural marital fertility rate*	9.93	11.93	11.67	14.23
Number of countries included	7	11	4	9

*Estimated as 15.3 times index of postpartum infecundability. SOURCE: Tables 2 and 3.

ject to large sampling errors because of small numbers of populations included in each transition phase.) The total natural marital fertility rate (TN) rises from 9.93 to 14.23 births per woman between the first and last phase of the transition. This is the consequence of a shortening of the mean duration of postpartum infecundability from 12.9 to 3.0 months, which yields a rise in C_i from 0.649 to 0.930. Despite the large increase in TN, the total marital fertility rate declines from 9.08 to 3.80 during the transition. The reason is clearly a large rise in the contraceptive prevalence from 0.10 to 0.69, accompanied by an increase in contraceptive use-effectiveness from 0.85 to 0.94. The combined effect of the changes in prevalence and use-effectiveness is expressed in the index of contraception, which declined from 0.912 to 0.301 over the course of the transition. Induced abortion plays, on average, a minor or negligible role except in the last two phases of the transition when its effect becomes significant. Interestingly, the decline in marital fertility during the first three phases is quite modest, as the increase in the practice of contraception barely manages to compensate for the fertility-enhancing impact of a shortening of the duration of postpartum infecundability. Finally, the total fertility rate changes from 7.03 to 2.06 during the transition, due to the reduction in marital fertility as well as to the decline in the index of marriage from 0.78 to 0.55. This decline in the proportion of women married is largely the result of a rise in the mean age at marriage.

In sum, this outline of the transition in the various fertility measures indicates that a typical transition from natural to controlled fertility is accompanied by a shortening of postpartum infecundability, a large increase in contraceptive use, and a decline in the proportion married. It should be emphasized that this pattern is based on a comparison of contemporary populations at different stages in the transition. Actual transitions over time in developing countries probably resemble this pattern quite closely, but the transitions in historical European populations are different in one respect. Instead of a reduction in the proportion married, these historical populations typically experienced a decline in the mean age at marriage and a rise in the proportion of women married.[13]

Conclusion

The principal finding of this study is that a small number of intermediate fertility variables are responsible for most of the variation in fertility levels of populations. Four intermediate factors—proportion married, contraception, induced abortion, and postpartum infecundability—are the most important determinants of fertility. These four factors explain 96 percent of the variance in the total fertility rate in a sample of 41 populations that included developing and developed countries as well as historical populations. The remaining intermediate variables—natural fecundability (or frequency of intercourse), spontaneous intrauterine mortality, and permanent sterility—are generally much less important although they may substantially affect fertility in some populations.

In the last section of the paper the average fertility effect of the intermediate fertility variables, as measured by the corresponding indexes, was estimated for groups of contemporary populations with different total fertility rates. Postpartum infecundability resulting from breastfeeding has a strong fertility-inhibiting effect in countries with high total fertility rates. As a result, natural marital fertility in these countries is much lower than in the developed countries. Although natural marital fertility is very high in the developed world, marital fertility is relatively low because of high contraceptive prevalence: around 1970 about two-thirds of married women of reproductive age were using contraception (this level increased further during the 1970s). This high prevalence of contraceptive use is the primary reason for the low total fertility rates in the developed countries, but late marriage and a high rate of marital disruption, as well as significant use of induced abortion, also contribute to lowering the total fertility rate.

Appendix: A Summary of the Model

Several equations relate the fertility rates TFR, TM, TN, and TF to the indexes C_m, C_c, C_a, and C_i (see text or reference in note 6 for a definition of these variables):

$$\begin{aligned}
TFR &= C_m \times C_c \times C_a \times C_i \times TF \\
&= C_m \times C_c \times C_a \times TN \\
&= C_m \times TM \\
TM &= TFR \; C_m^{-1} \\
&= C_c \times C_a \times C_i \times TF \\
&= C_c \times C_a \times TN \\
TN &= TFR \; (C_m \times C_c \times C_a)^{-1} \\
&= TM \; (C_c \times C_a)^{-1} \\
&= C_i \times TF \\
TF &= TFR \; (C_m \times C_c \times C_a \times C_i)^{-1} \\
&= TM \; (C_c \times C_a \times C_i)^{-1} \\
&= TN \; C_i^{-1}
\end{aligned}$$

Each of the indexes can be calculated from measurements of the intermediate fertility variables, as is illustrated below for Sri Lanka, 1975.

Index of Marriage

$$C_m = \frac{TFR}{TM} = \frac{\sum f(a)}{\sum f(a)m(a)}$$

where $m(a)$ equals the proportion currently married among females, by age, and $f(a)$ is a schedule of age-specific fertility rates ($m(a)$ should include consensual unions, but visiting unions are given a weight of 0.5). Only births to married women should be included in $f(a)$.

For Sri Lanka, 1975, the estimated values for $f(a)$ and $m(a)$ are:

Age group	$f(a)$	$m(a)$	$g(a) = f(a)/m(a)$
15–19	38.6	0.065	(293.5)
20–24	148.7	0.380	391.3
25–29	142.1	0.650	295.5
30–34	170.0	0.822	206.8
35–39	117.2	0.856	136.9
40–44	56.2	0.814	44.5
45–49	5.6	0.817	6.9
	TFR = 3.528		TM = 6.877

and therefore: $C_m = \frac{3.528}{6.877} = 0.513$

The value of the age-specific marital fertility rate $g(a)$ for the age group 15–19 is estimated as $g(15–19) = 0.75 \times g(20–24)$, because the direct estimate $f(15–19)/m(15–19)$ tends to be unreliable, especially in populations with low values for $m(15–19)$.

Index of Contraception

$$C_c = 1 - 1.08 \times c \times u$$

where u is the prevalence of current contraceptive use (including male methods and sterilizing operations) among married women of reproductive age (15–49), c is the average use-effectiveness of contraception, and 1.08 is a sterility correction factor. Since estimates of contraceptive effectiveness are difficult to obtain and therefore rarely available, the following standard method-specific values (adapted from data from the Philippines[14]) are used in the calculation of average effectiveness levels in developing countries.

Method	Estimated use-effectiveness
Sterilization	1.0
IUD	0.95
Pill	0.90
Other	0.70

Effectiveness levels for the developed countries are based on US data[15]:

Method	Estimated use-effectiveness
Sterilization	1.00
Pill	0.99
IUD	0.97
Condom	0.94
Diaphragm	0.92
Foam cream jelly	0.91
Rhythm	0.87
Other	0.93

The sterility correction factor is estimated to be 1.08. In the version of the model published earlier (see note 6), this coefficient was estimated to equal 1.18 on the not quite accurate assumption that all contraceptive users are nonsterile. The new coefficient is calculated from the reported age-specific prevalence of sterility from a number of WFS surveys.[16]

For Sri Lanka, 1975, $u = 0.32$ and $c = 0.84$, so that $C_c = 1 - 1.08 \times 0.32 \times 0.84 = 0.710$.

Average use-effectiveness, c, is estimated as the weighted average of the method-specific use-effectiveness levels, $e(m)$, with the weights equal to the proportion of women using a given method, $u(m)$: $c = \sum e(m)\,u(m)/u$. For Sri Lanka, 1975:

Method	$u(m)$	$e(m)$
Pill	0.019	0.90
IUD	0.048	0.95
Sterilization	0.099	1.00
Other	0.154	(0.70)
	0.32	

so that $c = (0.019 \times 0.9 + 0.048 \times 0.95 + 0.099 \times 1.0 + 0.154 \times 0.7)/0.32 = 0.84$.

Index of Induced Abortion

$$C_a = \frac{TFR}{TFR + 0.4 \times (1 \div u) \times TA}$$

where TA equals the total abortion rate (including only abortions among married women).

Reliable statistics for induced abortions are not available in Sri Lanka. If induced abortion is assumed to be absent, $C_a = 1.0$.

Index of Postpartum Infecundability

$$C_i = \frac{20}{18.5 + i}$$

where i is the mean duration of postpartum infecundability.

If a direct estimate of t is not available, it is possible to obtain an approximate value from the duration of breastfeeding, B, with the following equation[17]:

$$t = 1.753 \exp(0.1396 \times B - 0.001872 \times B^2)$$

In Sri Lanka the mean duration of breastfeeding was 21 months, yielding $t = 14.4$ months and

$$C_t = \frac{20}{18.5 \div 14} = 0.608$$

References and Notes

This is a revised version of a paper originally prepared for the IUSSP and WFS Seminar on the Analysis of Maternity Histories, London, April 1980 (Proceedings forthcoming).

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9 This variable measures the reduction in the monthly probability of conception due to the use of contraception.

10 Sources of data for Table 2 are as follows.

For developing countries: estimates are taken from J. Bongaarts and S. Kirmeyer, "Estimating the impact of contraceptive prevalence on fertility: Aggregate and age specific versions of a model," in *The Role of Surveys in the Analysis of Family Planning Programs*, ed. A. Hermalin and B. Entwisle (Liège: Ordina, 1981), except Korea, which is based on Bongaarts, cited in note 6, with fertility estimates updated from L. Cho, "The demographic situation in the Republic of Korea," Papers of the East-West Population Institute, no. 29.

For developed countries: *Demographic Yearbook* 1969 and 1975 (New York: United Nations, Department of Economic and Social Affairs, 1970 and 1976); *Fertility and Family Planning in Europe around 1970*, Population Studies no. 58 (New York: United Nations, Department of Economic and Social Affairs, 1976); total fertility rates do not include illegitimate births); C. Tietze, *Induced Abortion: 1979* (New York: The Population Council, 1979). Contraceptive prevalence data were inflated to include sterilizing operations for noncontraceptive reasons in the European countries 3 percent was added for lack of direct estimates of the incidence of such operations).

For historical populations: German populations—J. Knodel, "Natural fertility in pre-industrial Germany," *Population Studies* 32, no. 3 (1978): 481; "Demographic transitions in German villages," paper prepared for the Summary Conference on European Fertility, Princeton, N. J., July 1979; From natural fertility to family limitation: The onset of fertility transition in a sample of German villages," *Demography* 16, no. 4 (1979): 493; C. Wilson, cited in note 5. Mean duration of postpartum infecundability was estimated by subtracting the mean interval between marriage and first birth from the average birth interval among married women with two or more legitimate births; total fertility rates were estimated by multiplying the average number of children ever born per married woman in completed unions by 0.88, the approximate value of the proportion ever marrying among women. Other populations—H. Leridon, *Human Fertility: The Basic Components* (Chicago: University of Chicago Press, 1977). Mean duration of postpartum infecundability was estimated by subtracting the mean interval between marriage and first birth from the interval between the first and second birth, adding one month to correct for increasing durations of birth intervals with age. The estimate of postpartum infecundability among the Hutterites was taken from M. Sheps, "An analysis of reproductive patterns in an American isolate," *Population Studies* 19, no. 1 (1965): 65.

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15 Bongaarts and Potter, cited in note 6.

16 D. Nortman, "Voluntary sterilization: Its demographic impact in relation to other contraceptive methods," Papers of the East-West Population Institute, no. 65, 1980.

17 See note 12.

child-spacing in tropical Africa: traditions and change

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the policy implications of changes in child-spacing practices in tropical Africa

A. L. MABOGUNJE

The demographic situation in most tropical African countries is usually characterised as one of rapidly declining mortality in circumstances of high and fairly stable (or even slightly rising) fertility levels, leading to what are perhaps some of the highest rates of population increase in the world today.[1] For many of these countries, birth rates lie between 40 and 55 per thousand whilst death rates continue to drop below 25 per thousand. Given this situation, it is natural to assume that little is happening among the generality of the population with regard to the management of their fertility behaviour. Policy prescriptions for coping with the developmental consequences of such growth rates have varied from an out-and-out advocacy of vigorous family planning campaigns and programmes to a more *laissez-faire* approach based on a form of the post-Bucharest position of "development being the best contraceptive" (Funkle and Crane, 1975). Either way, it was becoming somewhat depressingly apparent that policies addressed to population problems in many developing countries have had rather ambiguous or sometimes even contradictory results.[2]

In these circumstances, it is natural to expect a re-appraisal not only of these policies but also of the body of knowledge on which they are based. Two elements have been crucial in this re-appraisal. The first has been the need for a better understanding of the causal relations among the variables that impinge on fertility behaviour; the second is the greater application of what Lasswell (1975) calls their contextuality — the context within which these relations are situated and policy guidance proffered. The significance of the former is that it gives special emphasis to identification of the sequential relations between variables: an attempt is made, as it were,

to peep into the "black box" of causation and to identify variables that are "intermediate" or "intervening" between the input and the output of particular social processes. This enables a distinction to be made between those behavioural or biological factors that affect fertility directly (the intermediate variables) and socioeconomic, cultural and environmental factors which do not influence it directly but only through their effect on the intermediate variables (Davis and Blake, 1956).

This distinction has special significance in the design of policy measures to cope with problems arising from the particular fertility patterns of African societies since it helps in particular to establish their cultural contextuality. Contextuality defines an approach to policy formulation that considers a given problem in relation to the larger context of the social process in which it is embedded and with which it interacts. With regard to fertility behaviour this approach requires a conceptual map that depicts the interplay between population factors and policy and locates this interplay in the social processes of the particular community. Such a map permits a clearer perception of those critical points in the relationship that provide specific and effective opportunities for policy interventions.

The preceding chapters in this volume have been concerned with reporting the results of research activities and identifying changes in traditional child-spacing practices among different communities in tropical Africa. The basic hypothesis is that child-spacing practices represent one of the crucial intermediate variables affecting fertility levels. The demographic models discussed in the introductory chapter (chapter 1, Section 3) and by Bongaarts (chapter 5) show that lactation-related amenorrhoea and postpartum abstinence are indeed major determinants of fertility, having the potential of roughly doubling average birth intervals, thereby halving fertility, while the case studies have documented the extent to which this potential check on fertility is actually realised in selected populations. Also implicit throughout the book is the notion that child-spacing practices must be situated correctly within the larger context surrounding the social processes of child-bearing and child-rearing. We may now be in a much better position to appreciate their implications for policy and to identify strategic areas where policy intervention may be more effective and productive of desired results.

The purpose of this concluding chapter is, therefore, four-fold. First, it summarizes the salient features of traditional child-spacing practices among various communities in tropical Africa; second, it examines the factors that are inducing wide-ranging changes in these practices; third, it considers the context of these factors and their potential for policy intervention; and finally, it assesses the constraints that are likely to facilitate or inhibit the formulation and implementation of appropriate policy measures.

1 Salient features of traditional child-spacing practices

Although the evidence is far from complete, the various studies reported in this volume emphasize that among various communities in tropical Africa, traditional child-spacing practice has involved an interval of about three years between successive births (except when early infant mortality intervenes). This practice is hallowed in many communities because it protects the health of the newborn babe and increases the child's chances of survival by ensuring a longer period of lactation: the medical evidence of the advantages of lactation and also of adequate birth intervals in general is clear from chapter 4. Postpartum abstinence is also seen in some communities as a means of protecting the health of the new mother (see chapter 3, (Sections 3 and 4), for example), although this particular concern would seem in most cases to be of more recent origin. Even more recent is the idea that a long interval between child-bearing is desirable because it guarantees the rights of women to live a normal life of social and economic involvement and not be regarded or treated simply as "baby machines". In many traditional African societies, although these last two reasons for fairly lengthy child-spacing were not always as clearly articulated, they were nonetheless recognised because of the high level of participation of women in the economic life of the communities. Some exceptions may be found among those Islamised communities where the institution of keeping women in purdah is prevalent, but elsewhere it is generally recognised that the roles played by African women as agricultural producers and/or traders are facilitated by child-spacing practices, since these ensure that their labour input is less restricted by frequent pregnancies or by the difficulty of caring for a small child and a baby at the same time.

Clearly, the overall effect of lengthy child-spacing is to restrain considerably the fertility of women in traditional society, although this does not imply a preference for small family size. This culturally accepted restraint is often ignored in conventional descriptions of fertility in underdeveloped societies where high levels of fertility were assumed to have been always characteristic. Moreover, and of far greater significance, the social context within which the restraint was practised and the institutional support developed around it were hardly ever investigated. For example, little research has been carried out on the role of older women (not necessarily mothers) in advising younger ones as to the essential facts of child-rearing and on the societal evaluation of various practices related to it. Anthropologists who have been placed in a unique position to examine these areas of social relations in depth have usually shown little interest in matters of demography. Yet, it is obvious that the daily routines of households in traditional societies tend to maximize opportunities for this

form of social education of younger by older women. Such routines include the long trek to fetch water, the concourse at the periodic markets, the numerous annual festivities and family celebrations and other occasions of a more private nature.

The mothers or older siblings of the married couple also play a very special role in the maintenance of this practice. In many communities, one or the other of these close relations is expected to take up residence with the new mother both to assist her in the very demanding task of child-rearing and to offer advice and guidance whenever necessary. The physical presence of such third persons encourages abstinence on the part of the couple and thus ensures the achievement of a desirable birth-spacing.

Not all communities seek to achieve their spacing objectives through absolute abstinence. The anthropological material surveyed in chapter 2 shows broad areas (notably in eastern Africa and, to a lesser extent, in Islamised areas of western Africa) where child-spacing relies more on prolonged lactational amenorrhoea and/or on coitus interruptus or low coital frequency. The anthropological evidence also indicates that, within this broad pattern, child-spacing practices can show considerable local variation between ethnic groups and between sub-groups, a fact which is emphasized by some of the case studies, most notably the chapters from Zaire but also those from Ghana, Togo and Senegal. Nonetheless, whether through abstinence or other means, a woman is not expected to conceive another child until after a socially acceptable interval has elapsed.

In many communities, infringement of this social norm attracts formal sanctions. Such sanctions are imposed within the extended family or by the peer group of either husband or wife. But perhaps more important are the informal sanctions ranging from public ridicule to social ostracization. All these sanctions are induced by a certain feeling of outrage at the callousness implied in imperilling the life of the young infant (see the discussion of sanctions given in section 6 of chapter 3, for example). Indeed although without real medical foundation, it is generally believed among many communities that sexual intercourse during the critical years of lactation actually poisons the mother's milk.

Lactation closely ties child-spacing practices with issues of nutrition. Research into traditional food practices among various communities in so far as it affects pregnancy and child-rearing still has a long way to go. Among some groups, however, there are food taboos on the basis of sex and age. Women, and in some cases pregnant women, are not expected to eat certain types of food. Generally, it is assumed that the choicest food is reserved for the male head of the household. What we know less about is whether among certain groups special items of food are regarded as having

significance for women at different stages in the child-bearing and child-rearing cycle. Nonetheless, in the wet tropics in particular, among communities whose diet is heavily dependent on root crops, the relatively low protein content makes weaning rather strenuous on the infant, who has to ingest considerable quantities of this material to secure adequate quantities of body-building substances.

2 Factors inducing wide-ranging changes in child-spacing practices

The perspective on fertility behaviour that is provided by looking at the intermediate variables of child-spacing practices enables us to appreciate better the directions from which some of the most significant changes affecting fertility are coming. In many tropical African countries, these directions are closely related to the current process of modernisation. Everywhere one is aware of a decrease in the length of the breast-feeding period and also of less regard for postpartum sexual abstinence, particularly among younger women, with or without a compensatory adoption of contraceptive practices. These changes are accompanied by a new perception of women's sexuality in marital relations, changes in the relationship of parents to children, the possibility of excess fertility and the emergence of the phenomenon of "unwanted" children. For the modern woman, sexual relations are no longer simply a means of child-bearing but more a lubricating element to ensure the smooth running and success of marriage. But such natural enjoyment of sex increases exposure to pregnancy and places greater importance on the need for artificial means of contraception. The urgency is further emphasized by the growing reversal in the direction and magnitude of intergenerational flows of wealth and services between parents and children.[3] Increasingly, parents regard their children less as useful farm labour and eventual security in their old age but as an additional burden on their meagre resources. All of this is creating a new situation in which the desirable number of children is being re-evaluated less in terms of their economic value and more in terms of the vital psychic satisfactions of parenthood. Beyond the preferred number, a new pregnancy is regarded as unwanted, an excess and a mistake.

One of the most significant results of the various researches reported in this volume (analysed in most detail in chapters 6 and, particularly, chapter 7 on Lagos and Ibadan respectively) is the indication that certain categories of women have been responding positively to this new situation through deliberate contraceptive practice. The most important element in the characteristic profile of these women is that most of them have reached at least a secondary level of education. Other elements shown to have

been of some importance though not as critical include urban residence (particularly the neighbourhood location of residence), income levels and employment within the modern, white-collar sector of the urban economy. Significantly, elements such as ethnicity and religion are of less importance even though these have an influence on more traditional child-spacing practices.

Clearly, the role of education in this transitional process is not only paramount, but also very complex. The significance of attaining a secondary level of education, for example, may or may not indicate the existence of a critical threshold above which education begins to have a real impact on fertility. The controversy about the relevance of threshold values for changes in fertility behaviour need not concern us here. What is important is to note that the education of women up to the secondary level has two important effects on the contextual framework of their fertility behaviour. First, by keeping girls in school up to the age of puberty, it has made it difficult for the older women to continue to play their customary role in sex education and has thus removed to the public domain activities which were in the past exclusively in the private domain. It is of considerable interest that in virtually all the researches conducted, the women practising contraception claimed to have learned about it first from their class-mates, peer group or even boyfriends. Hardly any of them mentioned their mothers, older women or older siblings. Second, for most women educated to this level not only are they more assertive of new social norms, including changes in practices related to child-bearing and child-rearing, but society itself shows a greater willingness or tolerance towards this assertiveness. It is now commonplace to see young educated mothers in cities insisting, especially with their mothers or relations, on how they would want babies to be reared.

From this perspective, it is easy to appreciate that the problem of high fertility in most tropical African countries occurs largely among women who have received some education but usually no more than the primary level and who have been removed from situations in which traditional norms and sanctions continue to have their erstwhile strength or validity. These women have escaped the socially imposed restraints of traditional society but have not been able to attain positions where they can self-regulate their fertility. The fertility problem of most countries in tropical Africa thus arises not only from the fluidity in the child-spacing practices of a category of women caught as it were, "between two stools" but also from the fact that the number of such women has been increasing rapidly with the recent, and sometimes dramatic, expansion of primary educational opportunities for girls.

3 Contextuality of policy issues

Phrased in this way, the problem of high fertility levels in many African communities poses a different set of challenges for policy intervention. It facilitates a contextual approach to the identification of an appropriate policy strategy for dealing with the problem. The conceptual map needed to locate both the fertility variable and policy measures within on-going social processes can only be accurately drawn by re-affirming the centrality of certain social goals. In traditional society, these goals revolve around the concern for safeguarding the health and survival chances of infants and also the well-being of the mother. It was primarily for this reason that these societies were prepared to create appropriate institutions, to devise means of inculcating supportive value systems and to apply sanctions, both formal and informal, to discourage infringement.

These goals of maternal and child health-care remain critical in all African countries today as they were in the past. But added to them are new societal objectives entailing not simply healthy survival but also a progressively enhanced living standard resulting from a fuller exploitation of national resources. Raising living standards, however, is predicated on much improved knowledge of the complex relations between resources and the size and composition of the population of a country. The possibilities of resource depletion and of irreversible negative ecological change as a result of too high a pressure of population on the land impose special obligations on governments to keep a vigilant interest in all those factors that determine the rate at which population is growing (Tinbergen, 1975). The preceding chapters, have shown that changes in child-spacing practices are one of the most dynamic elements influencing the rapid rate of population growth in much of tropical Africa.

In locating policy measures within a contextual framework appropriate to this particular problem, it is important to stress that two types of measures are available to government, namely those designed to have a direct impact and those whose effects are bound to be indirect. Policies with direct impact depend in general on the use of monetary or fiscal measures, administrative or regulatory procedures, physical activities such as the provision of infrastructure and service facilities, or the creation of special agencies to deal specifically with the problem in hand. Those with direct impact on the other hand, operate in such a way that although not initiated explicitly to deal with the particular problem, their effects spill over and exert some influence on its incidence or intensity. Indeed, in terms of what has been said so far, it is easy to appreciate that changes in child-spacing practices are themselves the unintended by-product of policies applied in other areas of national life notably in education.

Clearly, the problems arising from these changes are themselves amenable to policy intervention of both a direct and indirect nature. Of direct policy measures, four are relatively obvious and specific. First, there is the expansion of educational opportunities for girls, especially at the secondary school level. This policy can be defended not simply on the grounds that it would keep girls in school to the age where they can better appreciate the importance of sex education and the value of contraception but particularly because it will enhance their capacity for a more economically useful life. Second, there is a need to provide more maternal and child health-care facilities and to pursue ante-natal education in them more vigorously. The latter is particularly vital as a means of creating a substitute for traditional institutional arrangements based on the guidance and counselling role of older women. Antenatal education should stress the importance of a longer period of lactation (and thus amenorrhoea) as a means of improving the survival chances of babies. It should also pay attention to improving the knowledge of the women as to the critical role of appropriate nutrition. Maternal and Child Health-Care Units, especially in the context of tropical African countries, also have a responsibility in trying to cope with the special problems of sterility in a segment of the population and the varied demands of minority and cultural groups, such as the demand for abortion for pregnant unmarried girls. Third, family planning facilities should be considerably expanded and contraceptive devices made more easily available. Finally, the present permissible age at marriage should be re-examined with a view to legislating a minimum age that is more in consonance with present aspirations for improved living standards. For many African countries, a minimum age of 21 years for girls would appear to have much in its favour. Other direct measures could include tax reductions for keeping the number of children below a certain figure such as three. Fiscal advantages and subsidies can also be provided as incentives for keeping the size of families close to an acceptable national norm.

Nonetheless, in the longer run, it is the indirect policy measures that may have the greatest impact on the ability of women in countries of tropical Africa to cope more effectively with their fertility and the issue of their desired family size. Some of these may lead in the short run to an increase in fertility as traditional child-spacing practices decline, but in the longer term they are likely to lead to fertility decline through greater use of contraception and development of preferences for smaller families.

Of such indirect policies, five are likely to be of real importance. The first relates to policies concerned with the whole question of income re-distribution. In many tropical African countries, there is growing concern with the sharp income inequalities between social classes, sub-national

regional units, and urban and rural areas. This concern finds expression in development programmes directed specifically at target groups such as the urban poor and the landless peasants. In its most comprehensive form, the concern has led to a growing emphasis being placed on the development of the rural areas as a whole. Such policies, to the extent that they seek to raise the income of the rural population in general, have the potential of also affecting their perception of their role in society and their better appreciation of new opportunities for upward social and economic mobility.

The effect of such development on the reproductive and child-spacing behaviour of women cannot be under-estimated. If the results of researches reported in this volume are anything to go by, this is likely to change dramatically. The potential for change from traditional to modern patterns of child-bearing can be enhanced, and the potential problems of unwanted high fertility avoided, if from the very beginning maternal and child health-care facilities and antenatal and family planning counselling are built into the rural development programmes. Experience from other parts of the world shows that such facilities need not involve expensive investment in costly buildings and equipment. Instead, they can be largely community-based with, for instance, a systematic re-involvement and re-education of older women to play their customary role in this field. For such community-based programmes to succeed, McNicoll (1975) has emphasized that they must be part of a coherent development policy which must have three concurrent aims:

> first, to establish or strengthen community solidarity in economic and social affairs, accentuating the felt need for cooperative effort in addressing mutual problems; second, to eliminate serious external diseconomies at the community level — in other words, to ensure that any adverse consequences of individual behaviour within the community are not seriously felt by groups outside it; and third, to encourage economic growth and demographic restraint through an array of incentives and sanctions that are presented to the community as a whole and that invoke community accountability.

A second set of indirect policies are those concerning employment promotion and increased urbanisation. For most tropical African countries, problems of urban unemployment and under-employment figure among the most visible and pressing challenges facing their governments. Proposals for their solution emphasize the importance of labour-intensive programmes to counterbalance the capital-intensive processes of modern urban-industrial development. Such solutions, if effectively implemented, are bound to involve the employment of an increasingly large number of

women with relatively low educational qualifications, at least for the unskilled and female-related activities. Apart from the fact that this development will lead to a further rise in female out-migration from rural areas to urban centres, the consequential erosion of traditional social restraint in matters of fertility may contribute to a rapid increase in population. This eventuality needs to be planned for and greatly underscores the importance of expanding maternal and child health-care centres in urban areas and emphasizing their role in antenatal education and family planning counselling.

An equally important attention needs to be paid to policies concerned with raising the status of women. In many tropical African countries, various initiatives are being taken at national and international levels to improve and enhance the direct participation of women in development programmes and community decision-making.[4] Apart from improving access to educational opportunities for females, many countries are also engaged in removing various discriminatory provisions in the field of wages and salaries, superannuation, social security and legal protection. The impact of these policies on fertility behaviour is currently somewhat uncertain. What is, however, indubitable is that positive changes in the status of women are bound to enhance their capacity to articulate and achieve their preferred family size and to self-regulate their fertility.

The general health programmes of governments also tend to have an indirect impact on fertility behaviour, particularly through their more direct effects on infant mortality. Improvements in social and preventive medicine in so far as these increase the survival chances of infants are bound to enter into the calculation of preferred family size. The same significance attaches to improvements in the food productive capacity of a country and its effect on raising general nutrition status. Not only the amount but the mix between carbohydrate and protein food material is crucial in this respect. The mix factor is particularly important in terms of resistance to ill-health among adults and may also greatly influence levels of infant mortality in a given population.

4 Constraints on policy formulation and implementation

The likelihood that realistic policy measures of a type that impinge directly or indirectly on reproductive behaviour and child-spacing practices will be formulated and implemented is greatly dependent on the strength of various constraints that are part of the decision-making environment in tropical African countries today. This environment has been largely determined by the strategy of development currently operative in these countries. This

strategy has been based essentially on a neo-classical Keynesian-type approach to the management of national economic systems and places great emphasis on the use of monetary and fiscal policies to stimulate the economy. However, in tropical Africa, a large part of the economy still belongs to the so-called subsistence sector and the efficacy of such policies in this situation is very much in doubt. Similarly, the strategy also concentrates on import-substitution industrialisation as a means of stimulating economic growth, usually on the grounds (somewhat inconclusive in tropical African countries) that such activities facilitate the achievement of a very high capital-output ratio. A final element in this strategy is the emphasis on export production of agricultural or mineral raw materials to earn the foreign exchange needed to pay for the growing volume of imports.

This development strategy has important implications with regard to dealing with population-related problems. In general, it has a strong tendency to be commodity-oriented rather than people-oriented. A country is adjudged developing if it can show real growth in its gross national product irrespective of how this affects the life chances of various social classes in the population. Moreover, this strategy has tended to encourage "enclave" development with concentration on one or a few choice urban centres and on specific rural areas where export commodities can be produced. Even when, as in recent years, the strategy is directed at increasing food production, its project-oriented style of operation still limits the scope of its effectiveness. More seriously, this strategy has led in many tropical African countries to an increasing preoccupation with the problem of escalating foreign-debts and the resultant high cost of debt-servicing.

Clearly, the policy environment resulting from this development strategy has not been very pre-disposing to people-oriented policies. Indeed, in many countries it has not been too concerned with the health of the population at large beyond the level of rhetoric nor has it encouraged the articulation of a population policy beyond, in a few cases, responding to international or United Nations demands for written documents on this issue. The non-viability of this strategy in the long run is, however, becoming increasingly apparent in the strong trend towards economic stagnation noticeable in most tropical African countries as a result of the widespread neglect of rural areas where the majority of the population are still to be found.

The fragility or impending collapse of economic systems based on this strategy in country after country in tropical Africa is creating conditions more favourable to the adoption of an alternative and more self-reliant development strategy. This new strategy, whose major features are only gradually being articulated, differs from the preceding one in the emphasis

it places on the full mobilisation of population and natural resources in the development process and on the importance it attaches to ensuring the cultural authentication of the modes of societal modernisation adopted (Seers, 1977, p. 3). Such a strategy is more sensitive to the need for policies aimed at enhancing the capacity of individual households to articulate and achieve their preferred family size. At present, few countries in tropical Africa have been engaged in such fundamental changes in their development strategy. The most outstanding example is Tanzania where efforts at a complete restructuring of the rural areas have been pursued vigorously since 1976. The impact of this strategy on the responsiveness of the Tanzanian government to population-related issues is now generally recognised, as is shown by the more comprehensive structure of decision-making from village, community or district level to the central government (Rweyemamu, 1976). It will be a matter of considerable interest to investigate the effects of this new orientation on fertility behaviour and population dynamics in the country as a whole.

5 Conclusion

This investigation of the factors impinging on the intermediate variables of child-spacing has necessitated a close consideration of the social context in which a wide variety of decisions concerning family formation, reproductive behaviour, child-bearing and child-rearing practices take place among different communities in various countries of tropical Africa. It has revealed the wide variation in these practices in traditional society, particularly the variation between communities practising long abstinence and those recognising little or no need for abstinence. In either case, as many of the studies have shown, child-spacing was embedded in and interacted with other aspects of social life and institutions. This appreciation underscores the fact that in the modern period, these issues cannot be successfully dealt with outside the context of broad social policies and institutions.

This fact points to two major conclusions with implications of both a theoretical and a practical value. The first conclusion is that in dealing with population problems we need to know more about the people concerned. The chapters in this volume, for instance, underscore the importance for population studies of making intensive use of the research methodology of the different social sciences. It is perhaps commonplace to assert that population studies are largely concerned with individual and aggregate behaviour patterns and that few behaviour patterns are understandable outside the context of a given social and cultural milieu. As such, the capacity to understand, interpret and influence these patterns will be greatly

enhanced when demographic research investigates and emphasizes the social and cultural context in which the patterns are embedded rather than simply extrapolating from other cultures or historical experience, however similar these may appear.

The second conclusion is even more important because of its practical implications. This is that fertility regulation is not a recent discovery of American organisations. Traditional African societies have always been preoccupied with this matter although their capacity to maintain vigilance has been eroded with recent development.

By providing the necessary historical perspective to this set of social changes, the various studies in this volume make it possible for decision-makers to adopt a more realistic contextual approach to policy formulation. The social norms whose breaching is the cause of the problem are more clearly indicated, as are the profiles of those institutions, practices and value system whose obsolescence is making their breach possible. In such a situation, the need for countervailing action is easier to appreciate. The nature and scope of the required policies when designed against this perception can be expected not only to be more consistent with prevailing social and economic conditions but also to reflect familiar aspects of cultural life such that their apparent authenticity will evoke more positive and appropriate responses from the masses of the people.

Endnotes

[1]See the excellent discussions as to the resource for the persistence of high levels of fertility in Caldwell (1977)

[2]For an excellent review of this situation, see McGreevey and Birdsall (1974).

[3]For a fuller discussion of the implications of this issue for changes in fertility behaviour, see Caldwell (1976).

[4]See United Nations *Economic Bulletin for Africa* (1975).

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