Community Involvement in Reproductive Health
Findings from a Research Project
Hunsur taluk, Mysore district Karnataka

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Rationale

In April 1996, the government of India (GOI) decided to provide a package of reproductive health (RH) services through its existing family welfare program and to introduce decentralized planning approach to decide services' levels based on community's health needs.

These decisions created opportunities for researchers to undertake studies to explore effective ways to implement these changes and to assess their impact on service delivery. Decentralized planning approach attracted the most attention because it was to replace the contraceptive targets and promote community participation in implementing the RCH program. In this approach, health workers were to estimate reproductive health needs of people in their areas and prepare their own plans in consultation with community.

However, several assessments of this approach, undertaken during 1998-2000 had found that the target pressure on workers had reduced but community participation had not increased (Murthy). That may be partly because the CNA manual provided little guidance on how to involve community in decentralized planning and how to sustain their interest in it. Many studies had shown that health staff was not too keen to involve community because they feared their interference; community leaders were also not keen because no fund was devolved to their level with which they could plan.

Foundation for Research in Health Systems (FRHS) decided to undertake a research project to explore ways of involving community- based organizations like village health committees in decentralized planning, under the RCH program. FRHS initiated this project in Hunsur taluk of Mysore district in Karnataka in collaboration with the department of health and family welfare. The project was funded by the Frontiers Group of the Population Council, New York, for a period of two years.
Mysore district is situated in the southern most part of Karnataka, about 200 Km from Bangalore City and has a population of 2.6 millions, divided in 7 blocks. Hunsur is one of

the seven blocks with a population of 250 thousand, 14 primary health centers and 70 sub-centers (64 rural and 6 urban).

The project involved forming health committees at, with representation from all villages who would:

- Be a "bridge" between the community and the government health staff
- Use data to identify local health problems and plan activities accordingly
- Network with other CBOs and NGO to increase community's access to health services

Past experiences of community involvement

In India, there have been three well-known experiences of involving community in government health programs. These were -- Community-Based Distribution (CBD) project, Community Health Volunteer (CHV) scheme, and Link Worker scheme.

In the CBD project, village health committees selected "Sanyojak" (organizers) to function as depot holders for contraceptive methods. They received free supply of contraceptives from the government, which they distributed in villages for a small price. Though they made only a small profit that was their incentive to work as organizers.

GOI introduced the CHV scheme in 1977 in which village leaders selected health-volunteers from within village. Government provided them training, medicine kits and a small monthly honorarium. This scheme was discontinued in 1983 when CHVs started demanding that they be absorbed in the government service

In the Link Worker scheme, government appointed volunteer couples from among villagers and paid them a small honorarium to function as contraceptive depot holders and to promote contraceptive use. This scheme was effective in improving family planning acceptance as long as government paid the honorarium.

Thus, in all three schemes, community involvement meant one volunteer per village, selected either by village leaders or by health officers. They received honorarium from

government and in return they performed certain tasks assigned to them. Many of them considered themselves village level government functionaries.

However, in non-government organizations (NGO) the concept of community involvement has been somewhat different. Though most NGOs also used community volunteers and paid them honorarium, they ensured that:

- Community always selected health volunteers
- Volunteers received a lot of training and encouragement
- Volunteers addressed community's real health needs

This approach to community involvement has been found to be more effective as compared to government's approach.

Project Background

Under the India Population Project-IX, the government of Karnataka had announced formation of Sub-center Health Advisory Committees to support government's health activities. Each committee was to have 8-10 members, with panchayat leader as its president and female health workers as its member secretary. Other members included development functionaries like *mukhya sevika*, local doctors and prominent women from community. State Government directed female health workers to constitute these committees and provided to them Rs.200 / per month to cover the meeting expenses.

But in reality, most workers did not form these committees either because they did not know or did not want to form them. However, the state government was keen to revisit the concept of health committees and therefore agreed to participate in the FRHS's project.

This project was to demonstrate effectiveness of health committees in terms of improving RCH program performance. Therefore, in the project designed, Hunsur was an experimental block and T. Narasipur was a control block. We collected RCH performance data from both the blocks, before and after the project. Differences in the "before and after" measurements would indicate the effectiveness of health committees.

Differences in the experimental and control block would isolate the effect of government's regular health activities on RCH performance.

Both the blocks are similar in size, are equidistant from Mysore City, and are neither too backward nor too developed, having about 14 PHCs and 70 subcenters, but Hunsur is spread out in many small and isolated villages while T. Narsipur is a compact block.

Table 1: Profile of experimental & control blocks

	Experimental Block	**Control Block**
Block Name	Hunsur	T.Narasipur
Population	258,235	286,457
Number of PHC	14	13
Number of Subcentres	70	69
Number of villages	216	132

Both the blocks are well connected to Mysore City by road. Government buses ply on Hunsur-Mysore road rather frequently though 25 percent of its villages are not connected to bus route. Government buses ply less frequently on T. Narasipur-Mysore road, but most of its villages are connected to bus route.

Hunsur is situated on the state highway linking Karnataka to the neighboring state of Kerala. It is close to the Nagarahole National Park, a major tourist attraction. This block also has a sizable proportion of Tibetian population. Five out of its 64 rural sub- centers are tribal- dominated (Jenu Kurubas tribe) who live in small settlements (Haadis) which are distant and isolated.

Description of the Project

Though the concept of health committee was not new, in this project FRHS tried out a new combination of committee structure, formation process and role. To decide on this combination FRHS convened a meeting of health staff from Hunsur block, some women panchayat leaders and some representatives of local CBOs and NGOs. Participants in this meeting recommended that:

- Communities should be involved in nominating members to health committees
- Committees must have both, men and women (preferably 60% women and 40% men) and must have caste representation
- Committees must have some funds for their activities to sustain their interest and to help them raise funds.

FRHS accepted all those recommendations and accordingly decided that:

Committee structure

- Each member would represent a cluster of 50-60 households in a village
- Each committee would have at least equal number of men and women
- Members would select committee president and secretary
- ANM, Anganworker and gram panchayat members would be co-opted members

Formation process

- ANM would use village maps to identify clusters of different caste and community
- From clusters of 50-60 households, ANM would suggest potential candidates for health committee
- Formal and informal leaders would approve the list. If they cannot agree with the proposed list then they would call *gram sabha* to decide on committee membership

Committee Role

- Finding and sharing people's health concerns with government health staff
- Supplementing government's efforts in meeting community's health needs
- Fostering trust and understanding between community and health staff
- Creating demand for new health services

Project Inputs

- FRHS would appoint Community Facilitators (CF) to help form health committees, train committee members in their roles and responsibilities, to monitor their functioning.
- Each committee would receive Rs.2000 (one time payment) for meeting its expenses. FRHS would pay that amount to committee presidents in four installments and in the presence of committee members.
- Committee members would decide how to spend that amount. They would also seek contributions in cash and kind for their activities from *panchayat,* community members, and CBOs.
- FRHS would develop mechanisms to motivate participants and sustain their involvement

Project Implementation Process

To help implement the project, FRHS appointed seven Community Facilitators, five females and two males. One facilitator worked in two PHCs. Their function was to help form health committees, train committee members in their roles and responsibilities, as well as monitor their functioning. All CFs were local residents with grassroots experience in development work.

The project implementation process began with a Baseline survey, followed by committee formation, then their orientation about their roles and responsibilities and finally providing them certain inputs to facilitate their functioning.

1. Baseline Survey

FRHS carried out a household survey to estimate baseline values of 15 indicators, usually used to assess performance of RCH program. In this survey, a random sample of 1000 women of reproductive ages was selected from 30 villages of the experimental and control blocks. This survey showed that in Hunsur block contraceptive acceptance was high but about 1/3rd women reported suffering from contraceptive side effects. About one in five women reported suffering from at least one symptom of RTI but less than

one- third of them had sought treatment. More than half the women had heard about AIDS but did not know how it occurred or how to prevent it.

With respect to mother care, ANC registration was almost universal but less than one-third had received full ANC care. Less than half of them delivered babies either at institutions or at home by ANM (40%). The remaining delivered at home by untrained dai or relatives, without using the disposable delivery kit. About one- fourth women reported complications during delivery and nearly half reported serious postpartum complications such as excess bleeding, lower abdominal pain with fever.

With respect to child-care, child immunization was universal but practice of immediate breast-feeding was low (31%), only one in five babies were weighed at birth and less than half the mother knew about giving ORS to children with diarrhea.

Most committees used these data to decide on the type of activities they should undertake in their villages.

2. Forming of Committees

Though the process of forming health committees was decided well in advance, there were a few problems during implementation. In a few committees health workers and *panchayat* leaders disagreed with some names on the proposed list. Instead of taking that decision to *gram sabhas* where all adult members of village participate, both health worker and Leader argued that they should be the ones deciding committee membership. Health worker, because she had to work with the committee. The leader, because he knew what was good for his people.

Researchers had planned to implement the project in two phases and had randomly selected half the PHCs (7) to form committees in phase 1. Now, they decided to resolve the issue of committee formation through experimentation. Of the 7 PHCs in Phase 1, they assigned 3 PHCs to gram sabha method, 2 PHCs to health worker method and the remaining 2 PHCs to panchayat method. All three methods had to follow the same criteria of each member representing 50- 60 household clusters, giving adequate representation to women and caste/ community groups.

In the ***Gram sabha method***, *gram sabhas* were conducted in public places in villages, typically lasting one to two hours. CFs informed the gram sabha about the project and the role of committees. People then suggested names from different clusters. But this process turned out to be time- consuming taking over 3 months and over 80 scheduled gram sabhas to form 16 committees. Many gram sahbas were often postponed due to wedding, death or some festival in villages. For each sabha, CF had to be present.

In the ***health worker method***, workers listed the potential members and took those lists to formal and informal village leaders for approval. Leaders sometimes suggested changes but usually approved the list. That way, health workers could form nine committees within one month. They could not form two committees because of malaria work. This method made no demand on CF's time.

In the ***panchayat method***, CF met the *panchayat* presidents and explained the project and the role of health committees. Panchayat presidents then agreed to nominate members after consulting others and asked CFs to come back later for lists. This method also took long, about two months to form 11 committees, because panahcyat leaders were busy or not available whenever CFs visited them.

After 6 months of functioning FRHS evaluated the three methods using three criteria – transparency, member profile, and performance (See Appendix 2).

- Gram sabha method was found to be the most transparent while "panchayat leader" method was least.
- The gram sabha method gave more representation to women and SC/ST than the other two methods. Panchayat leaders nominated fewer women than required but gave adequate representation to SC/ST population. Health workers gave proportional representation to all.
- In terms of activity level, committees formed through the gram sabha performed the best while health workers' committees, the least.

This analysis indicated that the gram sahba method was the best, but it was also the least efficient method and difficult to implement within government set- up. Instead

researchers decided to judiciously combine the gram sabha and health worker method for phase-II committees. In this combination method, health workers identified clusters of households using their village maps and listed possible members from each cluster. They then conducted a meeting, inviting panachyat presidents, members, informal leaders, members of SHGs and other CBOs to finalize the list. Using this method, workers took about three months to form 28 committees.

FRHS staff was not involved in committee formation in Phase 2, but they attended the first meeting of all committees to find out whether the selection process had been followed and membership norms were met.

3. Orienting Committee Members

After committees were formed, CFs organized orientation meetings for members to discuss:

- Their roles and responsibilities
- Community Needs Assessment approach under the RCH program
- Problems people faced in getting services at PHC
- Actions they could take to improve health condition in their villages

PHC medical officers, supervisors and health workers also attended these meetings. These meetings usually began with researchers explaining that this was a two-year research project to explore what role health committees could play in meeting community's health needs and what support they would need. They clarified that this was a NGO project and not one of government schemes. The government health staff had agreed to participate in the project as partners along with the committee members and the NGO staff. This explanation went a long way in getting across the concept that this was a three-way partnership.

Next, ANMs informed committee members about Community Needs Assessment and the data they had collected about community's health needs. Members usually expressed satisfaction with ANMs data but in some committees they also expressed doubts that ANMs had really surveyed the entire areas.

Next they discussed problems people faced in getting services at PHC. Some committees discussed issues like whether poor people could afford to give time for committee work and whether they should be paid for their time. But they usually decided not to pay the poor because then everybody would claim to be poor. "If poor want to participate they must find time for it", they said.

The problems they frequently mentioned were PHC doctors not giving free medicines, doctors demanding money from poor people, health staff not keeping to the schedule etc..

These discussions upset the health staff. But most of them explained their constraints in giving free medicines. Some doctors even promised to stock emergency medicines or promised better treatment to the poor. During these discussions CFs emphasized that committee's role was not to find fault with government health staff and antagonize them but to work with them to the extent possible to improve people's access to health services. These interventions ensured that orientation meetings ended cordially though many began belligerently.

4. Providing Project Inputs

The project provided five inputs to facilitate committees' functioning. These were:

1. Community facilitators
2. Rs.2000 start-up grant per committee
3. Identity cards for committee members
4. Periodic meetings of committee presidents with Block/district health officers
5. Publication of a monthly newsletter

Community Facilitators (CF) helped to form committees and motivated them to undertake village level activities. They attended committees' monthly meetings and all their activities. Initially they also suggested health activities that committees could undertake and identified local resources that would be of help to them. For example, they identified State Resource Center (SRC) to help organize health education camps for adolescents. SRC's help improved quality of these camp as well as boosted

committees' confidence in undertaking such activities. CFs also helped committees to keep records of their meetings and accounts of funds they generated. They also facilitated their interactions with health staff.

Start-up grant of Rs.2000 per committee helped to initiate its activities. Committees reported how they spent that amount to FRHS, every month. These reports showed that they had spent that amount judiciously and built on it further through contributions from community members and community based organizations.

Identity cards were given to committee members to legitimize their role and to boost their status in the community. Initially doctors had objected to members getting I-cards, fearing that they might use it to create trouble for them. Therefore, while issuing those cards, CFs emphasized that I-cards did not entail any privileges and that they would have to return them if health staff complaint about their misuse. Though there have been a few instances of members using the I-card to jump the queue at health centers (unsuccessfully), health staff has no major complaints about misuse of I-card. On the other hand, members have reported feeling encouraged working in the community and getting cooperation from health staff even when they went out of Hunsur because of the I-card.

Presidents meetings at block level give them opportunity to share experiences among themselves and with district and state-level health officers. These meetings are organized in a grand style where all invitees sit around a large table. Each one has a nameplate in front and gets 5-7 minutes to address the gathering. This event is meant to make them feel important and proud of what they are doing. Health officers listen to them, make suggestions on what more they can do and promise cooperation. So far, two such meetings have taken place. Each one has been a success in terms of attendance and stimulating interest in the project.

Monthly newsletter, Arogya Midita, informs committees about what programs others are undertaking, highlights innovative programs with photographs. It has published items like a PHC doctor's speech on the World Population Day, research findings dealing with adolescents, hysterectomy, and nutritious recipe by an anaganwadi worker etc. It facilitates cross learning of ideas. For example when it reported about a well-executed

eye-camp by a health committee, five others also organized similar camps. The Newsletter has become a prime mover, motivating committees to organize more and better programs.

The Project Achievement

In June 2002, the project completed two years. We evaluated its achievements using two types of indicators – process and outcome. Process indicators included number of "active" health committees and the types of activities they have undertaken, resources they mobilized, and quality of their interaction with health staff. Outcome indicators included increase in health knowledge and access to RCH care (Box 1).

Box 1: List of Process and outcome indicators

Process Indicators
1. % Committees meeting regularly and active in health work
2. % Committees mobilizing local resources for health activities
3. % Committees maintaining transparency in fund management
4. % Committees maintain cohesive and democratic style of functioning
5. % Committees having respectful and supportive relationship with health staff
Outcome Indicators
1. % Pregnant women received full pre-natal care and safe delivery
2. % Couples using contraception and not suffer from side effects
3. % Women following appropriate child care practices
4. % Couples and adolescents participated in village level health activities
5. % Women know about RTI/ STI and sought treatment in case of problem

Achievements on Process Indicators

The process of committee formation actually began in December 2000 and completed by July 2001. During this period we were able to form 64 committees.

Activity level of committees

By June 2002, 56 committees have remained active while 8 have either stopped or never became active. Of the 56 active committees, half meet regularly and carry out some activity once in two months. In a one-year period, these 56 committees have carried out 172 programs (Table 2).

The key to activating committees was to get them to successfully implement their first planned activity. Therefore, researchers urged them to select activities that they were confident of carrying out. Also, CFs provided any support needed to implement the first activity. For example, in one case the committee had planned a sub-center clinic but that was about to be canceled because the ANM was on leave on that day. CF then met the doctor and requested him to send someone else in her place. The doctor agreed and the clinic was held.

From then on, committees decided dates for meetings, planned subsequent activities, reviewed activities, and maintained proceedings and account books. FRHS staff continued to guide them on types of activities they could undertake, suggesting a strategy of focusing on hitherto neglected areas like adolescent health, family education for newly-wed couples, treatment of RTI/ STI etc. Most committees seemed to have followed that advice.

Committees have so far carried out a total of 172 activities of 18 different types. Those include health awareness camps, health check- up camps, village cleanliness drives and so on (See Table 1 below).

For these activities, committee members choose the topic, either on their own or in consultation with health staff. They employ various participatory methods like games, songs, skits, quiz to create awareness and to entertain participants. For some programs like those for pregnant women and newly- wed couples, committee members visit their homes and invite them in a traditional manner. The most popular of all activities is the one for adolescents. These have received good responses from adolescents, parents and teachers.

Table 2: List of activities carried out by committees as of June 2002

Sr.	Name of activity	No. of activities
1.	Awareness program for adolescent boys and girls	35
2.	Program on ANC care for pregnant women	32
3.	Nutrition awareness for mothers	28
4.	Program on diarrhea control and use of ORS	13
5.	Village cleanliness drive involving school children, health staff & panchayats	13
6.	Health awareness program for newly- wed couples	11
7.	Program on various government health services	09
8.	First –aid training for committee members / volunteers	05
9.	Free eye check – up camp	05
10.	RTI/ STI awareness camp	04
11.	Getting water tank cleaned in the village	04
12.	Gender sensitization**	03
13.	Anti- malaria drive	03
14.	Prevention, Control and treatment of ARI	02
15.	Free health check- up	02
16.	Celebrated World Health day/ Women's day	02
17.	Training committee members to weigh newborn	01
18.	RTI/ STI detection & treatment camp	01
	Total number of programs	172

***: Even though there were only three programs specifically on gender sensitization, gender issues were the focus in all programs on nutrition & pregnancy and those for adolescents and newly- wed couples.*

Since these activities are well- attended committees have gained visibility not only through the Newsletter but also through local newspapers. Health staff has been supportive especially of committees that invite them and honor them. Some staff members are more popular than others. By and large they all feel that, *if they are friendly with committee members then members ease their burden in the field.*

Mobilizing resources and transparency in fund management

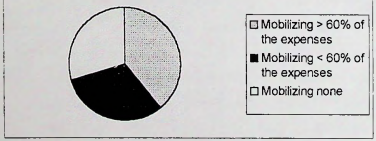
Members themselves meet expenditure of their monthly meetings. They also generate resources by contacting other groups in the community like *gram panchayat*, SHGs, school development committee, milk cooperative society, and religious establishments, usually in kind or in service form (Box 2).

Box 2: How KMH Committee organized adolescent awareness program

When KMH committee decided to organize an adolescent awareness program in a local school, they invited teachers and headmaster of that school to their monthly meeting. Headmaster and teachers were enthusiastic and agreed to allot one whole day for the program. The committee then asked the CF whom o invite as resource persons. The CF suggested SRC in Mysore. The Committee president called SRC and confirmed their availability. Committee members then approached a local religious establishment and requested them to make food arrangements. They obtained a mike system free of cost and hired a hall at a nominal charge because this was for a "social cause". This committee prefers to take help in kind. That way everyone can see how their contribution is being used and there is no room for suspicion.

Another committee organized a free health check- up camp, inviting doctors from the taluk hospital, PHC and rotary club. They collected free drugs worth Rs.7000 from local chemist shops. This half a day camp attracted 340 people.

Figure 1: Mobilizing resources

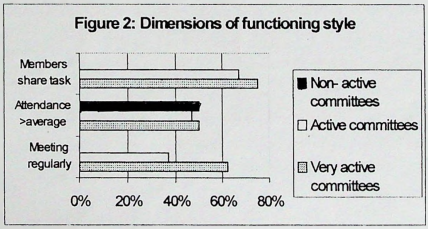


The start-up grant has helped committees raise funds. Of the 64 committees, 25 generated sizable funds, 20 generated some, and 19 none (See Figure 1). So far there has been no instance of misappropriation of funds. Some committees have opened accounts in post office to keep grant amount; some have divided it among themselves and paid interest on that amount to committee.

Out of the 92,500 rupees grant amount from FRHS, committees have spent 69,551 rupees and mobilized a sum of 48,433 rupees to create a saving of 71,382 rupees by the end of the project period.

Democratic and Cohesive Style of Functioning

From the beginning FRHS has emphasized the need for committees to function in a cohesive democratic manner. Indicators used to assess the functioning style were regularity of meetings, attendance at meetings, sharing tasks among members. We found that the project has not done as well on this indicator. We realized that this was a rather difficult criterion to meet because members came from different villages so attendance at any meeting was about 40 percent. Members also belonged to different social and economic classes. Some were from well off families could spend time for village work while others working on daily wages had little time for these activities



We observe a variety of functioning styles. In some committees one person (president or vice presidents) would take all decisions and other follow. In some others, committees would take decisions but actions were left to one or two persons. Five committees broke into smaller units while 3-4 committees always worked jointly so they can do large-scale activities. Some committees fight bitterly during meetings but then organize excellent programs. When we compared the "very active", "active" and "non-active" committees on these three indicators we found that even in "very active" members attendance in meetings was low. They conducting meetings regularly, mobilized resources, shared tasks equitably.

Relation with health staff

FRHS paid much attention to the relation between health committees and health staff realizing that this was the most difficult part of the project. Many committees felt that because they were doing health work, health staff should do their errands like calling members, running around for activities etc. Workers resisted such demands because they had other work and did not want to be seen as working for committees.

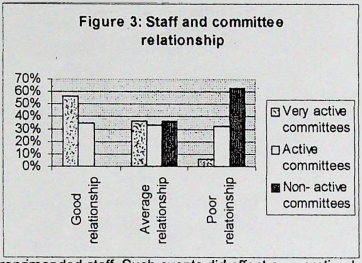


Figure 3: Staff and committee relationship

Though researchers from time to time had emphasized that committees' role was that of a bridge between community and health staff and that they had no power over the staff, some presidents had managed to complain about the staff to district officers who took those complaints seriously and reprimanded staff. Such events did affect cooperation between the two but those were not many because committee members feared that if they complained health staff might not give whatever services they were giving and committees would lose people's support.

Many non-active committees have poor cooperation from the health staff. The health staff has tried to disrupt committee activities by inciting members not to participate. They have behaved rudely in meetings and refused to support committee activities because they fear that if committees become strong they would harass them. The very active committees have managed to develop friendly relationship with health staff. That has been one of the factors determining their success.

Achievements on Outcome Indicators

The evaluation indicated that the project had made progress on certain outcome indicators while on some others there was none. Overall, 42% couples reported knowing

about health committee and its activities and reported that committees were doing good work. Since most committees had organized activities for specific groups like pregnant women, adolescent girls, and newly- wed, it is possible that household that did not have them, had not participated or did not know about those activities.

Table 2: Status on outcome indicators

Sr.	Indicator	Baseline N1=1057	Evaluation N2=1050
1	% Full ANC (3 visits + IFA tablets>=90 + TT)	28	31
2	% Institutional delivery	32	39
3	% Safe deliveries	40	49
4	% Home delivery used DDK	12	18
5	% Women knew all FP method	14	16
6	% Using FP method	72	75
7	% Reported FP side effects	34	25
8	% Women reported at least one RTI symptom	26	26
9	% Sought treatment for RTI (N1=271; N2=277)	31	43
10	% Reported immediate BF	32	34
11	% Babies weighed	21	43
12	% Low birth weight babies (<=2500 grams)	48	33
13	% Children fully immunized	96	92
14	% women knew about giving ORS or fluids during diarrhea	47	23
15	% couples know about committee activities	0	42

Indicators that showed significant increase were institutional and safe deliveries, use of DDK (since DDK was available now but not during the baseline), women seeking treatment for RTI/STI and proportion of babies weighed. Sterilization acceptance increased from 72 to 74 % but use of spacing method perhaps slightly reduced and women reporting FP side effects declined from 34 to 25 percent.

However, we were surprised to find decline in ORS awareness from 47 to 23 percent, even though 1/5th committees had organized ORS programs. In these programs giving ORS was promoted only as a primary level treatment. If diarrhea did not subside they were asked to take the child to the doctor. But a more pertinent reason could be that committees usually organized ORS programs in Anganwadis, where participants were mothers of children attending anganwadi and some school children. Therefore, that message perhaps did not reach as many women as in case of ANC or Adolescent programs. Here committees made special efforts to ensure all pregnant women/ adolescents participated and did not restrict it to convenient groups, as had happened in the case of ORS programs.

Implementation Analysis

The idea of creating health committee at the village level was not new. Most government health programs have them. But they mainly consist of ex-officio members or people with status in community. The Mahila Swasthya Samiti (MSS) i.e. women's health groups is one such example. Health workers selected members to MSS based on who they thought were active. Members attended health education meetings that workers convened and sometimes helped them in Pulse polio campaign or for recruiting family planning cases.

The health committee model tried out in this project was different from MSS in at least three respects: (1) Committee membership was broad -based (2) Members represented people were not there as ex-officio members. (3) Committees were expected to plan and implement certain tasks that would improve access and quality of health services in the community.

But unlike the School Development Committee in Karnataka, they had no financial or administrative power vis-à-vis the health staff. They only received a grant of Rs.2000 for start up activities. Beyond that, they had to raise resources for their activities.

This project had three stakeholders – health staff, community leaders and researchers. What made this project interesting that they all had different expectations and apprehensions about the role of committees.

Health staff wanted committees to undertake activities such as:

- Making DDK available at a nominal cost
- Helping the poor to come to health center
- Motivating people to accept family planning methods
- Changing attitudes of husbands and mothers-in-law towards RTI/STI etc.

The committee model that they liked was the MSS, where health department decided activities and members participated.

Health staff was apprehensive about the new model of health committee. Many of them feared that these health committees, having no health knowledge would try to interfere and harass them. Their fears were kind of confirmed in initial committee meetings when they had to face questions like, 'why do doctors take money?' 'Where are all the medicines going?' 'Why do you come late?'

Therefore, they strongly opposed the project. They wanted the option of not participating in it but the DHO ruled that out because "community participation", he said, "is a government policy". So they decided to tolerate the committees for the 2 project period.

Community leaders on the other hand, wanted health committees to function as watchdog of health system. They wanted them to find out:

- What the ANMs were doing or not doing?
- Which PHC doctor takes money for services?
- Does PHC staff keep to correct timings and behave well with people?

Researchers did not want health committees either to be dominating or be subservient to health staff. They wanted health committees to play a constructive role of a bridge between the community and health functionaries by undertaking activities such as:

- Creating health awareness in the community
- Encouraging women, especially the poor and socially disadvantaged, to seek health care

- Mobilizing local resources to increase access and quality of services
- Educating community about new health challenges such as adolescent health and HIV/AIDS

Success of committees therefore depended on how well they were able to balance these three types of expectations. When we analyzed the functioning of the "very active" and "non-active" committees, we found three features that distinguish them. These were:

- Ability to manage conflicts with health staff.
- Capacity to network and manage vested interests
- Playing the "bridge" role between community and health system

Managing conflicts with health staff

In active committees, usually the relationship between members and health worker was mutually helpful. For example, in one such committee members asked health worker to suggest priority health issues that they could work on. When she told them about many cataract cases in the area, the committee decided to hold an eye camp. Even when there were friction and workers not cooperating, committees managed to carry on their work, taking them along to the extent possible.

In non-functioning committees, relationship between health staff and committee members was usually unfriendly and both were responsible for that. Members continued to find faults with workers (they were not unjustified) but could not get over that hurdle.

Doctors' behavior made the most difference. Some doctors, by talking rudely in first committee meetings, had discouraged committees from functioning. But in active committees, doctors were friendly and encouraged committee work.

Capacity to Network and Manage Vested Interests

Most active committees networked with Continuing Education Centers, Self-help Groups, local NGOs, *Panchayats* to carry out their activities. In their programs for pregnant women, SHG and panchayat members contributed flowers and coconuts to felicitate the pregnant women or volunteers from Continuing Education Centers got adolescents together for programs.

One such committee organized a large eye camp where over 300 persons were examined. In that camp, facilitators of the Continuing Education Centers made the camp arrangements. P*anchayat* president supplied food. Transport Owners' Association made vehicle arrangement to transport 32 cataract patients to hospital and back, free of cost. One NGO met the cost of publicity and Bankers Association made monetary contribution.

While this camp was an example of convergence at the grassroots level, some health staff thought the committee was trying to get political mileage. Some members also felt hurt in the process of credit sharing. This affected their further work. On the other hand committees that have been functioning on a less grand scale, have managed to make steady progress.

Also, committees, where a few members tried to dominate all activities have split in smaller units. In one such committee when a powerful member unilaterally decided to cancel a health camp other members were so upset that were not willing to come together for any more activities. Some other committees broke because powerful members held all activities in their areas, ignoring claims of other areas.

One positive trend so far is that committees have managed to avoid political attention. That may be because they work with small funds and they also take care not to offend political sensitivities in villages. Members belong to different political parties and they guard against any one party getting mileage out of their collective work.

Playing the "Bridge" Role

Initially most health committees wanted to work on controversial issues like medicine supply at PHC, doctors charging money, staff not available during clinic time etc. Addressing them would have meant taking on an adversarial role, which committees were not equipped to do. Fortunately most of them soon realized that this approach would not work and people would blame them if doctors refused to give whatever little treatment they were giving. As a result, they agreed to researchers' suggestion of focusing on preventive and promotive aspects of health, focusing on problems identified from the baseline survey.

These activities helped to channel their energies into doing something in collaboration with health staff. They invited health staff as resource persons and felicitated them in village gatherings. As a result, health staff had fewer complaints about them. In one staff meeting they admitted, "if we don't get scared of their questions and answer them properly, they can be valuable in our work".

Many of the non-active committees had not accepted this role, either because their leaders wanted to control health staff or did not want to collaborate. In one committee the president was not interested in any constructive work and kept talking about corruption at the PHC. In another, the doctor was not interested in cooperating with committees. The doctor often remained absent from duty but resented committee members commenting on it. Committee president was equally rude and unfriendly. The relation between doctor and the community was so hostile, the committee had no chance to play the "bridge" role.

Notwithstanding such negative forces, the final evaluation showed that 88 percent committees have remained active mainly because CFs encouraged them and provided help in their activities. The Newsletter was a source of information and inspiration. Increasingly, committees are receiving support and recognition from local agencies like Swami Vivekananda Youth Movement, State Resource Center and Vedavathi charitable trust because they find committee presence helpful in their work.

The questions that we need to answer now are, how would these committees be sustained and what future direction can they take?

Sustaining committees and their activities

To strengthen and sustain these committees would require sustaining their motivation and building their capacities. In this project, we used public appreciation through Newsletter and Presidents' meetings, as mechanisms to sustain their motivation. Where health staff was non-cooperative but committees were motivated, we tried to link them with other resource organizations. How can committees be sustained beyond the project? This question remains to be answered.

What they really need is a mechanism that would sustain their motivation, empower them vis-à-vis the health system and build their capacity.

The newsletter for example, provides motivation and facilitates exchange of ideas and learning. Linkages with resource institutions and NGOs provide direct inputs into their activities, empowering them vis-à-vis the health system. For example, instead of depending on government doctors they now invite NGO experts for their activities and the project has a list of such resources, willing to offer services on request. An equally important input for their sustenance would be a federation like structure of health committees, supported by local NGO, playing the role as that of the FRHS.

If government recognizes them as a legitimate local institution they can be useful in implementing various programs like eye camp, DOTS treatment for TB, and water & sanitation. However, if these committees are not federated or do not have NGO support, health staff is likely to use them as CHVs, which would surely kill their initiatives. We see this trend already setting in.

Summary and Recommendations

This project rather successfully stimulated community participation in the planning and implementation of health services in Hunsur taluk of Mysore district. During this 2-year project, which ended in June 2002, there were 64 health committees, one in each sub-health center of which 56 were active and eight were dormant.

It took some time for health staff and committee members to understand and accept their respective roles. Health staff resisted the committee idea because they expected committees to create nuisance for them. Committees also took some time to realize that their role was to promote health activities in their areas and not to discipline health staff. They also knew that the project was not providing funds for their activities except a grant of Rs.2000 for start-up activities. Beyond that, they would have to raise funds for their activities and they accepted those conditions for participation in the project.

Health staff on the other hand, had more reservations about the project. They doubted committees' capacity to do anything good except harass them. Initially, some tried to incite committee members not to participate or created hurdles by not cooperating with them. But as more and more committees started undertaking various health awareness activities and organizing health services camps and gained visibility through local newspapers, health staff also changed their view and became active participants in many places.

These committees are not functioning as people' watchdog or pressure groups. Nor are they passively participating in government health programs like the *mahila swsthya samithi*. Committee members represent all clusters of houses in the community. They have a specific role to play that involves deciding which health activities to undertake, plan them, and generate resources to implement them. They get support from friendly doctors, health workers and NGO facilitators. Through their support and by networking with other community-based organizations, they have managed to undertake many health awareness programs and service camps. Through these activities many are acquiring visibility and fame.

Their next challenge would be to retain their visibility without antagonizing the local politicians and health bureaucracy especially for those ambitious committees that want to take-up large-scale programs and generate a lot of funds. Committees can avoid those dangers if they chose to work on less ambitious but effective programs like championing the health of neglected groups like the poor, the old, girl children, and adolescents.

State government officially recognizing health committees, would go a long way in sustaining them beyond the project period. In that case we would like to sound two cautionary notes. If government recognizes them then they might start assuming more powers and start having conflicts with health staff. Or health staff would start treating them like village health workers, ordering them to undertake various tasks. Neither of these possibilities would help committees to collaborate with health staff but plan their activities according to their priorities. To keep playing that role they would continue to need NGO support of the type the FRHS provided. Therefore creating a federation of health committees with administrative support from a NGO, might be the answer to their sustainability and growth.

Appendix 1

Selecting the Best Method for Committee Formation: an embedded experiment

Though the process of forming health committees was decided well in advance, in one or two instances in the beginning of the project, *panchayat* leaders proposed their own lists which did not at all match with ANM's list and both disagreed with some names on each other's list. And instead of taking that decision to *gram sabhas* where all adult members of village participate, both ANM and Leader argued that they should be the ones deciding committee membership. ANM because she had to work with the committee. The leader because he knew what was good for his people.

Researchers therefore decided to resolve this issue through experimentation. Of the 38 sub center they had selected to implement the project in phase-I, they randomly selected 16 where gram sabha would decide members, in 11 sub-centers health worker would decide, and in remaining 11, panchayat leaders would nominate members, by consulting community or otherwise.

In the ***Gram sabha method***, *gram sabhas* were conducted in public places in villages, typically lasting one to two hours. After learning about the project and about committee's role, people suggested names from different clusters. The criteria they used were, ability to read and write, permanent residents of the village, and would regularly attend meetings. They also suggested names of women, whose husbands had no objection to their attending meetings.

But this process was long and laborious. It took over 3 months and over 80 gram sabhas to form 16 committees. Sabhas were often postponed because of wedding, death or some festival in villages and for each sabha, community facilitator had to be present.

In the ***health worker method***, workers listed the potential members and took those lists to formal and informal village leaders for approval. Leaders sometimes suggested changes but usually approved the list. That way, health workers could form nine committees within one month. They could not form two committees because of malaria work. Workers made no demand on community facilitators' time.

In the ***panchayat method***, community Facilitators met the *panchayat* presidents and explained to them the project and the rationale for forming health committees. Panchayat presidents would agree to nominate members after consulting others and ask CFs to come back later for lists. Leaders also took long, about two months to form 11 committees, because they were too busy or not available whenever CFs tried to visit them.

FRHS observed their functioning for about 6 months before selecting the most effective method by comparing them on three criteria – transparency, member profile, and functionality. Our observations indicated that:

- Gram sabha method was most transparent while "panchayat leader" method was least transparent.

In all 16 committees formed through gram sabha method, people knew who was selected and why? Serious disagreements occurred only in three cases. In one, leader agreed to do what the people wanted. In another, people agreed to include two of leader's men in the committee. In the third, the leader managed to appoint all members of his choice by not allowing anyone in the sabha to speak. That committee never met again.

Since health staff workers had consulted informal leaders, all these committees enjoyed local support.

However, pachayat leaders it seems had not consulted any one while nominating members. In these villages, researchers often faced questions like why someone was selected or not selected. They complained about some clusters of houses not represented while some were over represented. Some panchayat members had nominated themselves.

- In terms of members' profile, the gram sabha method gave more representation to women and SC/ST than the other two methods. Panchayat leaders nominated fewer women than required but maintained the share of SC/ST population (Table 4).

Member profile by committee type

Profile Indicator	Committee Formation Method		
	Gram sabha (16 committees)	Health workers (9 committees)	Panchayat leaders (11 committees)
% women members	53 %	52 %	42%
% SC/ ST members	43 %	33 %	34 %

- In terms of activity level, committees formed through the gram sabha method performed the best while health workers' committees, the worst.

Activity Levels by committee type

Activity Level Criteria	Gram-sabha method (18)	Health Worker method (7)	Panchayat leader method (11)
% Committees organized at least 2 programs	72	57	73
% Committees raised resources	61	43	36

Even though this analysis indicated that the gram sahba method was the best, it was the least efficient and impossible to implement without NGO involvement. Therefore FRHS decided to use a judicious mix of the gram sabha and health worker method for phase-II committees. In this method, health workers used village maps to identify clusters of households. They also listed possible members from each cluster and then conducted a meeting in each village where she invited panachyat presidents, members, informal leaders, members of SHGs and other CBOs to finalize the list.

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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.

Question Page

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 material 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 ANTANTIFERTILITY 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 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.

221

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 decided 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 studi 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 ef 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 trial, participants may benefit personally from the antifertility effects of the vaccine 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 the world.

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.

If you volunteer will be interviewed. The procedures of the study are as follows. All women who 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.

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.

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.

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.

W.H.O. has established the 'Special Programme of Research Development & Research Training in Human Reproduction ' in 1972 ~~objective.~~ To promote international research and development effort required by developing countries for the successful implementation of their health strategies in the area of "fertility regulation".

Three Aspects of Research.

First New & Improved Methods of Fertility Regulation.

Why? There is an unmistakeable need for new methods.

1. Present methods unacceptable
2. New methods that are relatively more safe - taking into consideration the health profile of developing country Populations and the ability of health services to help those who may have problems.
3. Methods that can have a more extended availability. Another fact or is that whenever a new method is ~~untouched~~ a new layer of acceptors is added. Given the diversity and complexity of the socio cultural background in developing countries, there is a need and potential demand for new method in developing countries.

Six task forces.

1. Long Acting Systemic Agents of fertility Regulation.
2. Post Ovulatory Methods of fertility regulation
3. Vaccines for fertility regulation
4. Methods for regulation of male fertility.
5. Methods for the National regulation of fertility.
6. Plants for fertility Regulation.

Methods under development :

Once - a - month Injectables, Anti Fertility Vaccines, Vaginal Rings

Prostaglandins

Anti Progestins

Synthesized new long Acting progestins, Biodegradable ~~Implement~~ (Capronor) Progesterone releasing vaginal rings.

The Second Major Aspect :

On improving the performance of currently available methods for fertility regulation which requires a) ~~epidemiological~~ research on safety and efficacy of the method in the set up of developing countries and b) to understand the behavioural & social determinants of fertility Regulation.

"W.H.O. is in a unique position to fulfil this task of generating and providing information on the safety and efficacy of methods ~~in the health field~~, its impartiality its capability to undertake global and inter regional studies plus its traditional strengths in the area of epidemiological studies ".

So two Task forces of WHO Special Programme are involved and many research projects have been conducted on OC's, IUDS, injectable contraceptives etc. Some of the Indian Projects are:

1. Comparative study of the biochemical effects of combined estrogen/progestogen OCs containing less than 50 ug estrogen.
2. Vitamin supplements to women using OCs.
3. Interactions between OCs and Malaria.
4. Case control study on the relative risk of ectopic pregnancy and pelvic inflamatory disease associated with IUD use.
5. Phase III comparative evaluation of the contraceptive effectiveness of NET-EN given every two or three months.
6. Return of fertility following discontinuation of ICs.
7. Psychosomatic sequelae of femal sterilization.
8. Studies on sterilisation and abortion.

PSYCHOSOCIAL RESEARCH

INDIAN PROJECTS

Psycho social factors affecting continuation discontinuation of IUDS & Pills. Acceptability of Male fertility regulating methods in India (field study). Patterns and perceptions of menstrual bleeding . Acceptability of methods in a free-choice situation.

HEALTH SYSTEMS RESEARCH

INDIAN PROJECTS

Participation of rural practitioners in the delivery of services.

Introduction of NET-EN in the national family planning programme.

Use of services for the termination of pregnancies

Role of health delivery services on acceptance of family planning.

OBJECTIVE

The health system research aims at improving the effective utilisation of presently available methods of fertility regulation.

This involves studying the use of non physician personnel in the delivery of F.P. services. Studies have been conducted on

family formation patterns and health, & large scale introductory field trials of injectable contraceptives involving more than 25,000 subjects.

III ASPECT

Promotion of national self reliance for research in Family Planning.

Developing country scientists play a major role in Task Force activities. Five Indian scientists presently as members of steering committees for Research & Development. Indian scientists have carried out 113 task force projects in the past 14 years - 57% of steering committee members came from developing countries.

A global network coordinated clinical trials using common protocols & carefully standardized diagnostic techniques and laboratory methods. The number of collaborating centres for Research is presently 25 - 19 of which are in developing countries. Three centres are in India. The Institute of Research in Reproduction in Bombay, The Deptt. of Obstetrics and Gynaecology of the Post graduate Institute of Medical Education & Research in Chandigarh and the All India Institute of Medical Sciences, New Delhi.

Apart from CCRS more than 120 non designated centres have participated in the programme's multi centred clinical trials. The programme has so far conducted more than 180 multi-centred clinical trials involving approximately 1,85,000 subjects in 150 centres in 53 countries.

Finally collaboration of the programme with the ICMR has been outstanding.

Depot - Medroxyprogesterone acetate (DMPA) and Cancer.

Memorandum from a WHO Meeting

(Meeting convened in 1985 to review both published and unpublished epidemiological data from human studies only, and data available since 1981 meeting were thus examined in depth).

One subject under review by the WHO's special Programme of Research, Development & Research Training in Human Reproduction is whether the use of steriod contraceptive alters the risk of neoplasia. In 1977 the programme convened a Scientific Group which concluded that there was inadequate data to assess the effect of Progestogens particularly any effect on the "risk of Neoplasia". This conclusion and the finding of tumours in animal toocicology studies of progestogen only contraceptives emphasised the need for research in this area. WHO's Special Programme embarked upon the planning of a multinational collaborative case control study to examine the relationship between steriod contraceptives and the risk of selected Neoplasms.

In 1981 the programme reviewed all data available on injectable contraceptives.

At this meeting it was concluded that although DMPA users have, thus far demonstrated no increase in the risk of developing any type of cancer,, because of the lack of well controlled trials and the long latency period of some cancers, it is important to continue to monitor the possible development of neoplasms among women who have used DMPA".

The preliminary results of the WHO initiated collaborative study concerning breast and cervical cancers have been published.

But results of other epidemiological studies on DMPA and cancers of the breast and cervix initiated in New Zealand, Costa Rica and Jamaica are not yet available.

The W O collaborative study on Neoplasia & Steriod contraceptives was carried out in 14 collaborating centres in 11 countries. The risk of cancer in DMPA users was examined using data collected in three centres in Thailand, one centre in Kenya and one centre in Mexico which were the centres where DMPA use was appreciable.

ENDOMETRIAL CANCER

Experimental data in rhesus monkeys have raised the possibility that DMPA may increase the risk of endometrial cancer. Although neither of the two record linkage-epidemiological studies suggest an adverse effect of DMPA with respect to endometrial cancer no meaningful conclusion on this issue can be drawn from the studies primarily because of the small numbers involved.

On the other hand several studies have demonstrated a negative association between use of combined oral contraceptives and endometrial cancer and this protective effect is thought to be due to progestogen component of oral contraceptives.

RESULTS FROM WHO STUDY

Complete data on 92 cases of endometrial cancer.
A total of 316 controls were matched to individual cases on e exact year of birth year, of entry into the study and centre. Only one of the cases and 30 of 316 control had ever used

DMPA giving an estimated relative risk in women who had ever used DMPA to 0.3. However this study has accumulated insufficient data to assess the risk of endometrial cancer in long term users or the risk long after initial exposure.

OVARIAN CANCER

A total of 105 cases of ovarian cancer, from among the 6206 control - 637 were matched seven of the 105 cases and 74 of the 637 controls had been exposed to DMPA. The relative risk in women who had ever used DMPA was estimated to be 0.7 %.

LIVER CANCER

57 cases of primary liver cancer. Two hundred and ninety controls were matched. Seven of the 57 cases and 34 of the 290 controls had used DMPA giving a relative risk in women who had ever used DMPA as 1.0 %. Experimental data on beagle bitches have raised the possibility that injectable progestogens such as DMPA as may increase the risk of breast cancer. Although the relevance of these findings to women in controversial they underline the need to evaluate breast cancer risk in epidemiological studies. In one study among 19,275 women who received DMPA no breast abnormalities of any type were diagnised.

WHO STUDY

Data available for 427 cases and 751 controls of whom 39 cases and 557 controls had ever used DMPA. The relative risk in women who had ever used DMPA was estimated to be 1.0 %.

CERVICAL CANCER

For cervical cancer the adjusted relative risk in women who had ever used DMPA is 1.2 %.

To date in the WHO study only a small number of women who have used DMPA for prolonged periods or have had a long interval since first use. Information on cancer risk in these women can only be gained by continuing the present study or by initiating additional studies focused on these specific topics. Since any effect of DMPA on cancer incidence might not appear until after a delay of many years further studies will need to be carried out in the future.

One crucial bias, is cases and controls referred from fertility or family planning clinics were excluded unless the visit leading to hospital referral was the woman's first visit to the fertility or family planning clinic. This decision was made to prevent over representation in the study of cases that had used steriod contraceptives. (why ?)

A CRITIQUE ON W.H.O - AND CONTRACEPTION RESEARCH

Large sums are being pumped into research in human reproduction. "With particulars reference to the needs of developing countries".

What is the net result ? All kinds of wonder drugs - Hormonal drugs - being injected into the body in different ways - be it injectable contraceptives, implants, vaginal rings, pellets etc. What is objectionable is the bombardment of hormonal contraceptives on women, mostly poor, powerless and illiterate. This has generated a movement aimed at resisting it. No doubt the W.H.O. which has given these trials the status of "scientific studies" is embarrassed by some of the criticisms. And an impact assessment programme was instituted in June 1989 to suggest ways and means of making the research programme more acceptable to women .... visually to be .

One crucial assumption of the W.H.O. team is that their ethical guidelines with regard to informed consent of those who participate in the clinical testing are followed correctly. But there is a lot of scepticism about this. In some of the larger multi centred trials, even a cursory visit to the programme centre would clearly indicate that the circumstances in which these products are tested there is neither the time nor the inclination to give unbaiased information to women. According to Vimal Balasubramanyam in some hospitals women seeking abortion were being made to accept the injectable as a pre condition.

Moreover voluntary bodies like the campaign against long-Actig Hormonal contraceptives have also criticised the new guidelines on another score while the guidelines now seek a reduction in intensity and kinds of animal studies which constitutes the first stage of drug testing for safety & efficacy they have stressed "large scale surveillance studies on women once the drug has been registered and is in widespread use . This is completely impractical in developing countries". Women's and health groups have documented in detail the complete disregarding of medical ethics in various centres which were part of the W.H.O. sponsored multicentre clinical trials of NET-EN an injectable contraceptive. Perhaps because of all these criticims the clinical trials which are at present conducted are done on a much smaller scale. According to Dr. Subodh Das of Safdarjung Hospital, who is at present one of the investigators in the phase II clinical trial of a Birth Control vaccine admitted that the trials are being conducted on a smaller scale to enable a better surveillance.

Of course it is absolutely mandatory that phase IV trials are conducted on a larger ~~scale~~ scale -

The Role of W.H.O. "With the withdrawal of private industry from major investment in this field, the task of developing new approaches to fertility regulation is being increasingly entrusted to international research programmes and organisations and W.H.O. has led the coordination of these research efforts".

The Forty first World Health Assembly (May 1988) approved the Co-sponsorship of the Special programme of Research Development and Research Training in Human Reproduction by UNDP, UNFPA and the WORLD BANK. During 1988-89-80 countries including 54 Developing Countries participated in the programme's activities; 300 research projects in progress at 240 centres including 140 institutions in developing countries.

AREAS OF RESEARCH

Contraceptive Safety :

1979-WHO collaborative study of Neoplasia & Steroid Contraceptive initiated in 13 centres in developed and developing countries.

Results of the study

1. Protective effect of oral contraceptives against both endometrial & ovarian Cancer.

Developing Countries

Oral contraceptive did not appear to increase the risk of liver cancer.

No increase in the risk of breast cancer.

The possible link between the use of long acting injectable progestogen (DMPA) and cancer of the reproductive organs are currently being analysed.

In collaboration with Family Health International & the Population Council, W.H.O conducting post-marketing surveillance in 8 countires of a recently introduced long acting subdermal implant. About 8,000 users and the same number of controls will be observed for five years.

W.H.O. started studieson thepossible relations between contraception and human ~~immuno~~ deficiency Virus (HIV) infection.

SOCIAL SCIENCE RESEARCH

70 ~~So~~ projects - designed to provide information on the ways in which individuals or couples reach decision on family size, child spacing breast feeding, contraceptive use, sexual behaviour - role of men in reproductive decision making.

Can we get more details on this

CONTRACEPTIVE CHOICE

Research in preparation for the introduction of two new injectables and a vaginal ring has now been completed. other new subjects of research are : -

2 to 3 monthly injectable progestogen with 12 to 15 times less Steroid than those currently available. An improved anti-progestin - Prostaglandin combination for post-ovulatory use, a frameless copper releasing I.U.D. Anti-fertility ~~vaxine~~ - a long acting hormonal contraceptive for men.

ANTI FERTILITY VACCINE

The programme has always recognised that a Safe, effective and reversible birth would be a greatly needed addition to the currently available fertility regulating methods and an attractive proposition to family planning ~~progress~~, a view that is shared by the Indian Government which puts birth control Vaccines as a top priority area for National Research.

The programme has now developed.- An almost totally Synthetic birth control Vaccine. (Synthetic, peptide corresponding to the C-terminal 109 - 145 amino acid region of the B-subunit of HCG conjugated to Diphtheria toxoid as the carrier and administered with ~~Murenay~~ dipeptide adjuvant in a squalene - arlacel vehicle). After a full decade of indepth study on its efficacy and safety in monkeys, this new vaccine has been brought to the stage of clinical testing, after permission from both the Australian Drug Regulatory Authorities and the Food & Drug Administration of the United States.

Phase I Clinical trials have started with this vaccine in one centre in Australia on 30 women. The programme has supported the early animal experimentation with vaccine development in the All India Institute of Medical Sciences. It is most gratifying to see the progress that Indian Scientists have made in this field Dr. G. Talwar, is also since 1985 a member of the programme 's Task Force on Vaccines for Fertility Regulation ".

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May 24 1993

May 22, 1993 - Draft

SEXUAL AND REPRODUCTIVE RIGHTS IN FEMINIST PERSPECTIVE

Chapter Outline for
Population Re-Considered: Health, Empowerment, and Rights,
ed. Lincoln Chen, Adrienne Germaine, and Gita Sen

Sonia Correa and Rosalind Petchesky

Abstract: While the term "reproductive rights" is of recent (and probably North American) derivation, the ideas about entitlement it represents and its philosophical underpinnings have a much older and broader history. This chapter will provide a very brief summary of that history to ground the contemporary development of the concept of reproductive rights, but will concentrate on the current international context. That context is one in which women's groups are actively seeking recognition of women's rights as fundamental yet specific components of human rights, and in which an increasing concern with economic and social rights challenges the "individualist" connotations of rights discourse generally. The chapter aims to achieve three main tasks: (1) to situate an understanding of "reproductive rights" within a socially grounded reconception of both reproduction and rights; (2) to develop a feminist ethical framework for defending women's agency and (moral/legal) authority as reproductive decision-makers (bearers of rights)--that is, a gender analysis of reproductive rights; and (3) to suggest some consequences of this analytical framework for programs and policies dealing with population and health. (Cross-references: Chapters on The Rise of the Women's Health Movement, Empowerment, A Gender Perspective on Population Policy, Rethinking the Concept of Reproductive Health, and Population and Human Rights.)

I. Introduction

A. Definitions of Reproductive Rights Growing Out of National and International Women's Movements in 1970s and 1980s
(cross-reference: Chapter on The Rise of the Women's Health Movement)

B. Historical Precedents (brief overview)

1. Early modern European ideas about "self-ownership" and women's rights

2. 19th and early 20th century feminist birth control movements

II. Framework of Analysis

A. Rethinking the Problem of "Rights"

1. R. R. as part of indigenous human rights movements and worldwide struggles for social justice, democratization and citizenship

2. Ethical principles and their meanings as historically constructed and evolving; "rights," "entitlements," and "choices"

3. Traditional notions of reciprocal rights and duties within authoritarian or hierarchical social formations (Dumont); problem of conflating rights and duties in social democracies

4. Western origins and the Lockean paradigm: individualism, formalism, and the competitive market model (rights as the product of "choosing" and bargaining)

5. Distinction between classical liberal (contractual) and feminist, socially contextualized approaches to agency (the problem of "autonomy")

   a. bearers of rights as social beings with gender/class/cultural identities

   b. from contract to social being and intersectionality (black feminist and critical race theory; P. Williams and K. Crenshaw)

6. Current efforts to redefine rights as relational, social and substantive (integration of rights and needs); relevance to core ethical principles: gender equality, diversity, personhood and bodily integrity

B. Public-Private Boundaries

1. Public v. private domains of action and responsibility; ambiguity of distinction; applications to production and reproduction as both personal and social

2. Feminist challenges to the "public"-"private distinction: R. R. and the reordering of gender divisions of labor, power and resources

C. The Limits of "Reproduction"

1. Dangers of reifying women's bodies and traditional roles: "difference" v. "equality"

2. Toward an expanded vision of reproduction: integration on continuum with sexuality, health and wellness, child care, and production

D. Rethinking the Dichotomy between "Individual Rights" and "Public Good"

1. Reproductive rights as social and individual at the same time; inevitability of a residual tension, even in a feminist utopia (example: sex selection) (R. Petchesky, Abortion and Woman's Choice): necessity of anchoring individual rights in social and political rights

2. Intersections that refute dichotomization--i.e., "individuals" don't make "choices" in a vacuum; social mediations that construct "the personal" (economic conditions, cultural norms, family dynamics, communal power relations, etc.)

3. The social rights approach (between individual rights and public necessity); as enabling (pre)-conditions for individuals to exercise agency/make decisions in socially responsive (cf. responsible) ways (language from "Women's Declaration" and alternative "Conceptual Framework" for ICPD)

   a. material (example: child care, transportation as preconditions for clinic visits)

   b. political: the relevance of empowerment and democratization (cross-reference chap. on "Empowerment"); the social and historical construction of "the public interest" or "public good": who decides? in what context?

   c. problems with the language of "freely and responsibly" in international population instruments: (1) "corresponding duties" don't belong to rights-bearers; (2) need for political empowerment to feel "responsible"; and (3) responsible to whom? who is responsible? men? (apply to specifics of reproduction)

4. Problematizing definitions of "choice" and "coercion" through a social model of choice (see C-2, above)

   a. critique of the market model of "choice"; application to "quality of care" framework

b. examples of de jure and de facto coercion, as contrasted with agentic decision-making within constraints ("constrained choices") (case study: sterilization in Brazil)

c. the issue of incentives: distinguishing between coercive and supportive (enabling) preconditions of responsible reproductive decisions

d. why coercion is never appropriate in reproductive matters, from a public health or a rights standpoint (case study: prosecution of pregnant drug users)

III. Ethical Principles Grounding the Concept and Some Recent Applications

A. Equality (v. Liberty)

1. Between genders

a. Problems of gender-neutral language in international instruments (e.g., CEDAW - possibilities of misinterpretation around issues like spousal consent); tensions with particularity of women's situation in reproduction. Q: What are the justifications and costs of privileging women (i.e., do/should men have repro. rights/duties?

b. Implications for respective responsibilities of women and men, and for (erasing) differences in power; links between R. R. and gender justice. Cross reference: Chapter on Rethinking the Concept of Reproductive Health

c. Feminist dilemmas: balancing the need for increased male responsibility (for safer sex, contraception, child care) and the need for women's control (over contraceptive methods, their own bodies, the fate of children)

2. Among women

a. Problems of universalizing language that ignores differences (of class, nationality, race/ethnicity, religion, sexual orientation, generation, region)

b. Problems of unequal power and resources that exacerbate differences; links between R. R. and social justice, empowerment, development,

and strategies for national and international economic redistribution

B. Diversity

1. Attention to particular issues and priorities of different groups of women (by race/ethnicity, class, religion, region, sexual orientation, etc.)

2. Tensions between universal principles and principle of respect for local cultures, meanings and values (counter-examples: genetic mutilation; meanings of menstrual blood, vaginal bleeding)

3. Women's intersectional location--as members of communities, cultures, kin groups, sexual identities, mothers, etc.; challenges to R. R. discourse and prospects for a pluralistic, multi-cultural concept of R. R.

C. Personhood (agency)

1. Applying a feminist concept of "autonomy" to r. r.: subjectivity as relational and contextual in decision-making about reproduction and sexuality

2. Treating women as ends, not merely means; subjects, not merely objects - adapting the Kantian imperative (counter-examples: policies and programs that prioritize demographic targets)

3. Trusting women's judgments and experience (counter-examples: clinical practices regarding side effects of hormonal & long-acting contraceptives)

D. Bodily Integrity

1. 1975 International Women's Year Declaration and other international standards; analogous applications (prisoners, torture, medical ethics, etc.)

2. Specific relevance to gender relations and women's location as reproducers in the gender division of labor; women's bodies as reproductive vessels (counter-examples: impregnation as a tool of patriarchal, national, or ethnic identity - e.g., Bosnia; fertility control as exclusive focus of population reduction strategies)

3. Bodily integrity and sexuality; specific relevance to women's social and cultural location as sexual signifiers, incidence of male sexual violence, and power relations between women and men (case study: the cycle of sexual subordination -

STD risk - HIV risk - female morbidity/mortality)

4. Bodily integrity and having or not having children: Is there a right to procreate? (case study: China's family planning policy)

5. The right to sexual pleasure and expression: Are there justifiable limits? How can limits be compatible with principles of gender equality, social justice, diversity, personhood and bodily integrity?

E. Applications of Principles in Recent International Women's Documents: "Women's Declaration" and Comments on Conceptual Framework for ICPD; Women's Statement for International Conference on Human Rights

1. Cross-reference chaps. on Human Rights, Conventions and Treaties and Implementation

2. Emphasize large gap between formal language, adoption of rhetoric (even feminist) and practical enforcement measures by intergovernmental organizations, states and private parties

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WH-6

Section III, Chapter 14

Draft: May ~~23~~ 27, 1993

Reproductive Health: MCH and Primary Health Care

By Iain W. Aitken

for

Population Reconsidered: Health, Empowerment and Rights.
Edited by Gita Sen, Adrienne Germaine and Lincoln Chen.

Assumption: The basic case for improved, integrated reproductive health care services has been made in Adrienne, Sia, and Hnin Hnin's chapter.

Goal of this chapter:

To develop the concept of a basic reproductive health services package. This will vary in content and form according to local needs and health services history. It is composed of technologies, personnel and organization. Its effectiveness in meeting reproductive health needs depends upon vertical integration between levels of service/facility; its efficiency in meeting those needs depends upon horizontal integration/coordination between different sub-programs.

Context: District health services.

Chapter outline

I INTRODUCTION

Reiterate the need for an improved, integrated reproductive health service, and outline the goal and approach of the chapter.

II THE NEED FOR REPRODUCTIVE HEALTH SERVICES

Review the nature and extent of reproductive health problems, pointing out the size of the problems where data exist and the significance of the lack of good information about certain kinds of problems. This section would elaborate the situation more than in the Germaine chapter to emphasize their importance, their interconnectedness and long term implications in the life cycle.

Health problems to be addressed:

- Maternal morbidity and mortality
- Reproductive tract infections(Incl.STDs and AIDS)
- Contraception and abortion services
- Infertility
- Anemia and protein-calorie under nutrition
- Rape management
- Cancers of the cervix and breast

(Gender-related violence and mental health problems are both important, but will not be included in this context of reproductive and sexual health.)

III PRESENT HEALTH SERVICES AND APPROACHES.

Our health services usually operate in a situation where "health" is not usually expressed as a priority. When people require help, they usually have options to choose from. People will only choose options that they have some faith in, understand and can rely on.

This section will review the history and current situation of the main reproductive and sexual health service programs in different parts of the world. In particular it will examine the motive and methods of previous efforts to develop community level services and

those to integrate different health services and their results. These have clearly been productive in some situations, but in many situations, community level proggrams have failed, and the integration of activities already suffering from lack of resources or management has led to a worse situation.

Present health services problems:

a) **Problems of priorities:**

- Competition for resources in which child health and/or family planning usually take precedence
- Lack of awareness of RTIs, infertility and anemia
- Almost total lack of services for women's RTIs and other gynecological problems
- Absence of a life-cycle approach to repro. health
- Lack of clear goals and objectives for reproductive health services.

b) **Problems of Organisation**

- Lack of vertical integration within programs
- Lack of horizontal integration, fragmentation of different services

c) **Problems of resorces**

- Lack of resources
- Human resources spread to thin or given too many (conflicting) responsibilities.

IV VERTICAL INTEGRATION: TECHNOLOGIES, PERSONNEL AND LEVELS OF CARE

This section is concerned with the trade-offs of improving access with safety and accountability, and how to maximize each of them within different levels of care.

Most district health service systems consist of a "typical" three level type of health service structure, vis:

- community level

- health centre level (nurses & auxiliaries)
- district hospital

For each of the main health problem areas, identify:

(a) the technologies that are effective in preventing or "treating" the main problems already identified,

(b) the levels of skills and facilities that are required,

(c) the vertical linkages - support/supervision, referrals - required to achieve both enhanced access and choice as well as safety/accountability.

V THE ORGANIZATION OF CARE

This section now addresses the issues of horizontal integration more specifically.

NB, Distinguish:

a) Integration: bringing diverse, separate functions into a new unitary structure.

   Coordination: smooth relationships between separate activities.

b) Administrative v. service integration.

c) Integration at role level, agency level, sectoral level, policy-planning level.

1. Community level

Issues:

- Target groups: men and/or women.

- Control. The selection of the community worker and her/his relationship to women's groups or other concerned community groups and to professional supervisors.

- Concentration versus dispersion of knowledge. Is the community worker the "possessor" of special knowledge or the technical expert in knowledge that is shared among the women in the community?

NB the importance of empowerment of women in the community as opposed to disempowerment consequent upon "professionalisation" of community members.

• Division of labor v. integration. Separation of roles of TBA, CBDC, CHW, store-keeper, etc. v. multipurpose worker. Number of households it is possible to effectively cover. (Importance of time constraints for volunteer activities, cultural precedents.)

• Coordination/integration of activities of several community-level workers.

Empirical evidence from programs

2. **Integration of services at health centre level**

General: Evidence for benefits for one program by association or integration with another. e.g. integration of FP into MCH or MCH into FP.

Issues:

• Method of integration: role, intra-agency or inter-agency integration.

• Social reputation of primary service.

• Operational factors

- Number and range of services and the organization of work time,
  - availability for acute care
  - availability for maternity care
  - preventive care activities, e.g. prenatal & child health clinics
  - outreach activities,
  - supervision activities (TBAs, CBDCs, CHWs, etc.)
  - continuing education
- Requirements for patient confidentiality
- Numbers/types of health workers available per population served,
- Specific needs for service overlap at different service entry points.

- Efficiency issues in separated or integrated clinics.

- Community access/convenience issues in separated or integrated clinics

3. **Management of services at district level**

The importance of management in a situation where both vertical and horizontal integration and/or coordination of services is essential.

- setting of goals and targets for the district and its health units,
- information systems,
- training, continuing education and supervision,
- personnel management,
- supplies.
- community management/support bodies.

VI CONCLUSION

- Importance of focus on the health of persons and not just the treatment of diseases, on a life cycle approach and not just management of isolated episodes.
- Integration/coordination of services highly desirable.
- Integration only works when individual programs are adequately planned, funded and managed.
- Integration can and does work.
- Serious concern for these issues implies application of more resources than presently available.

~~WH-20~~

WH-6.

Chen, Zeitlin, Govindaraj Outline draft May 7, 1993

Financing Reproductive Health Services

Outline

I Introduction

- Brief discussion of reproductive health services (cross-reference chapters by Germain, Nowrojee, Pyne and by Aiken).

- Universal call for additional resources for family planning and reproductive health. Current recommendations are based almost exclusively on cost per unit of actual and desired use of family planning.
  (TABLE 1: CURRENT ESTIMATES OF RESOURCE REQUIREMENTS)

- The current estimates of resource requirements for family planning and reproductive health services have 2 major problems:
  (1) they are incomplete because they have not explicitly integrated resources for other reproductive health services in addition to family planning services;
  (2) they are of questionable validity because estimates are based on crude projections of current costs into the future. Calculations of current costs vary greatly depending on attention given to individual components such as contraceptive mix, research needs and, especially, service delivery.

- The focus has been primarily on HOW MUCH and not on HOW reproductive health programs should be financed. The question of how services are financed will determine whether allocated resources are used to provide effective, efficient and equitable services which are sustainable over time.

II Defining Reproductive Health Services for an Analysis of Financing

- Classical focus has been on contraceptive and abortion services. Use is measured by contraceptive prevalence and resources required for these services are calculated based on "unmet need" and on demographic projections. (TABLE 2: "UNMET NEED" FROM DHS SURVEYS and COST PROJECTIONS).

- Neglected are costs of broader reproductive health services. Reproductive health services can be variously defined to include: family planning + safe motherhood + STD/RTIs (men and women) + nutrition + child health (cross-reference

chapter by G,N,H and by I.Aiken).
(TABLE/FIGURE 3: BURDEN OF DISEASE WORLDWIDE AND BY REGION)

III How Much is Currently Being Spent of Family Planning and Reproductive Health Services ?

- This section will apply a broadened definition of reproductive health services to an analysis of current expenditures given available data. A comparison will be made between the narrow definition based on family planning services and one in which reproductive health services are included.

- Estimating total current expenditures on reproductive health services hindered by:
  • joint costs/products: difficulty of separating expenditures allocated to reproductive health in government programs from other health services (family planning, maternal and reproductive health services expenditures in MCH programs; reproductive health services from total health expenditures; vertical programs versus integrated programs)
  • Reproductive health needs are addressed by a variety of government programs and service providers. Although some data exists on government programs, there is an absence of data on private sector and other providers of reproductive health services.

- Present available data on government provision and describe patterns:
  national estimates of family planning expenditures
  (TABLE 4: GOVERNMENT BUDGETS ON FAMILY PLANNING AS % OF HEALTH, FAMILY PLANNING AS % OF TOTAL EXPENDITURE, MCH AS % OF HEALTH, STD PROGRAMS)

- Present data on national and international financing and describe patterns and trends. Government financing and international foreign assistance in population/health.
  (TABLE 5: FINANCING OF FAMILY PLANNING: % INTERNATIONAL, PRIVATE, GVT).
  (TABLE 6: ODA: FAMILY PLANNING, MCH, STD PROGRAMS AND TOTAL HEALTH).

- Explore question of integrated versus vertical programs in a sample of countries.

IV Can Resource Requirement Projections for FP and Reproductive Health Be Improved ?

- Evaluate validity of cost projections based on current point estimates. Look at evolution of average costs in countries with time-series data on expenditures on family planning services.

V How Should Reproductive Health Services Be Financed?

This section will present a conceptual framework for addressing the question of how reproductive health services should be financed. Micro-level and country-level studies which have analyzed financing systems and factors influencing the effectiveness, efficiency and equity of service delivery will be reviewed (cross-reference Aikin chapter). Focus on issues of:

- Efficiency/effectiveness
  - allocation of resources to reproductive health within the health system, efficiency of financing and administrative procedures;
  - composition and organization of reproductive health services: integration of services, operational links with PHC, public/private mix;
- Equity
  - local control and participation.
  - differential control of resources and access to care between men and women.
- Quality
  - Economic incentives in provider systems to promote quality of services. Relationship between quality of services and demand for services.

VI Future Needs

- Data on expenditures for reproductive health services needed for more accurate projections of resource requirements, analysis of use and evolution of resources allocated to reproductive health.

- Research on economics of reproductive health: factors which determine demand for reproductive health services (service as well as community, household and individual characteristics).

- Research on financing systems and effectiveness, equity and quality of service provision (organization and management, integration of services and programs, operational linkages with PHC).

- Promote spacing & timing. Spacing and number of births being crucial to the reproductive health of mothers as well as to child survival.
- Do follow up and monitoring of people using contraception; and referral if necessary.
- Achieve 100% registration in the first trimester, to ensure proper antenatal, natal, and postnatal care.
- Enable trainee ANMs & Dais to perform a sufficient number of normal deliveries in the field.
- Delay ligation of umbilical cord till it stops pulsating.
- Take care of the newborn.
- Ensure that breast feeds start within the first hour after birth, promote feeding of colustrum.
- Promote **exclusive breast feeding till the baby is 6 months old**.
- Develop leadership qualities & elicit community participation.
- Perform the specific functions that are expected of them at a sub-center.
- Perform "Visual Inspection" for down-staging of Cancer Cervix.
- Carry out examination for Breast & Oral Cancers.

11. A second village level functionary to take care of the newborn, in addition to the birth attendant during delivery, should be initiated. Aanganwadi teachers or other health workers who reside in the village may be selected for this and trained and equipped for neo-natal care as well as the care of the child up to 2 years of age. They can also assist in other health programs, Health Education, Adolescent health; and facilitate women's self-help groups. Alternately, the Gram Panchayat could appoint and support a woman of the village for this purpose as a health functionary.

Genderisation of Family Planning

11. **Gender sensitive indicators** as given above, should be incorporated in the programme.

12. Male Health Workers should be trained to tackle Gender issues and **ensure male participation** through individual counseling as well as community education programmes
13. The Village Health Guide Scheme may be reintroduced with a new name, workers be given a higher honorarium and the scheme be controlled by the panchayat system. Women volunteers should be given preference and encouraged to join.

14. The services of Lady Medical Officers should be made available, if necessary with support from the private sector. Especially in Northern districts two MO in the PHCs, one at least a Lady MO, , Should be posted.
15. The working hours of staff at the periphery may be changed to suit community needs.

Other facilities & services:

16. Personal hygiene especially during menstrual period should be promoted by the distribution of subsidised mentstrual cloth and supported by awareness programmes to ensure correct usage. Menstrual cloth is preferrable to pads for reasons of cost, familiarity of use and prevention of build up of non-degradable waste.
17. Only safe, effective contraceptive choices should be offered.
18. It is important that routine treatment for parasitic infections should be carried out for all children annually . In particular for adolescent girls .It is also equally important to ensure treatment of all members in the household for some of the infections.
19. In general the majority of parasitic infections that occur in pregnancy do not require treatment during pre However, if severe symptoms, anemia or malabsorption occur, treatment should be initiated during pregr

WH-6.

GOVERNMENT OF KARNATAKA

13TH STATE LEVEL STEERING COMMITTEE MEETING OF THE RCH PROJECT

ON

12 - 10 - 2000

AT

10.30 A.M

Venue: Committee Room No.253, M.S.Building, Bangalore -1.

STATE FAMILY WELFARE BUREAU,
DIRECTORATE OF HEALTH & FW SERVICES,
ANAND RAO CIRCLE,
BANGALORE – 560 009

for EFA project
12/10

13TH STATE LEVEL STEERING COMMITTEE MEETING OF THE RCH PROJECT
DATE- 12/10/2000 AT 10.30 A.M.

Agenda 1:

Reading & confirming proceedings of the 12th State Level Steering Committee Meeting held on10.08.2000.

Agenda 2:

Report on the Action Taken on the decisions of the 12th State Level Steering Committee meeting held on10-08-2000

Sl. No.	Agenda Item	Decision Taken	Action Taken
1	No. 2 (i)	Commissioner to review the performance of the Post Partum Centres of 'A' Type.	The review was conducted on 12.09.2000 and the proceedings issued separately. Heads of Post Partum Centres of A type have been impressed upon to achieve the inbuilt targets and prove effectiveness of these institutions in urban areas
2	No. 2(ii)	Feed back on the study "Factors Affecting Institutional Deliveries in Karnataka" from the Director, Population Centre to be obtained.	Preliminary work on the study has been initiated as per the letter received from the Director, Population Centre and as per the discussions held by its staff with the Demographer
3	No. 2(iii)	Auditing of Primary Centres by institute of Charted Accountants – piloting in PHC, Bidadi	The proposal is not cleared by the GOI as per the Letter No.D.O.No.G.27017/10/98 – RCH (DC), Dated: 19/09/2000- It has been intimated that the cost will have to be met by the State itself or the audit got done by the A.G
4	No. 2(iv)	Formation of Health & FW Society in Karnataka – placement of the subject for the approval of the Empowered Committee	This will be included in the Agenda of the 4th Empowered Committee Meeting of the RCH Project, for reconsideration
5	No.5	Placing of Budget grants of the RCH project at the disposal of Project Administrator, KHSDP for civil works	Released Rs.275 - Lakhs to the Project Administrator, KHSDP, taking the cumulative release to Rs.375 lakhs
6	No.6	Sanction of Telephone to the PHCs of Sub-Project , Bellary	Commissioner had discussions with the Telecom Authorities and a letter has been addressed to the General Manager Telephones

7	No. 7	Delegation of Powers to Deputy Commissioner to recruit Contractual Staff	Orders issued
8	No. 8	Utilization of funds for "24 hours Delivery Services"	Government order issued
9	No. 9	Hiring of Vehicles, Payment of TA DA for under taking tours and reimbursement of local transportation charges for visiting other offices to RCH consultants	Government order issued
10	No. 10	Release of Funds for maintenance of Cold Chain and Purchase of Injection Safety (Kerosene)	Amount released to Districts
11	No. 11	Release of Funds for Referral Transport	Government Order Issued
12	No. 12	Hiring of Vehicles under Sub-Project, Bellary	Rs.12 lakhs released to CEO, Bellary
13	No. 13	Procurement of Furniture to Consultants	Order placed
14	No. 14	Procurement of Surgical Kits (Kits C to P) for RCH Project	Procurement Plan has been submitted to KHSDP on 23-9-2k
15	No. 15	Procurement of two Ambulances for Sub-Project, Bellary	Action has been initiated by KHSDP procurement
16	No. 16	IEC Activities in Sub – project, Bellary	During the visit of Commissioner for Health & FW Services to Bellary, the Action plan has been finalized
17	No.17	Appointment of Contractual Staff under Sub – project, Bellary	The subject has to be placed before Empowered Committee as it involves creation of posts
18	No.18	Procurement of Drugs, Pethidine and AB Cotton under National Component	GOI will supply these items except pethidine directly to the Districts as per their Letter No.15012 46 2000-RCH(P) dated Sept. 2000. Hence procurement is not needed

Agenda 3:
Status report on the RCH project

The financial and physical progress under the National Component and Bellary Sub-project are shown in Annexure –II(A&B).

The status of implementation of the various components of the project is as follows:

Government Order No.FD 692 TA – 99 Dated: 28 09 1999 regarding the mode of drawal of funds under the project, by the CEOs of ZP expired on 31 03 2000. Proposal

was submitted to the Government and discussions held with the Secretary (Exp.),FD , for renewing the Government Order till the expiry of the project.

The following Government Orders have been issued (Copies attached)

1. Referal Transport
2. Utilization of funds for "24 hrs" delivery services
3. Hiring of Vehicles, payment of TA & DA for undertaking tours and reimbursement local transportation charges for visiting other offices to the RCH Consultants.

Agenda 4:
Utilizing the services of FOGSI members for conducting Safe Motherhood clinics in the PHCs of Bellary District.

Regular ANC by health staff can be substantially and qualitatively supplemented by arranging Safe Motherhood Clinics by FOGSI. In this direction, the entire district can be treated as a unit for operational convenience . Doctors belonging to this body should conduct ANC and PNC clinics and render health services related to safe motherhood once in a week or atleast once in a fortnight on a fixed day at PHC level. They should perform MTPs during their visits to PHCs subject to availability of equipment. It shall be the responsibility of the MO, PHC, to mobilise clients needing these services. These S.M. Consultants will be paid @ Rs.500 - per visit. Transport allowance at the rate of Rs.200 - per visit is also proposed.

This is proposed to be initiated in Bellary district on a pilot basis. There are 60 PHCs in this district out of which 10 have been identified initially by the FOGSI for conducting Safe Motherhood Clinics to begin with.

Agenda 5:
Special Financial Envelope

i) Mobility support to PHCs in Districts of Gulbarga, Bidar, Bijapur, Bagalkot, Raichur and Koppal

Majority of the PHCs in these districts do not have vehicles. Govt. of India desire strengthening outreach services by providing mobility support to the PHC personnel as one of the interventions in the modified annual envelope, which it has approved.

Instead of procuring vehicles for the mobility support and encounter delays and other attendant disadvantages, it is proposed to hire and place them at the disposal of PHCs for about 10 days in a month on rotation. Thus one vehicle can cover 3 PHCs in a month. It is proposed to hire about 35 vehicles during remaining 5 months of the current year to enable 100 PHCs to have mobility support

The DH & FWO will have to prepare the schedule for allotment of the hired vehicles to the PHCs for ten days in a month. Each PHC will draw up a plan of action for its turn of 10 days and use the hired vehicles for effective supervision of field work, holding immunization sessions in remote interior inaccessible areas and for fulfilling the requirements of clients of family planning program.

The hiring charges are at the rate of Rs.660 - per day and the amount accordingly required to be released to the districts is given below:

District	No. of PHCs	No. of Vehicles	Amount required(Rs.)
Gulbarga	31	11	660x30x5x11 =10.89.000
Bidar	11	4	660x30x5x4 =3.96,000
Bijapur	19	7	660x30x5x7 = 6.93.000
Bagalkot	12	4	660x30x5x4 =3.96,000
Raichur	14	5	660x30x5x5 =4.95.000
Koppal	13	4	660x30x5x4 =3.96,000
Total	100	35	34.65.000

ii) Dais Training

In Karnataka more than 50% are domiciliary deliveries. In the backward districts this is as much as 77.42% out of which the share of untrained trained birth attendants is 8.04%.

There are 2.600 untrained birth attendants in the districts of Gulbarga, Bidar, Bijapur, Bagalkot, Raichur and Koppal and Bellary. It is proposed to provide training to all these 2600 (UTB's) during 2000 - 01. Under the annual envelope proposal was sent to train only 1000 UTBAs. This has been approved by Govt. of India and funds have also been released. In addition, all the UTDs will be provided with Dai kit at the end of the training. The cost of each kit is Rs.500 -

An amount of Rs.21.00 lakhs is released under this component

This component has been included in the separate State Plan under Women Health Care submitted for approval of the Cabinet. Under this, it has been proposed to train all the 2.600 UTB's in the seven 'C' category districts and also to provide them Dai kits. An amount of Rs.24.96 Lakhs has been proposed under this scheme.

iii) Disposable Delivery Kits:

It is proposed to provide disposable delivery kits to ANMs AWWs. They will have to hand over them to the "would be delivery mother" for utilization at the time delivery so that sepsis and complications are avoided.

An amount of Rs.10.20 Lakhs is released under this component.

An amount of Rs.6.40 lakhs is required for 5 months to provide disposable delivery kits at Rs.20 - for 32.000 kits.

This component has also been included in the separate State Plan under Women's Health Care, submitted for approval of the Cabinet.. Under this, it has been proposed to provide 1.14 lakhs kits at a rate of Rs.36 - each.

The total requirement for the disposable delivery kits works to Rs.41.04 lakhs for the seven "C" category districts.

iv) Adolescent Health Education:

Adolescents constitute a very highly critical segment of the population required to be covered by RCH services. This segment in the schools will be covered through the School Health Programme. However to cover those adolescents who drop out from schools , a mechanism needs to be worked through the Women & Child Development department using the link of AWWs. It is expected to cover a population of 18,000 in the above 6 'C' districts.

A sum of Rs.10 lakhs towards preparation of charts, booklets, handouts and also contingent expenditure is proposed to be released.

v) Family Health Awareness Campaign (FHAC)

This component has been provided to the Karnataka State AIDS Prevention Society. An amount of Rs.5 lakhs has been received from the Govt. of India to meet the expenditure towards surgical gloves to the doctors examining RTI STI clients and towards distilled water ampules for dissolving penicillin injection.

Agenda 6:

Constitution of State Co-ordination Committee for RCH Training

The Director, State Institute of Health & Family Welfare, in his letter No.SIH 54 2000- 01 dated 12 09 2000 had submitted a proposal for the constitution of the State Co-ordination committee for RCH training. This has been modified as indicated below for approval of the Government. The NIHFW, New Delhi, has suggested the need for such a committee to coordinate , guide and monitor the RCH training programs.

1.	Chairman	–	Commissioner/Director, Health & FW Services
2.	Member	–	Director of Health & FW Services
3.	Member	–	Director, State Institute of Health & Family Welfare
4.	Member	–	Project Director (RCH)
5.	Member	–	Representative- from National Institute of Health & Family Welfare
6.	Member	a.	Divisional Joint Director, Bangalore
		b.	District Health & FW Officers of Belgaum, Gulbarga, Mysore and Bangalore Rural districts
7.	Member- Secretary	–	Joint Project Director, RCH

Agenda 7:

Constitution of District Co-ordination Committee for RCH ~~co-ordination~~

In accordance with the suggestion of the National Institute of Health & Family Welfare, the Nodal agency for training under then RCH, the Director, State Institute of Health & Family Welfare, in his letter No. No.SIH 54 2000 – 01 dated 12.09.2000 had submitted proposals for the constitution of District Level Co-ordination Committees for RCH training. This has been modified and the following constitution is proposed for approval of Government.

1	Chairman	–	District Health & FW Officer of the District
2	Members	a.	Principal, DTC
		b.	Principal, A.N.M. Training Centre.
3	Members	a.	District Family Welfare Officer
		b.	Assistant Director, Women & Child Development Department
4	Member Secretary		District RCH Officer

Agenda 8:

Supply of MCH, Antenatal Check Up cards to beneficiary under RCH Consultancy

The District Health & FW Officer, Bellary District, in his letter Dated: 15.09.2000 addressed to the Project Director (RCH), has requested funds for printing of Antenatal Cards, MCH cards for the beneficiaries under RCH program as per the type design suggested by the Secretary, FOGSI.

An amount of Rs.2,00,000 - may kindly be released.

Agenda 9:

Follow up action on the evaluation report by the Regional Evaluation Team, Bangalore

The Regional Evaluation Team of GOI , Bangalore, has carried out sample verification of Family Welfare Acceptors in Bangalore City, Haveri, Mysore and Chamarajnagar Districts during May and June 2000.Some of the noteworthy findings of this team, communicated by the Government of India in their letter D.O. No. Q – 11015/14/2000 - Stats, Dated: 17.08.2000 are as follows:

1. Sterilisation and IUD registers were not updated in Bangalore City district. Case cards of sterilisation, IUD and other methods were not maintained in the districts listed.

2. Sterilisation, IUD, OP and CC registers were updated but not printed in Haveri, Mysore and Chamarajanagar districts. Sterilisation, IUD and other case cards were not maintained in Haveri District. IUD Cards were not maintained in Chamarajnagar and Mysore districts.

3. The team could contact only 178, 121, 55 and 101 cases out of total selected cases of 232, 168, 116 and 137 respectively, in the aforesaid districts. The detailed findings are given in the statement enclosed.

4. No. of Non – Contact cases reported was much higher which is very serious and needs proper attention.

This for perusal of the Steering Committee

Agenda 10:
Appointment of Child Health Consultant for the RCH Project

The 3rd Empowered Committee meeting on RCH held on 27.06.2000, approved the proposal to appoint Dr. Mary Chandrakumari Thomas as Child Health Consultant in the project and to obtain the concurrence of the World Bank for this as her appointment is on a sole source basis.

As per the letter dated 08.09.2000 from the Project Administrator, KHSDP, Bangalore (the procurement agency for the RCH project), World Bank has no objection to appoint Dr. Mary Chandrakumari Thomas as Child Health Consultant on a consultancy fee of Rs.20,000 - per month.

Dr. Mary Chandrakumari Thomas was asked to report as Child Health Consultant on 18.09.2000 vide this Directorate's letter No. RCH 9/98 – 99 dated: 15.09.2000. She has been accordingly working in the project since 18-09-2000.

A formal Government Order is needed to ratify her appointment as Child Health Consultant as done in the case of the other three Consultants: M&E/MH/IEC.

The State Level Steering Committee may therefore ratify the appointment of Dr.Mary Chandrakumari Thomas as the Child Health Consultant with effect from 18.09.2000 for a period of one year initially.

(signature)

ProjectDirector(RCH)
&
Member Secretary,
State Level Steering Committee

Procurement for RCH very low – being done by KHSDP
one of the worst in the country)
NCB – National Competitive Bidding
ICB – International "
Pethidine – replaced by calmpose – last meeting decided [illegible]
 – rps permission

Annexure B

PROCEEDING OF THE 12th STATE LEVEL STEERING COMMITTEE MEETING OF

RCH PROJECT HELD ON 10th AUGUST 2000

IN COMMITTEE ROOM No. 253, M.S. BUILDING, BANGALORE

Sri. A. Sengupta, Principal Secretary to Govt., H & F W Dept. Bangalore, in the Chair

Members /Officers Present

1	Sri. Sanjav Kaul, Commissioner for H & F W Services, Bangalore
2	Sri. Ashok Kumar Manoli, Secretary(Expenditure), Finance Dept. Bangalore
3	Sri G.V. K. Rao, Project Director, IPP – IX, Bangalore
4	Sri. Arvind G. Risbud, Project Administrator, KHSDP, Bangalore
5	Dr. G.V. Nagaraj, Director (I/C), Directorate of Health Services and Project Director (RCH) Bangalore
6	Sri. K. Shankar Rao, Director, Planning Dept., Representing Secretary to Govt., Planning, Institutional Finance and Statistics, Bangalore
7	Dr. A Shamanna, Joint Project Director (RCH) (I/C) Bangalore
8	Sri. G. Prakasam, Demographer, DH&FWS Bangalore
9	Sri. N.T. Marulasiddappa, Joint Director (I/C), IEC Bangalore
10	Sri. Krishnamurthy Accounts Officer (FW) Bangalore
11	Dr. Manjunath Gowda, DH&FWO, Bellary representing CEO, ZP, Bellary
12	Representative of Secretary to Govt., Women & Child Welfare Department Bangalore
13	Representative of Secretary to Govt., Public Works Department Bangalore
14	Under Secretary, IPP –IX and RCH Project Bangalore
15	Consultant IEC
16	Consultant MH
17	Consultant M&E
18	Deputy Director (MCH)
19	Deputy Director (UID & PPP)

Members who did not attend the meeting

1	Secretary to Govt., Education (Primary & Secondary Education) Department
2	Director, Medical Education in Karnataka, Bangalore

The Principal Secretary to Government, Health & Family Welfare Dept. commenced the meeting with a cordial welcome to all the members, officers and invitees .He extended a special welcome to Sri Ashok Kumar Manoli, Secretary (Expenditure), Finance Department, who was attending the meeting for the first time.

The agenda items were then taken up for discussion.

Agenda 1:

Reading and confirming the proceedings of the 11th SLSC meeting held on 8th May 2000

The proceedings of the 11th SLSC meeting held on 8th May 2000 were read and confirmed. On the suggestion made by the Chairman it was decided that the SLSC meetings should be held regularly every month as in the case of the Steering Committees meetings of other projects like IPP –IX, KHSDP, etc.

Action: Project Director (RCH)

Agenda 2:

Action Taken Report on the Proceedings of the 11th SLSC Meeting

The Commissioner for H & F W services briefed the Committee on the considerable progress made in recent months and informed that Government orders have been issued in accordance with all the decisions of the previous SLSC meeting. The Chairman suggested that copies of GOs issued should be supplied to all members.

The Committee approved the action taken report with the modifications listed below:

(i) Sl. No.2:- Management of Post Partum Centres of A Category:

The Project Director (RCH), explained that the PPP is not being implemented as envisaged, in the teaching and bigger hospitals. The Commissioner at this juncture cited the example of HSIS Ghosha Hospital, Bangalore. It was pointed that the major impediment in the programme is the lack of coordination between the different Senior Doctors in the major hospitals.

The Project Director (RCH) pointed out that the approval of GOI is needed before taking any decision of far-reaching nature and that a thorough discussion with the concerned Programme Officers is very essential to diagnose the problems.

The committee thereafter approved the proposal to have the review- meeting of the PPCs of 'A' category under the chairmanship of the Commissioner.

Action: Demographer/ DD (IUD &PPP)

(ii) Sl.No.3. Study On Factors Affecting Institutional Deliveries In Karnataka:

The Commissioner informed that a feedback would be obtained from the Director, Population Centre periodically on the progress of the Study.

Action: Director, Population Centre

(iii) Sl. No.7.Audit of Primary Health Centres:

12th SLSC agreed for the pilot study to be taken up in the Bidadi PHC by the Institute of Chartered Accountants and also suggested that the proposed audit should cover both financial and work aspects of all national Programs. Chairman desires that this should be finalized urgently on a time bound basis.

Action: Commissioner/DHS

(iv) Sl. No.9 Annual Financial Envelope:

The SLSC was informed that Government of India has given sanction for the revised financial envelope of Rs.2.09 Crores. It was decided to incur expenditure according to the sanction by Govt. of India.

Agenda 3:

Action Taken on the Proceedings of the III Empowered Committee meeting held on 27/06/2000

Sl. No. 1, Agenda 2: - Formation of the State Health & FW Society in Karnataka:

Both the Principal Secretary and Commissioner were of the opinion that action needs to be taken for the establishment of a Society in view of the expected flow of external funds for number of health programmes and that the subject has to be therefore placed before the next Empowered Committee Meeting. Meanwhile, all the factors and arguments advocating the establishment of the Society have to be identified and the Chief Secretary impressed about them.

Action: DHS / RCH Consultant (M & E)

Sl.No.2 Agenda 3: - Contractual appointment of Staff nurses to PHCs of 'C' category Districts:

The committee while agreeing to implement the scheme strongly suggested that:

a. Action should be initiated for widespread awareness in the community about the availability of delivery services during nights at PHCs.
b. The institutions should remain open at any time during nights to attend to emergency calls for the delivery services.
c. Sufficient care needs to be exercised at the time of the recruitment of the contractual staff and it has to be specified that the staff nurses will be required to stay in headquarters and work during the nights also in order to bring about substantial increase in the obstetric care.

Action: Project Director (RCH)/RCH Consultant (MH)

Sl.No. 3, Agenda 4: -Utilizing Services of AWWs on Part Time Basis in 'C' Category Districts:

The modus operandi of drawing the state RCH funds by the district authorities for implementing various schemes /programmes like payment of remuneration to AWWs was deliberated upon at length, eliciting the views of Project Director (IPP-IX), Secretary (Expenditure) DH&FWO, Bellary and Accounts Officer (FW).

It was decided that the Secretary (Expenditure) would be the appropriate authority to sort out the issue and a find a smooth solution after formal discussions with Project Director IPP-IX, Project Director (RCH), CAO cum FA, CAO of IPP- IX, and Accounts Officer (FW). It was further urged that the meeting to discuss this complicated and key issue should be convened very urgently.

Action: Secretary (Expenditure), Finance Department/ Accounts Officer (FW)

Sl. No 4, Agenda 5: - Mode of utilizing of Funds Received from UNFPA for Granting Loans to ANMs for Purchase of Moped:

The Commissioner, H&FW services, proposed that a comprehensive Government Order indicating the modalities of granting of loans and maintenance of proper accounts could be issued based on the proceeding of the meeting held in this connection on 8/8/2000. The SLSC agreed with the modalities worked out at the meeting held on 08/08/2000 and authorized the issue of a Government Order in this regard.

Action: Under Secretary IPP-IX /Accounts Officer (FW)/Consultant (MH)

Sl.No.7, Agenda 8: - Utilization of the services of FOGSI, Bellary Branch, in Emergency Obstetric Care:

The Commissioner gave an account of the progress made so far and the discussions with Dr Kamini Rao, President, FOGSI in this regard. It was also informed to the committee that FOGSI would claim the service charges for the service rendered by its members from the GOI directly.

The Project Director (RCH) sought clarification about permitting private doctors into Government institutions for rendering their services. The committee agreed that there is no bar on such arrangements, which is in the overall interest of promotion of EsoC and EmOC. The Committee then cleared action for further measures in this regard.

Action: FOGSI /Consultant (MH) /DH&FWO, Bellary

Agenda 4:

Status Report on the RCH Project

The Committee appreciated that after two years the RCH project expenditure is picking up.

The Project Administrator, KHSDP, and the Secretary (Expenditure) both pointed that presently most of the expenditure is attributable only to one component namely, civil works. They desired the programme to become multi-dimensional so that the RCH objectives can be achieved. Therefore, speed of expenditure should improve in all components of the programme.

The Commissioner, H&FW services, assured the Committee that RCH machinery would be geared up for accelerating work on all the activities both under National Component and Sub-Project. He also elucidated that once civil works are completed, progress on some other activities would also as a corollary, follow.

As regards procurement of Drugs, AB Cotton Etc., the KHSDP agreed to expedite the procurement process according to the requirement already furnished by Project Director (RCH)

Action: Project Administrator, KHSDP/PD (RCH)

As regards sub-project, Bellary, the Principal Secretary requested the Commissioner H&FW services, to visit Bellary shortly and draw a plan in consultation with DC, CEO and DH&FWO, for giving momentum to all the components of the sub-project.

It was also decided that out of the Rs.141 lakhs provided for drugs, Rs.100 lakhs may be utilized for drugs and the remaining Rs.41 lakhs should be used for minor repairs to furniture, purchase of linen, upholstery, pillows etc.

The DH&FWO, Bellary was directed to prepare, by the time the Commissioner visits Bellary:

i. The List of sites for all categories of Civil works, including alternate sites wherever required
ii. A plan for Rs.41 lakhs for purchasing linen and for effecting minor repairs and paints to furnitures, for the PHCs and sub-centres.
iii. An exhaustive statement for plan/non-plan and salary and non-salary components under the general budget and link document

Action: CEO, Bellary/ DH&FWO, Bellary

The Secretary (Expenditure) assured the committee the GO facilitating drawal of RCH funds (white bills) would be issued immediately

Agenda 5:

Placing of Budget grants under RCH Project at the disposal of Project Administrator, KHSDP for the year 2000-01 for Civil works.

The Committee agreed for the release of Rs.275 lakhs now available, to the Project Administrator, KHSDP, for Civil Works and to release the balance requirement as and when funds are replenished by the GOI

Action: Accounts Officer (FW)/ RCH Consultant (IEC)

Agenda 6:

Sanction of Telephone to the PHCs of Sub-project, Bellary

The Committee agreed to release a sum of Rs.10 Lakhs to Bellary District for installing telephones in PHCs and enhance the essential communication facility. The Principal Secretary and Commissioner cited the recommendation of The Task Force on Health in this regard.

It was also agreed that meanwhile the Commissioner would have discussions with the telecom authorities regarding various alternatives; OYT/PCO etc., to facilitate an efficient decision about the type of telephones to be installed.

Action: Accounts officer (FW)/CEO, Bellary/DH & FWO, Bellary /Consultant (IEC)

Agenda 7:

Delegation of powers to Deputy Commissioners to recruit Contractual Staff:-

The committee decided to empower the Deputy Commissioners to recruit all categories of contractual staff to be funded by RCH Project, both under the National Component and sub-project, Bellary on the same lines as being done for the other Health department staff.

Action: Under Secretary, IPP - IX & RCH

Agenda 8:

Utilization of funds for "24 hours delivery services"

The Secretary (Expenditure) Finance Department raised the need for including the backward Northern Karnataka Districts also in all the RCH Components .

It was explained that though these funds were released earlier the activity could not be started because there was no GO for enabling drawal of funds by the District authorities. RCH Consultant (MH) mentioned that under the special financial envelope, a number of Northern Karnataka Districts have been included for expanding various RCH services and for strengthening infrastructure too .

The Committee thereupon agreed for the proposal to release funds to the six districts shown below for the 24 hours delivery services:

1.	Kolar	:	Rs.1 lakh
2.	Mysore	}	
3.	Mandya	}	Rs.0.5 Lakhs each
4.	Chamrajnagar	}	
5.	Dharwad	}	
6.	Bangalore (R)	:	Rs.0.43 lakhs

Action: Under Secretary IPP –IX and RCH/ Consultant(MH)

Agenda 9:

Hiring of Vehicles, Payment of T.A / D.A for under taking tours and Reimbursement of local transportation charges for visiting other offices to, RCH Consultants:

The committee agreed in principle, for the proposal to hire vehicles for tours by the three Consultants (IEC,MH,M & E) subject to the following conditions:

a) For reaching long- distant district headquarters the Consultants would use railways, wherever possible.
b) For nearby districts(Kolar, Tumkur, Mysore and Mandya) they can hire vehicles from Head Quarters i.e. Bangalore
c) If a no. of districts are covered in one tour, even if they are nearby, the vehicles can be hired from Head Quarters i.e. Bangalore
d) The District Health & FW Officers will be authorized to hire the vehicles at the local rates by following local shopping procedures for the Consultants on receipt of their tour programme.

It was decided that the Consultants would be reimbursed the hiring charges by the Project Director (RCH) as per the approved rates.

Action: Under Secretary IPP –IX and RCH/ Accounts Officer (FW)/ Consultants IEC/MH/M&E

Agenda 10:

Release of funds for maintenance of Cold Chain and purchase of Injection Safety (Kerosene oil):

The PD (RCH) clarified that kerosene oil would used for boiling water in the autoclaving equipment, thereby ensuring sterilized syringes and needless for use in immunization sessions.

Release of funds for CC maintenance and Injection Safety, as per the norms stipulated by the Govt. of India to the District Health & FW Officers, was approved by the committee.

Action: Accounts officer (FW)/Under Secretary (IPP-IX&RCH)

Agenda 11:

Release of funds for Referral Transport:

It was suggested by the Principal Secretary that clarification should be obtained from the GOI about the applicability of this to the obstetric services rendered by private institutions. However, the proposal for operating the scheme, to start with, in the Govt. Institutions, was approved by the committee.

Action: a. Project Director (RCH) (for clarification from GOI)
b. For issue of G.O. – Accounts Officer (FW)/ Under Secretary IPP – IX (RCH)

Agenda 12:

Hiring of vehicles under sub – project, Bellary

The DHFWO, Bellary, informed that he has already submitted a proposal to the Project Director (RCH) in this regard.

The committee while agreeing to release Rs.12 Lakhs simultaneously suggested that the proposal of the DH &FWO, Bellary should also be examined as to the competitiveness of rates, before issuing necessary permission.

Action: Accounts Officer (FW)/ DH&FWO, Bellary

Agenda 13:

Procurement of Furniture to Consultants

The Committee delegated the powers for procurement of furniture for Consultants to the Project Director (RCH).

The Committee further delegated powers to Project Director (RCH) for all minor procurements/purchases as per the general delegation of powers for a HOD, without having to seek the approval of the SLSC.

Action: Accounts Officer (FW)

Agenda 14

Procurement of Surgical Kits (Kits C to P) for RCH Project

Dr. A.S. Shamanna, Joint Project Director (I/C), explained the contents of these kits and process of revision of the specifications. He further informed the committee that the revised specifications of GOI have already been handed over to the KHSDP authorities.

The Committee then requested the Project Administrator ,KHSDP, to expedite the procurement surgical kits &drugs and place proposals for release of funds .

Action: Project Administrator, KHSDP

Agenda 15

Procurement of two (2) Ambulance for Sub-Project, Bellary

The committee noted that two ambulances would be given to the two NGOs in Bellary District and that these NGOs have to bear the cost of drivers and POL.

The Committee agreed to the procurement of two ambulances for the Bellary Sub-project at an approximate cost Rs.10 lakhs and requested the Project Administrator, KHSDP, to take necessary action for procurement.

Action: Project Administrator, KHSDP

Agenda 16:

IEC *Activities in the Sub-Project Bellary*

The Committee gave approval in principle for implementing the IEC Action Plan chalked out by the Joint Director (IEC) and placed at Annexure-3 of the agenda notes.

The Commissioner briefed the Principal Secretary and the committee that this action plan is in accordance with the convergent IEC Strategy and that detailed guidelines would be issued.

The DH & FWO, Bellary was instructed by the Committee to implement the action plan effectively and bring behavioral changes in the community. The Principal Secretary, requested the Commissioner to look into the IEC activities also during his ensuing visit to Bellary.

The JD (IEC) has to accompany the Commissioner to ensure action for vigorous implementation of the IEC activities.

Action: Joint Director (IEC)/DH & FWO, Bellary/ Consultant (IEC)

Agenda 17:

Appointment of Contractual Staff under sub-project, Bellary

The committee while conceding the need for incremental staff for improved services felt that the remuneration fixed for Staff Nurses should be atleast equal to or more than that for the Lab. Technicians, in view of their higher qualification. The Project Director (RCH) intervened and pointed out that the proposed rates are as per the prevailing rates of government. The Project Director (IPP - IX) suggested that the proposal be approved as placed before the committee and revise the rates as and when changes are effected by the Government. This suggestion was agreed to by the committee and thereafter approval was given for creating these posts on an incremental basis as proposed in the Sub Project document and to empower the DCs to recruit them .

The Project Administrator, KHSDP, was requested by the Principal Secretary to prepare a suitable cabinet note for modifying the remuneration- structure of all categories of contractual staff in tune with the changes in the corresponding pay scales and other relevant aspects like qualification, and nature of responsibilities.

Action: Under Secretary IPP – IX/RCH, Deputy Director (MCH)/Project Administrator (KHSDP)

Agenda – 18:

Procurement of Drugs, Pethidine and AB Cotton under National Component

It was agreed that the KHSDP could procure AB Cotton and other essential drugs already listed and approved.

Action: Project Administrator, KHSDP

No.RCH/12/98 – 99

Sd/-
Principal Secretary to Govt.,
Health & FW Department
and
Chairman State Level
Steering Committee

To:

1. Sri. Sanjay Kaul, Commissioner for H & F W Services, Bangalore
2. Sri. Ashok Kumar Manoli, Secretary(Expenditure), Finance Dept. Bangalore
3. Sri G.V. K. Rao, Project Director, IPP – IX, Bangalore
4. Sri. Arvind G. Risbud, Project Administrator, KHSDP, Bangalore
5. Dr. G.V. Nagaraj, Director (I/C), Directorate of Health Services and Project Director (RCH) Bangalore
6. Sri. K. Shankar Rao, Director, Planning Dept., Representing Secretary to Govt., Planning, Institutional Finance and Statistics, Bangalore
7. Dr. A Shamanna, Joint Project Director (RCH) (I/C) Bangalore
8. Sri. G. Prakasam, Demographer, DH&FWS Bangalore
9. Sri. N.T. Marulasiddappa, Joint Director (I/C), IEC Bangalore
10. Sri. Krishnamurthy Accounts Officer (FW) Bangalore
11. Dr. Manjunath Gowda, DH&FWO, Bellary representing CEO, ZP, Bellary
12. Representative of Secretary to Govt., Women & Child Welfare Department Bangalore
13. Representative of Secretary to Govt., Public Works Department Bangalore
14. Under Secretary, IPP –IX and RCH Project Bangalore
15. Consultant IEC
16. Consultant MH
17. Consultant M&E
18. Deputy Director (MCH)
19. Deputy Director (IUD & PPP)

Project Director (RCH)
&
Member Secretary
State Level Steering Committee

PROCEEDINGS OF THE GOVERNMENT OF KARNATAKA

Subject: - Reproductive and Child Health Services Programme-
Utilization of funds for 24 Hours Delivery services at the PHC's/CHC's.

READ :

1. No. FWG(1)/RCH/29/99-2000 Dated: 17/07/99 of Project Director (RCH)
2. No. FWG(1)/RCH/29/99-2000 Dated: 17/02/2000 of Project Director (RCH)
3. Proceedings of the 12th State Level Steering Committee on RCH held on 10th August 2000

PREAMBLE:

Attempt is being made to set up 24 Hours delivery services in the PHC's/ CHC's in the districts under the RCH Programme. The arrangements in this scheme is proposed to involve a mechanism for one doctor to be available on call, atleast one staff nurse being available beyond normal working hours in the PHC's and cleaning services being available similarly beyond the normal working hours i.e. Between 8.00 P.M. in the evening and 7.00 A.M. in the morning.

The Honorarium paid to each of them are as follows-

1. Rs.200-/- per delivery to the doctor who conducts the delivery.
2. Rs.100-/- per delivery to the staff nurse who conducts and / or assists in the delivery.
3. Rs.30-- per delivery to the cleaning services personnel.

The above Honorarium will not be admissible to Doctors /staff Nurses on night shift duty and also restricted upto 50% of deliveries conducted in such institutions or actual number of deliveries conducted during night hours whichever may be less.

GOI has released Rs.3.43 Lakhs to ensure 24 Hours delivery services available in health centres.

The State Level Steering Committee on RCH in its 12th meeting held on 10/8/2000 has approved the above action plan.

Hence this order.

GOVERNMENT ORDER NO.HFW/7/RCH/2000-01 BANGALORE, DATED-4.10.2000

In the circumstances explained above and in superssion of the earlier orders issued by Project Director RCH in this regard, the government of Karnataka are pleased to accord sanction for the release of funds to different districts as detailed below:

Sl.No.	District	Amount.
1	Kolar.	Rs. 1.00 lakh
2.	Mysore	Rs. 0.50 lakh.
3.	Mandya	Rs. 0.50 lakh.
4.	Chamarajnagar	Rs. 0.50 lakh.
5	Dharwad	Rs. 0.50 lakh
6.	Bangalore (R)	Rs. 0.43 lakh
		Rs. 3.43 lakhs.

The CEO's of the concerned districts are authorised to draw and disburse the above amounts to different PHC's/CHC's through the concerned DH & FWO's. These funds shall be utilized for 24Hours delivery services at the PHC's /CHC's in the manner prescribed in the RCH manual i.e. for payment of Rs 200-/- per delivery to the Doctor, Rs.100-/- per delivery to the staff nurse and Rs 30-/- per delivery to the cleaning services personnel subject to the condition that:-

1. The delivery must be between 8.00 P.M. in the evening and 7.00 A.M. in the morning.
2. The Honorarium is not admissible to Doctors /Staff Nurses on night shift duty and also restricted upto 50% of deliveries conducted in such institutions of actual number of deliveries conducted during night hours whichever may be less.

The above expenditure is debitable to the Head of Account "2211-FW-00-103MCH-0-70- RCH Services, National Component

By Order in the Name of the
Governor of Karnataka.

(Sundara Raja Guptha)
Under Secretary to Govt.
Health &FW Dept. IPP IX & RCH Project

To:

1. The Accountant General. Karnataka. Bangalore
2. The Private Secretary to Chief Secretary to Govt. of Karnataka, Vidhana Soudha, Bangalore
3. The Principal Secretary to Govt., Health & FW Dept./Planning Dept.
4. The Commissioner for Health & FW Services. Bangalore
5. The Additional Secy. to Govt. Finance Dept., Bangalore
6. The Project Director IPP – IX, Bangalore
7. The Director for Health & FW Services, Bangalore
8. The Project Director (RCH), DH & FWS, Bangalore
9. The CAO – cum – FA, DH & FWS, Bangalore
10. The Accounts Officer (FW), SFWB, DH & FWS, Bangalore
11. The CEO, Zilla panchayat, Kolar/Mysore/Mandya/Chamrajnagar/Dharward/Bangalore (Rural)
12. Divisional Joint Director. Bangalore/Mysore/Belgaum Division
13. District Health & FW Officers Kolar/Mysore/Mandya/Chamrajnagar/Dharward/Bangalore (Rural)
14. Consultants (RCH) IEC/MIS/M&E/CH
15. Office Copy

PROCEEDINGS OF THE GOVERNMENT OF KARNATAKA

Subject: Reproductive and Child Health Services Programme - Engaging Transport Facility to pregnant women for safe delivery at Subdistrict and CHC level-

Read: Proceedings of the 11th and 12th State Level Steering Committee on RCH held on 8th May 2000 and 10th August 2000

Preamble:- As a supplement to emergency obstetric care under the RCH programme, it is proposed to incur an expenditure upto a sum of Rs 200- per client for providing transport facilities to pregnant women to have safe deliveries at FRUs. Necessary amount is earmarked for this purpose. This amount is proposed to be kept at the disposal of Taluk Health Officer of the concerned taluk.

The State Level Steering Committee on RCH in its 11th and 12th meeting held on 8th May 2000 and 10th August 2000 respectively has approved the proposal for operating the scheme in the Government institutions of the districts of Gulbarga, Bidar, Bijapur, Bagalkote, Raichur and Koppal.

Hence this order.

Government Order No. HFW/ 11/ RCH/ 2000-01
Bangalore Dated ೨೨.೯.೨೦೦೦.

In the circumstances explained above, the Government of Karnataka is pleased to accord sanction for the release of Rs 10.00 lakhs (Rupees ten lakhs only) to the following districts towards engaging transport facility to pregnant women for safe delivery at subdistrict and CHC level. Approval is also accorded for payment of Rs 200- per client for this purpose.

SL. NO.	District	Amount in Rupees.
1.	Gulbarga	2.5 lakhs
2.	Bidar	1.5 lakhs
3.	Bijapur	1.5 lakhs
4.	Bagalkote	1.5 lakhs
5.	Raichur	1.5 lakhs
6.	Koppal	1.5 lakhs
	Total	10 lakhs

This above expenditure is debitable to the Head of account 2211-FW-00-103-MCH-0-70 RCH Services-National Component.

By Order and in the name of Governor of Karnataka

(SUNDARA RAJA GUPTHA)
Under Secretary to government Health & FW Dept.
IPP-IX and RCH project.

TO

1. The Accountant General, Karnataka, Bangalore.
2. The Private Secretary to chief secretary to govt. Of Karnataka, Vidhana soudha, Bangalore.
3. The Principal secretary to Govt., Health&FW Dept./ planning dept.
4. The Commissioner for Health& FW Services, Bangalore.
5. The Additional Secretary to Govt., Finance Dept., Bangalore.
6. The Director of Health & FW Services, Bangalore.
7. The Project Director (RCH),IPP - IX, DH & Fws, Bangalore.
8. The chief accounts officer-Cum -Financial Advisor, D H & FWS, Bangalore.
9. The Accounts officer (FW), D H &FWS, Bangalore.
10. The C E O , Districts of Gulbarga, Bidar, Bijapur, Bagalkote, Raichur and Koppal.
11. The Divisional Joint Director , Gulbarga and Belgaum Division.
12. The District Health & FW Officer of Districts of Gulbarga, Bidar, Bijapur, Bagalkote, Raichur and Koppal.
13. Consultants IEC/MIS/M&E.
14. Office copy.

Annexure – II (A)

FINANCIAL PROGRESS UNDER RCH – NATIONAL COMPONENT

(Rs. in Lakhs)

Item	Budget Released		Expenditure			Total	Remarks
	1997 to 1999	2000-2001	1998-1999	1999-2000	2000–2001		
Drugs	15.50						Govt. Of India is supplying drugs directly. Hence there is no need for this amount
A.B. Cotton	31.13						Govt. Of India is supplying drugs directly. Hence there is no need for this amount
Civil Works-Major	0.00	883.00			107.20	107.20	69 Major Civil works under progress
Minor	190.00				86.07	86.07	Works have been completed in progress in 17 districts
PHN	185.00				0	0	
SCOVA	25.00				0	0	Not applicable
SM Consultant	8.00				0	0	-
24 hour Delivery Services	3.13				0	0	
Transport Charges	5.00				0	0	
CC Maintenance	26.00	31.62	12.99	13.00	0	25.99	-
Pethidine injection	1.80			0.00	0	0	This is not required as there are substitutes
Immunization Cards	7.72			7.70	0	7.70	Amount spent fully
Eligible Couple Registers	2.98			3.20	0	3.20	Amount spent fully
Consultants	0.00			1.20	2.16	3.36	
IEC – ZSS	57.36			2.95	21.14	24.09	
IEC- National Component	0.00			6.80	0	6.80	
Total	**558.92**	**914.62**	**12.99**	**34.85**	**216.57**	**264.41**	
Kind Materials	1275.84	363.00*	2111.95	2172.09	0	4284.04	

* Upto June 2000

Annexure – II (B)

FINANCIAL PROGRESS UNDER RCH – SUB – PROJECT, BELLARY

(Rs. In Lakhs)

Item	Physical			Financial			Total	Amount Released to implementing agency	Expenditure		Remarks
	1999–2000	2000-2001	2001 – 2002	1999 – 2000	2000-2001	2001 – 2002			Up to March 2000	Up to May 2000	
Civil Works	31	40	21	150.00	330.00	216.21	696.21	100.00	0	62.00	Construction work of 25 sub - centres started and expected to be completed by Sept. 2000
Equipment	174	93	64	37.80	15.00	8.40	61.20	50.00	0	0	Tenders have been called and evaluation process is completed
Furniture		51	50	0	40.00	0	36.93	0.00	0	0	Furniture will be supplied after the completion of the buildings
Vehicles	15	14		52.50	0	0	104.00	0.00	0	0	
IEC				5	60.00	28.50	91.50	5.00	3.81	3.81	
Training				5.65	10.00	10.13	0	5.00	4.21	4.21	Training programme is under progress
NGO Support	2	4	4	2	10.00	15.65	0	2.00+7.00 =9.00	0	0	Two NGOs have been selected and G O releasing Rs. 7.00 Lakhs has been issued
Contractual Services				124.02	25.00	93.00	259.52	5.00	0	0	
Drugs		60	25	51.72	10.00	52.45	111.25	50.00	0	0	World Bank clearance is sought
Operating Cost				5	55.00	51.14	111.11	0.00	5.00	5.00	Balance of funds has to be utilized in the successive years
Consultancy				7.50	5.00	0	0	2.00	0	0	Budget released to engage S M Consultants- expenditure awaited
Total				**441.19**	**560**	**478.48**	**1504.75**	**100+126 = 226.00**	**13.02**	**75.02 (33.19%)**	

It is often forgotten that women also suffer from communicable and other diseases during pregnancy with attendant morbidity & mortality in the mother and the child. These include malaria, Viral hepatitis, Tuberculosis, rheumatic heart disease, diabetes, etc.

Parasitic infections like Amebiasis, Giardiasis, Leishmaniasis, Malaria, Nematodes etc. may adversely affect fertility and/or reproductive capacity in the following ways:

They may produce sufficient debilitation and/or anatomic damage to the genital tract so that conception is impossible or normal implantation does not occur,

Several reports have suggested that the parasitic infections during pregnancy may be more severe and may b associated with a higher mortality rate than occurs in a non-pregnant women.

Protozoan parasites may infect and cross the placenta to produce adverse effects on the fetus such as abortio fetal infection, still birth, intrauterine growth retardation, and congenital infection.

They interfere with the nutrition of these women and result in a worsening of the already critical nutritional s with resultant impaired fetal growth. Malnutrition is also associated with immuno- deficiency, and thus the susceptibility of pregnant women to bacterial and viral infections and their recognised consequence for the fe new born is increased. Infections by nematodes like ancylostomiasis (hookworm) for instance can lead to an Malaria in pregnant women is associated with intrauterine growth retardation, spontaneous abortion and stillb the neonate congenital malaria presents within 48-72hr after delivery.

Trichomoniasis: women who are infected during pregnancy are predisposed to premature rupture of the placental membranes, premature labour and low-birth weight infants. Also linked to this disease are cervical cancer, atypical pelvic inflammatory disease and infertility.

Some complications during pregnancy also affect the child, which increases foetal and perinatal death as well as morbidity like premature birth, low birth weight and infection among children.

Latest studies show that nutritional insults during the first trimester may set a low fetal growth trajectory and once set, the potential for later catch up in growth or functions appears to be limited.

Health and Family Welfare Policy:

In the past, India's Health and Family Welfare Policy focussed on meeting contraceptive "targets". The programmes virtually ignored women who were not of child bearing age (adolescent girls, single women, women with infertility and post-menopausal women). Even among child- bearing women, only sexually active women, especially those who had not yet "completed their desired family size" were targeted for reproductive care interventions. They failed to address the root causes of women's poor reproductive health status, and consequently did little to improve their general well being over the long term.

In the obsession with meeting family planning targets, training and skills development in clinical diagnosis and rational management of women's health problems have suffered.

The International Conference on Population Development, held in Cairo in 1994, and The Fourth World Conference on Women, held in Beijing in 1995, emphasized the need to empower women to access services relating to all aspects of their health. It asserted that improvements in women's health needs should be met through the availability of affordable, comprehensive, integrated and holistic care, within easy geographical reach of women. Reproductive health and primary health care programmes are expected to address these gaps in health service delivery, mainly by dealing with the comprehensive health problems of women and incorporating gender equity concerns into their programmes.

Following this the Government of India's Health and Family Welfare Program changed to a more comprehensive Reproductive and Child Health (RCH) Programme offering the following:

a. Prevention and management of unwanted pregnancies and family planning services:
Spacing & sterilization.
Providing services for MTP to women who choose this option in order to avoid incidences of unsafe abortion.

b. safe motherhood (ante natal, natal & post natal) services
Antenatal care and identification and referral of high risk pregnancies to the FRH
Immunization with 2 dozes of Tetanus toxoid
Prevention, detection and treatment of anaemic pregnant women with Iron Folic Acid (IFA) tablets.
Natal Care
Delivery as far as possible, in hospitals, PHCs or subcentres under the supervision of trained qualified personnel. Assisted by LHVs, ANMs or trained birth attendants. Delivery in hospital ensures newborn care and therefore can substantially reduce incidence of infant mortality.
Emergency obstetric care services for high-risk labour cases

Postnatal Care - for 42 days after delivery of the placenta-
Advice and guidance to the mother about breast-feeding, nutrition, hygiene, care of the newborn and immunisation.
Referral immediate emergency obstetric care in case of fever foul smelling discharge, bleeding, abdominal pain, painful breasts, pain while passing urine and abnormal behaviour.

c. Diagnosis and treatment of RTI & STI

d. Child survival – care of new born
immunization
management of diarrhoeal diseases and ARI
Vitamin A prophylaxis

RCH programmes in the rural areas:
The RCH programmes in the rural areas are implemented through the Primary health care facility network of Sub-Centres and Primary Health Centres. The Community Health Centres (CHCs) and Taluka Hospitals are the First Referral Units (FRUs).
The ANMs play the major role in these programmes and are assisted by traditional birth attendants who also provide antenatal and delivery services. The ICDS programme of Women & Child Department, through Anganwadi workers are responsible for ensuring access of the health care services for children up to 6 years of age. The Male Health Workers are supposed to focus on motivation of males to access family planning and other health care services.

Urban RCH programmes are within the ambit of the City Corporations or Town Municipalities. In Bangalore for example the Bangalore Mahanagara Palike has 30 maternity homes, 37 Urban Family Welfare Centres (UFWCs) and 55 health centres funded by the World Bank under the Indian Population Project VIII (IPP-VIII). In addition there are 25 dispensaries and some Aurvedic clinics for general ailments under the BMP.

The IPP centres and UFWCs focus on routine out patient RCH activities, with field staff and Honorary link workers residing in the slums, who motivate mothers to utilize facilities and services for antenatal care, delivery, family welfare, immunization etc. They act as referral units for the maternity homes which focus on delivery; medical termination of pregnancy (MTP) and laboratory test in addition to providing antenatal / postnatal care, family planning non-surgical care for children needing specialists attention and minor gynecological procedures. All the services at all these facilities are supposed to be provided free of cost. The IPP VIII programmes are being extended to other urban areas.

- **Specialized facilities, staffed with trained gender sensitive health care providers of both sexes, were expected to provide the full range of reproductive health services to both men and women.**
- **Sub Centre plan: Unmet needs for Reproductive Services were supposed to be identified & quantified which, along with demographic data for that area and the previous years performance, would form the basis for the planning of the programme.**

Unmet need is defined on the basis of women's response to survey questions. The unmet group includes all fecund women who are married or living in union and thus presumed to be sexually active, who either do not want any more children or want to postpone their next birth for at least two more years, but not using any method of contraception.

However, at the field level, this paradigm shift has not become a reality, the target based functioning is still very much in practice and the programme still targets mainly women.

Health indicators:

It is apparent from the some of the health, developmental and other indicators that the RCH programme is not as effective as envisaged. This is true of Karnataka as also of most other states in the country.

Infant Mortality Rate (IMR)

The IMR is 51.5 according to NFHS-2, and 58 according to SRS 1998.
IMR is 70 for Rural and 25 for Urban areas and varies from 29 in Dakshina Kannada to 79 in Bellary.
The IMR for females is 72, and highest in Dharwad Bellary & Bidar.

The **Maternal Mortality Rate (MMR)** according to UNESCO is 450. But recent estimates by SRS (1998) places it at 195 per 100,000 live births.

Crude Birth Rate

The SRS estimate of CBR in 1998 was 22 per 1000 population; 23.1 in rural as against 19.3 in urban areas. CBR has been fluctuating widely rather in Karnataka and the regional disparity is similar to other indices.

Family Welfare: The then Maharaja of Mysore created history when he started the first official family welfare clinics (birth control clinics) in Victoria, Vani Vilas Hospitals at Bangalore and Krishnarajendra Hospital at Mysore in 1930.
Since then the Family Welfare programme has come a long way. The couple protection rate increased from 12% in 1971 to 48 % in 1993 and to 57% in 1995-96. This varied from 41% in Raichur to 73% in Mandya
But the emphasis of the programme is on sterilization (40% in 1993) and not on spacing (9% in 1993)

Another disquieting fact is that over the years the participation of men in family welfare has reduced. The proportion of vasectomies in the total sterilizations in Karnataka increased from 43% in 1958-59 to 59% in 59-60 and to 95% in 67-68. It was 52% in the emergency year of 1976-77. But this fell to 0.1% in 1993-94, 94-95 & 95-96.
1992-93 figures also showed that fewer men (1.7%) than women (6.8%) adopted spacing methods.

The Second National Family Health Survey, 1998-99, showed that in the preceding 4 years:
The emphasis on sterilization and that too among women was apparent from the 51.5% of married women being sterilized.
Mothers received antenatal care in 86% of births, though mothers in rural areas were less likely to visit an allopathic doctor.
Only 51% of live births took place in a health care institution but 70% were attended by doctors and 15% by dais.
Nearly 25% of mothers did not receive even one doze of Tetanus Toxoid.
75% of mothers were given Iron & Folic Acid tablets but it is anybody's guess as to how many actually took them.
Immunization for BCG, DPT & Polio was good but for Measles it was only 67.3%.
Nearly 42% of children with diarrhoea were not given Oral Rehydration Therapy of any sort.
In Karnataka:

According to the 1991 census the **Gender Ratio** is 960 women for 1,000 men. This is worse than in Kerala, Andhra Pradesh, Orissa and Tamil Nadu. But more disturbing is the fact that it has worsened between 1981 & 1982.
The Gender Ratio is unfavourable to women in most districts except in Dakshina Kannada & Hassan

Issues of concern in implementation of RCH programs:

Inadequacies in terms of infrastructure and delivery of services:

- The aim of the RCH program to attain 100% institutional deliveries may be a laudable one. But the inadequate capacity both in terms of numbers and in terms of quality of services has led to a low proportion of institutional deliveries.
- Shortfalls in staffing requirements, especially lady medical officers and trained birth attendants has lead to sub-optimal implementation of RCH programs. ANMs too are not always available. Large vacancies are aggravated by cumbersome recruitment procedures; unauthorized absence and indiscipline in work force.
- **In this context the role of the Traditional Birth Attendants or Dais is very crucial especially in providing natal services**. It was surprising to note therefore, that the Dai training program was abruptly stopped without ensuring functional alternatives.
- The **Disposal Delivery Kit program** also has been abandoned without insights into its functioning or the need for alternate measurements.
- During delivery, while the birth attendant looks after the birth component, **the crucial needs of the newborn is ignored**. This can lead to complications like hypothermia, infections etc. This is one reason for the increased incidence of infant morbidity and mortality.
- The **nutrition needs of the child between 6 months to 2 years** does not get the attention it deserves. ICDS does not adequately cover this age group, leading to high rates of malnutrition

amongst them. This leads to increased incidence of infections, delay in mile-stones and retarded physical & mental growth.

Inadequate attention to quality:
The quality of care framework developed by Judith Bruce (1990) uses the following indices to assess the quality of care received by clients:
Accessibility and availability of services; availability of basic facilities and essential supplies, choice of methods; information to users; technical competence; client-provider interaction; continuity of services, and appropriate constellation of services, including treatment for sexually transmitted diseases and MCH care.
In terms of these indices it is seen that the **quality of services is poor.** Lack of discipline, accountability and a lack of adequate training and motivation among the health care givers at all levels are factors which lead to the poor quality. Often even the basic common courtesies are not extended. A telling evidence is the treatment meted out to the women at tubectomy camps, where numbers score over the entitlement of the people.

Poor **quality of care and client satisfaction in the RCH services** is reflected in lower levels of client satisfaction, a poor image and general distrust of public sector system. This in turn results in weak commitment among the RCH staff.

- Bed occupancy in PHCs is low as 11.9%; and there is a lack of proper integration of PHCs with higher level facilities; Many patients go directly to secondary and tertiary level facilities.

Several Indian studies have reported that the rude behaviour of health staff has been a major reason why women have not liked or used the government health services and compelled them to go to private doctors.

Government health functionaries usually blame the lack of equipment and supplies for the poor quality of their services. Ramasundaram (1994) has however observed that even when equipment and supplies were made available, clients continued to receive poor quality of care. He attributed this to the attitudes of health workers, who showed little respect for clients, particularly if they were poor, illiterate or from lower social strata. Some health workers even believed that because the government provided free services and also gave cash incentives for sterilization operations, the clients had no right to demand good-quality services.

Corruption - A major barrier to quality care for the poor:
People are not aware of their rights to health care, the facilities that are available and do not value the services provided because everything is supposedly free. At the same time, several studies have proved that corruption at many levels ensures that unaccounted charges are collected even from the poorest.

In a study by Jagadish C. Bhatia (1995) on the " Constraints to service quality in Rural Karnataka", all categories or workers have cited the issue of widespread corruption during the in depth interviews and focus group discussions. The Auxiliary Nurse Midwives (ANMs) complained that their bills, arrears, and other claims were inordinately delayed unless they agreed to pay a portion of their claims as "speed money".
Following are some highlights of the comments made by an LHV with more than two decades which is a telling tale of how deep rooted corruption is in the area of public service delivery:

"In the past, although we had much less manpower, logistic support, service prerequisites, housing etc., you will be surprised to learn that we used to work well. However overtime the working standards deteriorated with the gradual erosion in the ethical standards of immediate supervisors and higher officials, which paved the way to the institutionalization of corruption in the health department. Today, to be corrupt is no longer considered reprehensible. Drugs and equipment in the health facilities are misused without any hesitation. The doctors are interested only in private practice and amassing wealth".

A World Bank initiated study in 1999 confirms free access to quality health care services at the IPP health centers, but not in the maternity homes being run by BMP. None of the services like MTP, sterilization, delivery were being provided free of cost and an "informal / unofficial user fee" (= bribe) was demanded in almost all cases. The desperate condition of the patient and the their families in a medical emergency is being exploited to the maximum.

A study by the Public Affairs Centre published in May 1998 on "Bangalore Hospitals and the Urban Poor- A Report Card " revealed that:

- About 89% of the respondents interacting with BMP maternity homes admitted having paid bribes (speed money) to access better services.
- There are distinct differences in service quality between maternity homes and IPP health centres. While maternity homes do not score that well on cleanliness and hygiene, IPP health centres do. Basic medicines that are to be given free are not being given to a large proportion of poor patients at Maternity homes, while at IPP HCs most people get free medicines.
- The differences in quality of service are also indicative of poor discipline and responsiveness among the staff at maternity homes
- The practice of corruption is far more entrenched in maternity homes than in IPP health centres. Bribes are being demanded and paid for almost every service being provided at maternity homes.
- The staff are not ready to accept the prevalence of corruption leave alone trying to tackle it.

With the termination of World Bank assistance in the year 2001, the IPP facilities are going to be integrated with the existing system of the BMP for routine operation and maintenance. The two main concerns arising out of this are about the state of infrastructure and strong foundation laid by the IPP health centers under the administrative regime of BMP; and the impact of corruption in terms of its potential to invade and corrode the IPP facilities.Inadequacies in terms of infrastructure and delivery of services

Distortions in Primary Health Care:

There is lack of integration of the RCH programme into the general Health System. This emphasis as a separate vertical program results in ignoring the basic health aspects and diseases not addressed under the RCH program, including menopausal and other gynecologic problems, cancers etc.
Community participation and ownership of the programme by the community is lacking. This can be seen by the fact that even the Sub Centre plans are still made on the basis of the previous year's "targets". A household survey and assessing "Unmet Needs" is not being done.
Partnerships with the NGOs and the private health sector are not adequately explored

Lack of Equity:
Regional inequalities:

The poor quality of services is worse in the Northern districts and gets compounded by poor social structures, poverty and low literacy levels. All this leads to even lower access to whatever services are available.

Gender inequality

The programme is insensitive to the gender inequality factor and therefore does not address it adequately.

- When women are not allowed to make choices about their life, they are hardly in a position to make choices about contraceptive methods, 'negotiate' with their partners to use condoms or to respect their reproductive rights, their feelings and their emotional needs.
- Male Responsibility

The issue of male responsibility in matters of contraption, STD, AIDS; sexual violence, growth of red light areas, trafficking of women, spread of pornographic literature and blue films, growing market for aphrodisiacs and male potency drugs, need to be addressed. The role of male sexual behavior, gender relations, sexual and gender responsibility, role of the 'Y' chromosome from the male partner in determining the gender of the child, etc.

- In the name of empowerment, contraceptive responsibilities have been transferred to the women. In health programmes and policy planning, it should be ensured that pregnancy is made a matter of male concern.

Gender sensitive indicators

The indicators used to assess RCH programmes focus on general reproductive health aspects, thus they are not useful to measure the impacts of the gender sensitive policy on the field level situation. So there is a need to develop gender sensitive indicators to specifically measure the integration and outcome of gender sensitivity at the programme level and subsequent changes at the community level.

Gender sensitive indicators that may be used to assess RCH programmes are:

- Average attendance of men and women at meetings with the community.
- Number/percentage of couples who participate equally in decisions regarding reproductive issues and sexuality.
- Number of women who negotiate with their partners for the use of condoms.
- Number/percentage of men using condoms.
- Number/percentage of the total pregnant women who report that the present pregnancy was not planned/unwanted and who are able to take a decision themselves to undergo MTP.
- Number/percentage of men who think that use of family planning method is the wife's responsibility.
- Number/percentage of sterilizations that are vasectomies.

Men have to be sensitized to this gender perspective and influenced to assume responsibility for the consequences of their sexual behaviour and reproductive roles; and share household work and child rearing. They have to actively promote gender equity, girl's education and women's empowerment within their families, communities and work places.

Gender perspective of health care providers

The work of health care providers is divided along gender lines and tends to be inequitable for female providers.

The ANMs are completely responsible for MCH, family planning and outreach work, while male health providers focus on prevention and control of infectious diseases. This makes male health care workers insensitive to reproductive health issues.
ANMs are overburdened; lack logistical and administrative support, travel long distances alone at odd hours of the day for home visits, risking their own personnel safety and security; and receive abusive and biased treatment by virtue of working at the bottom rung of a male dominated hierarchy.
Lady Health Visitors do their own work as well as that of the male workers.

Ensure that gender inequalities among male and female health workers are reduced.
Give adequate training and skills to perform their responsibilities in a gender sensitive manner.
Ensure that both men and women are represented in managerial and supervisory roles.

Recommendations

Improvement of infrastructure-Staff:

1. The system of **deliveries by Dais should be supported, with enhanced training.**
2. **Disposable delivery kits** should be reintroduced with good quality cost effective components. This should be available with the expectant mothers.
3. As far as possible, ANMs should be posted in their home villages. This will solve the problem of safety and timely attendance.
4. The present workload of ANMs needs to be rationalized- less paper work and better use of their expertise and talent.
5. **Mobility of the ANMs** should be enhanced and the loan facility to buy a two wheeler may be made available in districts not covered by IPP IX also. As far as possible the ANM should be encouraged to drive it herself. Training for this may be given as part of the ANMs Training Programmes.
6. Village health committees should be established with the ANMs, so that essential programmes are planned with certain objectives and aims which are specific to local needs, rather than target oriented vertical programmes. The committee could involve the community and NGOs in generating demand for RCH services.
7. Improve availability of trained staff by introducing certain government approved, training courses such as:

a. Trained Nurse Anaesthetist
b. Nurse-Obstetrician Practitioner (2.5 year course for registered nurses)
c. Short-term training in anaesthesia for MBBS doctors (6m to 1yr)
d. Midwifery courses for local village girls.

Training of birth attendants:

8. Initial as well as Periodic reorientation training should be obligatory.
9. There should be periodic evaluation of the educational courses for ANMs, Dais and staff nurse-midwives. All training institutions should be periodically inspected to ensure that prescribed teaching facilities are available.
10. The existing training programmes should be revised to incorporate enhanced **field training facilities and technical and communication skills** to enable them to:

- Understand the **CNA methodology, assess the "Unmet Needs"**, and work out a realistic SC plan based on actual preferences of couples and not try to achieve top-down, unrealistic targets.

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Chapter 12

AN ANTHROPOLOGICAL INTERPRETATION OF ENDOCRINE DISRUPTION IN CHILDREN

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The first words uttered by parents after the birth of a child reflect their concerns about normalcy. "Is my child all right?" The reply is based on the gross anatomy of having five fingers and five toes, or other normal external features. The hidden internal anatomy and physiological function are unknown. As scientists, we recognize that harmony in external features does not guarantee conformity in internal functioning. This fact grows in importance as environmental contamination becomes increasingly widespread. The possibility of covert effects of endocrine-disrupting contaminants (EDCs), which may have an immediate or delayed internal influence on the child's overall health, have only recently emerged, although gross teratogenic defects have been associated with such EDCs as dioxin and certain herbicides (Sherman, 1995). The purpose of this chapter is to present what is suspected and known about EDCs as obstructing normal childhood physiology and functioning, and to place this knowledge within a framework applicable to all types of EDC research.

Introduction

Other sections of this book reflect on the interactions of evolutionary responses to the environment and how EDC contamination has not allowed sufficient time for a protective evolutionary response to develop for most vertebrates. Temporally, evolutionary responses occur very slowly in humans, reflecting a long reproductive cycle between generations. On the other hand, cultural evolution has occurred at a more rapid pace. Marked technological change has occurred in the western culture over the last hundred years and is increasing rapidly. Developing countries, taking benefit of industrial and agricultural advances, have experienced marked technological change in a matter of decades. The children of today are a product of this cultural evolution as much as they are of biological evolution. As with biological evolution, cultural evolution serves as provocation for continuing action and reaction in future generations. We act and react according to the preceding changes that have occurred, both on an individual level and on a global level.

More ancestral vertebrates are not excluded from this process of "modernization." Specific aspects of both biological evolution and social organization are tied to various aspects of human cultural evolution and social change. Foremost are the pressures from human-induced ecological change and habitat compression. Other diverse factors affecting both animal and human welfare include pressures from population growth, social, economic, and political influences, plus access to the basic necessities of life. Correspondingly, we must remember that an event occurring locally may eventually have a global impact (i.e., the destruction of rain forests). Evolutionary factors are also a two-way street, reflecting the evolutionary interdependence of animal and plant life. Changes in biodiversity are known to lead to previously innocuous insects becoming devastating pests. Zoological and botanical change and/or extinction can easily feed back into the quality and quantity of human life (Epstein et al., 1997). Thus, the assessment of the impact of EDCs must be placed in a holistic, global context, with recognition of the magnitude of events that are capable of shaping the future for both animal offspring and our own children.

Reproductive Rights

The early unsettling hints that EDCs may be disrupting the many loci in the endocrine system are increasingly being accepted as reality. In light of the extensive scope of findings, both in animals and humans, the time has come to place endocrine disruption in a broad-based framework in which to evaluate the future of our children. The foundation of the framework lies in the reformulation of basic rights to reflect the need for sustainable existence, including ongoing reproduction and productivity. Three basic prerogatives, based in terms of reproductive rights to ensure the health and productivity of future children, are necessary: (1) the right to a healthy body for pregnancy and parenting, (2) the right to impregnate or become pregnant when a child is desired, and (3) the right to have the expectation that one's children will be able to express these same reproductive rights without physical or mental liabilities leading to restrictions (Guillette, 1997). Such rights, as stated, decrease the emphasis on the traditional sociobiological paradigm regarding the passage of genes and increase

LN-6

emphasis on a continuation of normal physiological function and intellectual prowess for all generations. Other chapters present what is known about EDCs in relation to reproductive processes. I will discuss reproductive rights as they apply to the children of today, integrated with thoughts on what is needed to ensure that today's generation can expect that future generations will have the same reproductive rights.

The course of the future will reflect the mental status, as well as the physical status, of today's children beginning with their conception and continuing throughout life. The healthy child is defined as born free of contamination-induced defects and who has no greater risk of exhibiting pathology later in life, either in terms of disease or dysfunction, than if never exposed to EDCs, and who has the same, or greater, ability to reproduce in adulthood as his or her forefathers. Implied in this statement is the concept that the child will be mentally, as well as physically, fit. With pressures to limit family size because of world population growth and limited resources to care for an excessive number of children with preventable pathology, it is of paramount importance that all children fall within this definition of "healthy."

The Right to a Healthy Pregnancy

Worldwide fertility rates, reflecting the number of births per woman, dropped for the first time in 1996 (Popline, 1997). Population control advocates assert that the decrease reflects an increase in the use of contraception, particularly in developing countries. Other factors are not generally considered. Unfortunately, there is no systematized record of global infertility, but a few statistics are available. In parts of sub-Saharan Africa—including Kenya, Uganda, Cameroon, Zaire, and Babon—infertility rates range between 30% and 40% (Leke et al., 1993). The underlying cause of most of the infertility is unknown. Sexually transmitted disease accounts for only one-third of the cases. Pathology, such as low sperm counts and endometriosis, has been identified in another third, conditions that have already been correlated with toxic exposures. The cause of infertility in the remaining third is unknown, which may be reflective of pathology difficult to diagnosis (Leke et al., 1993). Abnormal ovarian morphology, including polyovular follicles and polynuclear oocytes, is associated with alligators and mice exposed to a number of EDC contaminants (Iguchi, 1992; Guillette, 1994; Guillette and Guillette, 1996). An accelerated onset of reproductive senescence following prenatal exposure to EDCs occurs in rodents, although there is no comparable menopausal data for humans (Gray, 1991). The relatively recent increase in infertility for the sub-Saharan African women described above suggests that it is due to environmental change. Exposure levels in most sub-Saharan human populations, resulting from widespread use of pesticides—particularly DDT in coffee, tea, and cocoa plantations common to these areas—has never been fully determined or documented.

Problems with conception need not result from actual disease. Contamination from exposure to microwaves, industrial chemicals, or pesticides are associated with sexual disturbances. The problems range from decreased libido to erectile and ejaculatory problems in males (Bancroft, 1993). The impact of toxins on female sexual behavior is unknown (Bancroft, 1993). Many studies have shown that when mothers are exposed to high levels of EDCs prior to or with pregnancy, incidence of spontaneous abortion, prematurity, reduced birth weights, and smaller head circumference increase, depending on the type of contaminant exposure (Guo et al., 1993; Karmaus and Wolf, 1995; Guillette et al., 1998). Thus, the EDC-related prenatal health status of the child is frequently assumed to be a reflection of only the maternal exposures and cross-placental transfer. This may not be totally accurate. Men exposed to pesticides through farm work in India produced children with a 300% increase in congenital defects and a 4-fold increase in neonatal death when compared to controls (Rupa et al., 1991). However, neither the mother's exposure nor the history of grandparents was considered in this research. Children of dioxin-exposed mothers continue to have significantly elevated dioxin blood levels 25 years after birth (Schecter and Ryan, 1993). These children, now adult women, are in a position to pass the same EDCs on to the third generation.

Other factors, resulting from cultural evolution but completely unrelated to EDC or other toxic waste contamination, serve to further complicate the right to a healthy pregnancy. The obvious ones of poor diet, alcohol, tobacco, and drug use, poverty, and lack of prenatal medical care are generally considered when evaluating the impact of contamination. We must equally consider psychosocial stressors that impact the outcome of pregnancy. Such stressors may be observable. Loud, ambient noise levels at airports and at some industrial facilities have been correlated with lower birth weights and reduced physical growth during early childhood (Schell, 1997). Many of these same confounders complicating human research apply to wildlife and the stresses of noise, poverty in terms of limited habitat and food supplies, and disrupted social patterns of behavior resulting from human intervention (Epstein et al., 1997). These various confounding variables should not be allowed to become faults in research design. Instead, recognition should be given to their absence or presence within the studied and reference populations, along with the possible role of such factors in pregnancy outcomes and health of the newborn. Comprehensive recognition of all factors involved with pregnancy can provide strength to the correlative evidence relating EDCs to poor postnatal outcomes.

The Right to a Healthy Body for Parenting

It is beyond the scope of this chapter to detail the suspected health changes in adults that result from environmental change. An overview of changes in world health patterns provides basic insight. The increase in various chronic diseases

among younger and younger adults during the last 50 years appears to correspond with the introduction and increased presence of EDCs. Cancer is no longer a disease of the elderly in modern nations. Half of the world's cancers are now found in developing nations, all of which have been experiencing modernization and the accompanying increase in EDCs for the last 30 to 50 years (Polednak, 1989; World Cancer Research Fund, 1997). Since the introduction of man-made toxic chemicals, cancers of the reproductive track are now occurring early in life, besides having increased 3-fold in incidence (Benedek and Kiple, 1993).

Research is minimal on the correlation between EDC exposure and adult infectious disease. We are all aware of the recent outbreaks of both old and new infectious disease, yet neither pathogen mutations nor increased incidence of disease in adults has been investigated in terms of contaminant exposure. At the same time, correlation between immune system malfunctioning and EDCs has been documented (National Research Council, 1993; Colborn et al., 1996).

Environmental change appears to be influencing the gender of the child to be parented. Slow, mysterious declines in male births have occurred in various parts of the world. Suspect factors include exposure to dioxin, pesticides, and high voltage (Knave et al., 1979; Dimich-Ward et al., 1996; Mocarelli et al., 1996). Impairments to male-producing fertility are found with both fathers and mothers, leading to a hypothesis that the involved toxic agents impact hormone levels related to sex determination and/or pregnancy outcomes (Toppari et al., 1996; Toppari and Skakkebaek, 1997).

The Right to Expect Our Children to Have Healthy Bodies and Pregnancies

Given the suspected insidious and sometimes minute but important alterations induced by EDCs, the identification of changes in health and factual proof of such change presents a major dilemma. There is a scarcity of baseline data prior to the introduction of toxic chemicals on which to base the actual occurrence of possible EDC-induced aberrations. For example, birth defects are the leading cause of infant death in Florida, although a birth-defect registry, aimed at tracking the problem and looking at the causes, was not approved by the state government until May 1997 (*Gainesville Sun*, 1997). Florida is a state with a history of heavy agricultural and residential pesticide use. The rate of defects prior to the introduction of pesticides will never be accurately known. Although 34 other states have a similar registry, a national registry is still lacking. Such problems should not be viewed as deterrents for documenting changes in health status but used to enlarge the scope of recognizable steps that must be taken to promote better documentation and recognition of the health changes found in association with EDC exposure. One step that must be undertaken rapidly is the procurement of broad-based physical and mental

health baseline data on both adults and children living in the few lesser contaminated areas of the world, for EDC exposure will eventually increase in amount and complexity with modernization processes.

The process of growth and development during fetal life and childhood are reflections of health. While the foundations for body growth are laid down during fetal life, the human infant is compositionally immature at birth. Physical growth is a continuous process. Tissue organization and cellular maturation continues until adulthood. It has been demonstrated that infants exposed to high levels of PCBs or herbicides transplacentally are small for gestational age at birth (Munger et al., 1997). An enigma exists in regards to this question: Does *in utero* EDC exposure continue to disrupt postnatal growth? Children exposed transplacentally to PCBs can be used in this debate. Jacobson and Jacobson (1990, 1996) found that children with *in utero* PCB exposure were small for gestational age and remained small at 4 years of age. The studies on a prenatally PCB-exposed group of Yu Cheng children read that they may or may not continue to have continued growth retardation (Gnu et al., 1994; Lai et al., 1994). Cultural and social factors, some of which were considered as variables in the various studies, can account for some of the differences. In addition, one must consider the usual outcome of small infants for gestational age. In a 1972 study, occurring prior to the large-scale recognition of EDCs, babies who were born small were evaluated at 4 years of age. Of these children, 35% remained below the third percentile for both length and head circumference, and only 8% rose above the 50th percentile markers for their age group (Fitzhardinge and Steven, 1972). These data provide hints that other factors besides EDC-induced growth disruption may be involved with the continuation of the exposed fetus's failure grow to a normative level following birth. At the same time, it does not refute correlation between EDCs and limited growth. One must ask if there are any accompanying inborn genetic and/or physiological alterations due to EDCs that accompany below-average growth. This appears to be so. Disorders of ectodermal and neurological tissue are present in children with *in utero* PCB exposure (Rogan et al., 1998).

One of the most important postnatal maturation processes occurs within the central nervous system. Rapid neurological development, particularly learning capabilities, occurs during the first 5 years of life and ends with complete myelination of the peripheral and spinal cord nerve tracts at adulthood. Research has documented that children with high levels of transplacental exposure to PCBs have hypotonia and hyporeflexia at birth, indicating that the central nervous system (CNS) has been affected prior to birth (Rogan and Gladen, 1992). Other signs of defective CNS function that exhibit themselves later in childhood include slowed motor development, with deficits in gross and fine eye-hand coordination (Chen and Hsu, 1994; Cherr and Hsu, 1994; Guillette et al., 1998). The capacity for intellectual abilities also increases during these early years (National Research Council, 1993). Findings suggest that prenatal exposure to PCBs and pesticides tend to affect high cortical

function rather than the sensory pathway, resulting in a lower IQ (Chen and Hsu, 1994; Jacobson and Jacobson, 1996). Many of these identified deficits, including behavioral problems and increased activity levels, persist over time (Cherr and Hsu, 1994). Both human and animal research are also providing correlative evidence that prenatal exposure to heavy metals induces varied mental and psychomotor disturbances, including learning, behavioral, and memory disorders (Liu and Elsner, 1995). We do not know if the identified learning/behavioral deficits ever occur with postnatal exposure to an additional compound or if the prenatal deficits are exacerbated by postnatal exposure to similar EDCs. These questions are difficult to answer because of the multiplicity of extraneous factors affecting growth and development in any child, including genetics, diet, ethnic practices, and cultural opportunities for mental stimulation and the overt expression of abilities.

Ethnic and regional differences in thought processes do exist and will continue to exist (Polednak, 1989). Such differences must be taken into account with the mental evaluations of children living in various areas of the world. American children are presented with many opportunities to recall a series of numbers (zip codes, social security numbers, and telephone numbers). In underdeveloped areas, the need to recall a number series is usually absent, making any test item involving this task difficult for the child to comprehend. Revision of the method is often necessary, as done with the children of the Yaqui tribe of Sonora, Mexico, under study for pesticide exposure (Guillette et al., 1998). Only when asked to repeat vowel sounds in abstract order, can the child grasp the task, eventually moving into number repetition. Acceptable childhood play behaviors also vary among cultural groups. Most American preschoolers are encouraged to engage in standing on one foot, which represents a sense of balance. When this same task was asked of Yaqui preschoolers, the children either refused to perform the task or managed to stand on one foot momentarily, usually holding onto an object. Only after questioning the parents did cross-cultural differences regarding the activity emerge. Children had been taught that standing on one foot was dangerous and results in injury (Guillette et al., 1998). Therefore, any claim that low scores on this activity reflected disruption of a sense of balance would have been invalid. Cross-cultural research studies are increasing. Interpretation of findings must always account for social and cultural factors and their implications in regards to neurological and mental performance.

Body functioning also includes the response to disease. The incidence of all cancers in children up to 14 years old rose 7.6% from 1973 through 1989 (Miller et al., 1992). The largest increases were for cases of acute lympocytic leukemia (23.7%), cancers of the brain and nervous system (28.6%), and cancers of the kidney and renal pelvis (25.9%). During the same time interval, other childhood cancers decreased (bone and joints, -15%; Hodgkin's disease, -1.5%; non-Hodgkin's lymphomas, -0.9%). Total cancer incidence for the entire U.S. population increased approximately 16.1% during this period (Miller et al., 1992).

EDCs have also been correlated with a depressed immune response (Colborn et al., 1996; see Chap. 7). The number of T-helper cells is known to be decreased in mice when exposed to DES prior to birth, raising questions with regard to humans (Palmlund et al., 1993). One study on the Yu-Cheng children, with *in utero* exposure to polychlorinated biphenyls and dibensofurans, demonstrates altered T-cell function and increased rates of sinopulmonary infection (Luster, 1996). Immune system depression, believed to be induced by PCB-contaminated food, is at the point where Inuit children have chronic ear infections and fail to produce antibodies in response to the usual childhood vaccinations (Colborn et al., 1996). Pesticides appear to create a similar immune system depression. Over half the families residing in the agricultural regions of Sonora, Mexico, experience seven or more bouts with infectious disease per year, in addition to autoimmune ailments of allergies and asthma, compared to incidence of none to two episodes of infectious disease and no autoimmune symptoms in the reference group. Most common are upper and lower respiratory infections, with adults similar to children in disease incidence (Guillette, 1997). The long-term impact of a compromised immune system gains greater importance when viewed in terms of social and environmental change. Already the more common infectious agents show resistance to new and powerful antibiotics. Looking to the future, will these children be more susceptible to certain diseases of adulthood, including the sexually transmitted diseases and such immune disorders as rheumatoid arthritis, for which there is no known cure?

Evaluating Risk

Risk assessment is usually approached in the context of the probability of a particular compound producing undesirable health outcomes, usually cancer. Risk is generally determined from the extrapolation of data derived from highly exposed subpopulation groups and/or data based on the chemical's effect on rodents, and then applied to adult humans (May 1996). Several problems exist with this approach. First is the assumption that only the heavily exposed subpopulation is at the greatest risk. Little consideration is given to the fact that the majority of all children are exposed to unknown doses of contaminants, including heavy metals, carcinogens, and multiple EDCs. For instance, background levels of TCDD up to 20 ng/kg have been found in the general population, with no identifiable specific exposures (Peterson et al., 1993). Adults and children are also unknowingly exposed through the foods we eat and water that we drink, in addition to the dust of our environment (National Research Council, 1993). Opportunities for children to become contaminated are even greater than parents may suspect. Play leads to direct contact with pesticide residues in yards, schools, and homes (Calabrese, 1997; Stanek, 1995). Other sources of contamination include poorly ventilated classrooms and the arts and crafts supplies at

schools (Fields, 1997). In addition to the hidden sources of exposure is the fact that the child can be absorbing more toxic material than an adult in the same area. The child inhales and absorbs lead at a level 2 to 3 times that of an adult due to the child's higher metabolism and higher level of activity (Schell, 1991). One can assume that other airborne EDCs enter at a comparatively similar increased rate.

The universality of contamination places all children at some degree of risk, with the possibility of having cellular disorganization during fetal life and the later development of endocrine-related dysfunctions. The interrelationships between body size, time of exposure, and amount of exposure are not considered. This interrelationship is most important for the developing fetus and the young child (Bern, 1992). "Weak" estrogen, or EDCs that bind to the estrogen receptor, have a far more potent effect on unborn mice than on adult animals (Bern, 1992). There are also critical developmental periods during which exposure can induce modifications in cell function and structure (Bern, 1992; Guillette, 1994). Although these studies involve research on nonprimates, the applicability of findings to human fetal life should not be denied. As described by Bern (1992), the treatment of mice with diethylstilbestrol (DES) during the time period of development of the reproductive tract results in the same vaginal and uterine cell dysplasias as found in women whose mothers received DES during the third month of pregnancy. Such specifics are good to know, but the situation of the world today means that developing embryos are exposed to multiple specifics, many of which remain unknown.

Risk assessment for children needs to be considered both in terms of interuterine exposure and continuing exposure throughout childhood. It is now believed that many EDCs are able to pass the placental barrier and enter the fetus. Fetal blood and breast milk have a high lipophilic content and appear to absorb lipid soluble EDCs. The transfer of the contaminants to the fetus and child is well known (Rogan and Gladen, 1990; Ahlborg et al., 1992). Developing countries, which do not have controls on the use and types of chemicals as strict as those in developed countries, have a fetal blood and breast milk EDC concentration that meets or exceeds levels found in the developed world (Autrup, 1993). In human populations, the average levels of DDT in breast milk range from 70 to 170 mg/l, with highs of 830 (Wolff, 1983). Assorted pesticide residues have been found in such diverse areas as Australia, Uruguay, Spain, Italy, Mexico, and Guatemala (Thomas and Colborn, 1992). Therefore, it seems reasonable to assume that all children born today have experienced *in utero* exposure to some form of EDCs and continued exposure if breast feeding was undertaken. Hopefully, the time will arrive when child risk assessment considers the maternal body load of EDCs prior to pregnancy but not based exclusively on such data. Exclusive use of the toxic equivalency approach may underestimate the risk of deleterious effect, because of the many independent mechanisms involved with these effects and the number of factors involved, including the amount and timing of fetal exposure and possibly the mixture of transferred compounds. For these same reasons, the evaluation of children must extend beyond the typical disease incidence approach to include the endpoints of growth and development, including varied physical maturation process, cognitive abilities, neuromuscular performance, and behaviors.

Both the role of Darwinian evolution and cultural evolution must be incorporated into any evaluative method of growth and development. Genetic differences among children and among racial groups are increasingly recognized as being meaningful in terms of susceptibility to actual disease. Facemire (Chap. 3) discusses racial differences in the adipose tissue composition. The most rapid deposition of total body fat occurs during infancy and reoccurs later during puberesence, especially for the female (National Research Council, 1993). Questions exist if the rapid deposition of fat serves to protect EDC target organs of the neonate when exposed to lipophilic contaminants. The issue becomes paramount with breast feeding, as the intake of varied contaminants via breast milk can be exceedingly high and involve over 250 chemical contaminants (Thomas and Colborn, 1992). The anticipation that rapid fat deposition protects the infant's organs from high concentration of dioxins and feuans in breast milk is included in the 1990 Canadian Environmental Protection Act (Anonymous, 1990). Others claim that the magnitude of the safety margin cannot be determined, and the available information does not rule out the possibility that there is no safety margin for the weight-gaining infant (Ahlborg et al., 1992).

Cultural evolution has created circumstances in which the safety margin is compromised. Social-economic conditions in particular produce outcomes similar to the mental deficits identified with EDC exposure. Undernutrition is known to affect cognitive functioning, including poor scores on IQ tests, decreased intersensory perception, and increased propensity towards illness (Cravioto, 1966; Kamphaus, 1993). Nutrition is not the only social economic variable related to mental and neuromuscular achievement. It has long been known that poor sanitation, inadequate health care, limited and/or low-quality educational and recreational facilities, all interact to play a major role in childhood development (Krogman, 1972). Social-economic inequality is frequently correlated with environmental inequality, with the poor and minorities residing in the more highly contaminated areas (Johnson, 1997). The presence of environmental EDCs may well be the straw that breaks the camel's back, placing the children of these families at extreme risk.

In summary, actual risk assessment should not be based on single factors. Assessment is complicated. The child, from conception onward, is exposed many times to many compounds. The varied mechanisms of action, in conjunction with the varied times of doses and varied time lines of possible adverse effects, add additional confusion to determining risk, as children are not just little adults. They have different exposure, metabolism, and physiological processes. The total problem is compounded by sociocultural factors that create their own risk factors and possibly multiply those of EDC exposure. In

addition, childhood risk assessment does not take into account the possibility of delayed effects that may not be expressed until early adulthood or later (Bern, 1992; Guillette et al., 1995).

The Future

The course of the future depends on action taken today. Such action includes two important segments: that of limiting our exposure to EDCs released into the environment and that of integrating EDC research to present a valid and realistic picture of what is actually happening. These two segments apply to all living species, as the physiological and endocrine parameters, although species specific, also share a great degree of similarity.

Scientists involved with the study of EDCs tend to use a categorical approach in their research. Investigation centers on such areas as the impact on biochemistry (i.e., binding properties), cell responses (i.e., mutations), specific organs (i.e., ovarian function), or the general population (i.e., risk, disease incidence). Such research is important in that it provides new knowledge. At the same time, the treatment of these factors as separate entities carries overtones of artificiality, in that research addresses issues that are related causally and conceptually but fails to give a total picture. The building blocks that result from compartmentalized research are seldom erected in total to provide a total view of what may be occurring with all children. The findings give the impression that there are pockets of children with intellectual deficits and other separate pockets with children exhibiting hormonal dysfunction or gross birth deformities or growth retardation. While pockets with extremes do exist, one cannot, and should not, come to the erroneous conclusion that EDCs are not affecting all children to some degree. The unification of specific knowledge from each category is necessary to prevent a heightened state of environment-induced vulnerability for parenting and reproducing, especially with our children and our children's children.

Research involving children must be approached holistically, extending beyond one specific area of interest or expertise. The range of possible outcomes and their endpoints are largely unknown, as are appropriate methods to assess possible probabilities (Weiss, 1998). The broad-based assessment of the normal play behaviors of 4- and 5-year-old pesticide-exposed Yaqui children showed that all areas of play behavior, ranging from ball catching to jumping, from drawing a stick figure to remembering a gift of a balloon, were compromised (Guillette et al., 1998). Such broad-based investigations, delving into unknowns, not only point out the scope and multitude of possible environment-induced deficiencies but also point out a need for more in-depth research in areas not previously recognized as being affected. The holistic approach calls for an interdisciplinary approach involving social, medical, and natural scientists working together without the artificial separation of topical components. Secondly, the need for more international investigation must be recognized, particularly in developing countries. Contamination is not just a problem in industrialized and western nations. Many published reports of birth defects, correlated with maternal and paternal EDC exposure, do not receive recognition because they are usually in lesser-read publications, such as Rupa et al.'s (1991) findings of a 300% increase in congenital defects and a 4-fold increase in neonatal death of children born to pesticide-exposed men in India. Such reports—plus verbal reports by nurses, midwives, agronomists, and others—indicate that children worldwide are exhibiting syndromes consistent with EDC exposure. For instance, a South-African midwife asked me for help in explaining "a strange new disease of newborns" in a particular agricultural area. The symptoms she described fit the syndrome of hermaphroditism. Many countries are those that contain sites with maximum and minimal exposure, providing valid reference groups for research.

Lastly, as research identifies an increasing array of pathological and physiological changes hypothesized to be associated with EDC exposure, consideration must be given to the acceptable and nonacceptable trade-offs that accompany technological advances. Evolution of flora and fauna, including *Homo sapiens*, continues to go onward as life continues. Clean air, water, and sufficient food is needed for all life. Providing these basics involves an integrated plant-based, animal-based, and human-based political economy. Short-term advantages that maintain the political economy must be weighed against long-term disadvantages, as should short-term disadvantages against long-term advantages.

Similar choices must be made for proposing and selecting intervention for protecting children. There are no simple answers. Mothers have been advised to cut away fatty portions of contaminated meat and fish where bioaccumulation is greatest. The removal of fat is a stopgap at best, for where is such tissue discarded? I have observed it being fed to other meat-producing livestock, including goats and hogs. At other times it ends up in a garbage heap, where it reenters the earth. Agricultural workers are advised to wash pesticide-contaminated clothing separate from other articles. Yes, this does decrease skin absorption of these pesticides by others. But where does the contaminated water flow? The possibility of its reentering the water system is present, particularly in rural areas served by shallow wells and drainfields.

Other family-based interventions for decreasing exposure pose similar decision-making problems, balancing economics and health. A mother's decision in regards to breast or bottle feeding frequently reflects the social and economic status of the family in society (Frayser, 1985). Only recently have the possible relationships of decreased maternal breast cancer risk and immunological advantages for the infant play a strong influencing role on the lay person's decision-making process for infant feeding. The maternal cumulative EDC load is a new facet to be considered in the decision-making process. With regard to all EDCs, the estimated intakes for neonates could be exceedingly high, and may exceed the permissible daily intake (Colborn et al., 1996). One point of view is

that breast feeding occurs only for a relatively short period of the life span, with exposure reduced below the guidelines during the remainder of the life span (Anonymous, 1990; Ahlborg et al., 1992). Also, the supposition is that with the rapid deposit of fatty tissue during neonatal life, EDC concentration occurs in the adipose tissue rather than the target organs (Anonymous, 1990). The question whether breast feeding should be advocated or not remains a serious matter for scientists to resolve. There should be concern for the transference of EDCs, but considerations must also be given to the positive benefits for the mother and infant.

In all instances, the choice that must be made by the individual involves choosing between short-term and long-term options that will affect their health and their environment. The question all of us must face is: Should EDC production and use be restricted? If so, what will be the outcome in terms of global quality of life and for public health? There are no easy answers to these questions. Advances in knowledge, technology, and policy must provide avenues that will protect both the environment and the people, now and in the future. Until adequate means are found to substitute for present technology, we are left with the question: "Is my child all right?"

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INDEX

(Italic letter *f* after a page number means that an illustration is on that page; *t* means table.)

NITYANAND JAYARAMAN — CORP WATCH / anti Globalisation

Jayakumar — Thanal — Toxic waste / Endosulfan.

GOPALA KRISHNAN — HLL Ltd
Kodai, 5 tonnes of Hg dumped
Settled 130 employees

B. Mahanty
Grass-root movement (UMAPANT) — UMAPANT (Orissa)
Social activist
Mines — Tribal areas

SRINIVASAN
Pasumai Thayagam (70,000 vol) Vellore — (Vellore)
570 tanneries — against pollution. 60% of total tanneries
Polluting air/water/land
tanning 1 kgs of leather
45 Lits of water & hundreds of chemicals. Closing tanneries without effluent treatment plant. (contains lot of Cr even in treatment plant)
upto 100-200 ppm / Std is 2ppm
Palar River

Dakshina Kannada Parisara — In Dakshina Kannada — Western ghats — Mega industries
Cogentrix 1000 MW
Nagarjuna — / steel / power MW
ex-employee of union carbide.
Mr Vithal rao organic farmer.

Dr Ramakrishan. — NIE / Stastician

Dr Sukanya — Community health Doctor
Achuta Menon Institute

Dr Murali / Bombay (4 No.s) with Interns from college. Jagriti / Deepa — 1988 Occupational Health & Safety Center (OHST)
Book on Guidlines of
Book of Dis-ability.
3 - Books - (Get it from him)
Legal perspectives / compensation
Employment schemes.
Lung function Test.

WH-6.

World Bank

Population and Reproductive Health
(Some Documents)

1. Population And Reproductive Health - Information Brief
2. India Reproductive And Child Health Project Signals Policy Change For Family Welfare Program -- *World Bank provides largest ever credit for population project*
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The World Bank Group and Population and Reproductive and Child Health in India

India was among the first developing nations to recognize the threat rapid population growth poses to national development and to adopt policies to address the problem. Its Family Welfare Program, launched in 1951, has contributed significantly to improving the health of mothers and children and to providing family planning services.

Forty-six percent of eligible couples now use some form of contraception, fertility has declined by about two-fifths, and immunization coverage of children is approaching 80 percent. However, maternal deaths remain high at 437 per 100,000 live births, and the total fertility rate, while below replacement level in the states of Kerala and Goa, is as high as four or more children per woman in the poorer northern states of the Hindi-speaking belt.

India's continued high fertility rate, combined with a two-thirds drop in the death rate

and a doubled life expectancy, have resulted in substantial population increases, from 342 million in 1947, to 684 million in 1981, to 931 million people today. Each year, 16 million people are added to the population and by 2050, India's population is projected to reach 1.5 billion.

Slow progress in the 1980s made it essential for India to devise innovative strategies to achieve greater dynamism in its Family Welfare Program. In the early 1990s, the Government of India began a paradigm shift from a system based on contraceptive method-specific and fertility reduction targets and monetary incentives to a broader system of performance goals and measures designed to encourage a wider range of reproductive and child health services. The Ministry of Health and Family Welfare developed an action plan to strengthen the program and made several recommendations consistent with the reproductive and child health approach.

This approach, which was adopted by the Government of India when it initiated the Child Survival and Safe Motherhood Program in 1992, is also central to the new vision of population policy that emerged from the 1994 Cairo International Conference on Population and Development. Reproductive health refers to a state in which people can reproduce and regulate their fertility, women go through pregnancy and childbirth safely, the outcome of pregnancy is successful in terms of maternal and infant survival and well-being, and couples are able to have sexual relations free of the fear of pregnancy and disease.

In its transition to this approach, India is taking careful account of the links between family welfare and other health services. More emphasis is now placed on the private and voluntary sectors as they develop in the increasingly dynamic Indian economy.

World Bank Group assistance to India's efforts in population and reproductive and child health (RCH) dates back to the earliest days of Bank involvement in the population sector. Between 1972 and 1986, four population projects totaling about US$188 million were

approved. Since then, Bank Group-Government of India collaboration has been stepped up, with approval of five more population projects and a Child Survival and Safe Motherhood (CSSM) Project totaling about US$645 million, and preparation of a Reproductive and Child Health Project for some US$248 million. The objective of each of these projects has been to strengthen the capacity of the family welfare and health systems to deliver better quality services more equitably.

The development of this lending program has been based on a number of analytical efforts and on a continuous dialogue between the Bank Group and the Government of India, which has allowed the Bank to support India's transition to a reproductive and child health approach. The Bank has focused an increasing share of its attention on those features of the Family Welfare Program that constrain it from being more effective, including reorienting management focus from contraceptive targets to client-responsive quality service. The Bank Group also continues to emphasize assistance to the national immunization program, programs in safe motherhood, and the control of acute respiratory infections and diarrheal disease.

Completed World-Bank Assisted Operations

The First Population Project (1972-80) was financed by an IDA credit of US$21.2 million and a grant from the Swedish International Development Authority. The project supported the Family Welfare Program in five districts in the state of Karnataka and six districts in the state of Uttar Pradesh. The project was essentially an experimental demonstration project intended to test the efficacy of various program activities, and to develop ways for attaining better performance of the national program.

The project experience indicated ways subsequent World Bank support of the Family Welfare Program could be improved, and was the foundation for the government's subsequent accelerated program of family planning and maternal and child health. Also, the two population centers established under this project have carried out a variety of research.

The Second Population Project (1980-88) was supported by an IDA credit of US$46 million. The project assisted the Family Welfare Program in six districts of eastern Uttar Pradesh and three districts in the state of Andhra Pradesh. The project was part of a government effort to obtain external assistance to strengthen the Family Welfare Program in underprivileged districts of selected states.

The project gave further support for the integration of family planning and mother and child health care services, emphasized the importance of generating demand for services and, as in all subsequent projects, stressed the increased use of temporary contraceptive methods and gave substantial support for the construction of basic health facilities. An estimated 22.7 million women and children benefited from strengthened family welfare services provided under the project.

The Third Population Project (1984-91) was financed by an IDA credit of US$70 million. It too was implemented in underprivileged districts-six districts of northern Karnataka and four districts of the state of Kerala.

Project impact was particularly notable in Kerala, where project support helped bring program implementation in the underprivileged project districts up to the much higher standard already achieved in the rest of the state. In Kerala project districts, contraceptive use has increased and, on average, immunization of children has risen from about 28 percent to about 78 percent. Overall, approximately 18 million women and children in the 10 project districts were reached by the project-assisted family welfare program.

The Fourth Population Project (1986-94) was supported by an IDA credit of US$51 million and was implemented in West Bengal. In the four districts where facility construction was supported by the project, program implementation benefited more than 12 million women and children. The project emphasized maternal and child health. A

comparison of fertility, mortality, and infant mortality rates between the pre-project year of 1984 and 1992 indicates substantial progress in these three vital indicators.

During the course of the project, the birth rate in West Bengal declined from 30.4 to 24.6 per 1,000, the death rate from 10.7 to 8.3 per 1,000, and the infant mortality rate from 82 to 64 per 1,000 live births. There was also very good progress in the share of couples using modern contraception, which improved from 33 to 52 percent. State-wide support for program management information, communications, and training components had a positive effect on the implementation and impact of West Bengal's family welfare program in general.

The Fifth Population Project (1988-96), financed by an IDA credit of US$57 million, supported the National Family Welfare Program in the municipalities of Bombay and Madras, and was extended to other urban areas in the states of Maharashtra and Tamil Nadu. The main goal was to improve the service delivery and outreach systems of family welfare services in urban slums. Innovative features included support for involvement of non-governmental organizations (NGOs) and private medical practitioners in carrying out the Family Welfare Program. The project met its service delivery objectives and benefited some 2.5 million poor women and children in slum areas.

The Child Survival and Safe Motherhood Project (1991-96), financed by an IDA credit of US$214.5 million, supported the enhancement and expansion of the Maternal and Child Health (MCH) component of the National Family Welfare Program. It was national in scope, with emphasis on districts where maternal and infant mortality rates were higher than the national average.

The project's specific objectives were to enhance child survival, reduce maternal mortality and morbidity rates, and increase the effectiveness of service delivery by supporting:

- child survival programs including the Universal Immunization Program, diarrhea control programs, and the control of acute respiratory infections;
- a Safe Motherhood Initiative to improve ante-natal and delivery care for all pregnant women and to identify high-risk pregnancies; and
- institutional systems development, including improving and expanding training programs for family welfare workers, education and communication, and management information.

More than 42 million women and children benefited annually from the services provided.

Ongoing World Bank-Assisted Operations

The Sixth Population Project, approved in 1989, provides assistance through an IDA credit of US$124.6 million. The project supports improvements in the efficiency and effectiveness of the delivery of family welfare services in the rural areas of the states of Andhra Pradesh, Madhya Pradesh, and Uttar Pradesh. The project has established a well-regarded and systematic program of in-service training and a training culture focused on improving performance of workers and an increased awareness of how to monitor and improve the quality and effectiveness of training.

Three state institutes of health and family welfare, 18 regional training centers, 91 district centers/teams, and 23 field practice demonstration areas have been established and are conducting regular in-service training; 23 basic auxiliary nurse midwife (ANM) training schools have also been strengthened. In addition, 1,620 sub-centers with ANM residence have been constructed, equipment and furniture have been provided to sub-centers, and primary health centers and delivery kits have been provided to traditional birth attendants.

- a local capacity enhancement component that would fund district and city sub-projects aimed at meeting specific needs of local priority groups.

The project is expected to be approved in mid-1997, and would be financed with an IDA credit of about US$248 million.

Research and Analysis

Two major studies, *Improving Women's Health in India* (1996) and *India's Family Welfare Program: Moving to a Reproductive and Child Health Approach* (1995), provide background for the Bank Group's discussions with the Indian government on further developing public, voluntary, and private sector capacity to address needs of the Family Welfare Program and health problems of India's women. The former was published as part of the Bank's Directions in Development series and the latter was published as part of the Bank's Development in Practice series.

Both studies build on an earlier study entitled *Family Welfare Strategy in India: Changing the Signals* (1990). Taken together, these studies provide support for the important steps the government has taken in moving away from a target-driven, demographic approach emphasizing female sterilization, toward a client-centered approach that helps people meet their broader health and family planning goals.

Improving Women's Health in India provides a comprehensive overview both of women's health issues and the government's programs to improve them. Despite considerable progress, the report argues that India still has a large, unfinished agenda in the areas of reproductive and child health. The report emphasizes women's reproductive health and the factors underlying excess female mortality at early ages, especially in the northern "Hindi belt" states of Bihar, Rajasthan, Madhya Pradesh, and Uttar Pradesh. These states account for almost 40 percent of India's population and exhibit well-documented unfavorable demographic trends compared with the rest of India.

The book also points out the needs of women in rural areas where mortality levels are substantially higher than in urban areas and access to care is limited. Its focus is on the measures necessary to address existing policy and implementation constraints and improve the quality, acceptability, and use of services essential to women's health. Further progress and more resources are needed.

In 1994, the Cairo Conference formalized a growing international consensus that improving reproductive health, including family planning, is essential to human welfare: reducing unwanted pregnancies safely and providing high-quality health services both satisfies the needs of individuals and stabilizes the population.

This perspective, strongly supported by the Government of India in its Program of Action in the India Country Report prepared for the Cairo Conference, led to a major piece of collaborative analytical work with the World Bank Group entitled India's Family Welfare Program: Moving to a Reproductive and Child Health Approach. The report identifies the major constraints on India's Family Welfare Program and recommends ways in which these constraints might be overcome. In addition, it discusses an "Essential Reproductive Health Package" designed to provide a cluster of recommended reproductive health services directed primarily at the needs of actual and potential patients. The Reproductive and Child Health Project was based partly on this work.

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Overall, it is estimated that up to 40 million rural households in the three project states are benefiting from program improvements achieved with project support.

The Seventh Population Project, which supports the National Family Welfare Program in the states of Bihar, Gujarat, Haryana, Jammu & Kashmir, and Punjab, through an IDA credit of US$81.6 million, was approved in 1990. This project, which also has a special training focus, is similar to the Sixth Population Project. At least 22 million families in the rural areas of the project states will ultimately benefit from project-assisted improvements in the quality and coverage of program services.

Since the project began in 1991, rates of sterilization and use of IUDs, oral pills, and conventional contraceptives have been steadily rising. Systematic and regular in-service training for family welfare workers has also been established.

The Eighth Population Project, financed through an IDA credit of US$79 million, became effective in May 1994. The project supports the improvement of family welfare services in the slum areas of Bangalore, Calcutta, Delhi, and Hyderabad. It focuses on the reduction of fertility as well as maternal and infant mortality rates among people living in urban slums by improving the outreach of family welfare services, upgrading the quality of family welfare services, expanding the demand for health services through expanded information, education and communication activities, and improving the administration and management of municipal health departments.

The Ninth Population Project, which became effective in September 1994, is being implemented in three states-Assam, Karnataka, and Rajasthan-and is financed through an IDA credit of US$88.6 million. The project supports improved access to, demand for, and quality of family welfare services, particularly among poor, remote, and tribal peoples.

The project aims to:

- strengthen family welfare service delivery, including establishment of first-referral units;
- improve the quality of family welfare service;
- strengthen demand-generation activities through improved information, education, and communications planning and activities;
- strengthen program management and implementation capacity; and
- provide funds for innovative schemes to improve service delivery.

Future Operations

Building on a major analysis done collaboratively by the World Bank and Government of India, and recent Indian program developments, the Indian government is preparing a Reproductive and Child Health (RCH) Project, which would support the National Family Welfare Program in improving the health status of women and children, especially the poor and underserved. An essential package of reproductive and child health services is integral to the project approach.

The project would include two major components:

- a nation-wide policy reform package, covering monitoring and evaluation, institutional strengthening, and service delivery; and

News Release No. 97/ 1368 SAS

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INDIA REPRODUCTIVE AND CHILD HEALTH PROJECT SIGNALS POLICY CHANGE FOR FAMILY WELFARE PROGRAM

World Bank provides largest-ever credit for population project

NEW DELHI, May 29, 1997— The World Bank today announced the approval of a US$248.3 million equivalent Interim Trust Fund credit to the Government of India for a Reproductive and Child Health Project. The project will support the National Family Welfare Program in improving the health status of women and children and stabilizing population growth.

The credit, which is the largest support undertaken by the Bank or any other development agency for follow-up to the 1994 International Conference on Population and Development, will be provided on International Development Association (IDA) terms.

The India Family Welfare Program is the longest established and one of the largest programs in this field in the world. It was assigned the formidable task of reducing fertility in the world's second most populous country. Fertility has declined from 6.0 to 3.4 births per woman, but it is still short of the replacement fertility goal of 2.1 births per woman. To address this, intensive evaluation within and outside the country, as well as the Bank's highly participatory sector work in 1994, contributed to a policy shift known as the "participatory planning approach."

"The Government of India has taken a bold, imaginative, and innovative step in initiating a shift in its long-standing program. With the new approach, the program focus will shift from achieving contraceptive targets to responding sensitively to the health needs of clients, and provide better quality, gender sensitive information, and services that are more accessible to the poor. Communities, particularly the rural poor, will participate in identifying their reproductive health needs and in monitoring service quality," says **Indra Pathmanathan, a World Bank Public Health Specialist and project task manager**.

"More specifically," Pathmanathan continues, *"the project will serve the contraceptive needs of the one in three couples who do not want another child but are not using contraception, reduce the very high levels of death and illness among pregnant women, and further reduce the high levels of preventable childhood illness."*

The project will assist the Family Welfare Program in strengthening management performance by shifting to the participatory management approach. Implementation of such policy reform requires fundamental attitudinal and behavioral change in more than 280,000 managers and workers, as well as in the community. Recognizing this, the government, in partnership with the NGO community, spearheaded an extensive series of consultations with state policy makers, NGO and academia, rural communities, and grassroot providers.

ABOUT INDIA'S FAMILY WELFARE PROGRAM

With 950 million people, India is the world's second most populous nation after China. India has made remarkable strides in improving family welfare since the Family Welfare Program was launched in 1951. In the intervening period, mortality levels fell by nearly two-thirds, fertility declined by about two-fifths, and life expectancy at birth almost

rural communities, and grassroot providers. These consultations provided guidance on how to re-direct a massive program without losing its existing momentum and strengths. This consultative process will be continued during project implementation.

The project will enable the Family Welfare Program to deliver a package of essential reproductive and child health services, defined by the Government of India as: prevention and management of unwanted fertility; management of pregnancy and childbirth; reproductive tract infections; and child survival, including immunization, diarrheal and acute respiratory illness, and newborn care.

The project has three major components. The first is a nation-wide policy reform package, including monitoring and evaluation, institutional strengthening, and service delivery. It will expand existing monitoring systems through regular client polls and technical assessments of quality. This component also provides training and technical support for more responsive decentralized activity planning.

A second component will expand the essential package of reproductive and child health services and improve their overall quality, coverage, and effectiveness. The upgrading of quality and scope of services will take place through improved clinical and communication practices and the establishment of referral procedures from the community to the appropriate facility. This component will also support pilot experimental schemes designed for tribal areas and urban slums.

doubled. The Family Welfare Program helped to bring the country about two-thirds of the way toward its goal of replacement-level fertility (2.1 births per woman), with fertility declining from about 6 to 3.4 births per woman.

India has also made inroads in improving maternal and child health. The country has established an impressive network of more than 2,300 community health centers; 21,000 primary health centers; and 131,000 village-level sub-centers to provide primary health care, including maternal and child health care and family planning at the grassroots level. According to India's Ministry of Health and Family Welfare (MFHW), more than 40 percent of eligible couples are using contraception. MFHW's figures also show that over 60 percent of mothers had received tetanus-toxoid immunizations during their most recent pregnancy, over 50 percent of mothers had received iron-folate tablets to combat anemia, and over 60 percent of infants had received at least one immunization.

Source: India's Family Welfare Program: Moving To a Reproductive and Child Health Approach, Directions in Development Series. World Bank.

A third component focuses on local capacity enhancement. In India's most disadvantaged districts and urban slums, the project will provide additional investment for expanding the family health care infrastructure by financing the construction of health posts, special NGO schemes, and stipends for voluntary health workers and women's village health committees.

More specifically, the project will:

- reduce unwanted fertilitypregnancies aamong the 30 million women reported in the 1993-94 National Family and Health Survey who have 'unmet contraceptive needs', namely, those not using contraceptives, although they wished to space or not have any further births.
- reduce the health risks and burden of disease associated with pregnancy and childbearing among the 220 million women in the reproductive age group in India, in particular, the largely poor women in districts that have high concentrations of scheduled tribes and castes, and poor women in urban slums.
- increase child survival in the 0-4 year age group by increasing program coverage to an estimated 10 million additional children over the five year period, improve effectiveness of ongoing interventions, and reduce poor maternal health which is estimated to be associated with 30 percent of deaths of children under five years of age.

The US$248.3 million equivalent credit will be provided through theon standard IDA terms with a 10 years grace period and 35 yearsto maturity and includes a commitment fee of 0.5 percent and a service charge of 0.75 percent. IDA is the World Bank's concessionary lending affiliate. The Indian Government will contribute US$60.5 million. Total project costs are US$308.8 million equivalent.

Population and Reproductive Health
HNP Information Brief

Challenges

The World Bank, its client countries, and other donors are implementing new approaches in their response to population and reproductive health issues after the call by the 1994 Cairo Population Conference (ICPD) to link population policy more closely to poverty reduction and human development and to adopt a reproductive health approach that integrates family planning, maternal health, and prevention of sexually-transmitted infections. ICPD seeks to place individual rights and needs in the forefront of population and development policies and programs.

Implementing these new approaches poses special challenges. Population policies and programs need to be adapted to the diverse demographic, economic and geographical conditions in countries. Countries with high rates of population growth require sustained, coordinated investments in family planning, child survival, maternal health, girls' education and women's empowerment.

Experience shows that such investments can have a significant demographic impact. For a variety of reasons, including changes in attitudes linked to increased education and economic opportunities for women, dissemination of new ideas through the mass media, and organized efforts to increase access to modern methods of fertility regulation, fertility rates have declined to below half their 1960 levels in East Asia and Latin America, and nearly so in South Asia. Investments by the Bank and other donors created enabling conditions for these fertility declines.

Reasons for Investing in Reproductive Health Projects

- ***High-quality, user-oriented health services offering a range of reproductive health services and information*** can improve individual health and welfare.
- ***Improvements in reproductive health have multiple benefits*** - lower fertility, lower maternal mortality, healthier children, and better-off families.
- ***Slowing of population growth is still a high priority in the poorest countries:*** rapid population growth makes it more difficult to provide education and health services, create jobs, and preserve the environment in poor countries.
- ***Integration of population policy with social policies,*** including girls' education, women's status, and poverty reduction, is more effective in reducing high birth rates than policies that focus on fertility reduction alone.
- ***Empowerment and choice enable*** people to make their own choices about family size by providing them with the means - family planning information, education, supplies, access.
- ***Promoting better reproductive health*** helps women avoid the risks of too many births, too closely spaced, or initiated when the mother is too young or too old.
- ***Poor reproductive health*** undermines women's potential to contribute to increased productivity and family welfare.

The poor in all regions continue to experience unacceptably high fertility, malnutrition, and child and maternal mortality. An estimated 120 million women who currently wish to space or limit further childbearing are not using contraception. Almost 10% of the total disease burden in the developing world is due to maternal and perinatal conditions. Among women in the age-group 15- 44, pregnancy-related illness and death impose the greatest disease burden. While illustrating the high global burden of preventable disease, this statistic masks considerable regional variation even among poor countries. For example, at similar per capita income levels, maternal mortality in Yemen is ten times higher than in Vietnam, and almost 30 times higher in the Ivory Coast than in Sri Lanka.

The Link to Poverty

Improving human development and economic productivity are central to the Bank's efforts to reduce poverty. Population and reproductive health are linked in various ways to these important agendas. For example, the growth, age composition and geographic distribution of populations affect and are affected by progress in reducing poverty and improving living conditions. In poor households, high mortality and morbidity, along with unwanted fertility, are among the major burdens of poverty. Reducing them contributes directly and indirectly to poverty reduction.

The linkages between poverty, population and reproductive health are complex. Most of the increase in global population over the last four decades has occurred in developing countries, and future increases are projected to occur in the poorest of those countries. Despite the pressures of rapid population increase, developing countries have made substantial progress in improving living standards. However, rapid population growth continues to undermine efforts to reduce poverty in Africa and Asia and poor economic performance combined with a high rate of population increase has

led to declines in per capita income in several countries.

The World Bank's Role

In keeping with its development objectives, the World Bank is working closely with partners and client governments to address population issues within a broader context. The Bank's main comparative advantage in population and reproductive health policy is through dialogue and analytical work to help borrowers understand how demographic shifts affect the social sectors (health, education, social security) as well as the environment and agriculture, employment, and basic infrastructure.

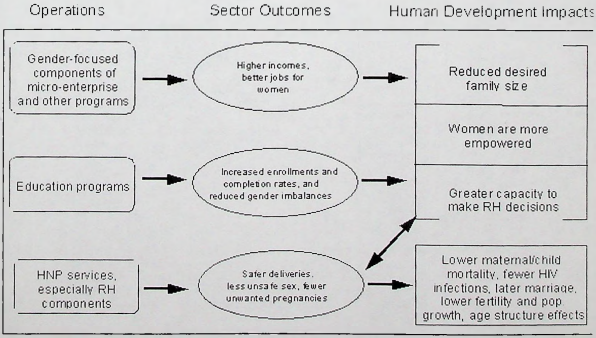
Over the past 40 years, Bank population projects have included a combination of strategies. In the 1970s, projects supported infrastructure projects to provide facilities to provide reproductive health services to clients. At the same time, funds were provided to provide technical assistance and training for the development of skills to implement family planning programs. During the 1980s, the focus expanded to cover primary health care and communities, particularly addressing the health of children and more recently, of women. In the 1990s, operations are increasingly addressing health sector reform and new health problems, including HIV/AIDS. In addition, reproductive health and family planning are now being addressed as components of broader health programs. The broader approach is expected generally to be more cost effective and yield greater results.

The World Bank is working with borrower countries and other donors to implement the agreements on reproductive health and rights agreed upon at the 1994 International Conference on Population and Development (ICPD) and the 1995 Fourth World Conference on Women and is working to reduce the gender gap in education and to ensure that women have equitable access to and control over economic resources.

World Bank Lending

The Bank is the largest single source of external funding in developing countries for human development (HD) programs: health, nutrition, population (HNP), education and social protection. Population and Reproductive health activities constitute a significant portion - just less than one-third - of all lending for health, nutrition and population. Most of the World Bank's funding for Population and Reproductive health programs is provided on highly concessional terms to low-income countries through the International Development Association (IDA).

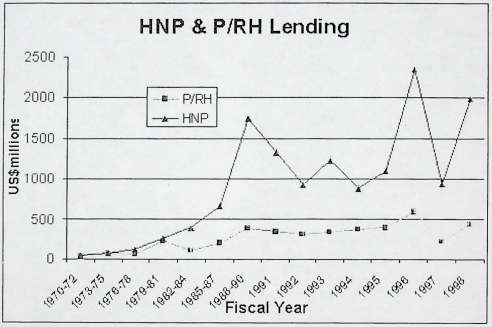
Population and Reproductive Health Related Development Impacts of Bank Operations



Bank lending supports investments in a variety of initiatives that contribute to positive population and reproductive health outcomes, as shown in the figure above. These programs contribute directly to

outcomes that are important in their own right (the middle column of the figure). They also contribute indirectly through changes in the enabling environment, for example by influencing desired family size or by increasing women's capacity to make decisions that affect their reproductive health (as shown in the right-hand column of the figure). At the policy level, recognizing these broader development links and ensuring that social programs contribute positively to them is much of what ICPD meant when it called for population issues to be addressed in a broader human development context.

In the HNP sector, the Bank has lent US$ 3.7 billion over the last twenty-five years to support population and reproductive health through 192 HNP projects in over 80 countries. Although new commitments have varied from year to year, the trend has been steadily upward. In recent years, Bank lending has integrated reproductive health projects with its population programs, financing an average of nearly US$ 400 million a year since fiscal 1992 for projects involving population and reproductive health activities. Many Bank projects include grant assistance from other donors or are designed to complement the work of other donors in client countries.



Other Bank-funded projects also make significant contributions to Population and Reproductive health issues. Over the past three fiscal years (1996-1998), the Bank and IDA have committed nearly a billion dollars in new lending to increase education for girls. Outside of the Human Development sector, rural development projects provide micro-credit, which contributes to the empowerment of women and indirectly enables them to exercise greater choice in reproductive decisions. Gender-focused initiatives in a number of sectors have similar effects. For example, the Second Egypt Social Fund Project has a $354 million enterprise-development component providing loans and technical assistance through NGOs, with special emphasis on credit for poor women.

Regional Perspective

The Bank's six regional units have all made major commitments to reproductive health and family planning. During the period covering FY 1992 to FY 1998, South Asia accounts for the largest share (35 percent) of the $2.7 billion in loans and credits. Latin America and the Caribbean countries have the second largest share with 20 percent, and Africa is third with 17 percent.

Commitments for Population/Reproductive Health in Loans/Credits, Fiscal Years 1992-98 by World Bank Region (Millions of U.S. Dollars)

Fiscal Year	1992	1993	1994	1995	1996	1997	1998	Total	Percent
Sub-Saharan Africa	25.2	67.1	96.7	145.8	50.7	1.7	65.0	452.2	17
East Asia	0.5	79.3	9.4	93.5	114.4	8.0	50.6	355.7	13
Europe & Central Asia	46.6	0	0	1.8	111.8	26.1	2.7	189.0	7
Latin America & Caribbean	2.3	35.6	184.5	54.0	111.8	64.5	98.2	550.9	20
Middle East & North Africa	0	79.4	0	46.4	37.5	0	38.0	201.3	8
South Asia	243.7	78.6	133.1	106.6	82.7	131.7	171.0	947.4	35
TOTAL	318.3	340.0	423.7	448.1	508.9	232.0	425.5	2696.5	100

Effective Action

The Bank's comparative advantage

The World Bank's partners in the population and reproductive health fields - including UNFPA, WHO, UNAIDS, UNICEF, bilateral donors and NGOs - provide borrowers with most of the technical expertise as well as significant financial assistance for their programs. These partners look to the Bank for support in policy dialogue and resource mobilization. Because of the Bank's access to both finance and planning ministries as well as functional ministries such as health, education, and women's affairs, it is well positioned to facilitate actions that link investments in different sectors, including health, education, and gender, to achieve optimum impact. Further, it has the financial capacity to support investments in these areas and has committed itself to increased support of the social sectors.

In order to sharpen strategic focus and strengthen effectiveness, the Bank's staff in population and reproductive health are working to ensure that these perspectives are included in key documents during policy dialogue with client governments in countries where such a perspective is expected to have a critical impact on poverty and human development. A database of key population and reproductive health indicators (see box) will be maintained to identify key issues for possible discussion in World Bank Country Assistance Strategies (CASs) and other key documents. These indicators will help to identify population and reproductive health issues in countries slated for CAS review with the aim of directing increased attention on these issues during discussions with governments.

Key Population and Reproductive Health Indicators:

- The total fertility rate
- The maternal mortality ratio
- The prevalence of HIV/AIDS
- An index of the force of population momentum
- Urban population growth
- Growth of the young working-age population
- Enrollment of girls in secondary school

Strengthening Partnerships

Many Bank Population and Reproductive health projects currently involve a partnership between governments, international agencies, other donors and non-governmental organizations (NGOs). Many of these partners have developed specialized skills over the years and Bank collaboration with these groups is steadily increasing.

- ***United Nations Population Fund (UNFPA)*** : UNFPA is the lead international agency in the population field, with a strong network of field offices that are knowledgeable about local conditions and issues. The Bank already uses UNFPA's contraceptive procurement facility and is working to increase collaboration in such areas as training, procurement, strategy development, and country program management.

- ***World Health Organization (WHO)*** : WHO is the lead international agency in health, with strong links to the scientific community for maternal, reproductive and child health. The Bank supports WHO's program for training and research in reproductive health, and WHO provides the Bank with policy guidance and technical support.
- ***Joint United Nations Programme on AIDS (UNAIDS)*** : UNAIDS is a global partnership cosponsored by the World Bank and five other international agencies. Its goal is to provide policy and technical leadership to countries in their efforts to turn back the epidemic.

- *United Nations Children's Fund (UNICEF)* : UNICEF is a partner in a number of Bank-supported RH operations, and has recently begun to expand its focus on adolescent reproductive health. UNICEF's specialized skills in advocacy and health communication are particularly important for reproductive health initiatives.

- *Bilateral Donors* : Bilateral donors cofinance P/RH activities in a number of borrower countries and provide a broad range of technical support to country programs.

- *Nongovernmental organizations (NGOs)* : NGOs have played a critical role in the population and reproductive health fields - particularly for developing and testing novel approaches to problems, in research, advocacy, and service delivery in settings where the government and for-profit private sectors are particularly weak.

Addressing the multisectoral dimensions of population and reproductive health also requires working with partners outside the HNP sector. Within the Bank, links to the Education and Social Protection, as well as Gender, Poverty Reduction and Environment, are being strengthened. Outside the Bank, ties are being nurtured with more general development groups as well as those with a special focus on gender, the environment and human rights.

Additional Funding Sources

One of the most effective mechanisms for working with these partners is through grants given under the Bank's newly established Development Grant Facility (DGF, formerly the Special Grants Program). In addition to the WHO programs mentioned above, these grants have enabled the Bank to build the capacity of grass-roots groups in borrower countries that work on issues (female genital mutilation, for example) which cannot be addressed through the lending program. Another initiative supported by the program, the South-South Partnership in Population and Reproductive Health, is already helping to bring a range of development partners into collaborative arrangements to assist in training and interagency coordination.

Making A Difference - Bank Population Programs

INDIA
The India Reproductive and Child Health project is upgrading the quality and scope of reproductive and child health services. The two central project components include a nationwide policy reform package covering monitoring and evaluation, institutional strengthening and service delivery, and a local capacity enhancement component that would fund district and city sub-projects aimed at meeting specific needs of local priority groups. The project is intended to increase access for particularly disadvantaged groups such as scheduled castes and tribes, and the urban poor.

BANGLADESH
In Bangladesh, a consortium of development partners, including the Bank and the Government of Bangladesh, has funded a series of health and population projects. The consortium was established during earlier projects and is now working with the Government in implementing a sector-wide program that will support delivery of an essential package of reproductive and child health services. Priority will be given to the needs of vulnerable groups, particularly poor women and children, and to addressing Bangladesh's high rates of maternal mortality and morbidity. The program is also supporting key reforms aimed a making Bangladesh's health system more cost effective and sustainable.

MOROCCO
The Morocco Social Priorities Program/Basic Health Project is working to increase access to essential curative and preventive health services in 13 target provinces. Safe motherhood goals are being attained by increasing availability to contraceptives, reorganizing prenatal service delivery, training traditional birth attendants, and establishing a medical evaluation system for obstetrical emergencies.

MALAWI
The Malawi Social Action Fund is a multi sectoral Bank project. It will upgrade and construct community infrastructure such as schools, health facilities, community water points, rural/urban markets, and granaries to help women gain better access to health and education facilities and employment opportunities. The project's promotional activities focus attention on women's priorities and needs and support women's involvement in the design, implementation and management of subprojects.

The benefits of the projects include:

- Increased access to health care, including family planning, at sites where health facilities have been constructed.
- Better access to maternal care at sites with maternity facilities.
- Better management of emergency cases as a result of road works, allowing ambulances to reach previously inaccessible communities.

- Increased food purchasing power and improved women's and children's nutrition resulting from higher earnings.

DESPITE PROGRESS, MILLIONS IN THE DEVELOPING WORLD STILL DENIED ACCESS TO REPRODUCTIVE HEALTH SERVICES

WASHINGTON, February 4, 1999--Around the globe, 120 million poor couples are still denied access to good reproductive health services and counseling. Lack of access is most serious in sub-Saharan Africa and in several countries in Asia and the Middle East, where most of the additional 2 - 3 billion people will be born before global population stabilizes sometime late in the next century, according to the World Bank.

As experts and policymakers gather in The Hague, Netherlands, next week to review progress since the 1994 International Conference on Population and Development in Cairo, population growth remains a persistent problem. Despite the strides many countries have made, unwanted pregnancies, mainutrition, and high child and maternal death rates are still far too common in the developing world.

Tragically, one in every 48 women in the developing world dies from pregnancy-related causes each year, compared to one in 4,000 in developed countries. Reproductive- tract infections are widespread. The leading cause of death and disability for women in the developing world is poor maternal health and birth-related problems..

Governments can no longer afford not to invest in population and reproductive health programs--the most cost effective public health initiatives developing countries can undertake. Because such investments are inexorably linked to economic growth, the World Bank has been working with developing countries to implement the landmark agreement signed in Cairo and to integrate its population and reproductive health activities into its core agendas of poverty reduction and human development.

"The Cairo conference shifted the focus of population work from demographic targets and control to an approach that puts people and their human rights first," said **Tom Merrick, World Bank Senior Population Adviser**. *"This shift parallels the World Bank's own move toward greater emphasis on social development and on balancing its goals of poverty reduction and human development with more traditional concerns about public finance and macroeconomics."*

The World Bank¾ the single largest external financier of human development programs in developing countries¾ is also working closely with partners and client governments to address population issues within a broader context. The Bank's main comparative advantage in population and reproductive health policy is through dialogue and analytical work to help borrowers understand how demographic shifts affect the social sectors (health, education, social security) as well as the environment and agriculture, employment, and basic infrastructure.

Following its commitment made at the Cairo conference, World Bank has steadily increased lending for population and reproductive health activities-- over $2 billion in loans since 1994-- and developed a new strategy linking these goals to its core agendas of poverty reduction and human development. Even more lending has been provided through support for child survival, girls' education, and the empowerment of women, where the links to population and reproductive health are indirect. The social sectors now account for a fifth of overall Bank lending.

With access to both finance and planning ministries, as well as to ministries such as health, education and women's affairs, the Bank is well-positioned to encourage a broader perspective of population issues and to link investments in various sectors to achieve the best results.

The Bank works with its partners to find the underlying flaws that make health and education systems unresponsive to the needs of the poor. Constraints like financial disincentives and rigid civil

service rules--guaranteed employment no matter how poor the performance--undermine efforts to improve the quality of health and education programs. Improving the performance of health systems is particularly important for such initiatives as Safe Motherhood, which requires an effective referral of obstetric emergencies in order to save women's lives.

"For all aspects of population and reproductive health, empowering women is a critical factor," said **Anne Tinker, Senior World Bank Health Specialist**. *"This requires careful analysis to identify synergies across sectors such as health education, and social programs. Coordinated support for programs in reproductive health, girls' education and access to income-generating opportunities and employment for women will yield gains in welfare for individuals, families and communities."*

MAKING A DIFFERENCE – WORLD BANK POPULATION PROGRAMS

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DESTRUCTIVE HEAT AND COOLING PRAYER: MALAY HUMORALISM IN PREGNANCY, CHILDBIRTH AND THE POSTPARTUM PERIOD

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Abstract—Malaya, an ancient crossroads of trade, was the recipient of Chinese and Ayurvedic humoral ideas and, later, those of medieval Islam. These ideas were readily accepted by Malays, since they are highly congruent with pre-existing notions among aboriginal peoples of Malaya involving a hot–cold opposition in the material and spiritual universe and its effects upon human health. Islamic Malays have adapted these aboriginal beliefs to correspond to the Greek–Arabic humoral model in matters concerning foods, diseases, and medicines. Although Malay theories of disease causation include such concepts as soul loss and spirit attack, along with 'naturalistic' ideas such as dietary imbalance and systemic reactions to foods, all of these theories can either be reinterpreted in humoral terms, or, at least, are congruent with the basic tenets of Islamic humoral pathology. Behaviors and beliefs regarding human reproduction, however, while essentially following a humoral pattern, diverge from Islamic, as well as traditional Chinese and Indian Ayurvedic, humoral theories. Unlike any other major humoral doctrine, Malay reproductive theory (like that of non-Islamic aboriginal peoples of Malaya) equates coldness with health and fertility and heat with disease and sterility. These ideas, in turn, are related to beliefs regarding the nature of the spirit world: the destructiveness of spiritual heat and the efficacy of cooling prayer.

Key words—reproduction, humoral pathology, Southeast Asia, Islam

A systematic theory of pathology defining health as the balance of opposing elements in the body was basic to medical thought in three of the world's great civilizations: ancient Greece, India and China. The similarities of humoral thought in these cultures are due, in part, to early and continuing cross-fertilization, yet each has its own special variation on this broad theme. In the ancient world, Greek and Indian humoral traditions travelled from east to west and back again through Persia [1]. In the centuries following Chinese conversion to Buddhism, particularly during the fourth to tenth centuries A.D., pilgrim-monks established links between India and China and brought back Indian medical texts in Chinese translation [2].

From hundreds of years before the birth of Christ until modern times, Malaya has been the crossroads of trade from India and China, exchanging ideas as well as goods with representatives of these cultures. Archaeological evidence suggests that Indian ships visited Malaya as early as the fifth century B.C. By the second century A.D. there were Indianized kingdoms throughout the Malay peninsula [3]. Although the earliest written records of Chinese trade with Malay states date from the seventh century A.D. [4], since they are not reports of first contacts, there is reason to believe that the association considerably predates these records.

When Arabic humoral theory, offshoot of Greek, reached Malaya along with Islam in the fourteenth and fifteenth centuries, the circle was complete. Elements of the three great humoral traditions had come together on the Malay peninsula. Arabic medicine found a fertile field for the dissemination of its ideas among a people who had long subscribed to similar Ayurvedic theories, introduced into Southeast Asia by early Brahman immigrants [5], and tempered by long association with representatives of Chinese culture.

Over the centuries, humoral theory has been shaped by and integrated into Malay* thought. Elaborated humoral ideas now extend from such mundane matters as food and illness to the workings of the Universe and the nature of its inhabitants, both seen and unseen. For foreign ideas to take root and flourish, as humoral theories have done in Malaysia, there must be a favorable climate, a welcoming soil. What preconditions might have favored the acceptance of humoral assumptions in Malaya? What world-view could incorporate them without dissonance?

Just as the humoral system brought to the New World by Spaniards found acceptance among Native Americans who believed the Universe to be ordered by a balance of opposites [6], so may such theories have found points of resemblance in pre-Hindu Malayan beliefs about sickness and health, particularly in regard to reproduction. Since we lack written records of Malay life and thought in ancient times, we must turn to ethnographic accounts of aboriginal peoples of Malaya, the Orang Asli, for clues. This entails a number of problems, ranging from the unevenness of coverage in the ethnographic record, the varying degrees of contact these peoples have had

*'Malaya' refers to the Malay peninsula, 'Malaysia' to the modern state which comprises the peninsula plus Sabah and Sarawak on the island of Borneo. 'Malay' refers to the politically dominant ethnic group which professes Islam, habitually speaks the Malay language, and conforms to Malay customs (so defined by the constitution of Malaysia).

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with the dominant Malays, and the diversity to be found among the Orang Asli themselves. Traditionally grouped into three broad categories, the Semang or Negritoes, the Senoi, and the Aboriginal or Proto-Malays, Orang Asli vary in their accommodations to the environment, from foraging, through shifting agriculture, to sedentary village life. Their cultural values and social organization are equally various, and their languages range from forms of Austroasiatic to Austronesian dialects almost indistinguishable from Malay. Yet despite the great diversity of Orang Asli, there are several broad cultural themes that connect these aboriginal peoples of Malaya*.

HUMORALISM AMONG ORANG ASLI

Although they do not employ a humoral classificatory system, hot–cold opposition is dominant in Orang Asli medical theories. Among the Semelai, a Proto-Malay people, glowing health is equated with coolness, tiredness and ill-health with heat, a feeling which undoubtedly reflects good commonsensical observation of life in a hot equatorial climate. The Semelai, however, do not attribute sickness only to the heat of the day. Sickness can also result from contact with *badi*, a hot destructive spiritual force found in all living things and released upon death, but concentrated especially in human corpses and jungle animals. It can also inhere to certain kinds of food, making them hot and dangerous as well. The basic Semelai healing ritual consists of reciting cooling spells and employing cooling rice-paste to rid the patient of excess heat and bring him back to normal [7]. Senoi Temiar healers combat the heat of malevolent spirits with the cooling power of beneficent spirits who assist them in magically infusing their patient's body with refreshing invisible liquid [8].

Although these beliefs and practices strike a chord of recognition among students of Malay culture, I find it significant that healers of these Orang Asli groups, which were neither part of the Hinduized Malay kingdoms nor, later, Islamicized, differentiate their medical practices into those which they say were borrowed from the Malays and those which they claim were not influenced by their neighbors. Among the latter are both the basic ideas I have briefly mentioned, and the steps taken by a mother and her attendants during and after childbirth to protect her health and that of her child.

Semai and Temiar women in labor are asperged with cold water to keep them cool and healthy, and to protect them from destructive heat [8, 9]. After a woman has given birth, however, her body is no longer normally cool but has temporarily become abnormally cold and vulnerable. She and her equally vulnerable child must be kept warm and protected from chilling. The new baby is given a warm bath [9], and the mother is massaged with and bathed in heated water [8]. Cold drinking and washing water is forbidden to women in the puerperium [8–10]. Sashes containing warmed leaves or ashes are tied around their waists, and they lie down near a fire source (a practice widespread throughout Southeast Asia, often referred to as 'mother roasting', although, considering the moderate amounts of heat produced, it might be more accurately termed 'mother warming' or 'mother toasting').

All of this behavior has its direct or close counterpart among practices of contemporary Islamic Malays, who have incorporated them into an elaborated humoral system. Among most Orang Asli, however, they are part of a belief system that makes general statements about heat and coldness and does not categorize particular diseases, treatments, medicines, or foods according to the hot, cold, wet or dry properties of their components in the 'scientific' and 'rational' manner of Greek–Arabic or Ayurvedic humoralism. A basic hot–cold opposition could set the stage for acceptance of an exogenous humoral theory, since such a theory would agree with pre-existing modes of thought. After its acceptance, the humoral system is shaped by and incorporated into the medical and cosmological beliefs of the recipient group. It may elaborate and diffuse through many domains, yet it remains only one of a number of multiple overlapping theories within an overarching world-view.

Rather than merely propose this point as a plausible generalization, I will show, through a discussion of contemporary beliefs and practices during pregnancy, childbirth and the postpartum period of rural Malays on the east coast of peninsular Malaysia, the shape of the Malay humoral system and its place within the world-view of which it is one component.

THE MALAY HUMORAL SYSTEM

The Malay humoral system, which I have previously described in detail [11, 12], is a dynamic complex, incorporating variation as one of its precepts. People are believed to be different from one another in their humoral proportions, and each one's humoral relation to the outside world is expected to change daily and seasonally, and as he passes through the stages of life. Owing to this expected variation, broad humoral categories, such as 'hot, cold, or neutral' foods, and the rationales behind such categorizations, are shared concepts, but particular items within these categories differ on an individual basis without causing disruption of the system.

Among contemporary rural Malays, beliefs, humoral and otherwise (with the exception of the five daily prayers and other religious duties demanded by Islam), tend to remain quiescent unless some crisis calls forth action. Childbirth is such a time of stress—physiological, psychological, and social. Even though it is viewed as a normal occurrence in every woman's life, childbirth's potential dangers evoke protective measures to minimize these risks. Ideas and behaviors surrounding reproduction tend to be highly conservative. Malay women who have accepted the precepts of hospital-based medicine, including wives of doctors and women who themselves possess advanced degrees in biological science, return, during the weeks

*A further caveat lies in the direction of possible Hindu influences on Orang Asli cosmology. Benjamin [26] and Endicott [27] mention that the Temiar and Batek Negritoes, respectively, have incorporated Hindu terms and stories into their mythology.

practical-sounding advice as admonitions to pregnant women to refrain from sleeping during the day for fear heat might collect in their cheeks and make them swell, or to sit on the floor instead of a chair for fear their ankles might swell. Other pantang reflect belief in sympathetic magic. Mothers are cautioned that tying cloths around their necks may result in the umbilical cord looping itself about the baby's throat. Fathers are warned that sitting on their house steps and blocking the entrance may obstruct a wife's birth canal. Although some prospective parents obey these injunctions, others ignore them completely. While the neighbors may think such people are tempting fate, their chances of escaping unscathed are considered good. It is only because pantang are not implicitly obeyed that satisfying ex post facto explanations are possible (see [9] for similar observations about the Semai).

Besides allowing for individual decisions in their observance, pantang themselves are often both practical and flexible. For example, the husband of a pregnant woman should not hammer nails into wood lest his wife have a difficult labor, *unless he is a carpenter*. He should not slaughter wild animals, *unless he is a fisherman*. The prohibitions of pregnancy do not restrict a family's usual economic activities or interfere seriously with the continuation of their normal daily life.

The primary sources of danger to the unborn come from risks to his spiritual and ultimately his bodily integrity, due to his father's carelessness or cruelty, or his mother's shock or fright; and from contact with *badi*, the destructively hot spiritual force previously mentioned in connection with Orang Asli. To avoid increasing the risks to his child, a father-to-be should not engage in wanton destruction. Animals must be slaughtered cleanly and for good cause. Wood should not be splintered or cut leaving jagged edges. Animals and wood possess *semangat*, the life-force that permeates the Universe and dwells in man, beast, plant, fire and rock (see also [15]). All share a form of life; the life of a fire is swift and soon burns out; a rock's life is slow, long and dreamlike. Slashing and splintering wood is equivalent to cutting and chopping flesh and bone. Both can disfigure a growing fetus, since all are bound up in the actions of the father, its primary source of life.

A mother should guard against being startled or disgusted during pregnancy, when her semangat is particularly vulnerable to shock. Fright can deplete the life-force, leaving the mother's body a prey to spirit attacks and interfering with her baby's development. Many minor birth defects and behavioral anomalies of newborn babies are attributed to prenatal shock.

A father can avoid afflicting his unborn child with the destructive force of badi by foregoing hunting during his wife's pregnancy. Killing domestic animals and fish is a necessary part of village life and carries no risk if done humanely. Chickens belong to the world of Man, the cultivated, domesticated, familiar village. Fish, although wild, are essential to the diet, and fishing is a primary occupation of rural Malays. Hunting, however, is a non-essential activity that takes a man away from the protection of his home and into the jungle, where dangers range from savage animals to untamed spirits. As frightening as the *hantu* of the village and fields might be, jungle spirits are known to be wilder and more unpredictable, unused to the ways of men and resentful of their encroachment. The animals of the jungle are cherished by the spirits. Killing the spirits' pets can expose the hunter and his unborn child to the wrath of their ghostly friends, and to the malign heat of the animals' badi which escapes at the time of their death.

The badi of human corpses can be extremely dangerous to those with a precarious hold on their semangat. Prospective parents, and sick or delicate people, may have an unpleasant aftermath to a visit of condolence. An adult with depleted semangat may find himself growing weaker, and an unborn child may be afflicted with *badi mayat* (the badi of a human corpse), which manifests itself in the newborn as a wasting disease. In the one case of badi mayat I observed, the baby, who was fat and healthy at birth, refused to eat, took on the appearance of a corpse, and died within weeks of her birth*. Considering the severity of badi mayat, if Malays believed in a direct cause-and-effect relationship, it would be simple common sense for all vulnerable persons to stay away from the dead. That they do not is ample proof that they believe in increased probabilities rather than certainties, and that the peril is remote enough for many people to test the limits or flirt with danger.

Islamic Malays share the concept of destructive spiritual heat with the Orang Asli. They have, however, adapted this pre-humoral notion to correspond with the Greek–Arabic humoral model of the Universe and the Islamic myth of Man's creation. The spirits, to a Malay, are not merely hot, they are lacking in two of the four basic elements of which the world is made. They were created through the curiosity of the archangel Gabriel. God entrusted the Breath of Life into Gabriels hands and ordered him to place it into Adam's nostrils so that his still lifeless body, fashioned of earth and water, might be animated. Gabriel opened his hands before reaching his destination to see what he was carrying, and the Breath of Life escaped. Having no body to receive it, the Breath became hantu, disembodied spirits composed only of air and fire. They can bring sickness to humanity by blowing on their victims' backs, causing humoral imbalance.

Rituals performed during the reproductive process attempt to balance the fire and air of the spirit world by adding earthy and watery elements to the prospective mother's body. Such spiritual prophylaxis is most important during a woman's first pregnancy, since she has not yet become adept at her womanly task. The ceremony of rocking the abdomen (*lenggang perut*), performed by a midwife during the seventh month of a primagravida's pregnancy, combines symbols of release and rebirth, such as loosening slipknots and passing through circles, with humoral 'balancers'. The mother-to-be is bathed in cold water into which humorally 'cold' lime juice has been squeezed. *Tepung tawar*, the neutralizing rice paste employed in much of Malay magic, is added to the

*The baby in question died in the hospital several hours after being admitted. The diagnosis was gastroenteritis and severe dehydration. See [12] for further details.

water and painted on the foreheads of both the midwife and her patient. Its efficacy is owing to its qualities of earth and water, which neutralize the spirits' fire and air. Tepung tawar is made of rice, the quintessential fruit of the earth for a Malay, which is, moreover, grown in water. It is ground into flour and mixed with water to form the most efficient 'balancer' of Malay materia magica. Spiritual heat is further balanced by the midwife's breath, cooled by the power of her incantations and blown toward her patient. The fetus is protected from heat by 'cooling' herbs which are strung around its mother's waist. All of these measures are expected to help a prospective mother deliver her baby safely, yet they may not achieve their goal if she is not in harmony (*sesuai*) with the midwife she has chosen.

MALAY CHILDBIRTH

The successful outcome of a pregnancy depends not only upon the harmony of the fetus and its mother, and the harmony of a mother and her midwife, but also the harmony of the mother and the Universe. The midwife assists the patient in achieving this harmony by advising her, toward the end of labor, to lie in the direction that corresponds to the heat of the prevailing wind of the day. All of the possible positions in this directional system for childbirth cluster around south and west. North is avoided, since Muslim corpses are buried facing in that direction, and east is avoided since it is the opposite of west, the holy direction towards Mecca which Malays must face when they pray. The value of harmony, which runs through much of Malay thought, has been enriched in this directional system to include both humoral and Islamic ideas.

The midwife employs many other measures to assist her patient through childbirth, some of which are specifically humoral, such as rubbing 'hot' substances like calcium oxide (lime) paste on her abdomen to make the womb uncongenial to the baby and encourage him to leave. Other treatments range from such 'naturalistic' measures as tying a rolled-up sarong above a laboring woman's uterus to keep the fetus from rising, to actions designed to discourage malevolent spirits, such as placing sharp and spiny objects beneath the place of birth to catch the hanging intestines of birth demons and frighten away the genies who live in the earth. Danger to the baby can come, as well, from the afterbirth, considered to be his own sibling. While it possesses the human qualities of earth and water, it lacks the fire and air that quicken its brother into life. Its human qualities demand that it be given a decent burial, washed and placed in its winding sheet and coconut shell coffin by the midwife. Its lack of humoral balance, however, makes it the mirror image of the disembodied spirits and admits it into their company. Postpartum depression is often attributed to the placenta's envy of its sibling's favored lot.

Throughout labor and delivery, although a midwife's advice is treated with the greatest respect by her patient and the family, there is nothing that compels the prospective parents to follow her advice. Unlike the experience of many American women, a Malay mother, not her birth attendant, has the final say. If she wants to lie on her side or sit up during labor, there is nothing to prevent her from doing so. If she wants to eat or drink, she may. If she does not wish to wear a sash above her uterus, she may discard it. She and her family may either neglect some of the usual magical procedures, or, in the case of difficult or abnormal deliveries, add to them by calling in other healers or birth attendants as they see fit. The behavior of Malays during childbirth, like their behavior during pregnancy, is neither routinized nor completely predictable. In common with the behavior of people in all societies, Malay reproductive behavior is based on shared cultural concepts transformed by individual desires and situational requirements. This will be demonstrated further in the discussion of behavioral changes specific to the Malay puerperium, to follow.

THE POSTPARTUM PERIOD

Malays consider the 40 days following childbirth to be the most dangerous time for both mother and baby and, accordingly, take many precautions to guard against threats to their bodies and souls. It is during this period that we find the greatest concentration of humoral thought and behavior, although, once again, these humoral conceptions are only one facet of Malay medical theory.

During pregnancy, a Malay woman usually continues her normal diet and behavior with few changes, secure in the belief that her physical vitality and humoral balance will protect her from spirit incursions and other unusual threats to her health. After she has given birth, however, she must guard herself and her baby against danger. The newborn and his mother are vulnerable to attack from the spirit world during the postpartum period—he, because his little body is tired after its long journey from the darkness of the womb to the light of day; she, because her body is tired from the exertion of giving birth. The infant's semangat has a precarious hold on its new lodging; the mother's semangat has been depleted by her labors. When the essential vitality is depleted, the body's defenses lose their integrity and spirits may use the opening to launch an attack.

A baby born with the umbilical cord looped around its neck will need to be ritually released from the dangers inherent in its hazardous entry into the world. A baby who exhibits the symptoms of prenatal shock will also require a healer's care. If he does not thrive despite the best efforts of his parents and their medical-magical consultants, a baby's problems may be attributed to the lack of harmony between his personality and his name. The discordance set up by a 'wrong' name may contribute to a child's vulnerability. Many Malay children are known by two names: a school name (the one on their birth certificate) and a home name, given for reasons of health [16].

Malays believe that the greatest threat to a new mother's health is the danger of postpartum hemorrhage. They attempt to obviate this possibility by careful obstetrical procedures during delivery of the placenta, by the use of massage and heat applications during the postpartum period, and by avoiding a

number of foods which they believe can cause digestive upsets and uterine hemorrhage during this time of increased vulnerability.

Although Malay concerns with maternal and infant health in the puerperium are often phrased in humoral or magical terms, we would be naive to think of them as merely symbolic. The perinatal period is so severe a challenge to the newborn that in some cultures a baby is not even given a name until he has safely passed through its dangers and proved his continued viability. Pneumopia, cellulitis (spreading inflammation of the tissues) and septicemia (blood-poisoning by fungi passed on from a maternal vaginal infection during the birth process, or by bacteria passed on by droplet infection or on the hands of his caretakers) are common in the newborn. Although he has acquired some immunity from his mother, the infant has not yet developed all his own necessary antibodies, nor have his gamma globulins been fully synthesized and phagocyte activity reached a satisfactory level. The blood-brain barrier of the newborn is ineffective, and he is therefore particularly susceptible to meningitis. Symptoms of infection in the newborn do not always follow a recognizable pattern. Lethargy, poor feeding and respiratory irregularities may be closely followed by vascular collapse, renal failure and death [17, 18]. To people who believe in the reality of spirit-inflicted disease, the rapid snuffing-out of a baby's life after little warning may well seem like the work of unseen hands.

A new mother is susceptible to infection from bacteria she can ordinarily tolerate. Micro-organisms that normally live in the vagina can become pathologic in the puerperium, invading the uterus [18]. Postpartum hemorrhage is, after infection, the major cause of maternal mortality. It can result from a number of causes, including hemorrhage from the placental site, from lacerations incurred in the birth process, and from retained products of conception. In humoral terms, the new mother's lowered vitality and increased vulnerability are due to her abnormally 'cold' condition.

Following the tenets of humoral pathology, the Malays believe that loss of 'hot' blood during delivery precipitates a woman into a 'cold' state. This humoral belief is strengthened by observable physiological reactions of new mothers. Within the first 24 hr, her pulse rate drops [18], a clear indication of humoral 'coldness'. In the case of some new mothers, the signs of internal 'coldness' are dramatic, as illustrated by the following advice given to American nursing students:

> During this first critical hour of the fourth stage of labor (immediately after delivery), the mother may experience a shaking chill. This reaction does not commonly result in an elevation of body temperature nor is it associated with any type of infection. The mother should be covered with a blanket, and, if alert, can at this time be given warm tea to drink [17].

Malays, like Americans, also apply heat both internally and externally to a new mother, although their reasons for doing so are humoral. Many of the Malay postpartum practices belong to a Southeast Asia cultural complex, which includes the Orang Asli. Like their non-Islamic compatriots, Malay mothers are bathed in warmed water, 'hot' substances are bound around their abdomens, they lie above or near a fire and avoid drinking cold water and eating a variety of foods. Unlike Orang Asli food avoidances, however, Malay postpartum dietary rules incorporate a well-developed humoral classifactory system. Sources of animal protein, including milk and eggs but excluding fresh fish, are 'hot', as are salty, bitter, or spicy foods, and those high in animal or vegetable fat. 'Cold' foods include juicy or sour fruits and vegetables, plants that exude viscous matter, such as okra, astringent plants, such as tea, as well as vines, creepers and climbers. Some foods, notably rice and fresh fish, are 'sederhana' (neither 'hot' nor 'cold'; see [12] for further details). Foods classified as 'cold' are, in general, not eaten until a new mother has been ritually released from the postpartum period.

For three days after giving birth, a new mother receives a thorough massage from her midwife to increase the speed of her circulating blood and bring healing heat to all parts of her body. She adds to her internal heat by taking 'hot' herbal medicines, many of which have symbolic as well as humoral, and perhaps physiological, value. A typical postpartum mixture contains herbs whose names have powerful symbolic connotations: tiger's milk, grave's adversary, Fatimah's areca nut slicer, and Ali's staff, beard and moustache. Fatimah, the daughter of the Prophet, and her husband, Ali, are regarded by Malays as the perfect husband and ideal wife.

Besides attempting to regain normal humoral balance by increasing heat and refraining from eating humorally cold foods, Malay mothers avoid a number of foods which are not problematic because of their humoral classification but because they are *bisa*, a word usually glossed as 'toxic'. A number of fish avoided as bisa have been linked to toxic reactions by ichthyologists. The incidence and severity of these reactions depend on the potential victim's state of health, the level of toxicity of an individual fish, and the amount eaten. The variable nature of fish poisoning supports the concept of bisa. Malays do not think of bisa foods as toxic, but, rather, as intensifiers of disharmonies already present within the body. They are believed to aggravate a pre-existing condition or bring to light hitherto unsuspected imbalances. Foods are not considered bisa *per se*, but only in context, and even then some people are thought to have constitutions so strong and balanced that they can eat them with safety.

Postpartum prescriptions and prohibitions, like the pantang of childbirth, are not absolute rules, but only guideposts for behavior. Women who eat bisa foods and experience stomachache or postpartum hemorrhage may be criticized as foolish, but they will not bring down supernatural or human wrath upon themselves through having broken a taboo. Those who eat bisa foods and remain healthy may even be envied and praised for their 'cast-iron' stomachs.

Since no one can know in advance one's susceptibility to foods normally proscribed during the puerperium, midwives advise women who have given birth for the first time to try small amounts of a wide variety of foods, starting with 'hot' and 'neutral' foods and gradually adding 'cold' and bisa foods. If

they experience no ill effect during their first postpartum period, they may eat a full diet after each subsequent delivery.

The way a woman views her own humoral balance, and her perceived reactions to bisa or 'cold' foods during the vulnerable postpartum period, can explain much of the variation in adherence to pantang found among contemporary rural Malays. In an east coast village considered very traditional by health authorities, 60% of the 145 women I interviewed did not follow a restricted diet for the entire 40 days of the postpartum period. They restricted their diets for shorter periods of time, added items gradually, or (as was the case with 21%) ate any foods they chose—hot, cold, or bisa.

This was no recent phenomenon arising from modernization, exposure to scientific medicine, or a growing rebellion of village women against the bonds of tradition. Women in their sixties and older reported the same variation now found among younger women, and village midwives said that their mothers and grandmothers, who had been midwives before them, had given the same advice to their patients. Clearly, Malay expectations of variable needs and behavior have a long and honorable history.

DISCUSSION

The conceptual boundary points and guideposts for behavior that assist Malay parents along the difficult road that leads from conception to the postpartum period illuminate the special nature of the Malay humoral system and the world-view that shapes and nourishes it. The Malay cosmos is one of odds and probabilities rather than simple cause-and-effect relationships. Because of this, Malays believe that the results of any action cannot be anticipated with complete confidence. Added to this philosophy is the expectation of individual differences and situational requirements which exert a strong influence upon the outcome of behavior. Pantang or rules for behavior frequently have subsidiary clauses which allow the continuation of normal life under unusual circumstances. Following these rules is a matter of individual volition; each person has autonomy of choice, and each must accept responsibility for the outcome. Some people interpret and manipulate the rules, continually testing the boundaries, while others, wary by nature or rendered cautious by past experience, obey them to the letter.

At the core of Malay belief is the conviction that harmony is the basis of health and life itself. If a fetus is not in harmony with its mother, its chances of becoming a viable infant are slim. Many things can disturb its precarious hold on life—a blow, a fall, massage, heat. If a healer is not in harmony with his patient, no amount of knowledge or skill will effect a cure. For the health and happiness of a Malay, even his name must be harmonious with his personality, or he may suffer the ill effects of discordance.

Threats to harmony and integrity come from depletion of one's inner forces (semangat), due to fatigue or fright, and from incursions by outside forces which, like badi, destroy one's balance by the addition of destructive spiritual heat, or, like bisa, aggravate and emphasize any tendencies toward disharmony that may already exist within one's body.

The Malay humoral system, in common with other portions of Malay belief, is dynamic, situational, reinforced by empirical observations, and incorporates variation within its model (see [11]). Harmony and balance, both humoral and otherwise, are equated with health and happiness, imbalance with disease and disaster.

Notwithstanding the real economic and social differences that exist within a Malay village, there is no rigid class stratification, and villagers conceive of themselves as equals. This lack of rigidly hierarchical social relationships, and the expectation of individual differences, is reflected in their humoral system. As interpreted by Malays, humoral pathology is far from the exact 'science' of post-Galenic Europe, which attempted to measure innate qualities of foods by their precise degree of heat, wetness, etc., and which believed in the innate human qualities that made some men serfs and others noble. Humoral qualities, in the Malay system, are neither precise nor invariable, but shifting idiosyncratic variations on a basic theme. For example, although most people classify taro as a 'cold' food, since eating much of it gives them a 'cold' stomachache, those who can tolerate large amounts of taro often classify it as 'neutral'. A well-known Malay proverb expresses this expectation of individuality within a common core: *Rambut sama hitam, hati berlain-lain* (We all have black hair, but each one's heart is different). S. Husin Ali believes that proverbs of this kind "can crystalize the very essence of Malay folk philosophy and outlook, or sum up some important experiences of Malay life, [and] are often used to explain things more clearly, or sometimes taken as simple guides to certain social behavior" [19].

The Malay humoral system shares the basic precepts of the three great humoral traditions from which it derives, but the character of Malay society and the content of their pre-humoral beliefs both opened the way for acceptance of these traditions and modified their shape. The composition of the Malay Universe—earth, air, fire and water—is the composition of the Greek–Arabic Universe, but Malay insistence on coolness as the optimum condition for health and growth brings it closer to both Ayurvedic doctrine and aboriginal belief in this respect than to Greek medical philosophy, which equated life and happiness with warmth. The extention of this preference for coolness to the beginning of life itself sets the Malay system apart from other humoral systems. Chinese and Korean women fear sterility, which they associate with a 'cold' womb (e.g. [20]). Malays, on the other hand, believe conception cannot take place unless the womb is cooler than usual. A pregnant woman in India is said to be in a heated condition [21], and among the Latin American heirs to Galenic doctrine, her heat is considered to be so intense that it can cure some people's 'cold' ailments and infect others with 'hot' [22]. As we have seen, this idea is diametrically opposed to Malay belief. The metaphorical use of coolness as personal and social good, and of heat as evil and threatening, extends to many areas of Malay thought. A rational, calm person is said to have a cool heart, while a man whose heart

is hot is bad-tempered and full of hate [23]. The successful rule of a sultan and the blessedness of prayer are expressed in terms of their 'coolness' [24], and the opposite of beneficent, socially sanctioned spiritual activity—the work of the sorcerer—is called the 'hot science' (*ilmu panas*).

Malay valuation of coolness must be considered in relation to their beliefs about the destructive heat of the spirit world and its emanations. Unlike the Chinese, who associate ghosts and the trouble and pain they bring with the coldness of the Yin world [25], and the ancient Greeks and their intellectual heirs, who associate cold with fear and death, and cold winds with malevolent spirits, Islamic Malays resemble the non-Islamic Orang Asli in their association of incursions from the spirit world with heat.

Although Malay theories of disease causation include such concepts as soul loss and spirit attack, along with 'naturalistic' ideas, such as dietary imbalance and systemic reactions to foods, all of these theories can either be reinterpreted in humoral terms, or, at least, are congruent with the basic tenets of humoral pathology. These theories of disease causation are far from mutually exclusive and, in fact, often overlap. A humoral imbalance may precede soul loss, which in turn invites spirit attack, which further skews the victim's internal balance. Because of this causal interaction, treatments we would classify as medical or humoral blend with those we would think of as magical, i.e. a massage, meant to soothe muscles and increase circulation, is preceded by an incantation to insure effectiveness of the treatment. A difficult or abnormal labor calls for the proliferation of all the methods at the midwife's command. She combines massage and the application of humorally 'hot' substances on the mother's abdomen with the censing of amulets, the use of magical oil, and the opening of windows and doors to evoke the sympathetic opening of the womb.

Combining treatments is frequent, since many problems are perceived as having more than one cause, but the palpable humoral content decreases as the condition is perceived as owing more to spiritual than to material causes. Most of the conditions as village healer (*bomoh*) treats are considered 'usual', or *biasa*. Aside from the obligatory incantation, they are controlled by the manipulation of diet and by medical treatments that are often classified as 'hot' or 'cold'. For those conditions which are *luar biasa*, or 'unusual', involving intangible forces, the humoral content is limited to such materia magica as tepung tawar (neutralizing rice paste) which is not ingested but acts on the spiritual plane to protect the body; and to the metaphoric use of heat and coolness to characterize the spirits and the work of the healer. Conditions which do not respond to treatments for either usual or unusual ailments are ascribed to the will of Allah. For these, no material treatment will suffice, and one must rely for help on the 'blessed cooling prayer'.

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REPRODUCTIVE AND CHILD HEALTH PROGRAMME - DISTRICT SURVEYS - KEY INDICATORS, DISTRICTWISE

SL. NO.	KEY INDICATORS	B.lore(U)	Belgaum	Bellary	Bidar	C.Magalur	D.K	Gulbarga	Kodagu	Mandya	Raichur	Tumkur
	1998 Population data											
1.	Total Population (in thousands)	4839.2	3583.6	1890.1	1255.8	1017.3	2694.3	2582.2	488.5	1644.4	2309.9	2305.8
2.	Percent Urban	86.2	23.5	29.9	19.6	16.9	28.3	23.6	16.0	16.2	20.8	16.6
3.	Percent Scheduled Caste	14.71	11.36	19.32	20.71	19.25	6.52	23.65	12.08	13.78	17.23	17.72
4.	Percent Scheduled Tribe	1.11	2.32	8.82	8.30	2.61	3.94	4.14	8.25	0.73	7.80	7.27
5.	Decennial Population Growth rate (1981-91)	38.00	20.30	26.92	26.12	11.57	13.36	24.10	5.75	15.96	29.49	16.58
	Rapid Household Survey Reproductive and child Health :											
	MARRIAGE AGE											
1.	Mean age at first Cohabitation for women interviewed	18.6	15.9	15.7	14.3	18.6	19.9	15.2	19.6	15.9	15.1	16.6
2.	Percent of Boys Married at age less than 21(since 1 Jany 1995)	4.2	21.5	20.9	30.2	9.1	3.4	30.9	8.5	6.0	30.7	5.9
3.	Percent of Girls Maried at age less than 18(since 1-1-1995)	12.0	55.8	54.1	67.6	13.6	4.5	47.7	22.0	37.0	57.1	27.1
	Birth Rate (During 1 Jany 1995 to 30 June 1998)											
1.	Crude Birth Rate (Average)	20.7	24.0	31.9	31.6	25.5	19.7	30.1	34.2	20.3	29.1	24.1
2.	Percent of third or higher order births reported	23.3	36.7	45.9	52.9	18.4	32.0	53.7	18.9	26.2	52.9	27.4
	FERTILITY											
1.	Mean No. of Children ever born to women age 40-44	3.5	4.0	5.1	5.4	3.7	3.7	4.9	3.2	4.0	4.7	4.1
	INFANT MORTALITY											
1.	Infant Deaths among children born during 1-1-95 to 30-6-97	4	8	11	22	9	3	17	8	9	15	9
	MORBIDITY											
1.	No of Cases Reported											
	Malaria (3 months prior to survey)	21	102	46	45	42	67	129	17	94	109	52
	Tuberculosis	10	6	42	7	6	17	24	7	26	23	26
	Leprosy	2	3	12	4	2	1	4	0	8	4	2

WH-6.

REPRODUCTIVE AND CHILD HEALTH PROGRAMME - DISTRICT SURVEYS - KEY INDICATORS, DISTRICTWISE

SL. NO.	KEY INDICATORS	B'lore(U)	Belgaum	Bellary	Bidar	C'Magalur	D.K	Gulbarga	Kodagu	Mandya	Raichur	Tumkur
	Knowledge and use of Family Planning											
1.	Percent of Currently Married Women:											
	a. Knowing any method	99.1	99.0	99.6	99.5	100.0	99.4	99.8	98.7	100.0	99.6	100.0
	b. Knowing any modern method	99.1	99.0	99.6	99.3	100.0	99.3	99.8	98.7	100.0	99.6	100.0
	c. Knowing any modern spacing method	79.9	70.9	56.0	63.8	91.7	92.8	64.2	95.4	83.6	76.8	76.2
	d. Knowing all modern methods	55.8	40.4	26.4	23.2	52.2	70.7	27.2	88.8	50.2	29.3	40.8
	e. ever used any method	65.9	62.9	50.0	52.7	75.7	67.4	41.0	73.9	73.3	47.9	63.1
	f. currently using any method	60.1	61.8	48.7	50.6	71.4	63.7	39.2	70.6	71.7	45.4	61.3
2.	Percent of currently married women currently using											
	a. female sterilization	47.6	58.5	46.5	46.0	59.1	41.1	37.8	44.7	68.8	42.7	55.2
	b. male sterilization	0.3	0.6	0.2	0.8	0.8	0.6	0.4	0.2	1.0	0.9	0.1
	c. I.U.D	5.3	1.3	1.1	0.7	5.3	5.6	0.3	9.5	0.9	0.8	5.2
	d. pills	1.7	0.3	0.4	0.7	1.2	1.6	0.2	2.5	0.2	0.1	0.2
	e. condom	4.2	0.7	0.0	0.9	2.0	4.1	0.3	3.0	0.8	0.1	0.5
	f. any traditional method	0.7	0.2	0.2	1.2	2.8	10.3	0.0	10.6	0.0	0.8	0.0
3.	Percent of currently married women having unmet need for											
	a. limiting	15.2	5.2	8.8	12.6	5.9	9.5	16.4	6.8	4.8	16.4	9.2
	b. spacing	18.5	24.9	34.2	24.6	14.4	21.4	31.7	14.4	16.8	25.8	21.8
	c. total	33.7	30.1	43.0	37.2	20.3	31.0	48.1	21.3	21.7	42.2	31.0
	MATERNAL HEALTH CARE.											
	Percent of women who had still/ live birth since 1 January 1995											
a.	received antenatal care (3 check-ups, 2TT injections and IFA tablets)	71.9	40.1	29.0	27.2	63.1	75.5	20.4	78.1	59.7	27.6	68.4
b.	Delivered at health facility	82.5	50.6	17.0	32.9	62.4	76.6	27.9	67.7	48.8	22.7	48.4
c.	delivered at home and attende by Doctor/hurse/TAB	8.1	18.0	23.4	19.7	15.6	15.0	19.8	11.8	13.1	25.5	15.1
d.	total safe delivery (b+c)	90.6	68.7	40.4	52.7	78.1	91.7	47.8	79.5	62.0	48.3	63.6
	CHILD CARE											
1.	percent of 0-4 months childre on exclsive breast feeding	52.9	87.5	31.3	86.2	81.2	37.5	63.1	66.6	17.3	85.1	35.4
2.	percent of women who gave colostrum to their children	65.7	40.0	38.2	36.0	52.5	52.2	19.3	56.7	50.0	30.2	38.9

REPRODUCTIVE AND CHILD HEALTH PROGRAMME - DISTRICT SURVEYS - KEY INDICATORS. DISTRICTWISE

SL. NO.	KEY INDICATORS	B.lore(U)	Belgaum	Bellary	Bidar	C.Magalur	D.K	Gulbarga	Kodagu	Mandya	Raichur	Tumkur
3.	percent of children age 12-36 months who received											
	a. BCG	96.7	90.6	80.8	75.1	93.9	98.0	52.4	98.8	99.0	61.4	98.7
	b. three injections of DPT	89.6	77.5	74.4	73.1	94.8	95.5	42.1	98.2	95.0	50.8	95.8
	c. three doses of polio	90.2	85.5	76.2	80.3	95.2	94.5	55.8	97.1	96.0	58.0	95.4
	d. measles	84.7	72.4	69.3	57.2	92.2	88.5	32.5	97.1	91.5	44.0	90.0
	e. complete (BCG, 3 DPT, 3 polio & measles)	77.7	64.8	64.2	50.3	83.5	86.0	25.3	94.8	88.0	37.2	89.6
	REPRODUCTIVE MORBIDITY											
	Percent of women reported											
	a. aborton complications	43.7	33.3	18.7	50.0	41.6	41.6	22.2	40.7	0.0	64.2	33.3
	b. pregnancy complications	54.8	44.0	24.4	66.7	56.9	60.5	29.3	54.7	56.3	40.6	25.5
	c. delivery complictions	42.2	17.7	16.2	25.5	38.6	28.9	10.2	17.8	16.9	24.6	16.3
	d. post-delivery complicatins	27.2	30.2	21.8	49.2	41.9	32.7	23.3	22.7	24.8	23.3	36.3
	e. contraceptive side effects											
	i. female sterilization	20.1	16.9	17.7	32.5	14.5	13.7	35.6	15.5	9.6	17.3	28.8
	ii. IUD	9.5	16.6	15.3	33.3	16.2	28.5	33.3	13.5	44.4	0.0	11.7
	iii. pills	7.1	33.3	20.0	0.0	30.0	8.3	0.0	15.3	0.0	0.0	0.0
	f. reproductive tract infection	5.4	0.0	17.0	48.2	5.5	2.8	11.0	4.2	1.2	13.4	2.3
	AWARENESS OF WOMEN ON RCH											
	Percent of women aware of											
	a. pregnancy complications	81.7	69.0	80.0	52.4	39.4	82.3	35.7	97.1	97.7	48.9	83.3
	b. treatment/practices to be followed in diarhoe episodes	71.0	89.1	73.7	24.8	47.6	53.8	31.4	85.1	69.4	84.7	59.5
	c. peumonia symptoms	28.1	17.3	24.9	12.8	38.0	25.1	5.8	63.3	16.2	18.4	39.8
	d. reproductive tract infection	13.4	2.0	1.7	0.7	10.2	15.9	0.3	51.7	28.0	2.2	25.4
	e. sexually transmitted infection	18.0	3.0	1.4	0.2	12.8	18.4	0.4	45.9	9.5	1.3	4.4
	f. HIV (AIDA)	77.2	65.0	26.4	24.8	66.5	78.4	30.0	74.9	72.4	48.3	49.3
	VISITY BY HEALTH WORKER											
1.	Percent of rural households visited by ANM/Health worker	29.2	36.4	21.5	18.0	43.2	48.9	13.8	87.0	60.0	18.3	44.1

REPRODUCTIVE AND CHILD HEALTH PROGRAMME - DISTRICT SURVEYS - KEY INDICATORS, DISTRICTWISE

SL. NO.	KEY INDICATORS	B.lore(U)	Belgaum	Bellary	Bidar	C.Magalur	D.K	Gulbarga	Kodagu	Mandya	Raichur	Tumkur
	UTILIZATION OF GOVERNMENT HEALTH FACILITY											
1.	Percent of currently married women availing Government Health facility for											
	a. induced abortion	0.0	0.0	66.6	0.0	50.0	25.0	0.0	42.8	100.0	33.3	0.0
	b. treatment of complications following											
	i. induced abortion	*	*	*	*	*	*	*	*	*	*	*
	ii. spontaneous abortion	*	*	*	*	*	*	*	*	*	*	*
	c. antenatal care	43.2	38.3	42.7	39.9	54.8	41.6	32.1	75.5	61.8	31.2	57.0
	d. treatment of complications during pregnancy											
	i. Doctor	32.7	29.5	42.9	25.8	46.4	30.9	36.7	72.1	56.0	17.0	42.6
	ii. nurse/ANM	0.0	4.7	9.0	5.3	6.2	5.5	1.2	0.4	6.4	1.2	1.6
	iii. dispensry	0.0	1.9	0.0	0.6	0.0	0.0	0.0	0.0	0.0	0.0	0.0
	Treatment of post delivery complications											
	i. Doctor	42.3	25.7	50.4	23.7	43.7	25.0	33.8	67.5	56.8	12.2	47.1
	ii. nurse/ANM	0.0	5.7	5.3	5.9	13.7	4.6	0.0	2.6	1.9	0.0	7.1
	e. child birth (percentage of institutional deliveries taken place in Govt. institutions)	44.8	33.7	66.1	57.3	62.5	33.8	39.4	73.6	69.2	39.1	73.9
	f. immunization of children	59.2	88.6	93.7	92.4	86.5	79.0	52.2	88.2	96.4	57.2	90.8
	g. treatment of children having											
	i. Diarrhoea	11.3	17.1	30.2	30.7	26.4	17.6	19.6	38.1	48.8	16.9	19.2
	ii. Pneumonia	13.4	15.7	50.0	14.2	28.1	18.9	25.5	41.6	43.4	14.2	25.0
	h. contraceptive services	64.7	82.4	93.3	82.9	88.5	69.6	83.9	86.8	94.3	76.2	91.8
	i. treatment of side effects/ health problems of											
	i. female sterilization	35.8	48.1	51.5	45.5	52.8	42.4	34.1	66.6	74.4	39.1	55.8
	ii. IUD	0.0	100.0	50.0	0.0	50.0	40.0	*	80.0	50.0	*	66.6
	iii. pills	*	*	100.0	*	0.0	0.0	*	100.0	*	*	*
	j. treatment of RTI Doctor	11.9	10.8	25.2	5.8	17.9	8.8	14.5	26.7	19.8	7.8	12.3
	Nurse/ANM/LHV	0.0	3.1	2.6	0.0	2.9	8.8	0.0	0.9	2.4	1.6	2.3

REPRODUCTIVE AND CHILD HEALTH PROGRAMME - DISTRICT SURVEYS - KEY INDICATORS, DISTRICTWISE

SL. NO.	KEY INDICATORS	B.lore(R)	Bijapur	C.Durga	Dharwad	Hassan	Kolar	Mysore	Shimoga	U.Kannada
	1998 Population data									
1.	Total Population (in thousands)	1673.2	2928.0	2180.4	3503.2	1569.7	488.5	3165.0	1909.7	1220.3
2.	Percent Urban	18.1	23.5	22.8	34.9	17.4	16.0	29.7	26.5	24.1
3.	Percent Scheduled Caste	19.5	17.41	19.84	11.72	23.65	17.42	18.89	17.70	7.54
4.	Percent Scheduled Tribe	2.95	1.35	14.60	3.00	4.14	1.06	3.23	3.00	0.83
5.	Decennial Population Growth rate (1981-91)	13.2	19.8	20.40	17.30	24.10	14.6	19.8	14.2	13.0
	Rapid Household Survey. Reproductive and child Health									
	MARRIAGE AGE									
1.	Mean age at first Cohabitation for women interviewed	17.0	14.8	16.8	16.5	17.5	16.2	16.6	16.2	19.0
2.	Percent of Boys Married at age less than 21(since 1 Jany 1995)	2.0	26.9	13.3	12.2	9.6	15.7	3.4	6.3	3.3
3.	Percent of Girls Married at age less than 18(since 1-1-1995)	21.5	64.8	30.5	36.5	15.2	33.5	47.9	16.5	15.0
	Birth Rate (During 1 Jany 1995 to 30 June 1998)									
1.	Crude Birth Rate (Average)	17.3	22.9	22.5	22.9	17.5	21.3	20.6	19.6	19.5
2.	Percent of third or higher order births reported	16.4	43.1	34.4	37.4	19.7	29.7	23.9	22.9	27.2
	FERTILITY									
1.	Mean No. of Children ever born to women age 40-44	3.7	5.0	4.1	4.1	4.0	4.6	3.9	3.6	3.5
	INFANT MORTALITY									
1.	Infant Deaths among children born during 1-1-95 to 31-12-97	4	22	11	19	14	12	17	5	6
	MORBIDITY									
1.	No.of Cases Reported									
	Malaria (3 months prior to survey)	10	108	8	67	54	7	11	38	1
	Tuberculosis	12	6	8	17	4	18	18	14	5
	Leprosy	0	1	3	1	1	1	0	1	0

REPRODUCTIVE AND CHILD HEALTH PROGRAMME - DISTRICT SURVEYS - KEY INDICATORS, DISTRICTWISE

SL. NO	KEY INDICATORS	B.lore(R)	Bijapur	C.Durga	Dharwad	Hassan	Kolar	Mysore	Shimoga	U.Kannada
	Knowledge and use of Family Planning									
1.	Percent of Currently Married Women:									
	a. Knowing any method	98.7	98.6	100.0	99.8	99.6	99.8	99.8	100.0	99.6
	b. Knowing any modern method	98.6	98.6	100.0	99.8	99.6	99.8	99.8	100.0	99.6
	c. Knowing any modern spacing method	73.0	71.8	86.9	80.8	71.8	81.7	77.0	99.0	85.1
	d. Knowing all modern methods	95.6	93.9	48.7	98.6	94.7	40.1	30.0	81.9	55.3
	e. ever used any method	64.3	48.6	61.8	64.4	76.3	58.5	68.3	74.2	69.5
	f. currently using any method	63.0	47.1	59.9	61.2	75.1	57.1	65.4	69.3	66.0
2.	Percent of currently married women currently using									
	a. female sterilization	60.4	44.0	54.9	55.5	72.6	52.6	61.8	56.6	47.6
	b. male sterilization	0.2	0.6	0.4	0.3	0.1	0.4	0.2	0.4	0.6
	c. I.U.D	1.5	1.1	2.3	1.6	1.7	2.1	1.9	5.7	6.1
	d. pills	0.2	1.0	1.0	1.1	0.5	0.6	0.3	1.0	1.1
	e. condom	0.3	0.1	0.4	2.0	0.3	0.7	0.7	1.8	3.7
	f. any modern method	0.0	0.0	0.0	0.0	0.0	0.0	0.1	0.0	0.3
	g. any other traditional method	0.1	0.1	0.8	0.6	0.1	0.5	0.2	3.5	6.4
3.	Percent of currently married women having unmet need for									
	a. limiting	8.0	9.7	8.2	7.5	4.4	9.5	6.6	6.4	5.7
	b. spacing	3.1	4.2	3.9	3.8	2.1	4.2	3.2	2.8	4.8
	c. total	11.2	14.0	12.1	11.4	6.5	13.8	9.9	9.2	10.6
	MATERNAL HEALTH CARE									
	Percent of women who had still/live birth since 1 January 1995									
a.	received antenatal care (3 check-ups, 2TT injections and IFA tablets)	59.5	28.0	60.5	47.7	60.4	65.5	69.1	71.0	66.2
b.	Delivered at health facility	64.7	38.9	39.5	44.8	60.4	41.3	59.5	62.4	78.1
c.	delivered at home and attended by Doctor/Nurse/TBA	14.3	11.1	14.3	20.4	9.3	17.9	10.2	20.6	8.0
d.	total safe delivery (b+c)	79.1	50.1	53.8	65.3	69.7	59.2	69.7	83.0	86.1
	CHILD CARE									
1.	percent of 0-4 months children on exclsive breast feeding	71.4	45.4	63.3	83.3	65.5	48.6	45.8	60.0	54.2
2.	percent of women who gave colostrum to their children	53.8	21.4	41.5	40.6	47.3	41.8	55.6	45.8	45.9

REPRODUCTIVE AND CHILD HEALT RAMME - DISTRICT SURVEYS - KEY INDICATORS, DISTRICTWISE

SL. NO.	KEY INDICATORS	B.lore(R)	pur	C.Durga	Dharwad	Hassan	Kolar	Mysore	Shimoga	U.Kannada
3.	percent of children age 12-36 months who received									
	a. BCG	98.8	.3	95.8	92.2	99.3	98.2	98.5	98.4	97.8
	b. three injections of DPT	92.1	.8	92.1	86.5	97.4	94.2	97.6	95.9	95.2
	c. three doses of polio	92.1	.6	93.5	90.9	96.1	95.9	95.6	94.4	93.1
	d. measles	92.7	.7	91.2	79.6	96.7	95.0	96.6	96.4	94.1
	e. complete (BCG, 3 DPT, 3 polio & measles)	83.7	.2	88.4	74.8	92.8	90.6	92.7	92.9	89.9
	REPRODUCTIVE MORBIDITY									
	Percent of women reported									
	a. aborton complications	28.5	5.3	16.6	63.6	0.0	20.0	20.0	29.4	42.8
	b. pregnancy complications	43.9	1.8	41.4	29.6	36.7	37.7	41.1	69.5	37.9
	c. delivery complictions	26.9	2.0	15.2	19.4	11.1	13.1	20.9	40.1	17.4
	d. post-delivery complicatins	33.4	4.0	25.4	22.9	24.1	20.0	29.7	43.2	15.1
	e. contraceptive side effects									
	i. female sterilization	15.7	6.8	20.2	9.2	16.4	20.1	10.7	23.0	6.1
	ii. IUD	15.3	9.0	20.0	0.0	6.6	35.0	11.1	24.4	8.3
	iii. pills	0.0	0.0	0.0	10.0	40.0	50.0	0.0	22.2	11.1
	f. reproductive tract infection	14.0	6.3	12.8	11.6	13.0	19.6	11.0	23.0	14.4
	AWARENESS OF WOMEN ON RCH									
	Percent of women aware of									
	a. pregnancy complications	78.7	1.6	75.8	39.5	93.0	79.9	84.4	91.8	50.3
	b. treatment/practices to be followed in diarhoe episodes	69.9	9.2	57.4	64.1	55.4	55.1	54.5	81.8	62.5
	c. peumonia symptoms	13.0	4.1	12.9	27.4	11.3	11.3	13.1	56.1	28.2
	d. reproductive tract infection	24.1	5.6	17.9	11.7	28.9	12.3	20.7	29.6	20.8
	e. sexually transmitted infection	24.7	1.0	17.0	9.6	28.1	8.7	24.2	11.7	13.9
	f. HIV (AIDA)	62.5	4.4	62.7	59.0	68.8	48.5	53.1	88.0	70.4
	VISITY BY HEALTH WORKER									
1.	Percent of rural households visited by ANM/Health worker	--	--	--	--	--	--	--	--	--

REPRODUCTIVE AND CHILD HEALTH PROGRAMME - DISTRICT SURVEYS - KEY INDICATORS, DISTRICTWISE

SL. NO.	KEY INDICATORS	B.lore(R)	apur	C.Durga	Dharwad	Hassan	Kolar	Mysore	Shimoga	U.Kannada
	UTILIZATION OF GOVERNMENT HEALTH FACILITY									
1.	Percent of currently married women availing Government Health facility for									
	a. induced abortion	100.0	3.3	50.0	0.0	0.0	100.0	100.0	14.2	20.0
	b. treatment of complications following									
	i. induced abortion	*	*	*	*	*	*	*	*	100.0
	ii. spontaneous abortion	50.0	0.0	100.0	100.0	*	100.0	100.0	100.0	75.0
	c. antenatal care	62.0	4.2	52.1	37.6	72.2	68.2	66.5	46.2	40.1
	d. treatment of complications during pregnancy									
	i. Doctor	44.1	7.0	55.3	20.4	48.4	55.2	45.7	39.8	16.3
	ii. nurse/ANM	8.8	0.2	4.2	11.3	9.0	2.6	14.2	5.1	8.1
	Treatment of post delivery complications									
	i. Doctor	54.1	16.6	61.2	11.7	54.7	48.7	46.7	40.6	48.4
	ii. nurse/ANM	29.1	8.2	10.2	19.6	16.6	7.3	17.7	5.4	3.0
	e. child birth (percentage of institutional deliveries taken place in Govt. institutions)	70.4	41.9	61.7	43.3	76.9	55.0	66.0	47.8	36.1
	f. immunization of children	87.8	93.0	91.5	87.6	90.8	86.8	83.5	89.8	84.3
	g. treatment of children having									
	i. Diarrhoea	40.3	8.8	46.1	6.1	44.8	33.6	33.9	13.0	13.5
	ii. Pneumonia	33.3	9.3	42.5	10.2	31.5	30.0	47.2	22.6	46.6
	h. contraceptive services	94.7	89.2	88.6	80.5	95.9	87.8	88.8	84.8	76.8
	i. treatment of side effects/ health problems of									
	i. female sterilization	82.6	45.4	66.1	26.4	81.6	66.6	82.9	41.6	60.0
	ii. IUD	50.0	00.0	66.6	*	100.0	50.0	0.0	54.5	50.0
	iii. pills	*	*	*	0.0	100.0	0.0	*	0.0	*
	j. treatment of RTI Doctor	57.9	26.3	41.3	26.8	63.4	44.4	41.1	34.5	24.2
	Nurse/ANM/LHV	15.9	7.8	3.4	2.9	9.6	2.0	7.8	0.8	7.5

WH-6.

The International Federation of Obstetrics & Gynaecology (FIGO) as part of its ongoing efforts to improve women's health internationally, initiated a project with the aim of using international human rights to improve women's reproductive and sexual health through collaboration, education and advocacy. Entitled the **"Women's Sexual and Reproductive Rights Project" (WSSR)**, it has emphasized the role of the Ob-Gyn profession in the respect, protection and implementation of human rights related to women's sexual and reproductive health. India was one of the six countries selected for the implementation of this project.

As part of the first phase of the project a National Workshop was held with the aim of :

- Educating the Obs/Gyn profession about national /international women's rights related to sexual and reproductive health.
- Developing a plan for the formulation of a human rights based code of ethics.
- Identifying priority areas in the country where failures in human rights impact on women's health and where obstetricians & gynecologists with collaboration can do something about it.
- Encouraging the development of effective collaboration of Obs/Gyn professionals with women's health advocacy groups and legal and legislative representatives to protect, promote and advance sexual and reproductive rights.

SAFE ABORTION WORKSHOP

The FIGO-WSRR Project in India was inaugurated with a Safe Abortion Workshop on 11th May 2002 at The Safdarjung Hospital, New Delhi. A strong turnout of around 225 registrants ensured the success of the Workshop. The Workshop commenced at 9.00 am with a Live Demonstration of Safe Abortion Techniques including Manual Vacuum Aspiration. Prominent invitees included Dr.Shirish Sheth, President of FIGO, Dr.Dorothy Shaw, Chairperson, WSRR Project, Dr. Jagdish Prasad, Superintendent of Safdarjung Hospital and a recipient of India's National Award-The Padmashree, Dr. Usha Saraiya, President of FOGSI and Dr.Kamini A. Rao, Immediate Past President of FOGSI and Co-ordinator of the FIGO - WSRR project in India.

Dr. Shirish Seth outlined a brief history of FIGO and FOGSI. He also pointed out that "every woman must have the right to choose pregnancy and safe motherhood". Dr. Jagdish Prasad proclaimed that gynaecologists and obstetricians play an important role in the upliftment of women. He stressed the importance of birth control and implored doctors to adopt an unselfish view in dealing with their patients. Speaking on the occasion, Dr Usha Saraiya expressed satisfaction in FOGSI having successfully trained personnel in dealing with abortions. She also lauded the role of this organization in making inroads into rural areas and promoting safe abortion and safe motherhood. "Be human when it comes to carrying out abortions. What goes on in any part of a woman's body also goes on in her mind" she said.

Dr Dorothy Shaw from Canada, highlighted some lamentable facts:

- In the 10 minutes that it takes for this presentation , about 400 women will undergo unsafe abortion.
- There is a high incidence of mortality from unsafe abortions the world over.
- The WHO states that the cost of treating a septic abortion is 2-3 times more than a normal delivery.
- A woman dies every minute due to causes related to unsafe pregnancy.

Giving the Indian view point, the co-ordinator of the FIGO - WSRR project and the pivotal figure behind the meet, Dr Kamini Rao pointed out that:

- 13% of maternal mortality is due to unsafe abortions.
- Annually, nearly 15 million abortions take place in India : of these 10 million risk their lives by approaching quacks.

- Every year 15000-20000 women die from complications of illegal abortions.

Highlighting the efforts of FOGSI over the past two years in promoting safe abortion, Dr. Kamini Rao drew the attention of the audience to the following :

- Over the past one year nearly 15000 FOGSI members have been sensitized and trained in the technique of manual vacuum aspiration.
- FOGSI raises awareness, promotes safe policies and practices and interacts with the government and NGOs.

"I look forward to your cooperation in fighting unsafe abortion and female foeticide", she announced.

Subsequent speakers stressed on abortion techniques during the different trimesters and methods of ensuring safe pregnancy and motherhood.

A cross section of the audience

PUBLIC FORUM

(3.30 - 6.30 pm)

SESSION I : Compere : Dr. Mala Arora
Chairperson : Dr. Ardi Kaptiningsih
Co Chairperson : Mr. Ashish Bose

Women's Empowerment Through Health -Role of FIGO	Dr.Shirish Sheth	5 Mins.
Women's Empowerment Through Health -Role of FOGSI	Dr.Usha Saraiya	5Mins.
Women's Sexual & Reproductive Rights-A Global Perspective	Dr.Dorothy Shaw	5 Mins.

The Role of Religion in Empowering Women (10mins each)

- Shahi Inam Mufti Mukarram of Fatehpuri
- Giani Hem Singh, President Namdhari Durbar
- Rev. Anil Couto, Arch Bishop of Delhi
- Swami Agnivesh Ji
- Sadhvi Rithambra ji

SESSION II : Compere : Dr. Hema Divaker
Chairperson : Mr. A.R.Nanda
Co Chairperson : Dr. V.K.Behal

GROUP DISCUSSION : " Can We Alter the Gender Equation ? " 45 mins
Moderator : Dr. Kamini A. Rao
Kalpana Jain Usha Rai Mohini Giri Sharada Jain Mr. A.R.Nanda Vinay Aggarwal

Address by the Chief Guest, Madam Sheila Dixit, Hon. Chief Minister of Delhi 15 mins
Multimedia Dance Drama "Flame of Life" by Dr.Neelam Verma
High Tea

Sheila Dixit, Hon. Chief Minister of Delhi releasing the WSRR booklet along with Dr. Kamini Rao, Coordinator, WSRR Project, India.

PUBLIC FORUM

A public forum was organized on the evening of 11th May at the India Habitat Centre. The forum was held with the aim of generating public awareness on the issue of Women's Empowerment. Inaugurated by Madam Sheila Dixit, Hon. Chief Minister of New Delhi, the forum was attended by religious leaders, NGOs, government officials, doctors and the lay public who came together to raise a united voice against female feticide, unsafe motherhood and gender discrimination. Prominent speakers included Shahi Imam Mufti Mukarram of Fatehpuri, Giani Hem Singh of the Namdhari Darbar, Rev. Anil Cuoto Bishop of Delhi, Swami Agnivesh and Sadhvi Rithambra. The star attractions were these religious leaders who pointed out that all religions respected women and accorded her the highest dignity, but it was the misinterpretation of the holy scriptures that leads to injustice. Everyone came together and as one body condemned the atrocities against women in this country and the world over and vowed to fight it. The highlight of the evening was an oath "to refrain from sex determination" administered to all gynecologists present, by Justice Sujata Manohar of the Supreme Court of India.

"Can We Change The Gender Equation?" was the topic of a Panel Discussion moderated by Dr.Kamini Rao. Mr. A.R.Nanda Secretary for Health & Family Welfare GOI, well known women's activist Mohini Giri, media representatives Kalpana Jain and Usha Rai, and the medical profession represented by Dr.Sharda Jain, senior obstetrician & gynecologist and Dr. Vinay Agarwal Chief Secretary of the Indian Medical Association were the panelists for the discussion.. Interesting debates on issues such as falling sex ratios, male dominance and superiority and gender discrimination along with intensive audience participation and interaction formed part of this panel discussion.

Madam Sheila Dixit, Hon. Chief Minister of New Delhi in her address urged the audience to promote, protect and uphold the sexual and reproductive rights of women. She stressed that obstetricians and gynecologists as a professional group had the power and the influence to act as a 'force' not only at the national level but also at the international level to ensure the implementation of women's rights.

A booklet on the FOGSI-FIGO partnership, aimed at creating an awareness of their commitment to the promotion of the sexual and reproductive rights of women and emphasizing FOGSI's stand as an advocacy group rather than a service delivery organization, was released by the Chief Minister.

The Public Forum has been a firm step forward in bringing about an awareness to pave the way for the promotion of "safe motherhood as a right" for every woman in India.

Day 2, 12 May, 2002

CLOSED DOOR MEETING AND GROUP DISCUSSION ON PRIORITY AREAS OF CONCERN WITH REGARD TO WOMEN'S SEXUAL & REPRODUCTIVE RIGHTS

9.00 am	Registration	
9.30 am	Welcome	Dr. Kamini A. Rao
9.40 am	Inaugural Address	Mr. A. R. Nanda
10.00 am	Women's Sexual & Reproductive Rights Project	Dr. Dorothy Shaw
10.15 am	Tea	

10.30 - 1.00 pm WORKING GROUP DISCUSSIONS

Five priority areas were identified for discussion

1. Making Abortion Safe and Accessible
2. Anemia Prevention
3. Adolescent Reproductive and Sexual Health
4. Preventing HIV/AIDS
5. Female Feticide Countering the Menace

GROUP-I : Making Abortion Safe and Accessible

- Service Delivery/Certification of Centres
- Training Requirements and Certification
- MTP Act and its implementation
- Advocacy and Sensitization of Stakeholders
- Contraception availability, accessibility and counseling

GROUP-II: Anaemia Prevention

- Recognition of Early Signs and Symptoms of Anaemia
- Prophylactic Administration of Iron & Folic acid in Pregnancy
- Nutrition Counseling
- Worm Infestation Treatment
- Adolescent Health Counseling

GROUP-III : Adolescent Reproductive and Sexual Health

- The psychological, emotional and socio-cultural dimensions of adolescent reproductive health
- Increasing the availability & accessibility of Gender sensitive Teaching and Curricular material
- Providing appropriate information and services
- Availability of Counseling services with a commitment to the autonomy and confidentiality of adolescents
- Behavioral patterns that are conducive to good reproductive and sexual health

GROUP-IV : Preventing HIV/AIDS

- Providing information & services on Safe Sexual behavior
- Role of men in preventing the transmission of HIV/AIDS
- Importance of empowering women in reducing the spread of HIV/AIDS
- Introduction of information on HIV/AIDS into the school curriculum
- Improving the accessibility and availability of barrier methods

GROUP - V : Female Feticide Countering the Menace

- Interventions to sensitize doctors, NGOs and the govt. machinery starting from the Panchayat level on the need to protect the girl child
- Need for education and sensitization of male members of the community regarding gender bias, female feticide, female infanticide
- Improving awareness regarding the PNDT Act.
- Effective implementation of the PNDT Act.

2.00 3.00 pm Presentation of Group Reports and Discussion

3.00 4.00 pm Action Plan

The participants were divided into five groups and each group was assigned one of the above subjects. During group selection care was taken to ensure that, not only did participants have a personal interest in the subject they were allotted, but also that participants from different backgrounds formed part of each group. Broad guidelines on which to base the discussion were given to each group. Two of the members of each group were designated Chairperson and Rapporteur of the group.

At the end of the two-hour group discussion, group rapporteurs presented the synopsis of their deliberations in a plenary session. The larger group discussed, debated and endorsed the issues that are outlined below.

Dr. Usha Saraiya, Dr. Dorothy Shaw and Dr. Shirish Sheth along with gynecologists pledging the "Sex Determination Oath" at the Public Forum.

A panel discussion on "Can We Change The Gender Equation" in progress during the Public Forum.

WH-6.

Youth Incentives Fact Sheet -- Draft

A Rights-based Approach to Young People's Sexual and Reproductive Health

Introduction

In the last decade of the 20th century new thoughts emerged concerning the sexual and reproductive health of young people. The time had come to rethink the approaches used to address young people's sexual and reproductive health. Young people are sexual beings and many are sexually active by their 18th birthday. Young people have real sexual and reproductive health needs, as well as rights. Many programmes designed for young people often ignore these needs and rights.

In many countries the sexual and reproductive health of young people is considered to be a problem, as well as a taboo subject. The approaches used to address this "problem" are frequently based on a top-down theory. This means that most programmes and policies are developed by adults and frequently view young people as only recipients of the services offered. Such an approach cannot effectively reach young people, especially those who are sexually active – they typically have the most needs and are the most at risk for the negative consequences of sexuality; unintended pregnancy, STIs, and HIV/AIDS.

Young people are often not encouraged to become active participants of the programmes developed to target them. If services are available they are frequently not designed to be "youth friendly". This ultimately results in many young people not using sexual and reproductive health services. Young people do not receive the information and education they need concerning their sexual and reproductive health, ultimately leaving too many young people in the dark and unprepared.

Young people can be reached effectively if they are perceived as social actors within their own rights. Young people are capable of speaking and deciding for themselves and should be encouraged to do so. In 1989, a rights-based approach towards the sexual and reproductive health of young people began to take shape—an approach based primarily on existing international human rights. For the first time, young people were recognised, internationally, as sexual beings that have a right to education, information, youth friendly services and participation. Great strides were made during four United Nations conventions, International Convention of the Rights of the Child (1989), International Conference on Population and Development (1994), ICPD +5 (1999), and UN Women's Conference Beijing +5 (2000). Participating governments and NGOs recognised the sexual and reproductive rights of young people and produced signed declarations binding them to respect and promote these rights.

Age-based definition of Young People (combination of UN and WHO definitions):
All young men and women between 10-24 years old.
Worldwide there are 1.7 billion young people. 85% of them are living in developing countries.
Young people make up 40% of the total population of most developing countries.

Social-based definition of Young People:
Young people are social actors in their own rights. They are a diverse group with great potential and capability.

The UN Conventions, important outcomes for young people

1989, International Convention of the Rights of the Child

- Young people are human beings and are the subjects of their own human rights.
- Young people have the right to express their views and have them taken seriously.

1994, International Conference on Population and Development (ICPD)

- The focus changes from family planning and fertility to reproductive health.
- Sexual and reproductive health and rights of young people are recognised.
- Reproductive health programmes must also meet the needs of young people.
- Young people have a right to the information and services necessary to learn about their sexuality; as well as make informed choices concerning their sexual lives. (source: Wereldbevolkingsrapport 1995)

1999, ICPD +5 and 2000, Beijing +5

- First Youth Forum takes place during ICPD +5
- Special attention is paid to the sexual and reproductive rights of young people – how to make sure that these rights are respected and exercised.
- Need for integrated and holistic approach to the sexual and reproductive health of young people is expressed.
- Demand of full participation of young people at all levels of the programmes targeting them – policy, development and implementation. (Source: http://www.unfpa.org/icpd/round&meetings/ny_adolescent/reportr1.htm)

Sexual and Reproductive Rights of Young People (source: IPPF Voice)

(Based on recognised international human rights laws)

1. The right to be yourself – free to make your own decisions, to express yourself, to enjoy sex, to be safe, to choose to marry (or not to marry) and plan a family.
2. The right to know – about sex, contraceptives, STIs/HIV, and about your rights.
3. The right to protect yourself and be protected – from unplanned pregnancies, STIs/HIV and sexual abuse.
4. The right to have healthcare – which is confidential, affordable, of good quality and given with due respect.
5. The right to be involved – in planning programmes with and for youth, attending meetings/seminars etc. at all levels and trying to influence governments through appropriate means.

What is a rights-based approach?

A rights-based approach to the sexual and reproductive health of young people starts from internationally agreed human rights as a base. Sexual and reproductive rights are then recognised as their own entity. A rights-based approach, as developed over the last 12 years, insists on the protection, empowerment, and equality of all young people, including their sexual lives. It is an approach for young people and not about young people. A rights-based approach serves the real needs of young people by involving them, which allows programmes to be more effective and sustainable. A rights-based approach provides the necessary freedom to meet the sexual and reproductive health needs of young people. (Source: www.familycareintl.org/briefing_cards_2000/rights.htm)

A rights-based approach:

- Is a strategy that **recognises** young people's rights within an ethical framework.
- Is meant to **protect** these rights, ensuring that young people can enjoy them.
- **Promotes** the sexual and reproductive rights of young people.
- **Educates** and **informs** young people of the existence and meaning of their rights.
- **Empowers** young people to **exercise** their rights and **advocate** for their rights.
- **Empowers** young people to be in **control** of their own sexual lives and make the decisions that best fit their own needs.

What does a rights-based approach mean in reality?

How can one ensure that these rights will be respected and enjoyed? What does the outcome of the UN conventions mean in reality when addressing the sexual and reproductive rights of young people?

There are many challenges associated with a rights-based approach. Some of the largest challenges are based in culture, religion, economics and politics. However, states that have chosen to recognise the sexual and reproductive rights of young people within a rights-based approach have accepted a certain amount of responsibility. Furthermore all other parties directly involved, NGOs and young people, must also accept certain responsibilities.

"While the significance of national and regional particularities and various historical, cultural and religious backgrounds must be borne in mind, it is the duty of the States, regardless of their political, economic and cultural systems, to promote and protect all human rights and fundamental freedoms." (IPPF Charter on sexual and reproductive rights)

Responsibilities of national governments:

- Respect the sexual and reproductive rights and health needs of young people.
- Act as a safeguard for the sexual and reproductive rights of young people
- Develop policy that ensures sexual and reproductive rights are known, understood and exercised by all young people.
- Make sure that sexual and reproductive rights are understood outside of religious, cultural and political beliefs.

(These responsibilities are especially true for the countries that signed the commitments and plans of action at the UN conferences mentioned above.)

Responsibilities of organisations that serve young people:

- Inform and educate young people of their sexual and reproductive health and rights.
- Educate communities, leaders and parents about the sexual and reprod. rights of young people.
- Advocate for the sexual and reproductive rights of young people, at the international, national and local level.
- Mobilise communities to assist in advocating for the sexual and reproductive rights of young people.
- Develop a working relationship with young people to ensure that their needs are met and that they are empowered to advocate for themselves.
- Develop policy that includes young people at all levels of programme development, implementation, and evaluation.
- Provide sexual and reproductive health services within a "youth friendly" environment.

Responsibilities of young people:

- Must respect their own sexual and reproductive health and rights, as well those of others.
- Inform and educate other young people about their sexual and reproductive rights.
- Become active participants within their communities and advocate for sexual and reproductive rights and health needs of young people.

Implementing a rights based approach

Implementation of a rights-based approach requires an equal working relationship between the government, organisations and the young people they serve. The IPPF Youth Committee developed three goals which should be kept in mind when implementing a rights-based approach, Youth Manifesto:

1. Young people must get what they need; access to education and information on sexuality and the best possible sexual and reproductive services (including contraceptives).
2. Young people must take part; involved at all levels of decision making and development empowering them to become active members of society.
3. Young people should feel good about their sexualities; taking pleasure and feeling confident about all relationships, including sexuality.

Examples of programmes incorporating a rights based approach

Due to the fact that a rights-based approach is a relatively new theory, it is challenging to locate programmes or projects that have implemented it and evaluated its effectiveness. However, there are several organisations that have implemented pieces of the theory into their programmes targeting young people. A rights-based approach has several valuable aspects. They are not always used simultaneously, yet when used individually each aspect of the theory can have a positive influence on the sexual and reproductive health and rights of young people.

Advocacy -Youth Coalition, International

In February of 1999 a group of young people attending the *First International Youth Forum* (organised around ICPD +5) in The Hague, the Netherlands, decided to take their concerns regarding the state of the sexual and reproductive health and rights of young people one step further. This group of concerned young people decided to organise the *Youth Coalition* -- an organisation established by young people working for the sexual and reproductive rights of young people.

- The Youth Coalition advocates, at the governmental, NGO, and community level, for the recognition and respect of the sexual and reproductive rights of young people.
- The Youth Coalition encourages youth participation and empowers young people to advocate for their own sexual and reproductive rights through trainings and workshops.
- The Youth Coalition shares the perspective of young people through disseminating information, knowledge, and sharing policy recommendations with others.

As an international organisation with young members from all parts of the world, The Youth Coalition has created a global voice for young people to express their concerns and become active in issues regarding their sexual and reproductive health and rights.
(Source: www.youthcoalition.org)

Youth friendly services - CEMOPLAF, Ecuador

During the evaluation process of a pilot project implementing sexuality education in high schools, young people expressed the need for youth friendly services. In 1998, Centro Medico de Orientation y Planificacion Familiar (CEMOPLAF) a family planning NGO in Ecuador, implemented youth friendly services based on a participatory model. Active involvement of young people, parents and the community at large was encouraged—ensuring respect for the clinics and their activities within the communities where they are located.

- Youth participation was encouraged during all stages of programme development, implementation and evaluation.
- Creation of new services to meet the real sexual and reproductive health needs of young people. Existing services were improved and made more acceptable and accessible for young people, for example separate waiting rooms.
- Opening hours, schedules, and fees were adjusted to meet the needs of the young clients.
- Personnel received intense trainings on how to work with young people and how to serve them-- interpersonal communication and counselling training with an emphasis on confidentiality.
- Counselling and education was also integrated into the clinics' activities.
- Information and education is disseminated for young people, teachers, parents and the community outside of the clinic.

Evaluations of the program, including interviews with young clients, demonstrated that since the implementation of youth friendly services the demand for services by young people has increased. There is also a higher return rate of young clients. In addition to the five CEMOPLAF clinics involved in the first stages of this project, sixteen clinics are expected to implement youth friendly services. CEMOPLAF has created an environment that allows young people to feel comfortable and exercise their sexual and reproductive rights. Information and services are easier to attain which encourages young people to make informed decisions concerning their sexual lives.
(Source: www.advocatesforyouth/

Education for school youth – Malaysia and Vietnam

Malaysia

In 2001 the Federation of Family Planning Associations of Malaysia produced a Module on the reproductive health of adolescents (RHAM). This comprehensive guide for educations, including youth peer educators, promotes adolescent reproductive health using a holistic approach. The RHAM uses seven concepts, nineteen topics and seventy-five activities plus integration of reproductive rights and reproductive health to empower young people.

RHAM is also based on four objectives: Information, Attitudes and Values, Relationships and Interpersonal Skills and Responsibility. The active participatory approach used aims to involve participants to share knowledge and dispel myths.

Vietnam

Also in 2001, the World Population Foundation (WPF) teamed up with the National Institute of Educational Sciences (NIES) from the Ministry of Education and Training in Vietnam to develop a comprehensive and holistic curriculum to be used in the re-education schools for children in conflict with the law (CCWL). Results from a needs assessment told of a need for the students to better understand their sexuality and how to protect themselves against sexual health problems. As a result, WPF and NIES with technical assistance from Youth Incentives were able to develop a sexuality education and HIV prevention programme using a rights-based approach as one of the central development themes.

The development process included defining objectives based on the actual sexual health concerns of the young school participants. Learning objectives to be included are to increase sexuality knowledge, communication and negotiation skills and social norms. Knowledge of sexual and reproductive rights was also integrated with the goal to empower the students to make informed decisions and advocate for their own rights. The participatory-based programme model encourages active interaction and allows students to be involved in their own learning process. The pre-test showed positive results and the extended module of more than 50 lessons will be implemented and evaluated in the first part of 2003. Young people have been involved from the beginning of the development process. Their own needs have become a real part of the programme. The module and the book to be used reflect the thoughts of the young people, as well as their rights—positive steps towards success.

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Utrecht, August 2002
Prepared by: Annemaire Oomans and Sara Massaut

WH-6.

WHAT IS REPRODUCTIVE HEALTH?

The 1994 Cairo ICPD Conference defines Reproductive Health as

"A State of complete physical, mental and social well being and not merely the absence of disease or infirmity in all matters relating to reproductive system and its functions and processes"

Reproductive health approach means that :

- People have ability to reproduce and regulate their fertility,
- Women are able to go through pregnancy and child birth safely,
- The outcome of pregnancy is successful in terms of maternal and infant survival and well being and
- Couples are able to have sexual relation free of fear of pregnancy and of contracting diseases.

Fathallah - 1988

PACKAGE

Health:

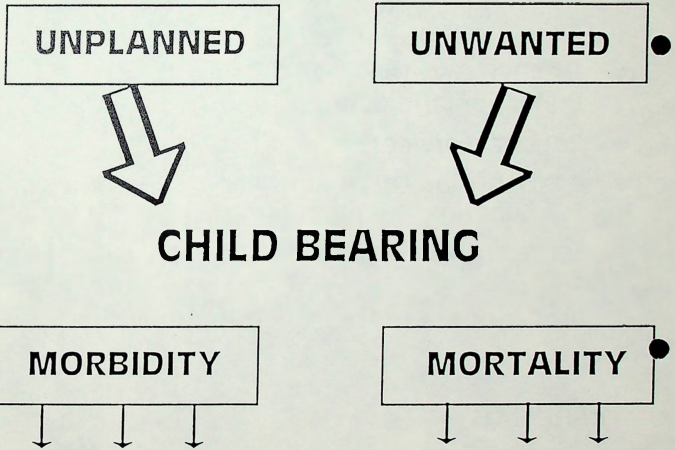
- Family Planning
- Safe abortion, Prevention of abortion and management of consequences of abortion
- Safe Motherhood
- Prevention and Management of RTI's and STI's
- Child Survival
- Health, Sexuality and Gender information, Education and Counselling
- Referral Services
- Growth monitoring and Food Supplementation for Children, Pregnant and Lactating Women
- Screening and Management of Cervical and Breast Cancer
- Prevention and Treatment of Infertility

NON-HEALTH

- Reduce Gender Discrimination and Violence
- Enhance female literacy

RCH means

REDUCTION OF THE BURDEN OF



Responsibility of RCH

THE CLIENTS :

1. **For each girl** — equal access to nutrition, education and health services;
2. **For each adolescent** — access to reproductive health information and services;
3. **For each woman of Reproductive age** — access to family planning and appropriate abortion management;
4. **For each pregnant women** — at least three prenatal contacts by a health care delivery personnel;
5. **For each High risk pregnant woman with threat of complications** — access to transport to first referral;
6. **For each woman in labour** — assistance by a trained health care provider;
7. **For each new mother** — access to postpartum health care and child spacing services and child care services;
8. **For women at large** — including the elderly women amenities for protection from and intervention for diseases that are gender specific and sex related.
9. **Youths and Adult Men**

CHANGING THE SIGNALS

	OLD SIGNALS	NEW SIGNALS
Primary goal	Reach two-child family size norm	While still encouraging smaller families, help clients meet their own health & family planning goals
Priority Services	Family planning, especially female sterilization	Full range of family planning services
	Immunization	**Full range of MCH services**
Performance measures	Number of Cases	Quality of care, coverage, measures, client satisfaction
Management approach	Top-down, target driven, male dominated	Decentralized, client needs - Gender sensitive
Attitude to client	Motivate, persuade	Listen, assess needs, inform
Accountability	To the bureaucracy	To the client and community, health and family welfare staff

COMPREHENSIVE REPRODUCTIVE HEALTH SERVICES PACKAGE

- Prevention and Management of Unwanted Pregnancy
- Service to Promote Safe Motherhood
- Service to Promote Child Survival
- Nutritional Services for Vulnerable Groups
- Prevention and Treatment of RTI's and STI's
- Prevention and Treatment of gynaecological Problems
- Screening and Treatment of Breast Cancer
- Reproductive Health Services for Adolescents
- Health Sexuality and Gender Information, Education and Counseling — Advocacy
- Establishment of Effective Referral Systems — NGO's and PRI's

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- Essential RCH Package

THE APPROACH

- Package of Services
- Improve Accessibility — Institution & Outreach
- More Responsive to Client Needs
- Improve Quality of Care
- Women Health Services — WHS
- Provide Accessible, Complete and Accurate Information
- Training
- Involvement of NGOs and Private Sector
- Cost Recovery
- Social Marketing
- Involvement of :
  Health Personnel
  NGOs
  Counsellors
  MSS Members
  Zilla Panchayat Members
  Religious Groups
  Mahila Mandal Members
  P.M.P's

REPRODUCTIVE HEALTH

- People have the ability to reproduce and regulate their fertility
- Women are able to go through pregnancy and child birth safely
- The outcome of pregnancy is successful in terms of maternal and infant survival and well being
- Couples are able to have sexual relations free of fear of pregnancy and of contracting diseases.

Fathallah - 1988

DEMOGRAPHIC INDICATORS

Sl. No.	STATE	Popⁿ (91)	GR (81-91)	FLR (91)	SR (91)	CBR (94)	CDR (94)	IMR (94)	TFR (92)	AM (92)	CPR (95)
1.	Kerala	29.09	1.34	86.17	1036	17.3	6.0	16	1.7	22.1	50.7
2.	Tamil Nadu	55.85	1.43	51.33	974	19.0	7.9	59	2.2	20.25	54.8
3.	Andhra Pradesh	66.5	2.17	32.72	972	23.7	8.3	63	2.8	17.8	49.4
4.	Karnataka	44.9	1.92	44.34	960	24.9	8.1	65	2.9	19.4	52.7
	INDIA	846.3	2.14	39.29	927	28.6	9.2	73	3.6	19.5	45.8

WH-6.

Registration form

Workshop on
Gender, Sexuality and Reproductive Rights

22 – 24 April, 2006 Visthar, Bangalore

Please fill in the following and mail it to us before the 25th of March.

1. Name of the participant

2. Sex and age

3. Educational background

4. Languages known

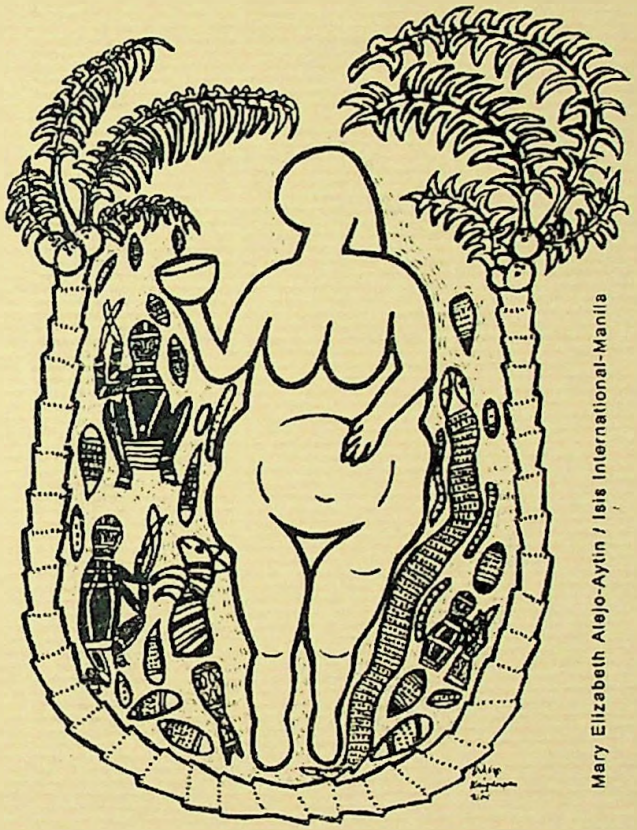
5. Postal address, telephone number and email

7. Trainings attended

8. Nature of current work / involvement

7. Cheque/draft details (registration fee)

Signature of the participant



Workshop on

GENDER, SEXUALITY AND REPRODUCTIVE RIGHTS

22-24 April, 2006

Rama Narayan

Visthar
Bangalore
Tel: 91 80 28465294 /295
Email: visthar@vsnl.com

1187
20/3/06

To NT/SJE

Overall objective

To enable participants to develop a gender and rights perspective on issues related to sexuality and reproduction.

Specific objectives

At the end of the workshop, participants will

- Have conceptual clarity on gender, sexuality, sexual and reproductive health and sexual and reproductive rights
- Be familiar with social determinants of sexual and reproductive health and identify gender as one of these determinants, affected by and interacting with other determinants
- Acquire skills to apply gender analysis and a human rights framework to analyse sexual and reproductive health policies and programmes
- Be acquainted with strategies to advocate for sexual and reproductive rights at the community and state/ national levels

Themes / aspects to be covered

- Introduction to concepts of gender, sexuality, sexual and reproductive health, human rights, sexual and reproductive rights
- Analysis of the social determinants of sexual and reproductive health at the household, community, national and international levels
- Introduction to international human rights frame work and how they have been applied to advance sexual and reproductive rights
- Analysis of policies from a gender and rights perspective (using a specific state population policy and/or NRHM as examples)
- A gender and rights approach to reproductive health programmes: What does it mean?
- Advocacy and social mobilisation for sexual and reproductive rights: approaches and strategies
- Planning for integrating sexual and reproductive rights hin the work of participants' NGOs

Methodology

The workshop will follow a participatory approach and will draw on participants' experience and knowledge. The methodology will include case studies, role plays, audio-visuals, inputs etc. Background readings will be compiled into a dossier (sent in advance on request) and handouts issued during the workshop.

Participants

The workshop is designed for women and men involved in training and advocacy on issues related to gender, reproductive rights and health. Coordinators, trainers, policy makers from governmental and non-governmental organizations, who have already undergone a basic course in gender, will find the programme particularly useful.

Facilitator

The workshop will be facilitated by Dr. Sundari Ravindran, Honorary Professor, Achutha Menon Centre for Health Science Studies, Trivandrum. Sundari has also served as Gender and Health Specialist at the Department of Gender, Women and Health and as Technical Officer of the World Health Organization (WHO). Her major publications include a training manual on *'Transforming Health Systems : Gender and Rights in Reproductive Health'* - Published by WHO, 2001.

Course fee and registration

Visthar is subsidizing the board and lodging expenses of the workshop. Patricipants are expected to pay a nominal sum of *Rs. 1500/-(Rupees one thousand five hundred only)* as registration fee. Interested candidates are requested to fill in the enclosed form and mail it to us before the 25th of March with a cheque/ draft *drawn in favour of Visthar*. Activists / non-funded groups will be exempted from the registration fee on a 'first come first serve' basis.

Contact: Mercy Kappen
email: visthar@vsnl.com, mercykappen@yahoo.com

WH-6.

GOVERNMENT OF KARNATAKA

STATUS REPORT
&
ACTION PLAN
2000-2001

REPRODUCTIVE AND CHILD HEALTH PROJECT

NATIONAL COMPONENT

ANNUAL FINANCIAL ENVELOPE

OFFICE OF THE PROJECT DIRECTOR (RCH)
DH&FWS, ANANDA RAO CIRCLE, BANGALORE - 560 009

MAY 2000

REVISED ANNUAL PLAN AS APPROVED IN THE 11TH STATE LEVEL STEERING COMMITTEE ON RCH HELD ON 8-5-2000

PRESENT STATUS AND ACTION PLAN FOR 2000-2001

BACKGROUND

Ministry of Health and Family Welfare, Government of India in their communication no. M. 14015/7/97 dated 3rd December, 1997 sanctioned the launching and implementation of the Reproductive and Child Health (RCH) programme with effect from 1997-98 to 2001-02 as a part of the centrally Sponsored programme with a total project outlay of Rs.190 crores for Karnataka for the project period. This includes the contribution that will be provided from Government of India directly to the State both in cash and kind.

PROJECT GOALS

The RCH programme intends to integrate a) fertility regulation and b) maternal and child health with reproductive health services such as screening, diagnosis and treatment of RTIs and STIs with the aim to reduce infant and maternal mortality and unwanted fertility thereby eventually contributing to stabilization of population growth and improve the health status of children.

CATEGORISATION AND COVERAGE OF DISTRICTS

Interventions directed towards improved and added facilities under this programme are to be covered in a phased manner depending on the classification of districts on the basis of certain important indicators and needed inputs. Accordingly districts are grouped under three categories as below:

"A" category Districts	"B" category Districts	"C" category Districts
D.Kannada (Udupi)	U.Kannada	Gulbarga
Kodagu	Belgaum,	Bijapur (Bagalkot)
Mandya	Chikmagalur,	Bidar
	Dharwad, (Gadag, Haveri)	Bellary
	Hassan,	Raichur (Koppal)
	Mysore, (Chamarajnagar)	Bangalore (U)
	Bangalore(R)	
	Tumkur	
	Shimoga	
	Chitradurga (Davanagere)	
	Kolar	

BELLARY SUB-PROJECT

Bellary sub-project has been selected for the district project to fill up the gaps in the MCH and FP programmes. The cost of the sub-project is Rs. 15.05 crore. A separate status report on this is prepared.

DEMOGRAPHIC GOALS FOR KARNATAKA

Based on an exercise similar to the NPP 2000, the department has set the following provisional demographic goals which it feels are realistic and achievable provided appropriate RCH and other sectoral interventions are made in the next few years.

Year	TFR	CBR	CDR	IMR	CPR	Popn. (000,s)
1988**	2.5	22	8.0	58	58	50983
2000	2.4	21	8.0	53	60	52091
2005	2.1	19	7.5	42	64	55425
2011	1.8	17	7.5	30	69	59815
2016	1.6	14	7.0	30	75	63007
2031	+	+	+	+	+	69836 #

** *SRS estimates/official estimates*

\+ *not fixed*

\# *level at which it is expected population may stabilize with the right interventions.*

PROGRESS MADE UNDER THE RCH PROGRAMME

The RCH programme in Karnataka has had a slow start. The Government of Karnataka sanctioned the programme in its order no. HFW FPR 95 dated 1.6.98. An empowered committee has been set up with the Chief Secretary as Chairman and this committee has met on two occasions. For overseeing the implementation of the programme, a Steering Committee with the Principal Secretary, Health and Family Welfare has also been set up. This Committee has met on many occasions.

Additional Director(FW) has been designated Project Director. The Joint Director and other supporting staff assist him. Three consultants have been appointed. Commissioner Health and Family Welfare Services also guides and monitors the implementation of the programme.

In brief, the following action has been taken/initiated.

National Component :

1. The Empowered Committee under the Chair Personship of the Chief Secretary to Govt., met twice and cleared some important policy decisions.
2. The State Level Steering Committee has to far met at least 10 times in order to give momentum to the implementation of the programme.
3. Out of five consultants allocated for the State, three consultants namely for Maternal Health, Evaluation & Monitoring and IEC have been appointed. They have been in position for more than three months and their services are being fully utilized.Under the major civil works component, works are in progress in various stages (Annexure - I).
4. The eligible couple registers have been printed to the extent of 25,000 using the amount of Rs.2.98 lakhs allocated for the purpose.
5. An amount of Rs.7.72 lakhs for printing of immunization cards has been utilized. Immunization cards have been districted to all the districts with instructions to ensure that these are in turn handed over to the beneficiary families.
6. Under the training component, the progress made so far is as follows :
   Awareness Generation : 2921
   Composite Groups :518
7. Outreach services are being strengthened by involving Anganawadi Workers working in the Dept., of Women and Child Development.

FINANCIAL PROGRESS UNDER RCH

(Rs.in lakhs)

Sl. No.	Budget released by Government of India 1998		Expenditure 1998-99	Expenditure 1999-2000	Cumulative expenditure
A) National Component					
1.	Drugs	15.55			
2.	A.B.Cotton	31.13			
3.	Civil works	190.00			
4.	PHN	60.00			
5.	SCOVA	25.00		1.20	1.20
6.	S.M.Consultants	8.00			
7.	24 Hour Delivery Services	3.43			
8.	PHNs	125.00			
9.	Transport charges	5.00			
10.	C.C. Maintenance	26.00	12.99	13.00	25.99
11.	Pethidine Injection	1.80			
12.	Immunization cards	7.72		7.70	7.70
13.	E.C. Registers	2.98		3.20	3.20
14.	IEC - ZSS	57.37	-	2.95	2.95
15.	IEC National Component	-	-	6.80	6.80
	Sub Total	558.98		34.85	47.84
B) Sub - Project		234.00	5.00	6.82	11.82
Total		792.98	17.99	41.67	59.66
C) Kind Materials :		1275.84	2111.95	2172.69	5566.48
Grand Total					5626.14

NATIONAL COMPONENT
(2000-01)

Apart from the schemes included under the financial envelope, the State of Karnataka proposes the following schemes to be continued under the National Component of RCH programme.

I Civil Works -

Over the years the position of buildings for different health institutions such as district hospitals, community health centres and PHCs have improved in most of the periphery. The position of subcentres has not been improved. Therefore it has become necessary to take up repair works for subcentres and PHCs involving repair of electric supply lines, water supply arrangements, attending leakage of ceiling and also repairs of floors, doors and windows limiting to the expenditure.

A lumpsum budget of Rs.10.00 lakhs to every district for such repairs will be made available. The Dist. Health and FW Officer/Dist.RCH Officers will identify such institutions and contact the Executive Engineers and Zilla Panchayat Division to get them repaired. No funds will be made available for construction of compound wall etc.,

Action is being taken to issue a GO in this regard. For this purpose an amount of Rs.190.00 lakhs is ear marked during the 2 year project period 2000-2002.

GOI has released budget of Rs.190.00 lakhs for civil works. Against these 69 civil works have been commenced.The civil works are being taken up in the PHCs (preferably MNP PHCs,) for construction of OT/labour room etc., wherever there is a greater demand for FP & MCH services and also the availability of land for add on work. The average estimated cost of these works is Rs.9.00 lakhs. For 69 civil works the total estimated cost is Rs.6.21 Crores. Against these works an amount of Rs.62 lakhs have been committed and payments are being made. During the remaining part of the year an additional expenditure of Rs.3.00 crores for this project is required.

In addition, in respect of 19 district excluding (Bellary). The ZPs have been asked to take up minor civil works up to Rs.10.00 lakhs each. Towards these Rs.1.9 crores is required. The total net amount required for civil works is as below

The total amount for civil Works proposed is therefore as below

a) Works already committed	Rs.362 lakhs
b) Repair Works	Rs.190 lakhs
Total	**Rs.552 lakhs**
Funds already released (-)	Rs.190 lakhs
Funds required for 2000-01	Rs.362 lakhs

II. DRUGS :

The following amount has been released by GOI for drugs and supplies

Drugs	15.55 Lakhs
A.B cotion	31.13
Pethidine Inj.	01.80
Total	48.48

This amount is being utilized for provision of drug kits to improve the essential obstetric care in PHCs in category 'C' & 'B' districts as well as supply of drug kits for emergency obstetric care for FRU's.

The total outlay required will be Rs.108 lakhs. @ Rs.54.00 lakhs per year for the period 2000-2002.

III Consultants

a) State Level Consultants are required for preparation of proposals, monitoring, evaluation and follow up at state level. It is also felt that the appointment of consultants will help in carrying out and formulating the activities of RCH programme effectively. 3 consultants have already been appointed in the field of Maternal Health, IEC, Monitoring & Evaluation . The balance are being appointed shortly. To meet the expenditure towards honorarium of consultants including expenses on their travel, stationery etc., a sum of Rs.15 lakhs is provided.

b) It is proposed to identify 2 suitable persons to fill the balance post of child health consultant and financial consultant.

For this purpose an amount of Rs.25.00 lakhs has been released under SCOVA for meeting the expenditure of honorarium, TA, Stationery etc.,

IV Monitoring & Evaluation

One of the important components of the RCH programme is the implementation of the CNAA for the Monitoring and Evaluation of the programme. Under this approach, it is envisaged that the annual plans/targets have to be prepared starting from the sub-centre level and consolidated in the form of State Plan in plan no.5. Similarly, the monitoring of the progress of the programme has to be done in the monthly reports starting again from the sub-centre level in form no.6 which has to be consolidated to the District/State level monthly progress report in form no.9

The immediate operationalisation plan of this approach is the transmission of both form no.4 and form no.9 through NICNET. However, in a phased manner, it is desirable to computerize the PHC-wise plan/monthly report also. As a first step in this direction, it is proposed to obtain the progress report PHC-wise for all the 1600 and odd centres in the state which will reflect the progress for the entire year 1999-2000. These reports will be collected at the State head quarters and by engaging private agencies, its consolidation and analysis will have to be taken up.

In addition to the above activity, the amount earmarked for Monitoring and Evaluation will also be utilised for printing and distribution of the various registers and formats prescribed under the MIS for RCH project.

The community needs assessment approach has to be implemented by using computers and information technology. One computer has already been purchased for this purpose. For this it will be necessary to engage computer agencies in the non-governmental sector and staff skilled in computer operations provision is also required for monthly monitoring meeting of RCH officers at State Level.

Following is the anticipated annual requirement of CNAA formats.

No.of CNAA forms to be printed		
a)	Form No.1	20000
b)	Form No.2	5000
c)	Form No.3	1000
d)	Form No.4	100
e)	Form No.6	225000
f)	Form No.7	50000
g)	Form No.8	10000
h)	Form No.9	1000
I)	Manual	12000

In addition it is proposed to take up audit of PHCs. The Chairman Professional Development Committee of Southern India Regional Council of the Institute of Chartered Accountants of India in the letter dtd. March 24, 2000 addressed that the organization has around 5000 chartered accountants in Karnataka of which nearly 2000 are in practice.

They have expressed to offer their services in the area of auditing primary Health Centres. During the preliminary discussion it was brought to the notice that such an audit system is being installed in Andhra Pradesh, and it will also be feasible in Karnataka also.

An amount of Rs.2000/- for each of the PHC, would be charged for auditing. During the current year it is proposed to audit 200 PHCs.

@ of Rs.2000/- per each PHC, it would require an amount of Rs.4.00 lakhs towards this which can be met under monitoring and evaluation sub head of National Component during 2000-2002.

Towards Monitoring & Evaluation during the current year of the project – 2000-01 a sum of Rs. 50.00 lakhs is required.

V. IEC through ZSS : An amount of Rs.57.37 lakhs has been released to 14 Districts to take up IEC activities of RCH programme through ZSS. The activities are being implemented through the district level committees headed by Dy. Commissioner.

National Component
Abstract 2000-2001

(Rs.in lakhs)

Sl. No	Interventions	Expenditure Plan 2000-2001	Amount released / proposed for re appropriation	Net amount required
1.	Civil Works	552.00	190.00	362.00
2.	Drugs	54.00	48.48	5.52
3.	Consultants	15.00	25.00	10.00 (excess)
4.	Monitoring & Evaluation	50.00	0	50.00
5.	IEC	57.37	57.37	0
	Total	728.37	320.85	417.52 (Deduct Rs.10.00 lakhs)
				407.52

FINANCIAL ENVELOPE UNDER RCH (2000-01)

During the World Bank review meeting in May 1999, with the State Governments, among other things, one of the decisions was to grant greater flexibility to the Southern States to meet the specific needs within a fixed financial envelope to further smoothen the implementation of the RCH programme.

Govt. of India in November 1999 indicated the flexibilities offered and requested to forward a proposal with details such as districts selected, expected outcome and funds already received etc.,

The flexibilities offered in this envelope are :

1. The envelope would be applicable to 20% of the disadvantaged population of the State and free to set criteria for selection of the districts.

2. The States will be free to choose the intervention provisioned for round the clock delivery services at PHCs.

3. The State will be free to choose the no. and category of contractual appointment of staff.

CRITERIA FOR SELECTION OF THE DISTRICTS :
The following are considered as criteria for selection of the districts.

- Low levels of Antenatal care
- High Crude Birth Rate
- High unmet need in Family Planning
- Low levels of institutional deliveries
- Low levels of fully immunized children

The Rapid House Hold Survey reports under RCH for the years 1998 and 1999 are available. Keeping in view the above listed criteria, the districts such as Gulbarga, Bidar Raichur (Koppal), Bijapur (Bagalkot) are selected for the financial envelope.

Important findings of Rapid House Hold Survey under RCH of these districts are listed.

*Important findings of Rapid Household Survey under **RCH project*

Sl. No	Parameter	Districts				
		Gulbarga	Bidar	*Raichur	*Bijapur	State
1.	Popl. in lakhs	25.82	12.55	23.09	29.28	44.97
2.	% Girls married less than 18 years	47.7	67.6	57.1	64.8	35.20
3.	CBR	30.1	31.6	29.1	22.9	22.0
4.	Couple Protection Rate	39.2	50.6	45.4	41.9	58.1
5.	Birth order 3 & + %	53.7	52.9	52.8	43.1	27.8
6.	Unmet need %	48.1	37.2	42.2	14.0	18.1
7.	% of ANCs who had 3-checkups	47.8	57.3	60.6	28.0	57.6
8.	Institutional deliveries %	27.9	32.9	22.7	38.9	52.5
9.	Exclusive breast feeding %	63.1	86.2	85.8	45.4	67.8
10.	Children fully immunized %	25.3	50.3	37.2	53.2	64.9
11.	Reproductive morbidity % (pregnancy complications)	29.3	66.7	40.6	31.8	25.7

* *Old Districts before reorganization of the districts.*

** *Rapid House hold survey I and II phase [1998, 1999]*

Among other things, the following are observed from the findings of the Survey :

a) *The total population of these districts is about 91 lakhs which works out to 18% of the State population.*
b) *The ante-natal care is about 48% as compared to State average of 75% (NFHS-II).*
c) *The average Crude Birth Rate of these districts works out to 28 per 1000 population which is more than the State average of 22 (1998 SRS)*
d) *The average institutional deliveries works out to 31% as compared to 52% of the State average (NFHS-I & II)*
e) *The unmet need in Family Planning is about 35% as compared to the State average of 18% (NFHS -I 1992-93)*
f) *The levels of fully immunized children works out to 42% as compared to the State average of 60% (NFHS - 2).*

Therefore selection of these districts for the financial envelope is justified to furthering the progress in the implementation of FW/MCH/RCH programmes. These districts have already been identified by Govt. of India as 'C' category districts for additional inputs under RCH.

Further, in general these districts are characterized by :

- *Low Female Literacy levels*
- *Infrastructure weaknessincluding large number of vacancies of ANMs and doctors and also lack of mobility support in health facilities.*

OBJECTIVES :

Having realised that the identified districts are having poor demographic profiles, the objectives envisaged under the Financial Envelope are the following :

- *Strengthening outreach services*
- *Provision of round the clock services in PHCs*
- *Ensuring Clean and safe delivery practices*
- *Adolescent health education.*

EXPECTED OUTCOMES :

At the end of the Project period of two years (2002) the expected outcomes would be

1. *To increase the present level of ANC care from 48% to atleast 65%*
2. *To bring down the crude birth rate from the present average level of 28 to about 25%*
3. *To promote the institutional deliveries from the present average level of 31% to about 50%.*
4. *To increase the coverage in the immunization level from the present average level of 42% to 62%.*
5. *To reduce the gap in unmet needs in family planning from the present average level of 35% to 25%.*
6. *To enhance awareness in improved hygienic practices and behavoural changes under RCH programme.*

INTERVENTIONS :

As seen from the findings of the RCH Survey, those districts are considerably pulling down the average levels in the demographic profiles of the State.

Keeping in view the objectives and the outcomes, envisaged the following interventions are proposed.

I. STRENGTHENING OF OUTREACH SERVICES :

Large no.of vacancies of ANMs in the above selected districts are posing a problem in providing effective delivery of outreach services particularly in delivering ante-natal care, immunization and promotion of spacing methods. Large no.of health institutions are not able to provide credible preventive care, family planning services and curative care because of lack of doctors and other skilled staff. Therefore it is proposed

a) To hire the contractual services of doctors
b) To utilize part time services of Anganawadi workers (of women & child development dept.)
c) To provide mobility support for the PHC personnel for increasing the coverage in outreach services.

a) Doctors at PHCs : Out of the existing 347 PHCs in these districts 63 PHCs are Govt. of India pattern PHCs in which there are two sanctioned posts of Medical Officer. In the remaining MNP PHCs there is only one sanctioned post of Medical Officer. Out of this 284 MNP PHC, it is proposed to select only 100 PHCs (recording poor immunization coverage and family Planning coverage) from these districts. Hiring of the contractual services of one additional doctor to each of the 100 PHCs is proposed. The placement of the doctor will enhance the availability of health services provided by PHCs, and also improve holding of subcentres clinics and supervision. The services of the doctors will also help in providing round the clock services including family planning services in these selected 100 PHCs. For the current year (for 8 months) the amount required Rs.48.00 lakhs. (100 Doctors x 6000 x 8 months). These Doctors will be recruited on the basis of qualifying marks by the Deputy Commissioners.

b) Anganawadi Workers:Part time services of Anganawadi Workers will be utilized to improve the outreach services irrespective of whether the incumbent in the ANM sub centre is positioned or not. The job responsibilities have been identified. It is therefore, proposed make to 163 PHCs fully functional round the clock. For this purpose selected catagories 'C' districts. 163 PHCs includes 63 GOIP and 100 MNP.

One day joint training with ANM will be organised. Important monitoring lines will also be identified to justify the need of her services.

An honorarium of Rs.250/- for part time services (about 3 hours in the afternoon) is proposed.

COST : 6019 AWWs X Rs.250/- pm X 8 months = Rs.120.38 lakhs

c) Mobility Support For PHCs : Barring supply of four wheelers to few selected PHCs under National Programme such as family planning, Malaria, Leprosy, TB majority of the PHCs do not have vehicles of their own.

There has been no replacement even since long time. Most of the vehicles supplied earlier have become road unworthy. Therefore there is an urgent need to support the PHCs for availing the vehicles for improving the mobility of the doctors and the staff.

Instead of procuring the vehicles which pose many disadvantages, it is proposed to hire the vehicle preferably four wheelers and placed for the use at PHCs for about 10 days in a month. Thus about 100 vehicles proposed can cover 300 PHCs in a month which do not have vehicles.

COST : 100 VEHICLES X Rs.500/- per day X 30 days X 8 months = Rs.120.00 lakhs.

Each PHC will draw up a ' plan of itinerary ' for its turn of 10 days and use it for effective supervision of the field work, holding of Immunization sessions in most remote/ inaccessible areas and also use for family planning client needs.

d) Transport Charges : A sum of Rs.5.00 lakhs released from Govt. of India, towards transport charges is being placed with the Taluk Health Officers towards payment of transportation charges in case of emergency situation.

e) S.M. Consultants : To supplement the regular arrangements in the Health Institutions, it is proposed to utilize the services of doctors trained in MTP in the PHCs once a week or atleast once in a fortnight on a fixed day for performing MTP. These doctors will also provide antenatal care and post natal care to the patients during their visit. An amount of Rs.500/- per visit is proposed. In addition to this, it is proposed to utilize the services of Anesthetist for providing Emergency Obstetric care. Rs.1000/- per attended case in case of emergency obstetric care is proposed.

The amount of Rs.8.00 lakhs released from Govt. of India towards this will be utilized in selected 6 districts.

II PROVISION OF ROUND THE CLOCK SERVICES AT PHCs :

The staff sanctioned in almost all the PHCs particularly for MCH care is very minimal. This problem is further compounded with limited hours of govt. timings from 9 am to 5.00 pm. There is a wide gap of non-availability of services at PHCs and therefore the services rendered from these PHCs have no credibility at all in the eyes of the public. Community seems to have lost confidence that some staff is available in the PHCs during night times. The emergency situation such as delivery, abortion, acutely ill mother and child has no solution to tide over the critical hours. Many a times their lives will be at stake.

Hiring of doctors at 163 PHCs will fill up the gap to a certain extent as dealt under strengthening of outreach services.

In addition the services of staff nurse and a cleaning staff is expected to ensure a very good solution for providing round the clock services especially maternity services such as institutional deliveries, abortion services etc.,

These staff nurses will be absorbed into the general health system as and when vacancies are available after the project period.

It is expected that about 28000 deliveries will be taking place during nights in these districts which are to be attended for providing cleaning services. Each attendant is proposed to be given an honorarium of Rs.50/- per attended delivery case.

The services of staff nurse and cleaning staff will also be utilized for promotion of family planning services through PHCs. (63 GOIP, 100 MNP PHCs)

The projected requirement during the current year is as bellow :

Staff Nurse 163 x Rs.3800/- x 8 months = Rs.49.55 lakhs
Cleaning Staff 3500 x Rs.50/- x 8 months = Rs.14.00 lakhs
(per month)

Rs. 63.55 lakhs

GOI has already released Rs.185 lakhs towards payments of Staff Nurses. The total contractual services proposed towards outreach services as well as for round the clock services is as below.

(Rs. in lakhs)

Category	Number	Amount required
Doctors	100	48.00
Anganawadi Workers	6019	120.38
Staff Nurses	163	49.55
Cleaning Staff	3500	14.00
	Total	231.93

Against the above amount of Rs.185 lakhs already received from GOI. which will be used for this purpose, the balance amount required to be released towards this will be Rs.46.93 lakhs.

III. ENSURING CLEAN AND SAFE DELIVERY PRACTICES :

a) Training of Dais : Since the discontinuance of the Dai Training from 1997, it has not become possible to upgrade the skills of traditional birth attendants. There are considerable no.of these personnel in the villages who are to be trained in safe delivery practices, family planning and child care. Vacancies of large no.of ANMs in the districts has further aggravated the problem of lack of services. There are large no. of untrained birth attendants who need immediate training.

Keeping in view the skills to be learnt under maternity care, it is proposed to bring these untrained birth attendants wherever there are good no.of deliveries taking place either in PHCs or CHCs and provide them 'Hands-on' training for a period of 30 days in conducting safe deliveries. An honorarium of Rs.50/- per day would be given. In addition one delivery kit is proposed to be given to each Dai after the completion of the training.

Cost : 1000 (UTBAs)	*Rs.50/- per day*	x	*30 days*	*= Rs.15.00 lakhs*
TA (One time	*x 1000*	x	*Rs.100/- candidate*	*= Rs.1.00 lakh*
Dai kit (one time)	*x 1000*	x	*500/- kit*	*= Rs.5.00 lakhs*
				Rs.21.00 lakhs

b) Disposable Delivery Kits : It is estimated that about 30% of the deliveries in these districts are taking place in 'unsafe hands' which will be about 51000 during the period of 8 months. It is proposed to provide a Disposable Delivery Kit through ANM/AWWs which will be placed in hands of each 'would be delivering mother', so that this can be used at the time of delivery to prevent sepsis and complications thereafter. Each kit costing about Rs.20/- will contain a pair of gloves, one umbilical clip, an antiseptic lotion bottle, one plastic bowl, one towel and a gauze piece.

Cost : 51000 deliveries x Rs.20/- per kit = Rs.10.20 lakhs

IV] ADOLESCENT HEALTH EDUCATION :

1/5 of the total population constitute adolescent (10-14 years) in terms of both boys and girls. This group has not been covered so far in Health care delivery system except when they fall sick. Further, 50% of this group will drop out from the schools and hence not available to any type of education / services.

This is a very critical segment of the population who are to be covered by RCH services. This cohort who will be in the schools will be covered through school Health Programme. To cover those adolescents who drop out from the schools, a mechanism will be worked through women & child Development Dept., to link it with Anganawadi centres for organising orientation sessions at frequent intervals.

It is expected to cover population of about 18000 adolescents in these districts.

To begin with, it is planned to prepare simple educational materials covering physical development, personal hygiene, population education etc., which will be distributed through schools and anganawadi centres. It is also planned to hold sessions to adolescents by teachers who are in schools and out of schools.

Cost : A sum of Rs. 10.00 lakhs towards preparation of charts, booklets, handouts and also contingent expenditure .

WH-6.

NATION, CURRENT AFFAIRS

India's maternal mortality rate drops further

TEENA THACKER
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Annual compound rate of decline was highest in Maharashtra, followed by Andhra Pradesh

Representational photo (Photo: AFP)

New Delhi: India's maternal mortality rate has further dropped to 167 per one lakh live births, an indication that India will be able to achieve Millennium Development Goal 5 concerning maternal deaths — a feat that the World Health Organisation had earlier claimed would remain unmet. While the MMR in 2010-2012 was 178 per one lakh live births it further dropped to 167 per one lakh live births in 2011-2013.

"At the current annual compound rate of decline of MMR, India will be able to achieve MDG 5. In 1990 Indian's MMR as per the UN agency eatimates was 560, the drop this time is commendable. We are confident to achieve MDG 5 if the progress continues," said a senior official in the health ministry.

According to the recent data from the registrar general of india, ministry of home affairs, Kerala continues to register the lowest MMR at 61 per one lakh live births, followed by Maharashtra with MMR of 68 per one lakh live births. Significantly, the MMR also continue to drop in high-burden states like Bihar (208 per one lakh live births) and Uttar Pradesh (285 per one lakh live births).

The annual compound rate of decline was highest in Maharashtra, followed by Andhra Pradesh and Haryana.

Ironically, Dr Nata Menabde, WHO representative to India, had earlier claimed that India would miss 2015 MDG. Dr Menabde had said that India would be able to achieve its unfinished targets only after 2015.

As per the MDG targets, the MMR is to be reduced by three quarters between 1990 to 2015. India has been observing an average annual decline of 5.5 per cent. "Assuming that the annual rate of decline of 5.5 per cent observed between 2004-2006 and 2007-2009 will continue, India's MMR will decline well below the MDG target," added the source.

DATA

NEW DELHI, December 23, 2014

Updated: December 23, 2014 03:20 IST

India to reach replacement levels of fertility by 2020

RUKMINI S.

TOPICS

health

Total fertility rate in 8 States below 2 children per woman

Fertility is falling faster than expected in India, and the country is on track to reach replacement levels of fertility as soon as 2020, new official data shows.

The 2013 data for the Sample Registration Survey (SRS), conducted by the Registrar General of India, the country's official source of birth and death data, was released on Monday.

The SRS shows that the Total Fertility Rate – the average number of children that will be born to a woman during her lifetime – in eight States has fallen below two children per woman, new official data shows.

Just nine States – all of them in the north and east, except for Gujarat – haven't yet reached replacements levels of 2.1, below which populations begin to decline. West Bengal now has India's lowest fertility, with the southern States, Jammu & Kashmir, Punjab and Himachal Pradesh. Among backward States, Odisha too has reduced its fertility to 2.1.

"At 2.3, India is now just 0.2 points away from reaching replacement levels. Fertility is declining rapidly, including among the poor and illiterate. At these rates, India will achieve its demographic transition and reach replacement levels as early as 2020 or 2022," Dr. P. Arokiasamy, a demographer and Professor at the International Institute for Population Sciences (IIPS), Mumbai, explained to *The Hindu*.

The news on the other key indicator in the SRS - the infant mortality rate (IMR) - is less positive. India's IMR has fallen to 40 deaths per 1,000 live births, and 49 deaths of children under the age of 5 for every

1,000 live births, but at these rates is unlikely to meet its Millenium Development Goals for 2015. IMR has fallen faster in rural areas than in urban areas.

Among the metro cities, Chennai has the lowest IMR (16). Among states, Kerala has by far the best IMR at 12 deaths per 1,000 live births; the next best states, Delhi and Maharashtra, have IMRs that are twice that of Kerala.

Another worrying trend that continues is the unnaturally higher mortality rates both for infant girls and for girls under the age of five than for boys, a trend that runs contrary to the global trend.

Keywords: India's fertility rate

Distance and institutional deliveries in rural India

India has the highest rate of maternal deaths in the world

Santosh Kumar | Emily Dansereau | Christopher J.L. Murray

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The current Maternal Mortality Ratio (MMR) in India is 212, whereas the country's target in this respect, as per the Millennium Development Goal (MDGs), is 109 by 2015. Photo: Priyanka Parashar/Mint

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One-fifth of the 2,87,000 maternal deaths worldwide in 2010 occurred in India (WHO 2012). India is very likely to miss the Millennium Development Goal (MDG) for maternal mortality. The current Maternal Mortality Ratio (MMR) in India is 212, whereas the country's target in this respect, as per the MDGs, is 109 by 2015.

Institutional deliveries or facility-based births are often promoted for reducing maternal and neo-natal mortality. Yet, many women in low- and middle-income countries, including India, continue to deliver babies at home without the presence of a skilled attendant.

About half of all births in India in 2007-2008 occurred at home without skilled attendance (District Level Household Survey (DLHS-3)). Institutional deliveries in India range from about 35% in Chhattisgarh to 76% in Madhya Pradesh. Of the 284 districts in nine high-focus states which account for 62% of maternal deaths in the country, institutional delivery is less than 60% in 170 districts (Annual Health Survey (AHS) 2011).

Besides reducing maternal and neo-natal mortality, institutional deliveries are also believed to improve health-seeking behaviour and practices in the period following childbirth. Children born at a health facility are more likely to be vaccinated and breastfed (Odiit and Amuge 2003). Properly vaccinated and adequately breastfed children are less likely to be malnourished and have better health. Additionally, poor childhood health can have an adverse effect on educational attainment as well as on adult work productivity, and can hence affect adult earnings (Bleakley 2010). Therefore, institutional delivery can also be thought as an investment in human capital and can play an important contributory role in the development process of the economy.

Barriers to visiting a health facility

Women face various barriers to visiting a health facility to seek delivery care. These include cost of care, access to clinics, cultural factors, quality of care, and a lack of health awareness.

To relax the financial barrier, the government of India launched the Janani Suraksha Yojana (JSY) in 2005. JSY is a conditional cash transfer programme that provides a cash incentive to women who give birth at public health facilities. Rural women receiveRs.1,400 ($28 approx.) and urban women receive Rs.1,000 ($20 approx.) upon delivery at a public health facility. All services provided at the public health facility are free of charge.

The success of JSY has been mixed so far- the percentage of mothers availing financial assistance ranges from less than 15% in Jharkhand to about 60% in Orissa (AHS 2011).

Too far to travel

Physical access is an important barrier as longer distances entail higher transportation and opportunity costs. Distance to health services exerts a dual influence—it is a disincentive to seeking care in the first place, and also an actual obstacle to reaching care after a decision has been made to seek it (Thaddeus 1994). The adverse effect of distance is stronger when combined with lack of transport, poor roads, and poor quality of care.

In a recent study, we attempt to unravel the causal effect of distance to health facilities on institutional delivery in rural India (Kumar et al. 2013). It is very important to understand the effect of the access barrier as it greatly depends on contextual factors. For instance, distance may become irrelevant in a setting with high-quality health facilities and transport infrastructures. Some studies have shown that households are keen to travel longer distances for high-quality care (Collier et al 2002).

Analysing the distance barrier

Using DLHS-3, a nationally representative household data set, we find that distance to health facility is a significant barrier and adversely affects the number of institutional deliveries in India. For a 1 km increase in the distance to health facility, there is a reduction of about 4% in the chances of opting for an institutional delivery. At the average distance of 9 km from a Primary Health Centre (PHC), there is a 64% chance of opting for institutional delivery.

Additionally, the study finds that women who live 5-9 km away from the nearest health facility are 13% less likely to opt for institutional delivery as compared to women that live 0-5 km away from the nearest health facility. When the distance increases to more than 9 km, the chances of institutional delivery are reduced by 30% (as compared to a distance of up to 5 km). Based on a thought experiment conducted as part of the study, we find that if additional facilities are built such that the maximum distance of a health facility is restricted to 5 km, institutional deliveries will rise significantly.

We also find that women living in households that own cars or other motorised vehicles are more likely to deliver in health facilities. Poor road connectivity also deters women from visiting a health facility for delivery care.

What should be done?

Our findings indicate that in countries such as India, where distances to health facilities are quite large in rural areas, geographical access to health care is a significant barrier to institutional delivery. An increase in the density of health facilities and providers in rural areas is likely to greatly help improve maternal and neo-natal care.A comprehensive cost-effective analysis should be undertaken to demonstrate that the benefits would outweigh the cost of building new facilities.

In addition, it is important to improve road and transport infrastructure to reduce inequity in access to health facilities, and thereby, increase institutional deliveries.

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We the young people* of India aspire for....

* 10-24 years

people of India aspire forWe the young people of India aspire for...We the young people of India a

...access to reproductive and sexual health services

- Maternal health services
- Contraceptives
- Safe Abortion services
- Treatment of RTI/STDs

and Information

for all Young People

CHETNA
For Women Young people Children
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October 2010

We constitute one third of the Indian population. Our reproductive and sexual health status demands attention at the policy formulation, programme planning and programme implementation levels.

Our concerns have not been adequately addressed in policymaking and programme implementation so far.

The National Health Policy 2000, in its operational strategy mentions the following:

Enforce the Child Marriage Restraint Act, 1976, to reduce the incidence of teenage pregnancies.

Ensure adolescents' access to information, counselling and services, including reproductive health services that are affordable and accessible.

Emphasise a minimum of three year spacing between birth of two children.

Effect of these provisions are not reflected in the health statistics of young people in India.

The National Youth Policy 2003 has briefly touched upon the issue of reproductive health of young people. Reproductive and sexual health is not reflected in the rationale and thrust areas of the policy. The issue of reproductive and sexual health is not discussed as a key sector of specific youth concerns. The need for access to reproductive health information and safe sexual behaviour is mentioned in the HIV/AIDS and Sexually Transmitted Diseases. Also the process of policy formation does not value or encourage young people's participation at policymaking levels.

The National AIDS Prevention and Control Policy focuses on the age group 15-49 years in the context of prevention of HIV/AIDS. It does not address sexual and reproductive needs of young people that ideally should include provisions for ensuring their complete reproductive and sexual health and wellbeing in a comprehensive manner.

The Government of India (GOI) along with the Department of Youth Affairs and Sports is now aiming to bring out a National Youth Policy 2010. It is time to join hands and address the reproductive and sexual health concerns of adolescents and young people (10-18, 19-24) in India's National Youth Policy 2010.

Young people are central and critical for achieving the Millennium Development Goals

Universal Access to reproductive health (Target 5b)

Looking at our large numbers, our significance as a truly distinct segment with specific needs cannot be neglected anymore.

Nearly half of the people of the world are under the age of 25 years. In India Young people between 10-24 years will continue to constitute approximately one third of India's population in the coming years. India will have highest number of young people, which will continue to grow till 2050.

Many among us, especially those who live in rural areas succumb to social pressures that lead to early marriage and subsequently to early pregnancies and other health complications.

- The median age of marriage for women aged 20-49 is **16.7 years**.
  44.5% of all women aged 20-24 marry by **18 years**
  24% marry by **15 years**.

Lower the age at marriage, earlier the onset of sexual activity and thereby rising rates of fertility in women. It also increases the rate of unsafe abortions that lead to death of young girls National Family Health Survey (NFHS III 2006).

- More than 1 in 5 married adolescents have undergone childbirth by age of 17 and half of all women have already experienced pregnancy and childbearing by the age of **19 years**. About 13% of deaths among women and girls below **24 years** are related to pregnancy and childbirth (NFHS III 2006).

We need access to contraceptives that should be made accessible in a non-threatening, non-judgmental and friendly environment...

- Most young people aged 15-24 want fewer children. **4 among 5** young people want **2** or fewer children (Parasuraman and Kishore 2009). Almost **1 in 4** young women between the age of 15-24 years reported an unmet need for contraceptives[1].
- The use of contraception to delay the first pregnancy is rare. Just **13%** and **9%** of young women aged 15-19 and 20-24 respectively practised contraception to delay the first pregnancy[1].
- Use of oral contraceptive and Intra Uterine Device (IUD) is as low as **14%** and **5%** respectively among married young women of age 15-25 years[1].
- A large proportion of young men and women (15-24 years) hesitate to procure contraceptives from health care providers or pharmacies. Even among the married, one quarter of young men and half of young women reported inhibitions in approaching health care providers or medical shops[2].

We need access to sexual health services...

- Sexually Transmitted Infection is an increasing concern among young people. In India it is estimated that 2.3 million people are currently living with HIV/AIDS. Youth aged between 15-24 years are the fastest growing segment in the newly infected population.

We strongly demand access to reproductive and sexual health information through all different channels in local languages...

- Only **20%** of unmarried women between the age of 15-19 years and **31%** between the age of 20-24 years have ever discussed family planning methods with anybody. (District Level Household Survey - DLHS 2007-08).
- Among the age group of 15-24 years only 25% men and 35% women knew that oral pills should be taken daily/weekly. Only 30% young women knew that one condom could be used for only one sexual act. (The International Institute for Population Sciences- IIPS and Population Council 2010)
- Among unmarried adolescent girls **(15-19 Years)** 30% and between the age of **20-24 years** 43% have ever heard of RTI/STDs.
- 91% men and 88% women between the ages of **15-24 years** heard of HIV/AIDS. Out of which 45% men and 28% women had comprehensive knowledge of HIV/AIDS (IIPS and Population Council 2010)
- Less than 50% (37% men and 45% women) knew that women could get pregnant the first time they had sex.

Several studies indicate that correct information helps to delay pregnancy and decrease unsafe sex. However during the year 2007, a few states of the country banned reproductive and sexual health education in the formal schooling curriculum.

[1](IIPS and Macro International 2007) [2](IIPS and Population Council 2010)

Call for Action....

Voices of Young People

Considering our concerns and challenges, we seek attention to our following recommendations in:

The National Youth Policy 2010, National Reproductive and Child Health programmes of Government

Access to information...

- Impart age specific life skill based reproductive and sexual health.
- Design health education strategy and develop health education material in local languages. Disseminate health information widely through various socially acceptable communication channels. A proper delivery and monitoring system needs to be established to ensure better outreach and awareness building.
- Toll free help lines should be made available particularly to young people residing in the remotest areas. Professionals who can provide counselling with empathy should be recruited at these centres.
- Awareness programmes to increase sensitivity about needs of sexual minorities.
- Parents, teachers and other concerned stakeholders including government officers should be sensitized and trained on "Sex, Sexuality and Gender Issues"

Access to Services...

- Youth friendly centres or health clinics should be rebuilt or established in all the communities. The services should include a comprehensive sexual and reproductive health package to ensure overall health.(Access to contraceptive, maternal health entitlements, treatment of reproductive and sexually transmitted infections, safe abortion services)
- Trained male and female counsellors should be recruited at all schools, Primary Health Centres and Community Health Centres.
- All girls and boys must have equal access to the full range of health information and services.
- Proper monitoring systems should be established to ensure adequate and timely delivery of services.
- Reproductive and sexual health needs of vulnerable groups should be addressed with sensitivity, i.e. young people living on the street; institutions; physically and mentally challenged; migrants; survivors of natural disasters; sex workers and their children, etc.
- Address special health needs of transgender groups (Males who have sex with males (MSM), bisexual, lesbian and gays and young people living with HIV/AIDS)

Other recommendations-

- Strict action should be taken against early marriage.
- Registration of births, marriages and deaths should be followed strictly.
- Strict action should be taken against cases of violence and sexual harassment.
- Enforcing the fundamental right of education for all adolescents must be a priority

We strongly recommend a convergence among different Ministries and Departments to deliver various health, nutrition, education and livelihood services to young people. We recommend setting up a mechanism through which different departments can work together on common goals.

CHETNA
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WH-6.

1

SCHEME OF 'MINI FAMILY WELFARE CENTRES' AS A MODIFICATION OF CONVENTIVE SCHEME OF UNICEF IN AID ASSISTANCE TO VOLUNTARY ORGANISATIONS FOR PROMOTION OF MCH, IMMUNISATION & SMALL FAMILY NORM

OBJECTIVE

The basic approach of the model is to establish Mini Family Welfare Centres to promote MCH, Immunisation of Family Welfare Programme amongst the section of population resistant to family welfare programme and having high birth rates. This will be applicable to town and city upto a population of 1,00,000 and rural areas. Preference under the scheme will be such districts which have been identified as low CPR and high birth rates (Annexure-I).

2. The objective of the scheme will be entirely motivational to create a link between the infrastructure of Health and Family Welfare facilities and the community to promote responsible and healthy motherhood and small family norm.

3. The salient features of the scheme are :-

3.1 The Scheme of Mini Family Welfare Centre will be operative amongst the population group resistant to Family Welfare Programme. For urban areas, it will be limited to slum and unauthorised areas, in towns with population ranging upto one lakh. In the rural areas, the scheme will be restricted to areas having low CPR and high birth rate.

3.2 The objective of the scheme will be entirely motivational to serve as a link between the infrastructure of Primary Health Centres, Sub-Divisional Hospitals and Family Welfare Centres, Voluntary Organisation Hospitals/ Clinics and the community.

3.3 The population to be covered in urban areas will be 25,000 divided into five field units of 5000 each. In rural areas, the population to be served by each unit will be 15,000 consisting of five field units of 3000 each.

3.4 Structure:- Each Project will consist Mini Family Welfare Centre (MFWC) with a Unit Coordinator as Incharge. Each Mini Family Welfare Centre will have five field units. In each field unit there will be five Saheliss to be selected from Anganwadi workers, Balwadi teachers or any instructor under other child survival schemes from the operative units under these schemes located in the area of operation of these project. The lady workers from community can also be appointed as Saheli (i) if above named workers are not willing (ii) due to special requirement of the segment of population to be covered. One of the Saheli worker will be selected as group leader after ascertaining the leadership quality and watching their work for about three months.

-2-

4/1/88

4. This scheme is both for urban/and rural areas. Through this model, attempt is to reach the grass root levels and create awareness in the community served in a phased manner step by step from the very beginning of family formation i.e. marriage. In a gradual and step by step method the need for MCH and family planning is generated as the family develops keeping a continuous touch with the bride developing into a young mother. She is also trained in the art of motherhood by the grass root level Voluntary Worker known as 'Saheli' in this model. This trained mother becomes an agency herself for passing these traits to the new brides in her family and those in close proximity. Thus gradually the MCH & Family Welfare motivation would progress in a chain like manner and in due course the worker will have to concentrate on lesser number of families and contact with trained mother would be of maintenance centre.

5. The Mini Family Welfare Centre

The Mini Family Welfare Centre will have 5 field units and each unit will serve a population of 3,000 in rural areas and a population of 5,000 in urban areas. The following conditions have to be fulfilled :-

(1) The Mini Family Welfare Centre will be situated in the area of population served by it. Its 5 fields units will be disbursed around in the area of operation.

(2) The Mini Family Welfare Centre will be attached for clinical and referral services to the nearest PHC of Community Health Centre or Urban Centre in city area or Voluntary Organisation Hospital/Clinic to be specifically earmarked in this project.

(3) The Mini Family Welfare Centre will serve as a depot for supply of contraceptives like condoms and oral pills.

(4) The Mini Family Welfare Centre will serve as a unit for Community uplift by (i) Imparting Health Education (ii) training married young women in the art of motherhood; (iii) immunisation in children and mothers; (iv) motivating the community specially the target couples to have small family norm and (v) ensuring proper sanitation and hygienic conditions.

(5) The staff should be employed from the community to be served specially the grass root level worker the Family Female Voluntary Worker 'Saheli'.

6. The basic principle involved in the success of [illegible] is to create rapport with the newly wed bride and follow the couple through their reproductive phase including first pregnancy, delivery, post natal care, spacing of pregnancy, second pregnancy and finally sterilisation. During this follow up she will be educated and helped as the need arises in various phases step by step, ensuring a healthy marital life, healthy pregnancy period, safe delivery, healthy and trained motherhood and finally ensuring spaced small family. This step by step approach will provide complete MCH cover and Family Planning. This approach will produce well trained mother who can help other newly weds in her family and neighbourhood.

(a) Methodology

In average there are three to four marriages performed each marriage session in a village/cover area of an average 800 to 1000 population.

(b) First Step

To establish rapport with the Newly Weds and their family and this is done by 'Saheli' (Family Female Voluntary Worker) by ensuring her presence in the marriage and creating closeness to the family by presenting a small gift to the newly wed. This gift may be small and consist of some general items of brides use. In this gift pack there should be nothing related to Family Planning, so that no sensitivity is created in the family or with the bride. This primary rapport with family of newly wed and the bride herself will open the path for consequent visits.

(c) Second Step

The worker pays a casual visit to know the welfare of the newly wed and creating personal friendship with her. This may be done at a convenient and congenial time.

(d) Third Step

During the casual visits 'Saheli' (Family Welfare Female Voluntary Worker) may come to know about the conception occuring in the newly wed. From this, the visits of the worker is goal oriented and purposeful. The worker should start educating the would be mother regarding the conception, pregnancy, nutrition, for mother and child and few do's and dont's in sanitation. During this visit the worker should congratulate and encourage the would be mother and take her into confidence. This is the best period when the young mother is most receptive and inquisitive to learn about motherhood in confidence through a friend.

e) Fourth Step

The would-be mother is gradually prepared to come to the Primary Health Centre/Hospital with the help of elder family members specially the mother-in-law. Thus the routine ante-natal help is provided and would-be mother is told about healthy motherhood, protection of self from tetanus, nutriative value of specific foods to be taken and role of sanitation in pregnancy and delivery. She is educated for preparing clothese for delivery and the child to come. Complete checking is done at the nearest centre and if she is a risk case, she should be referred to Community Health Centre. Thus at one side the would-be mother is educated for motherhood and at the other side she is given full ante-natal services and care.

f) Fifth Step

'Saheli' (Female Family Voluntary Worker) thus fully prepares the would-be mother to have safe healthy delivery. Physically and mentally, she should be motivated for delivery at home or Community Health Centre or a Hospital as the case may be. The Voluntary Worker should as far as possible attend the delivery for providing psychological confidence in the mother to be.

g) Sixth Step

As the delivery takes place the 'Saheli' should present another 'Gift Pack' containing articles like Baby Soap, Powder, Clean Napkin etc. with a small booklet of Baby Care and Birth Card. The use of each article is to be fully explained putting emphasis on baby immunisation, nutrition and knowledge about oral rehydration along with method for preparing it. This all should be done in home surroundings in presence of womans' gathering which is a usual way. After delivery, by this step continuation of contact is ensured and knowledge is gained by other mothers, elderly ladies, and other would be mothers.

h) Seventh Step

The new mother is now prepared to listen about spacing methods and be made interested in the use of Nirodh, Copper 'T' oral pills. The need of spacing be generated through knowledge about the healthy development of baby if spacing is adopted. Also Family Planning is talked but casually and if the need is generated services are provided.

i) Eighth Step

If the need for second child is shown in a strong manner the worker should wait and help her through the second pregnancy. But usually for the second pregnancy the mother is fully prepared. Gifts may be repeated for the second delivery to create a final approach to sterilisation after second delivery.

Thus, it is seen that step by step the young lady is approached as personnel creation and helped and educated gradually when she is fully receptive. A person is not receptive for everything, every time but she becomes very receptive at the time of need and this is the key of success in above methodology.

Secondly, this scheme ensures creation of trained mother who can become a natural trainer in future.

Third advantage is that the image of the 'Saheli' (Family Female Voluntary Worker) gradually grows and in this way she is herself sought for, reducing her work gradually and also the number of visit in later period.

Fourthly, it may be seen that in operation-wise the scheme may look as slow and cumbersome but practically after proper scheduling the visits it is not difficult to follow in a small population of 1000 people in urban areas/ 600 in rural areas.

j) Maternal Practice :

All the women who are pregnant in the area of operation will be supplied with a maternity packet consisting of a piece of Lifebuoy Soap, a Blade, Boric Powder, Sterilised Thread, Cotton, three Tablets of anglesic and tissue paper and chlorine drop for disinfecting the water to be used at the time of delivery. These items will be packed in a/ sterilised packet double cover to avoid perforation and infection. This in a thick packet will also contain instructions for its use in Hindi, plastic regional Languages/English as may be suitable. The mothers pack and will be advised to handover this packet to the Dai at the sealed in time of delivery and suggest to use these items in the a GS process.

7. The most important point for the success of the scheme is:-

1. Proper selection of 'Saheli' (Family Female Worker) which may be easier for a Voluntary Organisation to do due to their close proximity with the community.

2. Continued and proper education of 'Saheli' who is the key person of the scheme is very important. 'Saheli'.

3. Besides the remuneration admissible the motivational and other benefits for sterilisation, IUD and Copper 'T' insertion will be according to the rates prescribed by the State Government in addition. She will also have to promote sale of commercial variety of condoms as per rates specified.

Arrangement for training of 'Sahelis', Unit Coordinator will be made at nearest PHC or Post-Partum Centre or Urban Centre/Hospital according to prescribed curriculum. They will also receive field orientation as a continuous process to be arranged by the organisation in consultation with the Directorate of Family Welfare of State.

8. Financial Implication

Gift for the Bride

The gift for the bride costing Rs. 20/- will be selected by the Group Leader preferably in consultation with the bride or other women in the home.

Maternity Packet. Rs. 2/- per head.

Baby Gift Packet

1. Baby Soap	- 1	
2. Napkin	- 2	In two instalments at the time
3. Small Towel	- 2	of birth and 4 months later.
4. Baby Care Chart	- 1	
5. Article of mother choice	- 1	

The total cost not to exceed Rs. 20/- .

9. Staff

(i) Mini Family Welfare Centre

Unit Coordinator (Full-time Employee) on salary	Rs.1000/- p.m.
Conveyance allowance	- Rs. 50/- p.m.
Postage/Contingency	- Rs. 50/- p.m.
	Rs.1100/- p.m.

Per Annum = Rs. 13,200/-

(ii) Field Unit

Sahelies	- 5	Rs. 100/- p.m. for each
Extra honorarium for Group Leader		Rs. 75/- p.m.
	Total :-	Rs. 575/- p.m.

Per Annum = Rs. 6900/-

(iii) Annual Expenditure

Recurring - Salary of the Staff
Mini Family Welfare Centre Rs. 13,200/-
5 Field Units @ Rs. 6900/- per Unit = 34500/-

(iv) Gift Packs

1. Pouly Wad
2. Baby Pack
3. Maternity Pack

} Rs. 4000/-

Administrative support cost to Voluntary Organisation @ Rs. 250/- p.m. Rs. 3000/-

Building Rent = Rs. 250/- p.m. per project - Rs. 3000/-

Contingencies = Rs. 2000/-

(v) Non-recurring expenditure

Furniture and educational aid = Rs. 2000/-

Training of Unit Coordinator and Sahelies = Rs.5000/-

Sub total = Rs. 7000/-

Grand Total for the project = Rs. 66700/- per annum.

10. Unit Coordinator/Group Leader/Saheli

(a) The Unit Coordinator will coordinate and supervise the project and keep a regular liason with the field unit. She/He will spent one day each with 5 units and will be at headquarter on the 6th day. She/he will maintain records and moniter the whole project, and undertake correspondence.

Unit Coordinator will be a full time employee and primarily Extension Educators and will be required to develop rapport with the Primary Health Centres, Sub-Divisional Hospitals, Family Welfare Centres and Voluntary Organisations, Hospitals/Clinics where he will be required to send the motivated persons. In case of male Unit Coordinator, he will also try to motivate the men in his areas for adopting a small family norm and terminal and spacing methods of family planning.

Unit Coordinator will have a degree in Science or Social Science and Biology from the recognised University. Preference will be given to persons having two years experience in health care/ family planning activities.

(b) Group Leader

Group Leader will primarily be a Saheli but she would also be given an additional responsibility to assist the Sahelies and act as group leader of the unit. She will establish rapport with the Primary Health Centre, Sub-Livisional Hospital and other Hospitals/Clinics and main basic records to be passed over to the Unit Coordinator. She will help to develop a programme for motivation of women in reproductive age group for a small family norm. She will extend support to Sahelies by visiting family etc.

(c) Saheli

There will be one Saheli for a population of 1,000 in urban area and 600 in rural area. The Saheli will opted from the Anganwadi worker/Balwadi workers or instructors or other Child Survival Scheme from the units located in the area of operation of the project. The lady workers from community can also be appointed as Saheli (i) if above named workers are not willing. (ii) due to special requirement of the segment of population to be served. Besides, the honorarium of Rs. 100/- p.m. motivational and other benefits for sterilisation and IUD cases will be admissible to the Saheli in addition in accordance with the rates prescribed by the respective State Governments.

11. Monitoring and Evaluation

This will be done each month at the level of PHC in rural set-up and at District level in city set-up by M.O., PHC/CMO respectively in their regular meetings. Project Manager will present the report regarding the work of the Centre under various heads like :-

1. Referral Cases.
2. MCH Work.
3. Motivation.
4. House Visits.
5. Educational Programme
6. Training Programme
7. Area Profile.

12. Release of Funds

Release of funds will be under the Central Sector Schemes for grant-in-aid to Voluntary Organisations. The amount of Rs. 56700/- for meeting the cost of implementation of the scheme during one year period will be paid into two instalments. The first instalment for the six months will consist of full non-recurring expenditure and 50% of recurring expenditure. The second instalment will be given when the project starts operating after completion of

Socio demographic data for districts with lowest CPR in each of the major State (Excluding districts with CPR exceeding 25)

State Districts	CPR (31st Jan., 1986	Birth Rate (1.00)	Growth Rate % 1971-81	Female literacy (%)	IMR 1980	Age at marriage females 1981
1.	2.	3.	4.	5.	6.	7.
1. Andhra Pr.	32.0	31.0	23.2	20.2	92	16.0
i, Adilabad	20.1	34.3	27.1	9.8	+	16.2
ii) Mehabub-nagar.	20.8	35.3	26.6	10.3	+	14.8
iii) Medak	21.1	33.6	24.5	10.9	+	14.5
2. Bihar	17.2	37.8	23.9	13.6	+	16.5**
i) Shojpur	11.7	36.9	19.8	15.1	90	15.9
ii) Khagaria	10.6	+	+	+	+	+
iii) Sitamarhi	11.6	35.6	21.9	9.5	100	16.1
3. J & K	15.6	31.3	29.7	15.9	72	17.4
i) Anantnag	18.0	39.0	26.7	10.9	92	7.1
ii, Jarmula	12.6	37.6	36.5	9.6	90	17. 1
iii, Jammu	19.5	37.9	30.2	32.2	63	17.4
4. Karnataka	32.8	27.6	26.4	27.8	71	15.9
i, Gulbarga	23.3	34.8	19.3	13.7	80	16.6
ii, Raichur	24.8	37.2	25.7	13.6	67	16.0
5. Kerala	38.1	26.8	19.0	64.5	40	19.1
i) Malappuram	22.9	40.1	29.4	53.8	+	17.8
6. Madhya Pr.	29.5	37.1	25.2	15.5	142	15.5
i) Bhind	16.8	40.2	22.2	14.6	129	14.7
ii) Morena	14.7	44.6	32.1	10.1	132	14.8
iii) Rewa	16.5	40.6	23.3	11.4	133*	14.4
7. Rajasthan	19.8	38.7	32.4	11.3	105	15.7
i) Barmer	8.8	41.5	43.8	3.7	102*	16.9
ii) Jalore	13.7	41.5	35.3	4.5	104*	17.3
iii) Sawai-Madhavpur.	14.9	43.3	28.4	8.0	141*	15.7
8. Uttar Pr.	17.1	39.6	25.5	14.4	159	17.8**
i) Basti	11.8	+	19.9	8.0	+	16.0
ii) Mainpuri	10.0	+	19.3	18.6	+	16.1
iii, Gonda	12.0	+	23.3	6.6	+	15.4
iv) Shahjah-anpur	12.4	+	28.2	0.8	+	16.4

2. West Bengal	27.3	33.2	23.0	30.3	± 16.3
i) Howrah	10.9	34.4	22.4	40.9	± 1.6
ii) Maldah	18.5	47.3	26.2	14.2	± 5.9
iii) 24-Parganas	15.5	34.3	27.0	35.4	± 16.4

Application Proforma for Applying grant-in-aid Assistance under the Model Scheme 'Mini Family Welfare Centres'.

Name of (i) President
(ii) Hony. Secretary

1. Name of the Organisation

2. Registered Address

3. Registration No. (with Act Statute under which registered)

4. Financial Status of the Organisation

i) Total income during the year ended _____ Rs. _____

ii) Total Expenditure during the year ended _____ Rs. _____

iii) Total Assets during the year ended _____ Rs. _____

5. Details of Health/Family Welfare infrastructure presently available with the organisation

6. Health/Family Welfare workers presently in employment. Full Time Part Time

7. Previous activities of the Organisation, especially in relation to Family Welfare.

8. Amount of grant-in-aid requested item-wise.
   i) Recurring
   ii) Non-recurring

9. Duration of Project

10. Project area - Urban
   (i) Name of City & District.
   (ii) Municipal Ward/Mohalla where units to be locate.
   (iii) Address of MFWC/Field Units.

   Rural
   (i) Name of District/Block
   (ii) Names of Village to be covered
   (iii) Location of MFWC/Field Unit & Address.

11. Population of the Project area
   (i) Number
   (ii) Economic status
   (iii) Literacy status
   (iv) Attitude towards :
      a) Small Family Norm.
      b) MCH/Immunisation

12. Number of eligible couples/Women/Children to be covered.

13. Objectives of the Project.

14. Name of P.H.C./Hospital/Dispensary which will provide MCH/Immunisation, Oral Pills and Family Welfare Services.

15. Methodology to be used for achieving the stated objectives.

(refer to para5-6 of scheme)

16. Target to be achieved.

17. Whether the Organisation is already running any scheme under Family Welfare Programme with assistance from State Govt./ Govt. of India.

18. (a) Are ICDS/Balwadi/Creche/ Child survival Schemes functioning in the area of Project?

(b) Whether the anganwadi worker, balwadi worker is participating in the scheme as Sahelis in the field units. Please give the particulars of these participating with location of Anganwadi/ Balwadi/Creche.

(c) Number of Sahelis to be associated not falling under (b) above.

19. Any other relevant information.

Signature

****

37

11 cities div.
Base Survey
pro forma
Ms Nirmala Murthy

A. K. MEHRA
Joint Director (Area Projects)
Tele : 3019131

भारत सरकार
स्वास्थ्य एवं परिवार कल्याण मंत्रालय
निर्माण भवन, नई दिल्ली-110011

GOVERNMENT OF INDIA
MINISTRY OF HEALTH & FAMILY WELFARE
NIRMAN BHAVAN, NEW DELHI-110011

D.O. NO. L19012/2/98-APS
July 9, 1998

Dear Madam,

This has reference to your letter no.793/CMDA/FW(US)/IPP-8/N-11/96(Pt.II) dated 30.06.98 regarding incurring of some expenditure in connection with extension of IPP-VIII Project activities to 10 additional cities in West Bengal.. As discussed during the wrap-up meeting held on 08.06.1998, the State may take up preliminary preparatory activities e.g. training, orientation workshop, contracting of some key personnel, Baseline Survey, finalization of selection procedures, constitution of various committees, assessment of additional requirements of equipments and furniture in the health facilities proposed to be covered, training to existing officers in additional cities in the World Bank procedures and other related activities. You may utilize the IPP-VIII funds to meet expenditure on the above preparatory activities subject to a maximum of Rs.15 lakhs. Regarding Baseline Survey, it is suggested that it may be got done in all the additional cities by one agency for which the sole source agency approval of the World Bank may also please be obtained. A copy of the questionnaire developed for Baseline Survey and terms of reference for RCH sub-projects are also enclosed for your ready reference.

With regards,

Yours sincerely,
Ajay Mehra
((A.K. MEHRA)
Joint Director (Area Projects

To,

Secretary, CMDA & Project
Director, IPP-VIII, Calcutta,
Unnayan Bhavan,
Bidhan Nagar 'G' Block,
3rd Floor,
Calcutta-700 091

Copy to:
Ms. Indira Padmanabhan,
World Bank,
70, Lodhi Estate,
New Delhi-110 003.

Zarey

Copy to send to:
1. Indra
2. Nirmala
15/7/98

TERMS OF REFERENCE FOR ~~ORGANISATIONS~~ Appointing a Consultant to UNDERTAKING RAPID BASE ~~line~~ LINE SURVEY UNDER THE ~~SUB-PROJECTS~~ OF REPRODUCTIVE AND extended ~~CHILD HEALTH PROJECTS.~~ IPP VIII project (in) cities of Karnataka

I. Background:

Ministry of Health & Family Welfare, Govt. of India has obtained a credit from IDA under Reproductive Child Health (RCH) project. Under the project, various interventions are being planned to enable clients to make informed choice, to receive counselling and education for responsible and healthy sexual behaviour, to access user-friendly services for preventing unwanted pregnancy and safe abortion, maternity care and child survival and, management of reproductive tract infections (RTIs) and sexually transmitted diseases (STDs). Under the District/City sub-projects of the RCH project, Baseline surveys are required to be undertaken in each sub-project area to determine baseline values for certain socio-economic, demographic and Health & Family Welfare indicators. This necessitates the engaging of Consultant organisations for undertaking the Baseline surveys in the specified Districts/Cities where the sub-projects are proposed to be undertaken.

II. A concise Statement of Objectives:

a) To undertake a baseline survey in the Cities/Districts where the sub-projects are being undertaken under the RCH project as per the details/guidelines to be finalised by the Ministry of Health & Family Welfare in consultation with the Bank.

b) To determine the baseline values as per the requirements.

c) To analyse and evaluate the findings of the survey.

V) Data, Services and Facilities to be provided by the Client:

- ~~The State Governments~~/Project Authorities will provide all necessary data, document and information, other inputs necessary as agreed to by the ~~Government of India and State Government/Project Authorities~~ for carrying out the assignment by the consultant.

- Consultants will discharge their duties in consultation with client.

VI. Final output (i.e., Reports, Documents, etc.) that will be required of the Consultant:

The Consultants would deliver the following outputs:-

- Detailed findings of the Survey.

- ~~Monthly~~ Progress Reports indicating the up-to-date status and giving details relating to progress, shortfalls, future work with the time frame, ~~etc. etc., to the Govt. of India, State Government and~~ to the Project Authorities.

- Interim Report of the Baseline Survey undertaken.

- Final Report of the survey with an Executive Summary.

- Any other relevant Report/Reports requested by the Review Committee.

VII. Composition of a Review Committee to monitor Consultancy Work:

The State Secretary (FW), the Project Director of respective sub-projects and the Joint Director (Area

Projects) from the Government of India or his representative will constitute the Review Committee which will review and monitor the work as and when felt necessary.

VIII. Cost of Consultancy:

The remuneration for undertaking the Baseline survey of a sub-project would vary between Rs.2 - 3 lakhs depending on the sample size.

(may actual cost)

8. The (Name of Consultant) will be responsible for appropriate insurance coverage. In this regard, the (Name of Consultant) shall maintain workers compensation, employment liability insurance for their staff on the assignment. The (Name of Consultant) shall also maintain comprehensive general liability insurance, including contractual liability coverage adequate to cover the indemnity of obligation against all damages, costs, and charges and expenses for injury to any person or damage to any property arising out of, or in connection with, the services which result from the fault of the (Name of Consultant) or its staff. The (Name of Consultant) shall provide the (Name of Client) with certification thereof upon request.

9. The (Name of Consultant) shall indemnify and hold harmless the (Name of Client) against any and all claims, demands, and/or judgements of any nature brought against the (Name of Client) arising out of the services by the Consultant and it's staff under this Agreement. The obligation under this paragraph shall survive the termination of this Agreement.

10. The Consultants agree that any manufacturing or construction firm with which they might be associated with will not be eligible to participate in bidding for any goods or works resulting from or associated with the project of which this consulting assignment forms a part.

11. All final plans, drawings, specifications, designs, reports and other documents or software submitted by the (Name of Consultant) in the performance of the Services shall become and remain the property of the Client. The Consultants may retain a copy of such documents but shall not use them for purposes unrelated to this Contract without the prior written approval of the Client.

12. The Consultant undertakes to carry out the assignment in accordance with the highest standard of professional and ethical competence and integrity, having due regard to the nature and purpose of the assignment, and to ensure that the staff assigned to perform the services under this Agreement, will conduct themselves in a manner consistent herewith.

13. The (Name of Consultant) shall pay the taxes, duties fee, levies and other impositions levied under the Applicable law and the Client shall perform such duties in this regard to the deduction of such tax as may be lawfully imposed.

14. The (Name of Consultant) also agree that all knowledge and information not within the public domain which may be acquired during the carrying out of this Agreement, shall be, for all time and for all purpose, regarded as strictly confidential and held in confidence, and shall not be directly or indirectly disclosed to any person whatsoever, except with the (Name of Client) written permission.

Place:

Date:

(Signature of Authorized Representative on behalf of Consultant)

(Signature & Name of the Client's Representative)

Attachment: Terms of Reference

m:\sbd\cons\other\c-9.doc: November 17, 1997 NR/vvv

8. The (Name of Consultant) will be responsible for appropriate insurance coverage. In this regard, the (Name of Consultant) shall maintain workers compensation, employment liability insurance for their staff on the assignment. The (Name of Consultant) shall also maintain comprehensive general liability insurance, including contractual liability coverage adequate to cover the indemnity of obligation against all damages, costs, and charges and expenses for injury to any person or damage to any property arising out of, or in connection with, the services which result from the fault of the (Name of Consultant) or its staff. The (Name of Consultant) shall provide the (Name of Client) with certification thereof upon request.

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14. The (Name of Consultant) also agree that all knowledge and information not within the public domain which may be acquired during the carrying out of this Agreement, shall be, for all time and for all purpose, regarded as strictly confidential and held in confidence, and shall not be directly or indirectly disclosed to any person whatsoever, except with the (Name of Client) written permission.

Place:

Date:

(Signature of Authorized Representative
on behalf of Consultant)

(Signature & Name of the Client's Representative)

Attachment: Terms of Reference

m:\sbd\cons\other\c-9.doc; November 17, 1997 NR/vvv

S. AivTermsTocal

Consulting Services

Draft Letter of Agreement for Small Assignments Carried out by Consultants

Subject: (Name of Assignment)

(Name of Consultant)

1. Set out below are the terms and conditions under which (Name of Consultant) has agreed to carry out (Name of Client) the above-mentioned assignment specified in the attached Terms of Reference.

2. For administrative purposes (Name of responsible staff of Client) has been assigned to administer the assignment and to provide the (Name of Consultant) with all relevant information needed to carry out the assignment. The services will be required in (Name of Project) for about ________ days/months, during the period from ______________ to ____________________

3. The (Name of Client) may find it necessary to postpone or cancel the assignment and/or shorten or extend its duration. However, every effort will be made to give you, as early as possible, notice of any changes. In the event of termination, the (Name of Consultant) shall be paid for the services rendered for carrying out the assignment to the date of termination, and the (Name of Consultant) will provide the (Name of Client) with any reports or parts thereof, or any other information and documentation gathered under this Agreement prior to the date of termination.

4. The services to be performed, the estimated time to be spent, and the reports to be submitted will be in accordance with the attached Terms of Reference.

5. This Agreement, its meaning and interpretation and the relations between the parties shall be governed by the Laws of Union of India.

6. This Agreement will become effective upon confirmation of this letter on behalf of (Name of Consultant) and will terminate on ____________________, or such other date as mutually agreed between the (Name of Client) and the (Name of Consultant).

7. Payments for the services will not exceed an total amount of Rs ______________

The (Name of Client) will pay (Name of Consultant), within 30 days of receipt of invoice as follows:

Amount	Currency	
....	....	upon receipt of a confirmed copy of this letter and submission of inception report
....	....	upon receipt of intermediate Status Report
....	....	upon receipt of the draft Final report.
....	....	upon receipt of the final report acceptable to (Name of Borrower)

The above remuneration includes all the costs related to carrying out the services, including overhead and any taxes imposed on the (Name of Consultant).

S. As Time/Local

RAPID HOUSEHOLD SURVEY

REPRODUCTIVE AND CHILD HEALTH (RCH)

WOMAN'S QUESTIONNAIRE

1998-99

Confidential for research purpose only

IDENTIFICATION

STATE _____

DISTRICT _____

TAHSIL/TALUK _____

PSU (VILLAGE/URBAN BLOCK) _____

VILLAGE SEGMENT/ENUMERATION BLOCK _____

TYPE OF LOCALITY (RURAL-1, URBAN-2) .....

HEAD OF THE HOUSEHOLD

NAME _____

ADDRESS _____

NAME OF THE ELIGIBLE WOMAN _____

SERIAL NUMBER OF HOUSEHOLD QUESTIONNAIRE _____

SERIAL NUMBER OF WOMAN'S QUESTIONNAIRE _____

INTERVIEW DATE — DAY | MONTH | YEAR

	SPOT CHECKED BY	FIELD EDITED BY	OFFICE EDITED BY	KEYED BY
NAME				
DATE				

NAME OF THE INVESTIGATOR:

SIGNATURE OF THE INVESTIGATOR

RCH SURVEY

SECTION-I

WOMAN'S CHARACTERISTICS

Q.NO	QUESTION AND FILTER	CODING CATEGORIES	SKIP TO
Q101	How old are you? Name and address.	AGE IN COMPLETED YEARS ☐☐	
Q102	Can you read and write?	YES.....1 NO.....2	→ Q104
Q103	How many years of schooling have you completed?	YEARS ☐☐	
Q104	Can your husband read and write?	YES.....1 NO.....2 DO NOT KNOW.....9	Q106
Q105	How many years of schooling has he completed?	YEARS ☐☐ DO NOT KNOW.....99	
Q106	How old were you when you started living with your husband?	AGE IN COMPLETED YEARS ☐☐	
Q107	How many sons and daughters do you have, including those presently not living with you? (INCLUDE ONLY THOSE SURVIVING CHILDREN TO WHOM RESPONDENT HAS GIVEN BIRTH)	SONS ☐☐ DAUGHTERS ☐☐ TOTAL ☐☐	
Q108	Did any of your children die?	YES.....1 NO.....2	→ Q110
Q109	If yes, how many boys and girls died?	BOYS ☐☐ GIRLS ☐☐ TOTAL ☐☐	
Q110	Did any of your pregnancy end in either still birth or abortion?	YES.....1 NO.....2	→ SECTN. II
Q111	If yes, how many were still births, induced abortions, spontaneous abortions?	STILL BIRTHS ☐ INDUCED ABORTIONS ☐ SPONTANEOUS ABORTIONS ☐	

SECTION-II

ANTE-NATAL, NATAL AND POST-NATAL CARE

(FOR WOMEN HAVING LAST PREGNANCY IN THE PAST 3 YEARS, i.e. SINCE JANUARY, 1995)

Q.NO	QUESTIONS AND FILTERS	CODING CATEGORIES	SKIP TO
Q201	When did you become pregnant last (excluding current pregnancy, if any)?	NO PREGNANCY.....00 94 OR BEFORE.....01 95.....02 96.....03 97.....04 98.....05	→ SECTION III
Q202	What was the outcome of your last pregnancy?	LIVE BIRTH.....1 STILL BIRTH.....2 INDUCED ABORTION.....3 SPONTANEOUS ABORTION.....4	→ Q209 → Q209 → Q204
Q203	If induced abortion, who performed the abortion?	GOVT. DOCTOR.....1 PRIVATE DOCTOR.....2 PRIVATE NURSE.....3 GOVT. NURSE/LHV/ANM.....4 TRAINED DAI.....5 UNTRAINED DAI.....6 RELATIVES/FRIENDS.....7 SELF INDUCED.....8 OTHER_____9 (SPECIFY)	
Q204	At what month of pregnancy did it happen?	MONTH [ ]	
Q205	Did you have any health problem immediately after abortion (within 6 weeks)?	YES.....1 NO.....2	→ SECTION III
Q206	If yes, what was the health problem? (CIRCLE ALL RESPONSES MENTIONED)	1. EXCESSIVE BLEEDING....A 2. HIGH FEVER.....B 3. FOUL SMELLING DISCHARGE.....C 4. WEAKNESS.....D 5. BACKACHE, BODYACHE....E 6. PAIN IN LOWER ABDOMEN.....F 7. OTHER_____G (SPECIFY)	
Q207	Did you consult doctor/health worker for your health problem?	YES.....1 NO.....2	→ SECTION III
Q208	If yes, whom did you consult?	GOVT. HOSPITAL DOCTOR.....1 PHC/CHC DOCTOR.....2 PRIVATE DOCTOR.....3 PRIVATE NURSE.....4 GOVT. NURSE/LHV/ANM.....5 DAI.....6 OTHER_____7 (SPECIFY)	→ SECTION III

ANC INFORMATION FOR WOMEN WITH LIVE BIRTH AND STILL BIRTH

Q.NO	QUESTIONS AND FILTERS	CODING CATEGORIES	SKIP TO
Q209	When you were pregnant, did ANM ever visit you at home?	YES.....1 NO.....2 NOT APPLICABLE.....3	-> Q213 -> Q213
Q210	How many months pregnant were you when ANM first visited you?	MONTHS [ ]	
Q211	How many times did she visit you during pregnancy?	NO. OF VISITS [ ][ ]	
Q212	Did she advice you for check-up?	YES.....1 NO.....2 DO NOT REMEMBER.....9	
Q213	When you were pregnant, did you go for antenatal check-up?	YES.....1 NO.....2	-> Q217
Q214	If yes, where did you go?	GOVERNMENT HOSPITAL.....1 PHC/CHC.....2 GOVERNMENT DISPENSARY.....3 SUB-CENTRE.....4 PRIVATE DOCTOR/PRIV. HOSPITAL..5 OTHER_____6 (SPECIFY)	
Q215	How many months pregnant were you when you first had antenatal check-up?	MONTHS [ ]	
Q216	How many times did you go for ante-natal check-up?	NUMBER OF TIMES [ ][ ]	-> Q218
Q217	(IF 'NO' FOR 213) Why did you not go for ante-natal check-up? (CIRCLE ALL RESPONSES MENTIONED)	1. LACK OF KNOWLEDGE OF SERVICES.....A 2. DID NOT FEEL NECESSARY.....B 3. NOT CUSTOMARY.....C 4. FINANCIAL COST.....D 5. DISTANTLY LOCATED.....E 6. POOR QUALITY SERVICE.....F 7. HOME VISIT BY HEALTH STAFF.....G 8. NO TIME TO GO.....H 9. NOT PERMITTED TO GO.....I 10. OTHER_____J (SPECIFY)	
Q218	Was your weight taken when you were pregnant?	YES.....1 NO.....2 DO NOT REMEMBER.....9	
Q219	Was your blood pressure measured when you were pregnant?	YES.....1 NO.....2 DO NOT REMEMBER.....9	
Q220	Were you given Iron and Folic Acid tablets during pregnancy?	YES.....1 NO.....2 DO NOT REMEMBER.....9	-> Q224 -> Q224
Q221	If yes, in which month of pregnancy you started taking Iron-Folic Acid tablets?	MONTH [ ] DO NOT REMEMBER.....9	

Q.NO	QUESTIONS AND FILTERS	CODING CATEGORIES	SKIP TO
Q222	How many IFA tablets did you receive during pregnancy?	NUMBER ☐☐☐ DO NOT REMEMBER.....999	
Q223	How many IFA tablets in a day you were taking?	NUMBER ☐ DO NOT REMEMBER.....9	
Q224	Were you given an injection in the arm during pregnancy to prevent Tetanus?	YES.....1 NO.....2 DO NOT REMEMBER.....9	→ Q226 → Q226
Q225	If yes, how many times did you take Tetanus injection?	NUMBER ☐ DO NOT REMEMBER.....9	
Q226	At what month of pregnancy did you have abdominal check-up for the first time?	MONTHS ☐ NO CHECK-UP.....0	→ Q228
Q227	How many times did you have abdominal check-up?	NO. OF TIMES ☐ DO NOT REMEMBER.....9	
Q228	Can you tell me about health problems that some women suffer from, during pregnancy? (CIRCLE ALL RESPONSES MENTIONED)	1. SWELLING OF HANDS AND FEET.....A 2. PALENESS.....B 3. WEAKNESS OR TIREDNESS.....C 4. DIZZINESS.....D 5. VISUAL DISTURBANCES....E 6. BLEEDING.....F 7. CONVULSIONS.....F 8. WEAK OR NO MOVEMENT OF FOETUS.....H 9. ABNORMAL PRESENTATION.....I 10.OTHER_____J (SPECIFY) 11.DO NOT KNOW.....K	
Q229	During your pregnancy did you suffer from any of these health problems?	1. SWELLING OF HANDS AND FEET.....A 2. PALENESS.....B 3. WEAKNESS OR TIREDNESS.....C 4. DIZZINESS.....D 5. VISUAL DISTURBANCES....E 6. BLEEDING.....F 7. CONVULSIONS.....F 8. WEAK OR NO MOVEMENT OF FOETUS.....H 9. ABNORMAL PRESENTATION.....I 10.OTHER_____J (SPECIFY) 11.NONE.....K	→ Q232
Q230	If any, did you consult doctor or any other health worker for your health problems?	YES.....1 NO.....2	→ Q232

Q.NO	QUESTIONS AND FILTERS	CODING CATEGORIES	SKIP TO
Q231	If yes, whom did you consult? (CIRCLE ALL RESPONSES MENTIONED)	1. DOCTOR,GOVT.HOSPITAL...A 2. DOCTOR IN PHC/CHC.....B 3. PRIVATE DOCTOR.....C 4. PRIVATE NURSE.....D 5. ANM/GOVT. NURSE.....E 6. TRADTNL. PRACTITIONER..F 7. DAI.....G 8. GOVT. DISPENSARY.....H 9. OTHER_____I (SPECIFY)	
Q232	Were you advised to go to hospital for delivery?	YES.....1 NO.....2	
Q233	Where did the delivery take place?	GOVERNMENT HOSPITAL.....1 PHC/CHC.....2 PRIVATE HOSPITAL.....3 HOME.....4	→ Q236
Q234	If home delivery, who conducted the delivery?	DOCTOR.....1 NURSE/ANM.....2 TRAINED DAI.....3 UNTRAINED DAI.....4 RELATIVES/FRIENDS.....5 NONE.....6	
Q235	Was Disposable Delivery Kit, used during delivery?	YES.....1 NO.....2 DO NOT KNOW.....9	
Q236	Was the delivery normal?	YES.....1 NO.....2	
Q237	During delivery, did you experience any of the following problems?	YES NO 1.PREMATURE LABOUR.....1 2 2.OBSTRUCTED LABOUR....1 2 3.PROLONGED LABOUR (MORE THAN 12 HOURS)..1 2 4.BREECH PRESENTATION..1 2 5.OTHER_____1 2 (SPECIFY)	
Q238	During the first week after delivery did you experience any of the following health problems?	YES NO 1. HIGH FEVER.....1 2 2. LOWER ABDOMINAL PAIN.....1 2 3. FOUL SMELLING VAGINAL DISCHARGE...1 2 4. EXCESSIVE BLEEDING..1 2 5. DIZZINESS, SEVERE HEADACHE.....1 2 6. OTHER_____1 2 (SPECIFY)	If NO to all → Q241
Q239	If any, did you consult doctor/health worker for your health problems?	YES.....1 NO.....2	→ Q241
Q240	If yes, whom did you consult?	DOCTOR IN GOVT.HOSPITAL...1 PHC/CHC DOCTOR.....2 PRIVATE DOCTOR.....3 PRIVATE NURSE.....4 ANM/NURSE.....5 TRADITIONAL PRACTITIONER..6 OTHER_____7 (SPECIFY)	
Q241	Did ANM visit you within 2 weeks of delivery?	YES..... NO..... NOT APPLICABLE.....	Q243

Q.NO	QUESTIONS AND FILTERS	CODING CATEGORIES	SKIP TO
Q242	How many times did she visit you within six weeks of delivery?	NUMBER [ ] NOT VISITED.....0	
Q243	(CHECK Q202, ASK Q243 AND Q244 ONLY IF IT IS LIVE BIRTHS) Was the baby weighed immediately or within two days of the birth?	IMMEDIATELY.....1 WITHIN 2 DAYS.....2 NO.....3	→ SECTION III
Q244	What was the weight of the baby?	GRAMS [ ][ ][ ][ ] DO NOT REMEMBER.....9999	

SECTION-III

IMMUNIZATION AND CHILD CARE

(IMMUNISATION OF CHILDREN FOR LAST AND LAST BUT ONE LIVING CHILD; BOTH BORN AFTER JANUARY, 1995)

Q.NO	QUESTIONS AND FILTERS	CODING CATEGORIES		SKIP TO
		LAST CHILD	LAST BUT ONE CHILD	
Q301	Name of the (index) child			
Q302	Sex of the child	BOY.....1 GIRL.....2	BOY.....1 GIRL.....2	
Q303	Month and year of birth	MONTH ☐☐ DO NOT KNOW.....99 YEAR.. 95,96,97,98	MONTH ☐☐ DO NOT KNOW..99 YEAR 95,96,97,98	

ASK Q 304 TO 310 FOR THE YOUNGEST CHILD

Q304	When you were pregnant with... (name), did any one advise you on breastfeeding?	YES..... 1 NO.....2	-▸Q306
Q305	If yes, who advised you on breastfeeding? (CIRCLE ALL RESPONSES MENTIONED)	1. DOCTOR IN GOVT. HOSPITAL.....A 2. PHC/CHC DOCTOR.....B 3. PRIVATE DOCTOR.....C 4. NURSE/ANM.....D 5. TRADITIONAL PRACTICE.....E 6. DAI.....F 7. RELATIVES/FRIENDS.....G 8. OTHER_____H (SPECIFY)	
Q306	When did you start breastfeeding your child?	WITHIN 2 HOURS OF BIRTH.....1 AFTER 2 HOURS BUT ON THE SAME DAY..2 WITHIN 3 DAYS.....3 AFTER 3 DAYS.....4 NEVER.....5	-▸Q309
Q307	Are you currently breast-feeding the child?	YES.....1 NO.....2	
Q308	How many months did you breastfeed the child exclusively?	MONTHS ☐☐ CONTINUING.....88	
Q309	At what age of the child, did you start giving semi-solid food?	MONTHS ☐☐ NOT YET STARTED.....99	
Q310	At what age of the child, did you start giving solid food?	MONTHS ☐☐ NOT YET STARTED.....99	
Q311	Do you know what to do when child gets Diarrhoea? (CIRCLE ALL RESPONSES MENTIONED)	1. GIVE ORS.....A 2. CONTINUE NORMAL FOOD.....B 3. CONTINUE BREASTFEEDING.....C 4. GIVE PLENTY OF FLUIDS.....D 5. OTHER_____E (SPECIFY)	
Q312	Has ANM/health worker told you what to do if a child has Diarrhoea?	YES.....1 NO.....2	

Q.NO	QUESTIONS AND FILTERS	CODING CATEGORIES	SKIP TO
Q313	Did any of your child born since Jan, 1995 suffer from Diarrhoea during last 2 months?	YES.....1 NO.....2	-→Q315
Q314	If yes, what did you do? (CIRCLE ALL RESPONSES MENTIONED)	1. DID NOTHING.....A 2. HOME REMEDY.....B 3. ORS GIVEN.....C 4. TREATMENT IN GOVT.HOSPITAL.....D 5. TREATMENT OF PRIVATE DOCTOR.....E 6. OTHER_____F (SPECIFY)	
Q315	Do you know the danger signs of Pneumonia?	YES.....1 NO.....2	-→Q317
Q316	If yes, what are they? (CIRCLE ALL RESPONSES MENTIONED)	1. DIFFICULT BREATHING.....A 2. CHEST INDRAWING.....B 3. NOT ABLE TO DRINK OR TAKE A FEED.....C 4. EXCESSIVELY DROWSY AND DIFFICULT TO KEEP AWAKE.....D 5. PAIN IN CHEST AND PRODUCTIVE COUGH.....E 6. CONDITION GETS WORSE THAN BEFORE.....F 7. WHEEZING/WHISTLING.....G 8. RAPID BREATHING.....H	
Q317	Did any of your child born since January, 1995 suffer from cough, cold and difficulty in breathing in the past two months?	YES.....1 NO.....2	-→Q320
Q318	If yes, what did you do? (CIRCLE ALL RESPONSES MENTIONED)	1. DID NOTHING..... A 2. HOME REMEDY..... B 3. WENT TO GOVERNMENT FACILITY..... C 4. WENT TO PRIVATE FACILITY..... D 5. OTHER_____ E (SPECIFY)	
Q319	Did ANM advise you about treatment of Pneumonia?	YES.....1 NO.....2	

FOR BOTH LIVING CHILDREN

			LAST CHILD	LAST BUT ONE CHILD	
Q320	Do you have a card where (Name's) vaccination are written down? (IF YES, MAY I SEE IT, PLEASE?)	YES, SEEN..... YES, NOT SEEN..... NO CARD.....	1 2 3	1 2 3	
Q321	Was polio vaccine(OPV '0') given to the child? (drop in the mouth immediately after birth)	YES..... NO..... DO NOT KNOW.....	1 2 9	1 2 9	
Q322	Was BCG vaccination against Tuberculosis given to the child? (That is an injection in the left shoulder that caused a scar).	YES..... NO..... DO NOT KNOW.....	1 2 9	1 2 9	 -→Q324 -→Q324

U.NO	QUESTIONS AND FILTERS	CODING CATEGORIES	LAST CHILD	LAST BUT ONE CHILD	SKIP TO
Q323	At what age BCG vaccine was given?	AGE IN MONTHS DO NOT REMEMBER	☐☐ 99	☐☐ 99	
Q324	Was a vaccination against Diphtheria, Whooping Cough and Tetanus given to the child as an injection (DPT)?	YES NO DO NOT KNOW	1 2 9	1 2 9	→Q328 →Q328
Q325	How many DPT injections were given?	NUMBER	☐	☐	
Q326	At what ages these injections were given?	FIRST INJECTION IN MONTHS DO NOT REMEMBER.. SECOND INJECTION NOT GIVEN..... IN MONTHS DO NOT REMEMBER.. THIRD INJECTION NOT GIVEN..... IN MONTHS DO NOT REMEMBER..	☐☐ 99 00 ☐☐ 99 00 ☐☐ 99	☐☐ 99 00 ☐☐ 99 00 ☐☐ 99	
Q327	If all required injection are not given, ask why the remaining were not given? (RECORD ONE IMPORTANT REASON)	CHILD IS TOO YOUNG..... NOT AWARE OF ALL 3 DOSES..... MOTHER TOO BUSY... CHILD WAS ILL..... FAMILY PROBLEM.... VACCINE NOT AVAILABLE..... NO SPECIFIC REASON OTHER_____ (SPECIFY)	1 2 3 4 5 6 7 8	1 2 3 4 5 6 7 8	
Q328	Did ANM/doctor advise you to get DPT doses of vaccine?	YES NO	1 2	1 2	
Q329	Was Polio vaccine (i.e., drops in the mouth) given to the child?	YES NO DO NOT KNOW	1 2 9	1 2 9	→Q333 →Q333
Q330	If yes, how many Polio doses were given?	NUMBER DO NOT REMEMBER...	☐ 9	☐ 9	

Q.NO	QUESTIONS AND FILTERS	CODING CATEGORIES	LAST CHILD	LAST BUT ONE CHILD	SKIP TO
Q323	At what age BCG vaccine was given?	AGE IN MONTHS DO NOT REMEMBER	☐☐ 99	☐☐ 99	
Q324	Was a vaccination against Diphtheria, Whooping Cough and Tetanus given to the child as an injection (DPT)?	YES NO DO NOT KNOW	1 2 9	1 2 9	→Q328 →Q328
Q325	How many DPT injections were given?	NUMBER	☐	☐	
Q326	At what ages these injections were given?	FIRST INJECTION IN MONTHS DO NOT REMEMBER.. SECOND INJECTION NOT GIVEN.. ..... IN MONTHS DO NOT REMEMBER.. THIRD INJECTION NOT GIVEN..... IN MONTHS DO NOT REMEMBER .	☐☐ 99 00 ☐☐ 99 00 ☐☐ 99	☐☐ 99 00 ☐☐ 99 00 ☐☐ 99	
Q327	If all required injection are not given, ask why the remaining were not given? (RECORD ONE IMPORTANT REASON)	CHILD IS TOO YOUNG..... NOT AWARE OF ALL 3 DOSES..... MOTHER TOO BUSY... CHILD WAS ILL..... FAMILY PROBLEM.... VACCINE NOT AVAILABLE..... NO SPECIFIC REASON OTHER (SPECIFY)	1 2 3 4 5 6 7 8	1 2 3 4 5 6 7 8	
Q328	Did ANM/doctor advise you to get DPT doses of vaccine?	YES NO	1 2	1 2	
Q329	Was Polio vaccine (i.e., drops in the mouth) given to the child?	YES NO DO NOT KNOW	1 2 9	1 2 9	→Q333 →Q333
Q330	If yes, how many Polio doses were given?	NUMBER DO NOT REMEMBER...	☐ 9	☐ 9	

Q.NO	QUESTIONS AND FILTERS	CODING CATEGORIES	LAST CHILD	LAST BUT ONE CHILD	SKIP TO
Q331	At what age Polio doses were given?	FIRST DOSE IN MONTHS	☐☐	☐☐	
		DO NOT REMEMBER..	99	99	
		SECOND DOSE NOT GIVEN.....	00	00	
		IN MONTHS	☐☐	☐☐	
		DO NOT REMEMBER..	99	99	
		THIRD DOSE NOT GIVEN.....	00	00	
		IN MONTHS	☐☐	☐☐	
		DO NOT REMEMBER..	99	99	
Q332	If all required doses are not given, ask why the remaining doses were not given? (RECORD ONE IMPORTANT REASON)	CHILD IS TOO YOUNG.....	1	1	
		NOT AWARE OF ALL 3 DOSES.....	2	2	
		MOTHER TOO BUSY...	3	3	
		CHILD WAS ILL.....	4	4	
		FAMILY PROBLEM....	5	5	
		VACCINE NOT AVAILABLE.....	6	6	
		NO SPECIFIC REASON	7	7	
		OTHER_____ (SPECIFY)	8	8	
Q333	Did ANM/doctor advise you to get the doses of Polio vaccine?	YES	1	1	
		NO	2	2	
Q334	(IF NO FOR Q321, Q322, Q324 AND Q329) Why (Name) was not given any vaccination? (RECORD ONE IMPORTANT REASON)	1. CHILD TOO YOUNG FOR IMMUNIZATION	01	01	
		2. UNAWARE OF NEED FOR IMMUNIZATION	02	02	
		3. PLACE OF IMMUNIZATION UNKNOWN	03	03	
		4. TIME OF IMMUNIZATION UNKNOWN	04	04	
		5. FEAR OF SIDE EFFECTS	05	05	
		6. NO FAITH IN IMMUNIZATION	06	06	
		7. PLACE OF IMMUNIZATION TOO FAR TO GO	07	07	
		8. TIME OF IMMUNIZATION INCONVENIENT	08	08	
		9. ANM ABSENT	09	09	
		10. VACCINE NOT AVAILABLE	10	10	
		11. MOTHER TOO BUSY	11	11	
		12. FAMILY PROBLEM, INCLUDING ILLNESS OF MOTHER	12	12	
		13. CHILD ILL NOT BROUGHT	13	13	
		14. CHILD ILL BROUGHT BUT NOT GIVEN	14	14	
		15. LONG WAITING TIME	15	15	
		16. OTHER_____ (SPECIFY)	16	16	
Q335	Was an injection against Measles given?	YES.....	1	1	
		NO.....	2	2	-►Q337
		DO NOT KNOW.....	9	9	-►Q337
Q336	At what age injection for Measles was given?	IN MONTHS.....	☐☐	☐☐	
		DO NOT REMEMBER..	99	99	-►Q338

Q.NO	QUESTIONS AND FILTERS	CODING CATEGORIES	LAST CHILD	LAST BUT ONE CHILD	SKIP TO
Q337	Why was the Measles injection not given to the child? (RECORD ONE IMPORTANT REASON)	1. CHILD TOO YOUNG FOR IMMUNIZATION	01	01	
		2. UNAWARE OF NEED FOR IMMUNIZATION	02	02	
		3. PLACE OF IMMUNIZATION UNKNOWN	03	03	
		4. TIME OF IMMUNIZATION UNKNOWN	04	04	
		5. FEAR OF SIDE EFFECTS	05	05	
		6. NO FAITH IN IMMUNIZATION	06	06	
		7. PLACE OF IMMUNIZATION TOO FAR TO GO	07	07	
		8. TIME OF IMMUNIZATION INCONVENIENT	08	08	
		9. ANM ABSENT	09	09	
		10. VACCINE NOT AVAILABLE	10	10	
		11. MOTHER TOO BUSY	11	11	
		12. FAMILY PROBLEM, INCLUDING ILLNESS OF MOTHER	12	12	
		13. CHILD ILL NOT BROUGHT	13	13	
		14. CHILD ILL BROUGHT BUT NOT GIVEN	14	14	
		15. LONG WAITING TIME	15	15	
		16. OTHER_____ (SPECIFY)	16	16	
Q338	Did ANM/doctor advise you to give Measles vaccine to your child?	YES	1	1	
		NO	2	2	
Q339	(Ask this question only to those persons who reported at least one immuni-zation) Where from the last immu-nisation was given?	1. GOVT. HOSPITAL	1	1	
		2. PHC/CHC	2	2	
		3. SUB-CENTRE	3	3	
		4. PRIVATE HOSPITAL	4	4	
		5. PRIVATE DOCTOR	5	5	
		6. OTHER_____ (SPECIFY)	6	6	
		7. DO NOT KNOW	7	7	
Q340	Was a dose of Vitamin A liquid ever given to (Name) to protect him/her from night blindness?	YES	1	1	
		NO	2	2	-→Q342
		DO NOT KNOW	9	9	-→Q342
Q341	If yes, how many vitamin A doses were given?	IN NUMBER	☐	☐	
		DO NOT REMEMBER	9	9	

Q.NO	QUESTIONS AND FILTERS	CODING CATEGORIES	LAST CHILD	LAST BUT ONE CHILD	SKIP TO
Q342	Was IFA tablets given to the (name) child?	YES	1	1	
		NO	2	2	->Q344
		DO NOT KNOW	9	9	->Q344
Q343	If yes, how many IFA tablets were given?	IN NUMBER	☐	☐	
		DO NOT REMEMBER	9	9	
Q344	Is the child attending ICDS centre?	YES	1	1	
		NO	2	2	
		NO ICDS CENTRE	3	3	

SECTION-IV

CONTRACEPTION

(FOR ALL ELIGIBLE WOMEN)

Q.NO	QUESTIONS AND FILTERS	CODING CATEGORIES	SKIP TO
Q401	Which of the Family Planning methods are you aware of?	YES NO	
	1. FEMALE STERILISATION.....	1 2	
	2. MALE STERILISATION.....	1 2	
	3. COPPER-T/LOOP.....	1 2	
	4. PILL.....	1 2	
	5. CONDOM/NIRODH.....	1 2	
	6. RHYTHM OR PERIODIC ABSTINENCE.	1 2	
	7. WITHDRAWAL.....	1 2	
	8. OTHER_____ (SPECIFY)	1 2	
Q402	Are you currently pregnant?	YES.....1 NO.....2	→ Q417
Q403	Are you/your husband currently using any Family Planning method?	YES.....1 NO.....2	→ Q417
Q404	Which method you/your husband is using?	FEMALE STERILISATION.....1 MALE STERILISATION.....2 IUD/COPPER-T/LOOP.....3 PILL.....4 CONDOM/NIRODH.....5 RHYTHM/PERIODIC ABSTINENCE.....6 WITHDRAWAL.....7 OTHER_____ (SPECIFY) 8	
Q405	Who mainly motivated you to use this method?	SELF.....1 HUSBAND.....2 RELATIVES/FRIENDS.....3 ANM/DOCTOR/HEALTH WORKER.....4 MEDIA.....5 OTHER.....6	
Q406	For how long have you been using this method continuously? OR How long ago did you/your husband undergo sterilization?	MONTHS [ ][ ] MORE THAN 8 YEARS.....96 DO NOT REMEMBER.....99	

FOR THE USERS OF COOPER-T/LOOP/PILLS/CONDOM AND THOSE WOMEN WHO/ WHOSE HUSBAND HAD UNDERGONE STERILIZATION, ASK Q407-Q416. FOR THE USERS OF WITHDRAWAL/RHYTHM METHOD/ANY OTHER METHOD, GO TO NEXT SECTION.

Q.NO	QUESTIONS AND FILTERS	CODING CATEGORIES	SKIP TO
Q407	Where did you/your husband go for sterilization? OR Where did you go for Copper-T insertion? OR From where did you obtain the pills usually? OR From where did you get condom/nirodh usually?	GOVERNMENT/MUNICIPAL HOSPITAL....01 PRIMARY HEALTH CENTRE....02 FAMILY PLANNING CAMP....03 SUB-CENTRE....04 PRIVATE HOSPITAL....05 GOVT. DOCTOR....06 PRIVATE DOCTOR....07 GOVT. NURSE/ANM....08 MOBILE CLINIC....09 CHEMIST....10 DO NOT KNOW....11 OTHER_____12 (SPECIFY)	
Q408	(ONLY FOR COPPER-T USERS) Who inserted Copper-T?	PRIVATE DOCTOR....1 GOVERNMENT DOCTOR....2 ANM/NURSE....3 PRIVATE NURSE....4 DO NOT REMEMBER....5	
Q409	(ONLY FOR PILL & CONDOM USER) Have you ever found difficulty in getting pills/condoms?	NO PROBLEM....1 NOT REGULARLY AVAILABLE WITH PHC..2 NOT REGULARLY AVAILABLE WITH ANM..3 NOT REGULARLY AVAILABLE WITH SHOPS/CHEMIST....4 OTHER_____5 (SPECIFY)	
Q410	When you started using this method, did doctor/nurse/ANM inform you about possible health problems that may occur?	YES....1 NO....2 DO NOT REMEMBER....9	
Q411	After you adopted this method, did any health worker/ANM visit you for enquiring about your/your husband's health?	YES....1 NO....2	
Q412	Have you/your husband had any health problem with the use of this method?	YES....1 NO....2	-> Q416
Q413	If yes, what health problem did you/your husband have? (CIRCLE ALL RESPONSES MENTIONED)	1. WEAKNESS/INABILITY TO WORK....A 2. BODYACHE/BACKACHE....B 3. CRAMPS....C 4. WEIGHT GAIN....D 5. DIZZINESS....E 6. NAUSEA/VOMITING....F 7. BREAST TENDERNESS....G 8. IRREGULAR PERIODS....H 9. EXCESSIVE BLEEDING....I 10.SPOTTING....J 11.WHITE DISCHARGE....K 12.OTHER_____L (SPECIFY)	
Q414	Did you/your husband seek treatment from any health worker/ doctor for the health problem?	YES....1 NO....2	-> Q416

Q.NO	QUESTIONS AND FILTERS	CODING CATEGORIES	SKIP TO
Q423	What was the main reason for discontinuing use of the method?	WANTED CHILD....01 METHOD FAILED/BECAME PREGNANT....02 SUPPLY NOT AVAILABLE....03 DIFFICULT TO GET METHOD....04 WEAKNESS /INABILITY TO WORK....05 BODYACHE/BACKACHE....06 CRAMPS....07 WEIGHT GAIN....08 DIZZINESS....09 NAUSEA/VOMITING....10 BREAST TENDERNESS....11 IRREGULAR PERIODS....12 EXCESSIVE BLEEDING....13 SPOTTING....14 WHITE DISCHARGE....15 LACK OF PLEASURE....16 METHOD WAS INCONVENIENT....17 OTHER_____18 (SPECIFY)	
Q424	(CHECK Q402, IF WOMAN IS PREGNANT GO TO Q425) Are you currently menstruating?	YES....1 IN AMENORRHOEA....2 NEVER MENSTRUATED....3 IN MENOPAUSE/HYSTERECTOMY....4	→ → Sects. V
Q425	Has ANM/health worker ever advised you to adopt any family planning method?	YES....1 NO....2	→ Q427
Q426	If yes, what method did she/he advise you to use?	FEMALE STERILIZATION....1 MALE STERILIZATION....2 IUD/COPPER-T/LOOP....3 PILLS....4 CONDOM/NIRODH....5 RHYTHM/PERIODIC ABSTINENCE....6 WITHDRAWAL....7 OTHER_____8 (SPECIFY)	
Q427	Do you intend to use any method of Family Planning at any time in the future?	YES....1 NO....2	→ Q42
Q428	If yes, which method you would prefer to use?	FEMALE STERILISATION....1 MALE STERILISATION....2 IUD/COPPER-T/LOOP....3 PILL....4 CONDOM/NIRODH....5 RHYTHM/PERIODIC ABSTINENCE....6 WITHDRAWAL....7 OTHER_____8 (SPECIFY)	
Q429	(CHECK Q402, IF WOMAN IS PREGNANT GO TO NEXT SECTION) Would you like to have another child?	WANT MORE CHILDREN....1 WANT NO MORE CHILD....2 NOT DECIDED....3 UP TO GOD....4	→ Q43
Q430	How long would you like to wait to have another child?	SOON/NOW/LESS THAN 12 MONTHS....96 MORE THAN 12 MONTHS ☐☐ NOT DECIDED....98	→ SEC V

Q.NO	QUESTIONS AND FILTERS	CODING CATEGORIES	SKI TO
Q431	What is the main reason for currently not using any method of family planning?	LACK OF KNOWLEDGE ABOUT FAMILY PLANNING METHODS.....01 AGAINST THE RELIGION.....02 OPPOSED TO FAMILY PLANNING.....03 HUSBAND OPPOSED.....04 OTHER FAMILY MEMBERS OPPOSED.....05 NOT LIKE EXISTING METHOD.....06 AFRAID OF STERILIZATION.....07 CAN NOT WORK AFTER STERILIZATION.....08 WORRY ABOUT SIDE EFFECTS.....09 COSTS TOO MUCH.....10 HEALTH DOES NOT PERMIT.....11 HARD/INCONVENIENT TO GET METHOD..12 INCONVENIENT TO USE METHOD.....13 DIFFICULT TO PREGNANT.....14 OTHER_____15 (SPECIFY)	

OBJECTIVE ATTAINMENT SURVEY OF HEALTH CENTRE / MATERNITY HOME

1.	Name and Address	:	
2.	How old are you	:	
3.	How many children do you have	:	
4.	Age of last child	:	
5.	Why did you visit the hospital	:	

II. ANTE NATAL CHECK UP:-

1.	What time did you come to Hospital	
2.	What time you received treatment	
3.	Are you satisfied with treatment	

Q508	Was doctor/ANM available when you went there for treatment?	YES....1 NO....2
Q509	Did you have to wait long for service?	YES....1 NO....2
Q510	Was there privacy where you were examined?	YES....1 NO....2 CAN NOT SAY....3
Q511	Was the staff at the centre friendly?	YES....1 NO....2
Q512	Were medicines available at the centre?	YES....1 NO....2 CAN NOT SAY....3
Q513	Did the health staff explain to you how to take medicines?	YES....1 NO....2 CAN NOT SAY....3
Q514	Did you find the treatment at the centre effective?	YES....1 NO....2 CAN NOT SAY....3

Q.NO	QUESTIONS AND FILTERS	CODING CATEGORIES	SKIP TO
Q515	Did you have to pay to the doctor or staff any money to get treatment?	YES.....1 NO.....2	
Q516	Will you recommend this centre to your friends/relatives?	YES.....1 NO.....2	Section VI
Q517	(IF SHE DID NOT VISIT CENTRE DURING LAST THREE MONTHS) What is the main reason for not visiting the centre?	NO NEED.....01 NOT CONVENIENTLY LOCATED.....02 TIME IS NOT SUITED.....03 POOR QUALITY OF SERVICE.....04 HEAVY RUSH.....05 NON-AVAILABILITY OF DOCTORS/ HEALTH WORKERS.....06 RARE AVAILABILITY OF DOCTORS/HEALTH WORKERS.....07 DOCTORS/HEALTH WORKERS DO NOT EXAMINE PROPERLY .....08 MEDICINE NOT/RARELY GIVEN.....09 MEDICINES ARE OF BAD QUALITY....10 DOCTORS/PARA MEDICAL STAFF DOES NOT BEHAVE PROPERLY.....11 SERVICES ARE CHARGED.....12 PREFER PRIVATE DOCTORS.....13 OTHER_____88 (SPECIFY)	

VII. FOR IUD/OP/CC:-

1.	What time did you come to Hospital	
2.	What time you received treatment	
3.	Are you satisfied with treatment	
4.	Comments	
5.	Were you informed regarding complications	

VIII. GENERAL INFORMATION

1.	Was the Doctor/ANM available	
2.	Were the staff friendly	
3.	Did you have to wait long to be attended	
4.	Did the staff explain how to take medicine	
5.	Did to have to pay money to Doctor or staff to get treatment.	

SECTION- VI

AWARENESS ABOUT RTI, STI AND HIV (AIDS)

Q.NO	QUESTIONS AND FILTERS	CODING CATEGORIES	SKIP TO
Q601	During the past three months did you have burning sensation, pain or difficulty while urinating?	YES.....1 NO.....2	
Q602	During the past three months did you experience pain in the lower abdomen or vagina during intercourse?	YES.....1 NO.....2	
Q603	During the past three months, did you have any problem of vaginal discharge?	YES.....1 NO.....2	
	IF 'NO' TO Q601, Q602 AND Q603 GO TO Q609		
Q604	(IF 'YES' TO Q603, ASK Q604 TO Q607) What was the nature of discharge?	1. MUCCID NON FOUL SMELLING, SMALL IN AMOUNT, PRESENT ONLY ON CERTAIN DAYS (NORMAL).....1 2. THICK CURDY WHITE.....2 3. THIN DIRTY WHITE FOUL SMELLING.....3 4. THICK GREY WHITE FOUL SMELLING.....4	
Q605	With vaginal discharge did you get itching or ulcers on both the sides in the vaginal area?	ITCHING.....1 ULCERS.....2 BOTH.....3 NONE.....4	
Q606	With the discharge, did you have severe lower abdominal pain?	YES.....1 NO.....2	
Q607	Did you have fever with the discharge?	YES.....1 NO.....2	
Q608	(IF 'YES' TO ANY OF 601-603) Have you consulted anyone for treatment? IF YES, who? Anyone else? (CIRCLE ALL RESPONSES MENTIONED)	1. GOVERNMENT DOCTOR.....A 2. PRIVATE DOCTOR.....B 3. GOVERNMENT NURSE/ANM/LHV..C 4. MEDICAL SHOP/PHARMACIST/ PRIVATE NURSE.....D 5. TRADITIONAL PRACTITIONER..E 6. DAI.....F 7. RELATIVE/FRIENDS.....G 8. SELF-TREATMENT.....H 9. OTHER_____ (SPECIFY) I 10. NO TREATMENT SOUGHT.....J	
Q609	Have you heard of an illness called RTI/STI/HIV (AIDS)?	RTI STI HIV (AIDS) YES.....1 1 1 NO.....2 2 2	If all NO STOP

Q. NO	QUESTIONS AND FILTERS	CODING CATEGORIES	SKIP TO
Q610	From which sources of information do persons have you heard about RTI/STI/HIV (AIDS)? (CIRCLE ALL RESPONSES MENTIONED)	RTI STI HIV (AIDS) 1. RADIO A A A 2. TV B B B 3. NEWS PAPERS C C C 4. MAGAZINES D D D 5. SLOGANS/ PAMPHLET/POSTERS E E E 6. DOCTOR F F F 7. HEALTH WORKERS G G G 8. SCHOOL TEACHERS H H H 9. COMMUNITY MEETINGS I I I 10. FRIENDS/ RELATIVES J J J 11. HUSBAND K K K 12. OTHER_____ (SPECIFY) L L L	
Q611	How is RTI/ STI/HIV (AIDS) transmitted? (CIRCLE ALL RESPONSES MENTIONED)	RTI STI HIV (AIDS) 1. HOMOSEXUAL INTERCOURSE.....A A A 2. HETEROSEXUAL INTERCOURSE.....B B B 3. NEEDLES/BLADES/ SKIN PUNCTURE....- - C 4. MOTHER TO CHILD..- C D 5. TRANSFUSION OF INFECTED BLOOD...- D E 6. LACK OF PERSONAL HYGIENE.....C - - 7. OTHER_____ (SPECIFY) D E F 8. DO NOT KNOW.....E F G	
Q612	Do you think that one can get HIV (AIDS) from someone who has HIV (AIDS) by:	YES NO 1. SHAKING HANDS.....1 2 2. HUGGING.....1 2 3. KISSING.....1 2 4. SHARING CLOTHES.....1 2 5. SHARING EATING UTENSILS.....1 2 6. STEPPING ON URINE/ STOOL.....1 2 7. MOSQUITO, FLEA OR BEDBUG BITES.....1 2	
Q613	How do you think one can avoid HIV (AIDS)? (CIRCLE ALL RESPONSES MENTIONED)	1. USING CONDOMS DURING EACH SEXUAL INTERCOURSE...A 2. SAFE SEX.....B 3. CHECKING BLOOD PRIOR TO TRANSFUSION.....C 4. STERILIZING NEEDLES AND SYRINGES FOR INJECTION....D 5. AVOIDING PREGNANCY WHEN HAVING HIV (AIDS) .....E 6. OTHER_____ (SPECIFY) F 7. DO NOT KNOW.....G	
Q614	Do you think RTI/STI/HIV (AIDS) is a curable disease?	RTI STI HIV (AIDS) YES.....1 1 1 NO.....2 2 2 DO NOT KNOW...9 9 9	

RAPID HOUSEHOLD SURVEY
REPRODUCTIVE AND CHILD HEALTH (RCH)
1998-99

Confidential
for research
purpose only

HOUSEHOLD QUESTIONNAIRE

IDENTIFICATION

STATE _____

DISTRICT _____

TAHSIL/TALUK _____

PSU (VILLAGE/URBAN BLOCK) _____

VILLAGE SEGMENT/ ENUMERATION BLOCK _____

TYPE OF LOCALITY (RURAL-1, URBAN-2)

HEAD OF THE HOUSEHOLD
NAME _____

ADDRESS _____

RESPONDENT
MALE ADULT (20-54).....1
MALE AGED (55+).....2
FEMALE ADULT.....3

SERIAL NUMBER OF THE HOUSEHOLD QUESTIONNAIRE.....

INTERVIEW DATE (DAY / MONTH / YEAR)

NUMBER OF ELIGIBLE WOMEN IN THE HOUSEHOLD INTERVIEWED

(IF THERE IS MORE THAN ONE ELIGIBLE WOMAN IN THE HOUSEHOLD, INTERVIEW ALL)

	SPOT CHECKED BY	FIELD EDITED BY	OFFICE EDITED BY	KEYED BY
NAME				
DATE				

NAME OF THE INVESTIGATOR:

SIGNATURE OF THE INVESTIGATOR

SECTION-I

HOUSEHOLD CHARACTERISTICS

Q.No.	QUESTION AND FILTER	CODING CATEGORIES	SKIP TO
Q101	How many persons, including small babies, usually live in your household?	PERSONS ☐☐ MALES ☐☐ FEMALES ☐☐	
Q102	At present, how many visitors are living in your household?	PERSONS ☐☐ MALES ☐☐ FEMALES ☐☐	
Q103	How many eligible women are there in your household?	NUMBER ☐	
Q104	Please give the name of all eligible women.	NAME OF ELIGIBLE WOMEN 1. _____ 2. _____ 3. _____ 4. _____ 5. _____	
Q105	What is your religion?	HINDU.....1 MUSLIM.....2 SIKH.....3 CHRISTIAN.....4 BUDDHIST.....5 JAIN.....6 ZOROASTRIAN.....7 NO RELIGION.....8 OTHER _____ 9 (SPECIFY)	
Q106	Do you belong to Scheduled Caste, Scheduled Tribe or Other Backward Classes?	SCHEDULED CASTE.....1 SCHEDULED TRIBE.....2 OTHER BACKWARD CLASSES....3 OTHER CASTE.....4 DO NOT KNOW.....9	
Q107	What is the main source of drinking water for your household?	TAP.....1 HANDPUMP.....2 WELL.....3 RIVER.....4 POND.....5 OTHER _____ 6 (SPECIFY)	

Q108	Type of house (RECORD BY OBSERVATION)	PUCCA.....1 SEMI-PUCCA.....2 KACHCHA.....3	

VITAL EVENTS SINCE JANUARY, 1995

Q109	Was there a birth, among the usual residents of this household since January, 1995? If yes, how many?	YES, NUMBER..... NO.....0	
Q110	Was there a birth, among the visitors of this household since January, 1995? If yes, how many?	YES, NUMBER..... NO.....2	

(IF NO FOR Q109 AND Q110 GO TO Q112)

Q111.

(a) Sl. NO	(b) Name of the baby	(c) Does the baby belong to usual residents?	(d) Sex of the baby	(e) Month of birth	(f) Year of birth	(g) Order of birth	(h) Is the child alive?	(i) If dead, age of the child at the time of death(in months, in days if < 1 month)	(j) Was the death due to Tetanus?
1.		YES..1 NO...2	M - 1 F - 2	DK...99			YES..1 NO...2	Days Months	YES..1 NO...2
2.		YES..1 NO...2	M - 1 F - 2	DK...99			YES..1 NO...2	DAYS MONTHS	YES..1 NO...2
3.		YES..1 NO...2	M - 1 F - 2	DK...99			YES..1 NO...2	DAYS MONTHS	YES..1 NO...2
4.		YES..1 NO...2	M - 1 F - 2	DK...99			YES..1 NO...2	DAYS MONTHS	YES..1 NO...2
5.		YES..1 NO...2	M - 1 F - 2	DK...99			YES..1 NO...2	DAYS MONTHS	YES..1 NO...2

Q.No	QUESTION AND FILTER	CODING CATEGORIES	SKIP TO
Q112	Since January 1995, did any woman (usual residents) of this household die in pregnancy or while delivering a child or within 6 weeks after termination of pregnancy?	YES.....1 NO.....2 NUMBER OF DEATHS [ ]	→ Q114
Q113	If yes, did the death occur due to complication of pregnancy or child birth?	YES.....1 NO.....2 NUMBER OF DEATHS [ ]	
Q114	Was there any marriage among usual residents of this household since January, 1995?	YES.....1 NO.....2	→ Q116
Q115	If yes, who got married? What was the age of that person at the time of marriage?	1 2 3 4 BOY [ ][ ][ ][ ] GIRL [ ][ ][ ][ ]	
Q116	During the last 3 months did any member of this household suffer from Malaria?	YES.....1 NO.....2	→ Q118

Q117. If yes, give details

Sl NO.	Name of the patient	Sex	Age (in completed years)	Was he/she given treatment?
1.		M - 1 ; F - 2		YES.....1 NO.....2
2.		M - 1 ; F - 2		YES.....1 NO.....2
3.		M - 1 ; F - 2		YES.....1 NO.....2
4.		M - 1 ; F - 2		YES.....1 NO.....2
5.		M - 1 ; F - 2		YES.....1 NO.....2

Q.No	QUESTION AND FILTER	CODING CATEGORIES	SKIP TO
Q118	Is any member of your household suffering from TB?	YES.....1 NO.....2	→ Q120

Q119. If yes, give details

Sl NO.	Name of the patient	Sex (M/F)	Age (in completed years)	Was he/she given treatment?
1.		M - 1 ; F - 2		YES.....1 NO.....2
2.		M - 1 ; F - 2		YES.....1 NO.....2
3.		M - 1 ; F - 2		YES.....1 NO.....2
4.		M - 1 ; F - 2		YES.....1 NO.....2
5.		M - 1 ; F - 2		YES.....1 NO.....2

Q120	Is any member of your household suffering from Leprosy?	YES.....1 NO.....2	→ Q122

Q121. If yes, give details

Sl NO.	Name of the patient	Sex	Age (in completed years)	Was he/she given treatment?
1.		M - 1 ; F - 2		YES.....1 NO.....2
2.		M - 1 ; F - 2		YES.....1 NO.....2
3.		M - 1 ; F - 2		YES.....1 NO.....2
4.		M - 1 ; F - 2		YES.....1 NO.....2
5.		M - 1 ; F - 2		YES.....1 NO.....2

Q.No	QUESTION AND FILTER	CODING CATEGORIES	SKIP TO
Q122	Is there any unmarried girl in this household in the age group 15-19?	YES.....1 NO.....2	→ Sectn.II
Q123	Has ANM/Doctor/Health Worker ever counselled her about possible health problems of girls?	ANM.....1 DOCTOR.....2 HEALTH WORKER.....3 NO.....4 DO NOT KNOW.....9	
Q124	Does the girl suffer from Anaemia during last 3 months?	YES.....1 NO.....2	→ Sectn.II
Q125	If yes, has ANM/Doctor/Health Worker given Iron and Folic Acid (IFA) tablets to her?	ANM.....1 DOCTOR.....2 HEALTH WORKER.....3 NO.....4 DO NOT KNOW.....9	Section II
Q126	How many tablets were given to her?	NUMBER ☐☐☐ DO NOT REMEMBER.....999	

SECTION II

(ASK ONLY IF THE RESPONDENT IS MALE AND IN THE AGE GROUP OF 20-54)

Q.NO	QUESTIONS AND FILTERS	CODING CATEGORIES	SKIP TO
Q201	Have you heard of an illness called RTI/STI/HIV (AIDS)?	RTI STI HIV (AIDS) YES.....1 1 1 NO.....2 2 2	If all NO → Q207
Q202	From which sources of information or persons have you heard about RTI/STI/HIV (AIDS) (CIRCLE ALL RESPONSES MENTIONED)	RTI STI HIV (AIDS) 1. RADIO..... A A A 2. TV..... B B B 3. NEWS PAPERS..... C C C 4. MAGAZINES.....D D D 5. SLOGANS/PAMPHLET/ POSTERS..... E E E 6. DOCTOR..... F F F 7. HEALTH WORKERS.....G G G 8. SCHOOL TEACHERS.....H H H 9. COMMUNITY MEETING....I I I 10.RELATIVES/FRIENDS....J J J 11.OTHER_____K K K (SPECIFY)	
Q203	How is RTI/ STI/HIV (AIDS) transmitted? (CIRCLE ALL RESPONSES MENTIONED)	RTI STI HIV (AIDS) 1. HOMOSEXUAL INTERCOURSE..... A A A 2. HETEROSEXUAL INTERCOURSE..... B B B 3. NEEDLES/BLADES/ SKIN PUNCTURE..... - - C 4. MOTHER TO CHILD..... - C D 5. TRANSFUSION OF INFECTED BLOOD..... - D E 6. LACK OF PERSONAL HYGIENE..... C - - 7. OTHER_____ D E F (SPECIFY) 8. DO NOT KNOW..... E F G	
Q204	Do you think that one can get HIV (AIDS) from someone who has HIV (AIDS) by:	YES NO 1. SHAKING HANDS.....1 2 2. HUGGING.....1 2 3. KISSING.....1 2 4. SHARING CLOTHES.....1 2 5. SHARING EATING UTENSILS.....1 2 6. STEPPING ON URINE/STOOL.....1 2 7. MOSQUITO, FLEA OR BEDBUG BITES.....1 2	
Q205	How do you think one can avoid HIV (AIDS)? (CIRCLE ALL RESPONSES MENTIONED)	1. USING CONDOMS DURING EACH SEXUAL INTERCOURSE.....A 2. SAFE SEX.....B 3. CHECKING BLOOD PRIOR TO TRANSFUSION.....C 4. STERILIZING NEEDLES AND SYRINGES FOR INJECTION.....D 5. AVOIDING PREGNANCY WHEN HAVING HIV (AIDS) .....E 6. OTHER_____F (SPECIFY) 7. DO NOT KNOW.....G	

Q.NO	QUESTIONS AND FILTERS	CODING CATEGORIES	SKIP TO
Q206	Do you think RTI/STI/HIV (AIDS) is a curable disease?	RTI STI HIV (AIDS) YES....1 1 1 NO....2 2 2 DO NOT KNOW....9 9 9	
Q207	Did you ever had any of the following problems?	YES NO 1. ANY DISCHARGE FROM PENIS....1 2 2. ANY SORE ON GENITAL OR ANAL AREA....1 2 3. POSITIVE SYPHILIS BLOOD TEST..1 2 4. DIFFICULTY IN URINATING....1 2 5. PAIN WHILE URINATING....1 2 6. VERY FREQUENT URINATION....1 2 7. SWELLING OF TESTES OR IN GROIN AREA (PENIS)....1 2	If all NO → Q211
Q208	If yes, have you ever consulted any one for treatment?	YES....1 NO....2	→ Q210
Q209	If yes, whom did you consult for treatment? (CIRCLE ALL RESPONSES MENTIONED)	1. PHC DOCTOR....A 2. PRIVATE DOCTOR....B 3. MALE HEALTH WORKERS....C 4. MEDICAL SHOP....D 5. RELATIVES/FRIENDS....E 6. SELF TREATMENT....F 7. OTHER_____G (SPECIFY)	
Q210	Have you ever discussed about this with your wife?	YES....1 NO....2	
Q211	What Family Planning method you think that couples who want no more children should adopt?	FEMALE STERILIZATION....1 COPPER-T/LOOP....2 → Q213 PILLS....3 MALE STERILIZATION....4 CONDOM/NIRODH....5 OTHER_____6 (SPECIFY)	
Q212	When you need will you use the ____ (name) method?	YES....1 NO....2 NOT APPLICABLE....3	→ STOP
Q213	Why are you not preferring male method? (CIRCLE ALL RESPONSES MENTIONED)	1. FEAR OF IMPOTENCY....A 2. LACK OF SEXUAL PLEASURE....B 3. FEAR OF METHOD FAILURE....C 4. FEAR OF OPERATION....D 5. FEAR OF WEAKNESS....E 6. OTHER _____F (SPECIFY)	