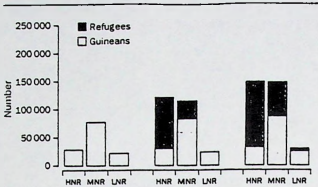

Figure 1: **Refugees and Guineans in study areas**
HNR=high numbers refugees; MNR=medium numbers refugees; LNR=low numbers refugees.

We separated rural Guéckédou into three areas by number of refugees (figure 2). High numbers were in the south-west far from Guéckédou city; the area had about 32 566 inhabitants in 1995, and the number of refugees eventually reached 3·53 for every one Guinean. There were low numbers of refugees in the north-west, at a similar distance from Guéckédou city, with 25 176 inhabitants in 1995; refugees numbered 0·20 for every one Guinean. The area with medium numbers of refugees was closer to Guéckédou city, and had 87 095 inhabitants in 1995 and 0·69 refugees for every one Guinean. We excluded the city of Guéckédou and its subprefecture from the study.

More than 90% of pregnant women attend antenatal clinics in the Forest Region of Guinea.[6a] Despite this high coverage, few women from rural areas deliver in the hospital. They present to the maternity ward only when an obstetric complication is already present. Relatives or traditional birth attendants attend most deliveries. If they perceive a problem during the delivery, they may or may not decide to seek medical care. Generally, they seek care first at a peripheral first-line health facility. Referral to the district hospital can be a lengthy collective decision. Once referral is accepted money must be collected for transport, hospital care, and living expenses in the city, and transport must be found. Often the whole process takes too much time, and the woman dies during transfer, or is very ill on arrival.[9]

Intervention

In Guéckédou, many changes were made to the general environment and the health system. Economic liberalisation and improved road infrastructure increased transport and trade. The district hospital in Guéckédou was repaired, staff were trained, and supplies and equipment improved. The number of first-line health services, including health centres and health posts in rural Guéckédou increased from three in 1990, to 28 in 1995, mostly in the areas with high or medium numbers of refugees. In the heart of the region with high numbers of refugees, a 30-bed rural hospital with a full-time doctor was opened in early 1992. Surgical cases, including caesarean sections, were referred to the district hospital. To facilitate such referrals, an ambulance was stationed at the rural hospital (figure 2).

Assessment of intervention

We took the rate of major obstetric interventions to be the number of deliveries by caesarean section, craniotomy, and intervention on a ruptured uterus (breach repair or hysterectomy) divided by the expected number of deliveries for a study area in a defined period of time.[10,12] We chose this rate as an indicator for use of health services for several reasons. First, the rate of major obstetric interventions is an indicator for coverage of obstetric need[1,6,13] with a high specificity, at least in sub-Saharan Africa, where most of such procedures are carried out for life-threatening maternal disorders,[14] which applied to 93% of major obstetric interventions in Guéckédou.[15] Second, the rate is sensitive to show improved access to health services.[16] Third, rates of major

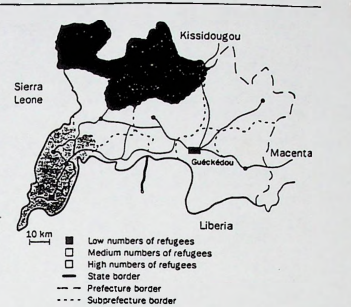

Figure 2: **Map of study areas in Guéckédou prefecture**

obstetric interventions can be assessed reliably, since the number of interventions and the expected number of deliveries can generally be estimated accurately.[13] Fourth, in areas with good access to health care, rates of major obstetric interventions for life-threatening maternal disorders were around 1%:1·1% in urban Kasongo, Congo-Kinshasa;[11] 0·98% in the district served by Albert Schweitzer hospital in Haiti (personal communication H Desenoncourt, 1997); 0·93% in urban Morocco;[12] and 1·14% in Guinea-Bissau.[16] Fifth, the rate of major obstetric interventions reflects the functioning of a district-health system. Peripheral clinics, referral systems, and a referral hospital have to collaborate smoothly for a timely obstetric intervention. Lastly, since in Guéckédou such interventions can be performed only in the district hospital, data could be collected from one source, and a differential bias in registration between the three areas seems unlikely.

We collected data retrospectively from patients' records and hospital registers. Each woman who had a major obstetric intervention between Jan 1, 1988, and Aug 20, 1996, was included. We noted the geographical origin of patients from the hospital register and patients' records.

We divided the study into three periods that corresponded to three phases in refugee migration and refugee assistance in Guéckédou. The first, from Jan 1, 1988, to Dec 31, 1990, was before the arrival of refugees and before the assistance programme started. By the end of 1990, only 16 000 refugees had settled in Guéckédou, and no new health facilities had been created. The second period, from Jan 1, 1991, to Dec 31, 1993, is the phase during which most refugees arrived and the assistance programme was set up, and many new health facilities were opened. The third period, from Jan 1, 1994 to Aug 20, 1996, was a phase of stabilisation of refugees, with little migration, and consolidation of assistance. Few refugees arrived during the last period and few new health posts were created.

Determinant	Factors*	Rate ratios (95% CI)	p
Area	HNR and LNR	..	
	MNR	4·15 (2·46–7·01)	<0·001
Time period	Continuous variable	1·82 (1·52–2·18)	<0·001
Interaction effect	(MNR and LNR)* time period	..	
	HNR* time period	1·67 (1·35–2·06)	<0·001

HNR=high numbers refugees; MNR=medium numbers refugees; LNR=low numbers refugees. *Poisson regression.

Independent determinants of rates of major obstetric interventions in rural Guéckédou, 1988–96

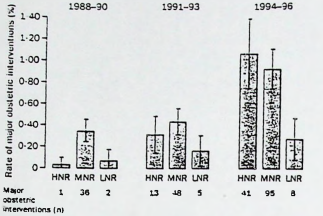

Figure 3: **Rates (95% CI) of major obstetric interventions by study area and period**
HNR=high numbers refugees; MNR=medium numbers refugees; LNR=low numbers refugees.

Statistical analyses

Since major obstetric interventions can be assumed to be distributed as a Poisson event, we calculated Poisson confidence intervals (95%) for rates, and used Poisson regression analysis to estimate the trend over time in each area. We estimated rate ratios for the three areas, comparing each time-period with the previous one. To test the hypothesis of the equality over time in the different areas, we included the main effects of time and area in the model, together with an interaction term (time* area).

Results

During the study period, 981 major obstetric interventions were performed in Guéckédou hospital. Interventions on 464 urban residents, 249 refugees, and 19 women from outside the prefecture were excluded from analysis. For 1994–96, rates of major obstetric interventions for refugees in rural areas of Guéckédou were estimated at 0·83%. These were not further analysed.

We analysed 249 major obstetric interventions carried out on Guinean women living in rural Guéckédou (figure 3). During 1988–90, before the arrival of the refugees, intervention rates were very low in all rural areas. After the refugees arrived, the rates of major obstetric interventions rose from 0·03% (95% CI 0–0·09) to 1·06% (0·74–1·38) in the area with high numbers of refugees, from 0·34% (0·22–0·45) to 0·92% (0·74–1·11) in the area with medium numbers, and from 0·07% (0–0·17) to 0·27% (0·08–0·46) in the area with low numbers. The estimated rate ratios over time were 4·35 (2·64–7·15) for the area with high numbers of refugees, 1·94 (0·97–3·87) for the area with low numbers, and 1·70 (1·40–2·07) for the area with medium numbers of refugees.

In a Poisson regression analysis (table), a model that included time and the area with medium numbers of refugees as main effects and a term for the interaction between time and area (high numbers *vs* medium and low numbers) provided the best fit (goodness of fit χ^2=7·22 for five degrees of freedom). The area with medium numbers had an independent effect on intervention rate, and there was an overall time trend. Most importantly, there was a significant interaction with time for areas with low and medium numbers compared with the area with high numbers, in which the effect on the rate of major obstetric interventions over time was significantly greater than the base rate (rate ratio 1·67 [1·35–2·06]). Although the area with medium numbers of refugees had initially higher rates of major obstetric interventions than the areas with low and high numbers, the presence of refugees and the refugee-assistance programme were associated with a significantly greater increase in intervention rates in the area with high numbers of refugees compared with the two areas with lower numbers of refugees.

Discussion

Our data show that the use of referral health services by the rural population of Guéckédou increased substantially over time. The only obvious difference between the areas with high and low numbers of refugees was the impact of the refugees and the refugee assistance programme.

It seems unlikely that bias could explain the differences we found. We tried to avoid misclassification of refugees as Guineans, although some Guineans may have registered falsely as refugees to obtain free medical care. Such misclassification, if it occurred, was, however, more likely in the area with many refugees than in areas with lower numbers of refugees. False refugees would thus lower the observed increase in intervention rates for Guineans in the area with many refugees.

During the study period, independent of the refugees and the refugee-assistance programme, important changes took place in the Guéckédou health system and in the general environment. These changes decreased certain obstacles to timely obstetric care. The Guinean Ministry of Health and the German Development Cooperation have improved the quality of care and the financial accessibility at the hospital of Guéckédou, and have developed a network of first-line health services in the prefecture. During the same period, economic liberalisation resulted in more access to money and higher availability of transport. These changes could have improved the access to the hospital, and may explain why the rate of major obstetric interventions increased in all study areas, including the area with low numbers of refugees in which the impact of the refugee-assistance programme was weak.

The presence of many refugees in certain areas of Guéckédou has, however, led to additional social and economic changes. First, economic changes have been more important in the refugee-affected areas. The presence of and assistance to refugees has transformed the economy in remote rural areas. The presence of freely settled refugees meant cheap labour and increased exploitation of agricultural resources. Relief food was sometimes resold, which substantially increased trade and circulation of money in the area. Some Guineans registered as refugees and obtained free food, and, therefore, economic assets. Agencies assisting the refugees employed hundreds of staff, which introduced more money into the local economy. These changes may have enabled better access to cash for the Guinean rural population of the refugee-affected areas. Patients commonly mention lack of access to money as the main constraint when seeking emergency medical care.

Second, transport infrastructure was substantially improved. Roads and bridges were repaired, mainly to allow food aid to be transported to the refugee settlements. Consequently, many more cars arrived in the area. The ambulance permanently stationed at the rural hospital in the area with many refugees undoubtedly facilitated referral to the district hospital in Guéckédou

and decreased the need for money. The ambulance was free of charge for refugees and Guineans. Since the ambulance started operating in 1992, it transported most of the obstetric emergencies to the district hospital. Efforts to improve the road infrastructure were also made in the area with low numbers of refugees, but much less was achieved than in the area with high numbers.

Third, there was probably a "refugee-induced demand" for health care. Before the war, health services in Liberia and Sierra Leone were better and more advanced than in Guinea, and the population used them more often. When confronted with a serious disorder, therefore, refugees living in close contact with the Guineans may have encouraged them to use the health services.

Lastly, more health services were developed in the areas into which refugees moved. When the first refugees arrived, serious efforts to upgrade first-line and second-line health services, were underway in Guinea, based on cost-recovery schemes.[20] Between 1988 and 1995, a health centre was opened in most sub-prefectures of Guinea. In the refugee-affected areas this process was faster and more widespread. Full coverage with health centres was already achieved in 1992, and many additional health posts were created.

Rates of major obstetric interventions in the area with high numbers of refugees were still low in 1991–93, and the changes took several years to become effective. This delay probably shows that there is an important time lag between the introduction of improvements in the health system, and increased use by people living in remote rural villages.

The greater increase in rates of major obstetric interventions in the area with many refugees than in the other two areas is probably because of the more intensive refugee assistance programme and the presence of refugees. We could not identify fully, however, what part each of these factors played, nor whether we identified all important factors. The combination of factors probably contributed to the increased use of referral health services by the host population. The changes that were introduced, however, decreased only partly the obstacles to timely obstetric care. Rural people still face important financial, logistic, and cultural barriers to such care. Efforts are being made in Guéckédou prefecture to set up small-scale health-insurance schemes to overcome these barriers.

None of the changes made in the refugee-affected areas was specific for obstetric interventions. All health services were general and the ambulance transported any patient referred to the hospital. Therefore, access probably improved for all disorders, not only for obstetric care.

The approach to refugees in Guinea made this positive effect on the host population possible. Refugee assistance followed the refugees to where they settled and supported the refugees' own coping mechanisms. Several factors were favourable to such a non-directive approach to refugee settlement and assistance. The refugees arrived gradually, in several waves, and were spread over a large area. The administrative and health authorities were not therefore, overwhelmed by the influx. Moreover, many refugees were culturally related to the host population in Guinea, with whom they had had contacts before arrival. This cultural proximity facilitated assistance by the host population. With between 15 and 20 inhabitants per km² the Forest Region of Guinea is not densely populated and has a relative abundance of underused agricultural resources. The population is generally positive towards strangers, who are perceived as an economic asset for villages.[21] The refugee-affected areas were also far from the capital, Conakry, and the refugees were not thought to be a threat to national security by the government of Guinea.

At the time of the refugees' arrival the conditions prevailing in the health system were favourable to an integrated approach to refugee assistance. In most districts the Ministry of Health had launched new integrated health centres and was upgrading the hospital. With stocks of drugs and medical equipment readily available locally, new health facilities modelled on the national health policy could be created overnight. Médecins Sans Frontières was assisting the Ministry of Health in this development of health facilities in the Forest Region before the arrival of the refugees. The two organisations were, therefore, able to put a refugee-assistance programme together, which may have contributed to the local and national impression of control of the influx. Indeed, all medical refugee assistance was organised by the Ministry of Health and Médecins Sans Frontières, in collaboration with the other foreign health agencies already working in the Region. No new health agencies brought relief during the first years of the refugee influx. During the first months, the operational role of UNHCR was limited. The agencies present agreed that medical assistance to refugees should respect the overall policy of the Ministry of Health to avoid negative impact on the changing and still fragile national health system. Resources that became available through the refugee-assistance programme were partly invested to reinforce the overall health system.

The situation of the refugees in Guinea was, therefore different from that for many refugees, who generally arrive more quickly in larger numbers.[22] During such acute refugee emergencies, most attention is focused on decreasing the burden of the acute health crisis faced by the refugees. The scope of the crisis and the urgency of the necessary measures commonly mean that parallel refugee health services are organised by foreign relief agencies to deliver a standard package of emergency-relief measures. The relief is generally well managed by relief agencies[23] and has probably decreased death rates,[23] but logistic and military constraints might prevent timely implementation. Unfortunately, this relief approach is commonly perpetuated beyond the acute emergency, especially when refugees have been housed in camps.[3] The effects on the health services of the host country, which does not have enough resources to cope, are often negative[3] and all relief resources are used exclusively by the refugee health services. Relief organisations often recruit medical staff from the host country, which can hamper the functioning of the health services in countries with scarcity of such staff.[4] The health authorities that are supposed to coordinate relief measures in their area can be overwhelmed by new relief actors, further weakening the local health services. The host population may not be able to use the refugee health services, even if they are better staffed, equipped, and supplied than those of the host country. The quality of care available to the host population may, therefore, decrease as a consequence of the assistance to refugees.

In other countries, conditions for an integrated approach to refugee assistance may be less favourable. However, the positive effects for the host population documented in Guinea show that it might be worthwhile for host governments to consider such an approach whenever possible. Relief agencies involved should adapt

intervention methods accordingly. An integrated approach to refugee assistance is probably also more cost-effective. In Guinea, the overall yearly cost of medical assistance to refugees was estimated at US$4 per refugee.[7] This cost is much lower than the yearly cost of medical services in refugee camps—often US$20 per refugee.

The improved access to health care for the host population in our study should not give the impression that the refugee influx and the way it was dealt with was always beneficial to the host population. The refugees and the refugee-assistance programme in Guinea caused substantial social and economic changes. The absorption of such a large population increase in a rural area may also have had important consequences on the ecological equilibrium. These changes may jeopardise the long-term livelihoods of certain strata of the population. The poorest of the host population may be the worst affected by changes to the economy.[24] Labour opportunities may be lost because of the presence of cheap refugee labour, and increases in market prices and increased monetarisation of the economy may decrease their purchasing power. Although there are no data to support this hypothesis in Guinea, the benefits of better access to necessary hospital care may have favoured only Guineans who also benefited from economic change.

A non-directive approach to refugees has the potential to avoid the negative impact of emergency refugee relief on the health services of the host country, and to improve access to health care for the host population. Which conditions enable such approach and appropriate intervention methods should be studied in other refugee-affected areas.

Contributors

All investigators contributed to the study design, data analysis, and revision of the manuscript. Vincent De Brouwere and Wim Van Lerberghe had previous experience of the methods. Wim Van Damme collected data in Guinea as part of his doctorate study on refugee health care in sub-Saharan Africa.

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Draft outline, May 24,1993.

CHAPTER 6: EMPOWERMENT AND FERTILITY

by Simeen Mahmud

A. Historical overview

1. Traditional transition theory

Traditional demographic transition theory maintains that aggregate economic development and modernisitation in a society will ultimately lead to declines in aggregate fertility levels (Coale,1973). While different societies will follow this generalised path at different paces depending upon specific contexts, the completion of transition will be characterised by declines in mortality levels followed by declines in fertility levels that tend to stabilise at levels significantly below pre-transition levels. It is assumed that improvements in overall health and hygiene including the control of epidemics with modern technology, a rise in literacy levels, and increases in income and consumption levels will produce appropriate responses in fertility behaviour patterns of populations experiencing transition. Implicit in these assumptions is that economic development and modernisation will effect all segments of the population including women, so that there should also be visible improvement in the level of female education and increase in female participation in modern sector employment which will then motivate couples to limit fertility.

While these theories have recognised that modernising changes in the economy may influence the motivation of couples to limit fertility, they have not paid much attention to the dynamics of the decision making process about reproduction at the individual or couple level. There is no recognition about how these changes could affect women's power and autonomy from male domination and their implications for the fertility decisions of couples and women. Not surprisingly, they have been unable to explain fertility patterns in many parts of the developing world where power balances favour men, and where a range of fertility regimes have been found to occur in diverse socio-economic contexts, a reality most recently confirmed by the World Fertility Surveys (WFS: Cleland and Hobcraft, 1985). In attempting to explain "deviant" fertility patterns in the developing world a macro concept of "women's status" (measured by aggregate indicators like female literacy and school enrollment rates or labour force participation rates) was introduced as a "catch-all" variable but there was poor understanding about both the concept as well as the linkages to fertility (Mauldin and Berelson, 1978).

2. Micro vs macro influences

Embedded in the traditional transition theory is the maternal role incompatibility hypothesis which stipulates that women in modern sector employment have lower fertility due to role conflicts

between "mothering" and "working". However, this conflict is not elaborated in terms of its implications for women's domestic power or role in fertility decision making, but rather more in terms of a lack of complementarity between women's time use in childbearing/childcare and work outside the home. A reappraisal of the hypothesis has led to the conclusion that micro rather than macro structural changes may better explain the relationship between women's work and fertility. Examining the working environment of women in Malaysia, Mason and Palam concluded that it was the "household's opportunity structure" through which it accumulates status and resources which shaped this relationship (Mason and Palam,1985).

The need to look more carefully at micro-level relationships that may influence in important ways the fertility decision making process and how these relationships may vary by social and cultural contexts was clearly indicated. One of these relationships was identified as that between men and women in the society, and the important implications of women's status on their domestic power and on demographic outcomes was recognised even quite early on (Mason,1984).

3. Women's status and fertility theories

More recent demographic theories of fertility decline in the developing world have invoked the concept of relative female status as an explanatory variable. Demographers, most notably Caldwell and Cain, have theorised about the linkages between some concept of women's status in patriarchal societies and their fertility behaviour patterns (Caldwell, 1976, 1981; Cain, 1979, 1981). The essence of these theories is that an improvement in women's status relative to men will lead to fertility decline.

The argument is that changes in the socio-economic structure which affect aggregate indicators such as mass and female education and women's access to or participation in gainful employment will lead to a significant reduction in the subordination of women by men (in the first case because of the emotional and material nucleation of families, and in the second case because of the reduction of women's economic dependence on men). It is further argued that this is sufficient to bring about declines in existing fertility levels since reductions in female subordination will lead to an increase in the costs of children due to a reversal in the "wealth flows" and/or a reduction in the "risk-insurance value" of children to parents. Cain describes the situation of women in patriarchal societies of South Asia while Caldwell draws his conclusions from family experiences in the patriarchal Yoruba community in Nigeria.

However, given that fertility decision making, if at all done consciously, ultimately takes place within a household context, there are no explanations about the mechanism through which reduced subordination of women at the household level can be translated into a greater role in fertility decisions in situations where this is empirically observed. Nor do they provide plausible explanations in situations where these predictions are not valid.

B. Empirical evidence of the status-fertility relationship

1. Female education and fertility

One of the first empirical linkages between women's status and fertility was evidenced in the strong and consistent relationship between female education and fertility levels. A comprehensive review of evidence across the developing world revealed that female education and fertility was inversely related in 11 out of 20 cases, the higher the literacy rate of a country, the more likely there was to be an inverse relationship, and that female education was more likely to be inversely related to fertility than male education (Cochrane,1982). The effect of education on fertility is hypothesised to be indirect through its impact on certain "intervening variables". Thus, the effect of education on fertility depends on how education effects the demand for children, the supply of children and the use of fertility regulation to limit births.

Although much of the attention on how female education affects fertility is focussed on its impact on the costs and benefits of children, some studies have looked at variables that could provide insights into women's roles in the fertility decision making process. It was found, for instance, that education increased the wife's age at marriage, husband-wife communication and the knowledge, attitude and access to birth control all of which were negatively related to fertility adjusted for age. These factors could potentially exert a positive impact on women's participation in fertility decision making but more research is needed to establish these pathways under different contexts.

(Box on these cross-national correlations ?)

In discussing the complex mechanism through which improved maternal education raises child survival in rural Punjab, Dasgupta concludes that education raises skills and self-confidence, increases exposure to information and alters the way in which others respond to them (Dasgupta, 1990). Caldwell, too, examining Nigerian data suggests that women who have been to school are more likely to elicit behaviour from others like mother-in-law, husband or health worker that are favourable to child survival (Caldwell, 1979). These could very well be the same mechanisms through which education could impact on women's autonomy with regard to childbearing decisions.

2. Women's work and fertility

The other source of empirical evidence drawn upon to illuminate the relationship between women's status and fertility are studies that examine the effect of women's work and fertility.

However, as Youssef (1982) concludes "Research to date has failed to provide a clear and consistent explanation of the relationship between women's employment and fertility, and has not confirmed the causality". What is recognised, nevertheless, is that both women's work and fertility emerge from "a family decision making process that encompasses a number of goals ... reacting in response to a common set of social and economic forces as well as to unfolding events over the life cycle" (Lloyd, 1985).

Empirical observations about the impact of women's work on fertility and child care can be differentiated along the lines of type and magnitude of remuneration, work place, type of activity, and occupation. There are even situations where maternal employment has been associated with higher infant/child mortality and undernutrition, reflecting a negative impact on child care, as well as larger completed families, reflecting a positive impact on fertility, suggesting that the effect of employment may be more context specific than that of education. Also, causality is less easy to establish since most women may work at various points in their reproductive years, so that fertility and employment decisions affect one another.

The important distinction to be made when trying to establish a relationship between women's work and fertility is that between earning an income and controlling it. Work which does not alter the existing gender pattern of control over productive resources and women's labour is not likely to have any impact on women's decision making power with regard to fertility. Although it has been established that women who leave their home for work have the lowest fertility in most societies, the explanation most commonly forwarded is that of role conflict. It could very well be that going out of the home, especially in traditional societies, could provide women with an enhanced self esteem, greater independence, access to information and services, peer support and so on that increase women's self confidence in independent decision making, i.e. their autonomy.

Studies of poor women in South Asia involved in subsistence income earning work have concluded that these women have a less subordinate position to men in the household relative to women who depend entirely on their husband's incomes. These women appear to have a certain degree of autonomy in their behaviour including in the use of contraceptives and exhibit significantly lower fertility levels (N. Nelson; Mahmud,1993). However, evidence is limited and more work needs to be done to identify pathways of impact on women's autonomy.

3. Linkages to women's decision making power

Empirically, the education-fertility (as well as the education-infant/child mortality) relationship has been more consistent than the employment-fertility relationship. This seems quite understandable since education, being in a sense more instrumental in terms of influencing learned perceptions should have a stronger and more consistent impact on women in the form of enhancing capabilities needed to "gain some control over one's own

life and over the resources needed for survival".

However, it is not yet sufficiently clear what type of education has the greatest potential for impact on women's decision making power, and under what specific contextual conditions strategies for "empowering education" may be sustained. For example, aggregate indicators of education are all based on the Western model of education (as emphasised by Caldwell), but many would argue that this type of formal schooling with a certain number of years spent at school, while assisting women to behave in a more modern way with regard to acceptance of new technology (birth control, ORS, child vaccination, hygeinic habits), was totally irrelevant to enhancing capabilities of poor rural women in traditional situations. Also, it is argued that it tends to reinforce traditional gender inequalities rather than to question them. On the other hand, the case can be made for a more informal and strategic type of education with empowering for women's practical and strategic needs (cross reference chapter on empowermrnt). Questions regarding mechanisms of influence as well as contexts under which these are feasible still remain to be answered and provide the directions for future research.

The case for the effect of employment on women's decision making power is more difficult to establish since there is a diverse range of the type of work that women engage in and the conditions under which these are undertaken. Empirically, it has been the experience that both the type of work and the context of work has significant and varying influence on women's perceptions about identity and wellbeing and on "enhancing capabilities" for increasing that wellbeing. The evidence, not surprisingly, has been mixed, especially since the effect of employment is often confounded with the education effect (eg. in the case of professional or non-traditional occupations).

In any case, whatever the direction of causality, there is sufficient reason to believe that causality is in both directions since decisions about women's work and fertility are not once for all decisions and evolve in response to one another and to other events and decisions. The significance for women's empowerment strategies lies in identifying the work environment that leads to an enhancement of women's autonomy and decision making power and the pathways of influence under situations of varying male control over women's labour. In this regard, too, much work needs to be done to answer questions about the viability and sustainability of these straregies.

C. Conceptualising pathways of influence

1. The concept of female status

As the concept of the status of women has entered mainstream demography, its complexity has led to the use of alternative definitions and synonyms (female autonomy, women's rights, men's situational advantage). Mason (1984) reviews these definitions and

concludes that beyond the common focus on gender inequality "demographers have more than one thing in mind when they discuss women's status". The three basic dimensions of gender inequality focussed most commonly were (1) inequality in prestige, (2) inequality in power and (3) inequality in access to or control over resources.

The complexity derives from the fact that women's status is a multi-dimensional concept: that there is more than one dimension on which it is possible for men and women to be unequal, although in reality a higher status in one dimension, e.g. control of productive resources, may mean a higher status in other dimensions; that women may be "powerful" in one area such as in domestic matters but may be completely powerless in another area such as in the control of productive resources. Superimposed on this is the fact that gender inequality may vary by location such as the social unit (family, neighbourhood, community, state) and by stage in the life cycle (unmarried daughter, young bride, young mother, older mother of many surviving children, woman with no children, mother-in-law, widow, old woman with no assets, and so on).

There is a need to recognise that the different dimensional and locational components of women's status as used in the literature may not necessarily respond to structural changes in a nicely consistent manner. For example, do women who are able to access productive resources including market opportunuties for income generation have a higher status because of their freedom from seclusion (purdah) or have a lower status because they have to give up the social status associated with purdah (Youssef, 1982). Alternately, poor women who have to engage in income earning employment or even educated women in professions may appear to be less dependent on or subordinate to men in the household but may in fact have very little autonomy in decisions regarding their incomes (Safilios-Rothschild,1980).

2. How status influences fertility decision making

Drawing conclusions from anthropological studies in developing countries Epstein (1982) defines women's role as "the way she is expected to behave in certain situations" and her status as "the esteem in which she is held by different individuals and groups who come in contact with her". As a woman proceeds through the different phases of her life cycle she assumes different roles and is "awarded different prestige ranking by different people within her social range". These rankings are in most part hierarchical and is also closely correlated to the various roles assumed by a woman within her "social range" which includes the household, the neighbourhood, the community and the state, generally in the chronological order of life cycle events. All of these status rankings in this highly structured system are primarily determined by the woman's reproductive outcomes, being significantly influenced by the gender, the number and the timing of her births (Cain, 1981 in comparing regions in South Asia). However, in certain situations where women traditionally have access to independent productive resources these status rankings may also depend upon women's productive outcomes (Boserup, 1970; Cain, 1981;

Adams and Castle chapter).

Hence, within the existing societal power structure women are able to ascend to status levels with higher rankings that are associated with visibly higher levels of "power" with regard to her relationships within the household (such as control over the labour of younger household members and domestic labourers, decision making power in domestic matters and so on) and to a limited extent with regard to the broader community (such as the prestige awarded to the elderly). This type of "power" is however limited or circumscribed to the extent that it is derived from men and relationships with men (Safilios-Rothschild, 1982) and does not significantly increase women's decision making power relative to men with regard to either their labour or their reproduction.

Given these structural constraints to women's independent decision making, the mechanisms by which women's status as achieved through their traditional roles can influence fertility may be conceptualised as follows:

(Box with diagramme representing these linkages based on Mason, 1984.)

Existing economic and social (including kinship) institutions determine the low status of women in society. The low status of women is characterised by gender based inequalities in prestige or esteem, in the control over productive resources and in decision making power. These inequalities determine the economic dependence of women on men and their lack of autonomy from male control, both of which are instrumental in controling women's labour and fertility. Women's economic dependence and lack of autonomy dictate their fertility behaviour and outcome rather than considerations of their own wellbeing. With changes in the economic and social structures of communities that are favourable to women (such as those leading to higher female education or increased female employment in gainful activities) it is expected, but with considerable lag, that women's status will improve reducing the gender based inequalities. These improvements will eventually reduce women's economic dependence on men and their lack of autonomy, so that some concerns for women's own wellbeing may be reflected in fertility outcomes.

3. The concept of autonomy/freedom from male domination

Upto now discussions of women's status have primarily focussed on gender inequality as an outcome but not on decision making power or women's autonomy as they effect these outcomes. Even when demographers have used the concept of female autonomy, its implication for women's freedom of control from others has been restricted to personal matters. Dyson and Moore (1983) explain the equality of autonomy between men and women as implying "equal decision making ability with regard to personal affairs", but do not extend their definition of female autonomy to include decision

making power beyond personal affairs. This is misleading because fertility decision making, while very much a personal concern for women, is also significantly influenced by family and often community situations to the extent that childbearing determines women's status in those social locations.

There is also no discussion about how gender perceptions of identity and wellbeing, often utilised to maintain existing inequalities in status (Sen,1990; Papanek, 1990) can be shaped by power relations between men and women or about how these perceptions may determine women's autonomy in decision making affecting their lives.

Clearly, the concept of female autonomy needs to be distinguished from that of women's status since the question of power relations between men and women and how they affect decision making is very central to it. Even though women may rise to higher status levels through their traditional roles, both as producers and reproducers of labour, their subordination to men is not necessarily reduced. Thus, although women may gain some power over the lives of younger women and some younger men in the household, they still have very little power and autonomy about decisions affecting their own lives (Safilios-Rothschild, 1982). In fact, women's greatest subordination occurs at a time when they are being initiated into fertility behaviour patterns that are not geared towards their own wellbeing but towards that of their families. Even when women are earning incomes they are often unable to translate these into decision making power if men control the income and the conditions under which women can work. The traditional gender balance of power is such that male dominance over women at all dimensions and locations takes the form of variously controlling women's labour and fertility, and the consequences of their fertility, by restricting their power and ability to make independent decisions about their labour and their reproduction.

It may be hypothesised that the major constraints to increasing women's wellbeing in a male dominated environment has been their lack of autonomy from men in decision making which affects their wellbeing, including reproduction, and the fact that women are resigned to accept the "legitimacy of the established order". Sen (1990) has argued that women's perception (or the lack of them) of their own wellbeing and self-worth can be an important factor in the perpetuation of existing gender imbalances in power, but that these are not necessarily resistant to change or alteration through conscious social policy.

4. Empowerment and its linkages to fertility decision making

The previous discussion would imply that one way of increasing women's autonomy and decision making power would be to provide them with an alternative power base that was independent of the domination of men. Even in societies characterised by highly skewed gender balance of power and control of productive resources, women may gain access to power from certain kinds of empowering experiences like the process of politicization for gender awareness, processes of economic change or processes of

mobilisation for economic, social or psychological support.

(These processes are described in the chapter on Conceptualising Empowerment. That chapter will also try to define empowerment in terms of a process rather than an end or even a means to an end, and that it is a process that the process of gaining power "begins in the mind with self image and confidence, with understanding the environment, with ability to turn weaknesses into strengths ...)

The mechanism by which such empowering processes may impact on women's autonomy and fertility decision making is conceptualised below:

(Box showing how the mechanism of impact of women's status on fertility is modified by introducing the notion of increased decision making power and autonomy which accompanies women's empowerment strategies)

The pathways of influence of women's empowerment on their fertility behaviour may be both indirect and direct. Empowering experiences impact on women's perceptions of selfworth and wellbeing and through them on their economic dependence on men and their lack of autonomy in decision making. These impacts flow back into the hierarchical social structure through women's relationships with men and other "powerful" women to exert influence in changing the established gender inequalities in prestige, control over resources and decision making power, i.e. the components of women's low status. Changes in women's status then affect fertility behaviour through the traditional channels as described in the previous box. This is the indirect effect of empowering experiences on fertility. The direct impact on fertility is through the formation of new relationships within the different social locations (household, community, state, market) which embodies self confidence, access to independent information, peer support, physical mobility and so on, in such a way that women's own wellbeing (family size preferences, health needs, birth control preferences, employment alternatives, healthy children) as well as that of their children and other vulnerable groups dictates fertility behaviour and outcomes. Also, since the empowering experience is conceptualised as a process rather than an end, impacts on fertility behaviour is also expected to be an on-going flow responding to external forces and life cycle events as they unfold.

5. Power sharing and responsibility

Obviously, if fertility decision making has to be a conscious one by both men and women in response to structural changes that effect them differently, then the mechanism by which these changes influence decision making has to do with the balance of power between women and men in all the different social locations like the household, community and the state within which they interact. In other words, there must be a reallocation of power in favour of women at all different dimensional and locational contexts, allowing them to alter their reproductive behaviour for their own

wellbeing. This may entail some "negative externalities" in terms of men feeling threatened or the established order being questioned by more "powerful" women.

So far women have had to bear the burden of reproduction at the cost of their own wellbeing (economic independence, education, health, healthy offspring, mobility), while men have been enjoying the benefits. Thus, the underlying assumption of empowering strategies for women has been that altering reproductive behaviour is primarily a woman-specific concern, perhaps even a concern with opposing gender interests.

Increasingly, it is clear that the concern needs to be not only gender neutral but also a societal concern, i.e. women's empowerment strategies need to incoroporate a greater role and responsibility even accountability of men and the broader societal institutions. The empowering process must be able to elicit a more caring and responsible attitude and behaviour from the other actors in this decision making scene. In other words, it must be ensured that the empowering process does not burden women with additional segregated responsibility. The persistence of gender based allocative inequalities in a society is not only determined by power relations but also rationalised by the implicit priorities and generalised notions of distributive justice that have emerged over many years. It should be remembered that these relations and notions are not likely to vanish automatically with the process of women's empowerment.

Other existing political structures such as the lack of a democratic state structure, the presense of a communist or a socialist state structure, the presense strong patron-client relationships, the emergence of religious fundamentalism will significantly influence the operationalisation and impact of strategies for women's empowerment.

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WH-2

(Draft for discussion-Feb, 2001)

Health Task Force

Women's Health

Why the need to look at Women's Health as a separate agenda-

- Consequences of poor health of women, as against those of men, are far greater since their poor health translates into poor health of families, particularly the children who represent the future generation. A mother's death has twice the impact of a father's death on child survival. "Women - Days- Lost" due to ill health therefore includes many hidden but critical factors which impact on the family and in the larger context on the health of the community and the nation.
- Also, gender related factors impact negatively on all issues related to women, including health.

Health status of women in Karnataka:

The overall health and developmental status of women and children in Karnataka has improved over the past several decades.

But, as can be seen by the health indicators and developmental indices, the improvement does not compare favourably with that of States like Kerala, Tamil Nadu, Andhra Pradesh, Maharashtra etc. There is a considerable **disparity** between Rural & Urban Karnataka, between males & females and regional disparities with the districts of Raichur, Koppal, Gulbarga, Bidar, Bellary, Bijapur and Bagalpur characterized as category C due to poor health and other developmental indicators.

Health Indicators of Karnataka:

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

Life Expectancy at Birth (LEB)

The International Conference on Population Development had resolved to target an LEB of 70 by 2005 and 75 by 2015. Karnataka has only reached 62.

LEB of women was higher than that of men throughout the State, but the difference ranged from the highest of 9 in Kolar and Hassan and only 0.62 in Bangalore (Urban).

LEB was highest in Dakshina Kannada with 68.82 and lowest in Bellary with 57.12years.

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.

Crude Death Rate (CDR)

CDR as estimated by SRS (1998) was 7.9 per 1,000 population; 8.6 in rural as against 6.9 in urban areas.

CDR varied from a low of 7 in Dakshina Kannada & Shimoga, to a high of 10.5 in Gulbarga.

Developmental Indices of Karnataka- HDI & GDI

The Gender-related Development Index (GDI) measures the overall achievements of women and men in the three dimensions of the Human Development Index (HDI) -life expectancy, educational attainment and adjusted real income-and takes note of inequalities in development of the two sexes. The methodology used imposes a penalty for inequality such that the GDI falls when the achievement

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levels of both men and women in a country go down or when disparity between their achievements increases. The GDI is therefore the HDI discounted for gender inequality.
Though the GDI and HDI are not comprehensive and do not cover all aspects of human development they serve to high light disparities within the State as well as the consequences of gender discrimination.

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
The IMR for females is 72, and highest in Dharwad Bellary & Bidar.
Age specific mortality rates indicate that 26% of deaths of women occoured between 15 – 34years of age as against 15% among men.

Reasons for the poor health status of women in Karnataka:

- The efforts taken to address women's issues have been inadequate, distorted, vertical, top-down and have rarely emerged out of women's priority concerns. Gender disaggregated data is often not collected on women's morbidity, suffering and pain.
- **Health seeking behavior of women**: The ingrained gender insensitiveness in society has led to women themselves relegating their own physical and mental health, emotional and social needs as their last priority, if at all.
- The health needs of women are **addressed by the RCH programs**, which are restricted to the reproductive phase. Very little systematized attention is being paid to their other health needs and much less to their emotional needs.

Factors for consideration:
The Gender Concept

Gender
Gender is the different meanings and roles that societies and culture assign to people, based on whether a person is male or female. It is a strong, but often unacknowledged, part of what we learn as we grow up, for example, how we treat each other and ourselves.
This means that men are expected to behave in a particular manner, women in a different manner and transgendered persons in another manner.
These divisions and roles are not equal between men and women and women are usually given less powerful and restricted roles to perform. This also means that the impacts of social phenomena are different on the different genders.
These roles change with changing times as well as within communities from time to time due to factors like improved literacy, higher economic status etc.

Gender Discrimination
From the time of conception the girl child is discriminated against all her life. This includes being subjected to foeticide & infanticide and sexual abuse; being weaned from breast feeds earlier than male babies; her nutritional, health, emotional and other needs being given the last priority; having restricted access to education- either not sent to school at all or if sent, not allowed to complete her education in order to look after siblings or do household & other work; and are often married off during adolescence.
The woman is required to meet the needs of her family before her own needs and acquires recognition as a family member only after she bears a child, and more specifically a male child.

She has very little decision-making power and issues concerning her are marginalized.

When gender discrimination has been socialised and internalised, it is no longer visible to the gender insensitive. Unfortunately, religion, health care, education the legal system, employment and the media, reflect and promote gender discrimination.
Men continue to control decision-making, limited family resources, women's sexuality, freedom of movement, access to the world outside the home, etc.
So women need a supportive environment to ensure that they are fed adequately, are educated and can make decisions regarding their life and their children.

Gender sensitivity
Gender sensitivity is an understanding and consideration of different needs of women and men arising from their unequal social relations and that a policy or programme can thus benefit women and men differently.
Gender sensitive indicators
Gender sensitive indicators are required to measure the integration of gender sensitivity into any given programme. They will point out changes in the status and roles of women and men over time, and therefore measure whether gender equity is being achieved.

Gender issues related to health care
Even when available, health care services are underutilized by women because:

- They are occupied all day with work related to childcare & household tasks, and work outside the house, and often neglect illnesses in the early stages.
- Health services available are insensitive to women's needs. They are staffed with male workers; privacy is ignored; the timing is inconvenient and long waiting periods result in lost wages.
- Access to health care facilities is inadequate. These include factors like long distances; lack of transport and even when available an inability to pay for it; a lack of independence that prevents them from leaving their homes alone and restricts them from using their own income or savings; the expenditure incurred even in the supposedly free health care facilities etc. This is especially critical when emergency care is required and is a major factor resulting in high maternal and neonatal mortality.
- The health needs other than those associated with their reproductive capacity are neglected.
- Their awareness of available facilities tends to be lower than that of men.
- They are also not aware of their rights and often do not think they have any.

Poverty & illiteracy

40 % of people in Karnataka are below Poverty Line. **Poverty** coupled with Gender bias and poor social and economic status of girls and women limits their access to education, good nutrition as well as money to pay for health care and family planning services.

Though the enrolment in primary schools exceeds 8.2 million; percentage of children in age group 6-14 attending schools is 65.3(rural) & 82.4 (urban) and drops out rates have declined from 69% in 1950 to 16.5% , still 2.6 million children (28%) in 6-14 age group are out of school.
Girls participation has gone up from 44.5 in 1980 to 48 in classes 1to 4 and from 39 to 45 in classes 1 to 7and the drops out rates has declined from 73% to 17%. But still there is need for improvement. Literacy programmes are not sustained despite good work in the early years. So the literacy rate is 56% for Karnataka but rural female literacy in Raichur is a dismal 16.48%

Low levels of Female Literacy is a major factor resulting in high rates of maternal & infant mortality, female foeticide, skewed sex ratio & dowry deaths.
Some reasons for girls not being sent to school are- to care for younger siblings, housework etc., for economic reasons, fear of sexual harassment and sexual abuse, far off locations, an overwhelming number of male students and a fear of not being able to get a groom with higher educational qualification than the daughter.

Women & Work

Wage earning empowers women in decision making. Non -wage earners do not have this advantage and their contribution is not even recognized. The down-side to this is the fact that very often women do not have control over their earnings. Also, work outside the home places an additional demand on the women who are already burdened with household work; reproduction and child rearing; and family demands- both physical and mental.

- Girls start working earlier than boys, work longer and harder throughout their lives. The energy consumption in mere survival tasks of fetching fuel, water, fodder, care of animals; washing; cleaning- which are exclusively women's responsibility, results in negative nutritional balance and calorie deficit. The situation worsens when women also have to perform hard labour for wages. Walk long distances to fetch water and fuel, especially in hilly areas; take care of large extended families, caring of children, elderly, sick husband and animals is done by women alone with little or no help.

All the above domestic work is unpaid work and is considered unproductive work. Even when women work outside the home, they do not get equal wages for equal work and are made to perform unskilled jobs which are poorly paid, more hazardous and demanding. They face various occupational health hazards. Rural women cooking in poorly ventilated huts using wood and cow dung cakes as fuel, are exposed to 100 times the acceptable level of smoke particles. This is equivalent to smoking 20 packs of cigarettes a day and can cause Chronic Obstructive Pulmonary disease. Women forced to earn their living as commercial sex workers are prone to infections like STDs, HIV, etc. from their male clients.

Nutrition

- **Malnutrition**

Though the incidence of severe malnutrition has declined to negligible levels, problems due to milder levels of protein -calorie malnutrition, and deficiency of iron, iodine and vitamin A deficiency are seen among a majority of women & children in India.
The Women & Child Departmen and not the department of H&FW is responsible for ensuring the nutrition of the people. The ICDS projects have not been able to ensure adequate nutritional coverage for children.

Denial of adequate food to girls, partly due to non-availability and partly due to discrimination, results in the lower nutritional status of women. Height for age is a sensitive indicator of adequacy of nutrition. This data shows that girls are more malnourished than boys today in Karnataka.
An inadequate diet has life-long consequences for girls and their growth and development is jeopardised. The nutritional needs of girls especially of iron, vitamin A, calcium and iodine, increases with the growth spurt associated with puberty and onset of menstruation. Early marriage and early pregnancy further deplete their inadequate reserves.
The woman herself is partly responsible for this. She considers her nutritional and health needs as the last priority and does not know the importance of her own health as a contributing factor in ensuring the health of her children.

Rising food prices, limitations of the public distribution system and shift to non-edible cash crops, will undoubtedly worsen the existing nutritional status of women.

Other than the direct ill health caused, malnutrition in women directly contributes to mortality & morbidity in infants and children.
A child's physical & mental potentials are formed during the period from conception to 3years of age of which rapid development takes place in the first 18months. So the nutritional status of women during pregnancy and lactation and of young children is of paramount importance for later development.
Likewise, the nutritional status of adolescent girls shapes the nutritional status of women during pregnancy and lactation.

- 20% of maternal mortality is directly related to **anaemia.**

The prevalence of Anaemia among women in Karnataka:

Age in years	Mild% 10.0-10.9gm/dl-children, pregnant women 10.0-11.9gm/dl-non-pregnant women	Moderate% 7.0-9.9gm/dl	Severe% < 7.0gm/dl	Any form%
15-24	29.3	16.4	1.7	47.4
25-34	25.4	12.5	2.4	40.2
35-49	25.8	12.2	2.7	40.7

Source : NFHS II, 1999

N.B.: at least one additional case of sub-clinical iron deficiency occurs for each case of iron deficiency anaemia, when prevalence rates are <50%.

- It must be noted that 10% prevalence is the cut off point, triggering the need for public health action.
- Severe Iodine deficiency in utero can cause cretinism in the baby, but milder deficiencies also cause lower levels of mental retardation.
- Amongst the causes of infant deaths which includes respiratory infection (14.7%), diarrhea (7.3%) and umbilical cord infections (5.7%), the major cause is prematurely (48.2%), which has a direct relation to women's health.
- Inadequate food intake during pregnancy is responsible, in 15-20% of women, for inadequate weight gain, which in turn increases their vulnerability to infection; and increased maternal and infant mortality as well as morbidity.
- Inadequate weight gain during pregnancy results in low birthweight babies, which in turn results in lower IQ by an average of 5 points below that for babies within the normal range of birthweight.

Post-Menopausal problems

Age-related and hormone related problems in women aged around 45 years or above, range from bleeding / prolapse / Uro-genital problems /cancer / Cardiovascular risk / Alzhimers / depression / etc.

Also included is Osteoporosis, leading to fractures and resulting problems like life long immobility following hip fractures for instance. It is silent and is caused by trivial injuries and even minor physical efforts like coughing, sneezing, lifting buckets etc but it is preventable
Bone Mineral Density test or Densitometry is a scan which provides a quick, painless and accurate measurement of bone density, but is accessible by very few.

Tuberculosis:

TB kills more women annually than all causes of maternal mortality combined. It is the leading cause of healthy years lost among women of reproductive age group [8.7 Million DALYs lost 2.5 Million (STD) 3.6 Million (HIV)]. This loss added to the cost of treatment, perpetuates poverty.
And now, HIV and drug resistance is increasing the burden of TB especially in productive years.
Although the prevalence of pulmonary tuberculosis is lower in women, the progression from infection to disease is higher because of the delay in access to medical care. This is due to underlying problems of ill health, malnutrition, repeated childbirth; burden of work & childcare; fear & stigma etc.
Children are more likely to be infected if their mother has TB than if their father has TB
Thus, not only does TB affect women more, women with TB have a greater negative impact on society.

RTI / STI

Three types of RTI's need to be addressed appropriately.

- Sexually transmitted diseases, for example, Gonorrhea, Syphilis, Trichomonas Chlamydia, HIV/AIDS.
- Endogenous, due to overgrowth of existing bacteria, for example, Candidiasis during pregnancy.
- Infections caused by instrumentation, for example, following a pelvic examination, septic abortion, etc.

RTI's can cause pain, dysmenorrhea, discharge, infertility, ectopic pregnancy following pelvic inflammatory diseases, etc. A large percentage of women are asymptomatic and therefore are unaware of the presence of any infection.
Women are more prone to infections than men because of a larger mucosal surface available for entry of infecting organisms. Young girls are more vulnerable to RTI's specially STD, as are older menopausal women.
Women infected by partners with HIV pass it on to their unborn child.
RTIs/STIs are supposedly dealt with through the RCH program. But the ineffective implementation of this component, biological vulnerability to these diseases, the lack of power to negotiate responsible behavior from their sexual partners and the non-availability of lady medical officers in adequate numbers, all contribute to increasing incidence of these eminently preventable diseases amongst women.

HIV/AIDS:

Incidence & Prevalence:

India has the largest number of people living with HIV/AIDS in the world. Latest reports from NACO estimates the prevalence of HIV/AIDS in India at anywhere between 3.5 to 4 million cases. The numbers per se may not be seen as large compared to other health-related problems. What is alarming is the steady rise in incidence, with estimates that the numbers are doubling every three years.
From the first HIV sero positive individual detected in 1988 in Karnataka the numbers have risen dramatically and is estimated to be upwards of 0.15 million. Six districts viz. Bangalore Urban, Mangalore, Udipi, Dharwad, Bellari and Mandiya contribute to 73.3% of HIV positive cases in this

State. It is also no longer confined to the so-called "high risk behavior" groups. The infection is spreading rapidly to the general population or the so-called "low risk" population of women and youth.

HIV/AIDS control activities, initiated in 1992 is carried out by State AIDS Control & Prevention Society (KSAPS) include Surveillance, Blood Safety, Awareness and targeted interventions programmes and Medical management, care & support of People Living With HIV/AIDS (PLWHAs).

The various factors that impact negatively on the implementation of the programme are:
The vertical mode & therefore a lack of integration with the Department of Health & Family Welfare.
Biological (physiological), gender inequalities, social, cultural and economic factors make women more vulnerable to STDs & HIV/AIDS and have to be factored into the programmes.
Addressing AIDS will be far more difficult in a country like India, where leucorrhea and gonorrhea, which can be prevented and treated, have not yet been successfully addressed.

Gender & HIV/AIDS

Lack of responsible sexual behaviour in men is clearly due to the gender roles. Women have fewer choices and little or no decision-making power, both within the private and public spheres. For many women, questioning the extra-marital sexual behaviour of their husbands, negotiating condom use or asking them to get contraceptive pills, means inviting violence.

- The culture of silence around sexuality in general and women's sexuality in particular implies that women have inadequate knowledge about their body, sex and sexuality, reproductive health, STDs HIV/AIDS etc. infection. This often leads women to underestimate the risk of HIV infection.
- In the absence of clear laws and policies pertaining to the manner in which partner notification is to be ensured, men (also women) may or may not disclose their HIV status to their sexual partners.
- Even if a women is aware of her partner's HIV status, she may not be in position to choose or insist on safer sexual practices.
- Health care services, including counseling care and treatment are often inaccessible to women.
- Studies have found that in cases where the woman's infected status become known first, she is either chased away, beaten up or forced to commit suicide.
- Fear of violence has also interfered with women's ability to take a course of AZT to reduce risks of transmission to the foetus.

Other Gynaecological problems:

Abortions

20% of maternal mortality is due to abortion-related causes. Medical Termination of Pregnancy (MTP) has been legalised under the MTP Act of 1971, under certain conditions, i.e. only prior to 12 weeks; it is not allowed after 20 weeks, unless it is a life-saving measure and is performed after consulting two doctors.

The **spiralling number of abortions(legal and otherwise) and abortion deaths** reflect the increase in the number of inflicted, unwanted pregnancies which women have to bear. Women also have to bear the consequences of the abortion, be it death due to bleeding and sepsis following abortion, or a sense of shame and guilt, specially when it involves young unmarried mothers. The majority of abortions are almost a substitute for family planning, as they are sought by married women, some being multigravida. Some are related to prenatal sex determination & foeticide.

A number of "illegal abortions" are also being conducted by untrained people, using methods that are not medically approved leading to a high incidence of morbidity and mortality.

Infertility
Infertility is a medical as well as major social problem. There is a need to change public opinion and attitudes towards childlessness of women. Even if the problem is structurally or functionally in the male partner, it is the women who is labelled and not treated in society with empathy and acceptance.

Uterine Prolapse
Heavy work at construction sites, walking long distances on steep hills in search of water or fuel, or climbing 2-3 storeys up a narrow staircase with buckets of water. Certain childbirth practices, such as pressing the abdomen during labour to hasten delivery also leads to prolapse of the uterus, especially if this is associated with a poor perineal muscular tone due to frequent pregnancies and malnutrition.

Cancer

Magnitude of cancer problem in Karnataka
Magnitude and patterns of cancer in Karnataka are well documented by both Population Based Cancer Registry and Hospital Based Cancer Registry of Kidwai Memorial Institute of Oncology (KIMIO).

About 35,000 new cancers are estimated to occur in Karnataka. The average annual age adjusted incidence rate of cancer from 1982 -1991 was 113 per 100,000 in males and 138 per 100,000 in females. The higher incidence of cancer in females is due to the greater proportion of cancer of the cervix and breast. PBCR data shows these two sites of cancer constitute over 40 percent of all cancers in women, accounting for over 11,000 cancers in Karnataka in 1994.
It is estimated that by year 2000, there will be 5447 new tobacco related cancer in Karnataka among males & 3507 among females.

Factors leading to this high incidence include changing life-styles; high incidence of risk behavior - both sexual as well as substance abuse; lack of personal and reproductive hygiene etc. Lack of clean water; poverty, gender inequality etc. are other indirect factors.

In terms of prevention of cancer, whether by primary or secondary prevention, over 60 percent of all cancers in males and nearly 40 percent of cancers among females fall into this category.
But, as per the HCR about 85% male patients and 90% of female patients present when the disease has spread beyond the site of origin. It is difficult to give one single reason for this phenomenon.
A combination of factors like lack of awareness, economic conditions, inadequate access to proper diagnostic facilities, fear of the disease and poor knowledge of the outcome of treatment could possibly contribute to the advanced stage of presentation.

Cancer Cervix:
It is estimated that by year 2000, there will be 5503 new cervical cancer cases in Karnataka.

The study conducted between 1980 and 1986 by the Department of Oncology, Kidwai Memorial Institute of Oncology found that, cancer cervix formed 40% of female malignances and 88.47% of all gynecological malignances. About 84% of these women were between the ages of 35 & 64 years; only 0.32% of cases presented for treatment at stage 0 and in the majority (97.1%), cancer had spread beyond the cervix at the time of diagnosis.
Reasons for delay in seeking treatment were: lack of awareness of the symptoms of cervical cancer (57.6%) and inadequate advice by medical personnel to whom they had reported their symptoms (33.7%)

Early Diagnosis of Ca Cervix

Since treatment of pre-invasive cases markedly reduces cervical cancer mortality and prognosis declines considerably as the stage of the disease advances, the primary goal of public health efforts should be to promote early detection through screening programme.

Cytology-based screening in India is not feasible due to the scale on which it is required (and the concomitant level of resources), and the lack of quality control. An ICMR study in 1986 estimated that even with a 12-fold increase in cytology services only 25% of
women at risk could be covered by the year 2000 AD.

But screening by visual inspection of the cervix " downstaging cancer cervix" if used can detect early stage disease in about 50% of cases compared with the current 5%.
A number of women below the age of 35 years have cervical dysplasia, but only a very small proportion will develop a malignancy. Thus, for a cost-effective screening programme, screening should have a high coverage of women above 35 years, and should have a low frequency.

Breast Cancer

It is estimated that by year 2000, there will be 2949 new breast cancer cases in Karnataka, many of them presenting at late stages for treatment.
A study conducted in Bombay points to an increasing incidence of breast cancer among the urban women, especially among the elite due to factors such as increased age at first pregnancy, fewer children, decreased lactation etc. This is in contrast to the incidence of cancer cervix, which is seen more among the rural as well as urban poor due to poor reproductive hygiene; higher incidence of STDs, numerous pregnancies etc. Infection with the Human Papilloma Virus (HPV) is also implicated as a causal factor.

Early detection of these cases can be implemented by awareness about self- examination of the breast by women as well as annual examination by a medical officer. Mammography is also recommended but is not affordable by the majority of women.

Violence against Women

Violence against women covers the whole gamut of domestic violence, sexual violence, sexual harassment, rape and sexual abuse, marital rape, forced prostitution; dowry related violence; abuse of children, neglect of widows and elderly women, etc. It has been recognized as a major public health and women's health problem, and occupational health hazard.

Despite a history of law reforms and increasing visibility around sexual violence, violence against women has continued unabated in India.
A first-ever study in India conducted by the International Centre for Research on Women found that 45% of the women interviewed were victims of domestic violence. These figures are an underestimation according to researchers, as women were not willing to talk about it.
According to a research carried out in 1997-98 by RAHI, a support centre for women survivors of incest, 76% of 600 women interviewed had been sexually abused in childhood or adolescence.
80% of rapes are perpetuated by relatives or men known to the women; 24% of rapes involve young girls, less than 16 years of age.
Domestic Torture constituted 30.4% of the total crimes committed against women in 1996 in 1996, rape formed 12.8% of the total reported crimes against women in India. Humiliation through verbal abuse and forcing women to work like servants are extremely common.

A study conducted by Sakshi, an NGO working on women's issues, in March 1996 revealed that 72% of women respondents had heard or encountered sexual harassment at the workplace.

The number of "missing women per 1,000 men" is an indicator of the increasing violence against women. This according to Census of India 1991 is 73 for the country, 89 IN Bihar, 36 in Kerala, 26 in Tamil Nadu and 40 in Karnataka.

Violence against girls and women is **prevalent among all-social classes and castes in India**, touching women at every stage of life & linked to their low social status within a patriarchal society. Violence has its roots in the way men have been socialised to exert social and economic control over their wives and other females in the household. Control over women's sexuality is an integral component of this process, where men believe they have the right to have sex with their wives regardless of whether or not their wives consented and justified wife beating as appropriate discipline when their wives refused sex. In a discussion be researchers with men in a Tamil Nadu village, the justification for violence was "A cow will not be obedient without beatings".
When couples are unable to produce children, it is the woman who is blamed, ostracized and abused, regardless of which partner is infertile or the cause of infertility.

Violence has a strong bearing on some of the most intractable reproductive health issues - unwanted pregnancies, forced abortion, HIV and other sexually transmitted infections and other complications of pregnancy.
Clearly then, its implications on policies on issues like AIDS prevention, population control and ensuring reproductive health rights are immense.
Gender based violence leads not just to physical injuries, but to psychological problems including depression and suicidal tendency. Mental cruelty by men with low self worth especially against women who perform better than themselves at work, jealousy towards wives are examples of violence.

Alcohol related Violence
Several studies show that that there is a strong **co-relation between substance abuse and domestic violence.** It is also seen that violence during relapse is only during drinking. Failure to address domestic violence issues among substance abusers interferes with treatment effectiveness and contributes to relapse.

Woman's response to violence is limited by the choices available to her.
Women prefer to suffer silently and believe that men are justified in beating them; a way to survive in the marriage and protect her children and herself.

Though women with better education reported less violence, their economic independence does not seam to matter much when it comes to resistance.

The very nature and functioning of the present system of redressal is such that women would not want to approach it for succor till the situation seems to threaten their lives or more importantly, that of their children.
For the majority of women, there is no safety valve at all. Though some pick up courage to register complaints with police, the latter refuse to accept, dubbing them as "domestic problems which ought to be settled within the family itself". They are directed by the police to undergo a medico-legal examination/ report. Even when there are obvious injuries, in the absence of a fracture these are

recorded as only 'simple injuries' in which case minimal action will be taken. This kind of minimalization leads to a lack of clarity regarding the violence suffered as well as of their rights.

In 1989 the Supreme Court of India passed a judgement in which it used the moral character and conduct of a minor victim to reduce the sentence of two policemen who were convicted of gang rape. Expressions describing the minor as "lewd and lascivious"; criticism that she had taken seven days to report the crime; reflected in the judgement.
Despite India's constitutional promise of gender equality, judgements like this demonstrated how gender bias, stereotypes and myths in dealing with the phenomenon of violence against women, impact on judicial decision making.

The need of the hour is changing the irrational prejudices in society and myths and stereotypes that impact on the mechanisms of redressal available. There is a vital need for gender-sensitizing the police, lawyers and judges through an interactive educational forum to enable them to understand violence as women experience it.
Laws pertaining to women like laws related to rape, sexual abuse, sexual harassment, divorce, marital rape, domestic and other violence etc. have to be changed to empower women. This should also include changes in the legal procedures and processes to enable the women to have easy access to justice.

Child sexual abuse
Sexual Abuse is - Being tricked or forced, into any form of penetrative or non-penetrative sexual act.
Child sexual abuse is sexual abuse of a person under 16 years of age.
Sexual Abuse is not confined to 'rape'. Any form of abusive behaviour expressed through language (sexual comments), body exposure and / or body contact that may be accompanied by other forms of abuse falls into this category.

Often the offense starts as an innocuous, affectionate gesture, which is acceptable in the society. Most often the abuser is a person very close to the child whom he / she trusts, loves and respects. Easy accessibility to the child, opportunities to be alone and intimate with the child and a close relationship between the abuser and victim play a major part in the initiation and continuation of child sexual abuse. Disclosure is usually met with disbelief and dismissal.
Sexual gratification is seen as a normal need in males, but not so for females; is associated with a "Macho image"; an aggressiveness that is acceptable. Therefore most sexual acts by men, whether normal or deviant, and whether within legal and ethical boundaries or not is accepted and is forgiven.
These are some reasons why in India, statistically more girl children are abused than boys.
With such emphasis on virtue and virginity in girls in our culture, sexual abuse in any degree is all that more traumatic.
Long term effects include behavioral problems, the victims are maladjusted, prone to extreme feelings of guilt, shame and depression, unable to cope with ordinary everyday situations and relationships even as adults, long after the abuse has stopped.

Female feticide & infanticide
Biologically, 105 boys are born for every 100 girls. In the first year of life, through higher death rates among boys, these figures even out. Logically, there should be 1000 women for 1000 men.
But Indian population statistics reveal a consistent and alarming decline in the population of women and, more importantly, girls right through the century.
In 1991 in Karnataka the sex ratio was 960 females for every 1,000 males.

This decline in female ratio is the result of female foeticide/infanticide, due to deep-rooted gender bias in all sections of our society.
The reason for this is that daughters are perceived as an economic and social burden on the family because of the dowry system, their dependency on males and therefore a lower status of women and of course the son obsession in our patriarchal society. Most women feel that it is better for a female to die in the womb than to be ill-treated later. On the other hand, the son perceived as an asset, a breadwinner, capable of supporting himself and the rest of the family, a person who will continue the family lineage, perform funeral rights and support parents in the old age.
If unchecked, foeticide and infanticide will permanently damage the demographic balance in India. This will lead to an increase in sexual crimes against girls and women.

Prenatal Sex Determination
Prenatal tests like Chorionic villous biopsy, Amniocentesis and Ultrasonography which should be used for detection of abnormalities in the foetus, are widely misused for sex determination by doctors. Ultrasonography, a non-invasive method done during 14-16 weeks of pregnancy, is presently the most sought-after, and has a success rate of 96%.
Moreover, doctors have been promoting female foeticide at the cost of woman's health through life-threatening second trimester abortions.
The use of pre-pregnancy sex selection by X-Y Separation is also increasing.

The Abortion Issue
The subject of selective female abortion is a highly complex issue raising many ethical and moral questions. The justification for liberal abortion laws in India is for health and humanitarian reasons and individual entitlement to an abortion by a women. The government gave licenses to only trained doctors, some hospitals and nursing homes to conduct abortions on four humanitarian grounds under aseptic conditions. It certainly did not give a license to kill at random and by no means on gender bias.

Legal aspects
The first law in India banning infanticide was enacted in 1870 during British rule. The Central government has begun to regulate prenatal diagnostic techniques.
But the nexus between some doctors and private ultrasound clinics that help determine the sex of the foetus have led to a virtual epidemic of female foeticide, even though the real culprits form only a minority amongst the medical fraternity.
Enacting laws regulating the conduct of the medical and paramedical fraternity alone will not check this deep-rooted social evil which originates from gender bias. Awareness about its dangerous consequences will help catalyse the evolution of a broad social movement against foeticide and infanticide.

Adolescent population
There is an increasing adolescent population with specific needs, which are not met by the present health and social structures.
India's adolescents (10-19 years) population is estimated at 21.8%, and married adolescents at 20 per 1000 population. 6% urban and 21% rural woman aged 15 to 19 years married before the age of 15 years.

A majority of adolescent girls have nutritional inadequacies including under nutrition; stunting; iron deficiency and aneamia; deficiencies of other micro-nutrients like iodine vitamin A; calcium, zinc and folate; and obesity. This results in malnutrition during pregnancy and therefore to maternal and infant mortality and morbidity.

Adolescent fertility is estimated at 17% and contraceptive practice is very low. Unmarried adolescents (who constitute a sizable proportion of abortion seekers), often delay their abortions until dangerously late because of ignorance or fear of social stigmatization.

Sexual behavior patterns which set in during adolescence can lead to sexual and reproductive health problems; RTIs & STIs; HIV/AIDS; the majority of new infections occuring in the age group of 14-24years.

Other issues related to adolescents are sexual abuse, prostitution, street children, violence, suicide and substance abuse. It has been found that in the six major cities of India, 15% of prostitutes are below 15 years and 24% between 16-18 years of age.

Adolescents are capable of responsible behaviour and can take the right decisions if empowered with information and the freedom to do so.

Empowerment

The management and monitoring of the basic health services that a community is entitled to by the community itself would go a long way to ensuring availability, accessibility and quality. The community should be capable of determining their basic health needs, evaluating the local health situation and the services that exist and improving upon them. In other words, to ensure that the peoples health is the people's hands.

Empowerment of the community, especially women, adolescents, the poor and the marginalized to make informed choices in issues relating to their health, amongst other important decision-making issues is the single most important factor that needs to be addressed if the health status of the community has to improve.

Empowerment will enable them to demand and get the services they are entitled to. A strong and active Panchayat will be able to help achieve this empowerment.

Health education

While the provision of primary health care services (like immunisation; control of diarrhoeal diseases, acute respiratory infections, malaria, tuberculosis; and provision of antenatal and postnatal care) are important in the short run, interventions that focus on the underlying causes of ill-health are much more significant in the long-term. Continued emphasis on the curative approach had led to the neglect of the preventive, promotive and public health aspects of health care.

Health Education will form part of the empowerment process and therefore will have to be addressed as a long-term, separate, planned activity.

Recommendations:

Recommendations to tackle gender inequality:

A department to implement "Genderization of Health" headed by an Additional Director should be set up/ identified to ensure the priority and importance that this program warrants. Needless to say the head should have a thorough understanding of gender issues. This department can implement the following recommendations and also co-ordinate inter- sectoral participation.

1. All Health -care personnel should be sensitized on issues relating to gender inequalities. The curriculum for Medical Education and for training programs for health care personnel should include gender perspectives.

2. Gender disaggregated data should be collected and gender sensitive indicators to evaluate gender equity should be integrated in all plans & programs. Examples of gender disaggregated data would include birth and death details, admissions & attendance at schools, hospital in-patient & out-patient records, immunization details, salary patterns for the same jobs and so on.
3. This department should support research on women's health needs.

Inter-Sectoral participation

1. Government departments and programmes:

- Gender sensitization of all government functionaries of all departments should be ensured, and institutionalized within government training systems at the entry and in-service levels.
- Women's issues and perspectives must be part of every sectoral plan/programme and not be limited only to the department of women and child development.
- Every department should prepare a women focused action plan. Gender analysis and gender audit of all plans, programs and policies both before and after should be made compulsory. Institutional capacity should be created within all ministries to ensure implementation and independent mechanisms which include participation of women activists for monitoring this.
- Laws pertaining to Inheritance and ownership of land and other assets need to be changed to give fair and equal rights to the women.
- There should be advocacy for equal wages for men & women.
- The Gender Empowerment Measure (GEM) looks at the level of participation of women in the economic and political life in comparison with men through four indicators- the percentage of women in Parliament, as administrators and managers, as professionals and technical workers and the share of women in national income. The GEM and other gender indicators should be used as the basis for improving interventions and programmes to achieve Gender equity.

Recommendations to improve Nutrition of women and children:

1. Weight gains of less than 4.3kg by 14 weeks of pregnancy approximately doubled the risk of "small for gestational age newborns" as well as incidence of preterm delivery regardless of total weight gain.

Therefore strategies aimed at improving the nutritional status of pregnant women, who are usually seen only after 14 to 16 weeks under RCH now has to look at pre-pregnancy nutritional status and correction of Iron & other micro-nutrients deficiencies.

- The **ICDS / School Health programme should include adolescents especially, girls** and nutritional inadequacies (Height-weight comparisons, Hb levels) identified and corrected with IFA, mid-day meals etc.
- The health worker should educate adolescent girls & women about nutrition and the additional nutritional requirements during puberty, pregnancy & lactation; the quantity and kinds of food that they have to consume during these times; anemia, its cause, iron rich foods and importance of taking IFS despite any side effects that may occour; and emphasize the influence of the mother's nutritional status as a factor influencing the health of their unborn and breast-fed child.
- Periodic checks will have to be kept on the pregnant women's Hb and weight. The reasons for continued low Hb & / or low weight gain should be ascertained and corrected.

Example: Have the women actually consumed the complete course of IFA tablets, and for those who did not complete it and what were the underlying reasons for it.
Have the pregnant women actually consumed the food supplied to them through the RCH / Anganwadi program.

2. Awareness regarding Osteoporosis; the importance of taking food rich in calcium like Ragi, milk products etc.should be given. Pregnant women can be told to get the elders at home for a review and, give them Calcium rich food to prevent life-long problems.

Recommendations for improved STD & HIV/AIDS programmes:

The Department of Health & Family Welfare should be fully involved, with KSAPS as the prime mover and should include the following:

Access to clean menstrual cloth, adequate water, privacy while bathing, toilet facilities, etc. should be ensured.

It is equally important to ensure responsible behaviour by male sexual partners. The strategy must be sensitive to gender factors. The 'men make a difference' campaign, attempting to make men more responsible in the control of the epidemic is an example of this.

Awareness about STDs & HIV/AIDS by ANMs and other health workers for the community. This should include risk reduction, behaviour change and condom promotion as well as efforts to minimize stigmatization.

Early diagnosis, treatment and counselling of STDs patients and their sexual partners.

Early diagnosis and treatment of TB patients. For the tuberculosis programme to be effective, it should address these gender related barriers to TB diagnosis and treatment; Women should be educated about how TB in the mother will affect the children.

Voluntary testing and counselling support.

Early diagnosis and treatment of opportunistic infections in PLHWAs.

Care and support of PLHAs.

Anti-Retroviral Therapy (ART) for pregnant women and newborns for prevention of vertical transmission.

Ensuring blood safety by increasing voluntary donations, rational & optimal blood use and ensuring quality of screening for Transfusion Transmissible Diseases (TTD).

Ensuring bio-safety in health care institutions & safe disposal of hospital wastes.

Availability of laboratory services for diagnosis of STDs even at the PHC level; & diagnosis of HIV at District Hospitals.

Drugs for ART; effective treatment of STDs, Opportunistic infections, TB etc.

Specifically:

1. Improve diagnostic, medical and counselling services for STI & HIV/AIDS for the patient as well as the sexual partner.
2. Train PHC MOs on detection & treatment of STI/RTIs, both syndromic as well as Lab-diagnosis based.
3. Train PHC technicians on laboratory tests that are required to be performed. Ensure that QC is an integral part of the testing.
4. The "Family Health Awareness Week" programmes have been very successful. Explore the possibility of conducting these more often & at regular intervals; strengthen the "pre-programme" awareness component; provide table-top laboratory diagnosis; and adequate supply of drugs on the spot.
5. Another avenue that can be explored is to have a "Medical-care" stall at shanties (market days).
6. Train PHC MOs to ask women leading questions regarding problems related to the reproductive system, make a provisional diagnosis and refer to FRUs if necessary. Most women do not volunteer this information due to lack of awareness, lack of or presence of mild symptoms only which they tend to ignore, shyness in the presence of male MOs, lack of privacy etc.

Recommendations for Cancer control among women:

Health Education, early detection and management of Cancer Breast, Cervix and Oral Cancers by trained health personnel should be taken up as an integrated programme. In addition, women can be taught to conduct self-examination of the breast.

1. Women health personnel (both health workers and lady medical officers) should be trained to perform visual inspection of the cervix and triaging its appearance into normal, abnormal and suspicious of malignancy; and making appropriate referrals
2. Health education programmes regarding commonly occouring cancers, their aetiological & risk factors, especially tobacco, & alcohol and importance of early diagnosis should be undertaken.

Health education programmes to disseminate information about Cancer Cervix should target both women and men & be a part of a broader public health programme on reproductive health. It should give information regarding the role of early marriage, repeated childbirth, poor hygiene of male partners and repeated infections, unsafe sexual practices, reproductive hygiene and smoking in the etiology of cervical cancer & use of condoms as a preventive measure. It is particularly important that cervical cancer initiatives do not become obsessed with the issue of number of sexual partners or "promiscuity" is not as straightforward as counting the number of partners; it is often a value judgement

3. HE should facilitate safe hygiene practice, promote safe sex practice and also encourage women to demand visual inspection from the trained health workers.
4. Prior to the launching of public health efforts to prevent and downstage cervical cancer, it is critical to ensure the availability and accessibility of therapeutic services- early detection, treatment, referral networks, and palliative care. It's no use empowering women, if diagnosis, referral and treatment are not guaranteed.
5. Early detection programmes should be effected by ensuring the following:

- promote early detection and down-staging through appropriate screening methods.
- Target women 35-64 years of age groups.
- Do not link with other unrelated programmes like RCH as the target age group is different.
- Maintain registry
- Referral & Follow up
- All health personnel should be responsible for and given training for doing visual inspection & procedure to sterilise the gloves and specula. They should be provided with a torch, sufficient specula & gloves, and those performing cytology with slides, a slide box, a glass marking pencil and fixative solution. The screening can be performed at the PHC, Primary Health Unit, and the village school or at the homes of the women.

6. For further investigations samples required (Cervical smear / FNACs, etc) can be drawn at the PHC & sent to District Laboratories for investigations. Surgeries and chemotherapy can be performed at FRUs. Only cases requiring Radiation need referral to specialized centers.
7. Palliative care can ensure that unacceptable, unnecessary suffering can be avoided. Nearly 80-90 per cent of pain can be managed using drugs, which cost less than aspirin. Early stage disease can be successfully treated by either surgery or radiation therapy, but in the advanced stages, only radiation therapy and palliation are useful.
8. The treatment lasts for four to six weeks and will entail travel to one of the metropolitan cities where cancer treatment is available and considerable economic and emotional sufferings.
9. Treatment of early stage cancer is not less expensive (or less technology intensive) than late stage disease; however, it is more effective because of higher rates of survival and cure. Bleeding and foul-smelling discharges which occour in late stages can be avoided.

10. Public-private partnerships in all these areas is essential. Eg. Specialists to augment services of Government doctors; Radiation therapy totally free or at minimal costs by using their facilities at night time or during other lean periods / holidays…
11. Anti- tobacco legislation should be enforced at the earliest. Efforts to ensure social boycott of tobacco is also essential.

Recommendations for improved services for adolescents:

Adolescents need health information and services particularly with regard to nutrition, sexuality and reproduction. There is need to promote reproductive health among adolescents. Right to factual information to maintain good health must be met, because in reality, peers and parents often give misinformation, pass on dangerous beliefs and practices or transmit a dis-empowering mind-set regarding sex and sexuality.

1. Health education activities targeting especially adolescents should receive a considerable boost. It should include apart from other health issues nutrition; sanitation; reproductive system, reproductive rights & responsibilities; population issues; human sexuality, sexual rights & responsibilities; RTI/STI; HIV/AIDS; substance abuse; values & life skills; gender issues; their rights and their responsibilities to themselves, their families as well as to society etc.

This is best provided with the help of trained, teachers, self-help groups & other NGOs as well as the JMHWs & JFHWs, anganwadi teachers, peers etc. and by the use of media.

2. This should be supported by Health services - A lab-diagnosis based treatment & counseling for RTI/STI
3. Alternate, vocational-training based programs could be made available for school dropouts. This will provide access to them to implement adolescence education.
4. Provide access for teenagers to health service delivery points such as PHCs, subcentres and CHCs, ensuring privacy and confidentiality.
5. Strengthen existing facilities and provide safe MTP services to all married/unmarried adolescent girls irrespective of age.
6. Advocate for policy changes at all levels to promote reproductive health services, including contraception to both unmarried and married teenagers.
7. Legislation for reproductive health and sex education in the formal school system.

Recommendations to address Violence against women and girls

Violence against women and girls at societal and household levels to be eliminated through strengthening of institutional capacity, involvement of women, and review of certain existing legal provisions.

1. Health Sector:

- Guidelines for addressing domestic violence should be incorporated into the national health policies.
- Diagnostic and treatment guidelines for domestic violence and emergency room policies and procedures for dealing with abuse victims should be developed.
- Privacy is essential when interviewing clients about domestic violence and this should be ensured.
- Health personnel should be trained adequately and sensitively to recognize signs of violence, to do early medical check-ups for trauma & give legal advice and counseling.

The health care giver should be trained to actively look for physical injuries, especially patterns of untreated injuries to the face, neck, throat, and breasts.

Other indicators may include inconsistent explanations for injuries and evasive answers, complications in pregnancy, stress related symptoms such as headache, backache, chronic pain gastrointestinal

distress, sleep disorders, eating disorders and fatigue; anxiety, palpitations, hyperventilation, panic attacks; sad, depressed affect; or talk of suicide.
The interviewer should be trained use concrete examples and hypothetical situations when asking about violence rather than vague, conceptual questions.
They must also be familiar with common excuses used. For example- "I only pushed her," " She made me so angry, I didn't know what I was doing." " pressure of work"....

- Substance abuse treatment programs and domestic violence programs should be linked and should include specialized counseling; a relapse prevention plan etc.

All substance abusers should be screened for current and past domestic violence, including childhood physical and sexual abuse.
It is extremely important to convey to the survivor that there is no justification for the battering; that substance abuse is not the real reason for the violence though it is often used as an excuse.
Families have to be counselled to break the cycle of "violence - honey mooning - violence" that the abuser inflicts on the family.

2. Social support:
Mechanisms to help women and children in immediate danger from a batterer, including referral to women's shelters should be available.
For long-term support rehabilitation centres, community linkages, professional services including counseling, legal aid, social security and skill training in income generating skills, a directory of information on available support services are also necessary.
The above services if provided by NGOs should have the active support of the Government.
Mechanisms to make men accept personal responsibility for their behaviour and to change their behaviour should be developed.

3. Legal and judicial issues:

- Police, lawyers and judges should be gender sensitised through workshops and training sessions, which would make them aware of the nature of violence against women, in particular domestic violence, sexual violence (including child sexual abuse) and dowry offences.
- The language employed in official court correspondence, decisions and oral communication when referring to women litigants, witnesses and lawyers should be gender sensitive and not derogatory to women, perpetuating traditional myths about women's roles.
- An advisory body of judges, legal activists and women's rights/human rights organizations should be constituted under the auspices of an autonomous body like the National Judicial Academy to review past judgements to highlight cases of gender bias, as a starting point of gender equality education
- Certain existing legal provisions and laws may need to be reviewed and changed.

Recommendations to reduce the incidence of female foeticide and infanticide.

1. Implementation of the 1994 law:
The Karnataka government was most active in the first two years in implementation of the law.
Thereafter the Appropriate Authority has lost interest and has not even met since 1998.
They have refused to register ultrasound machines because of opposition from ultrasonologists.
Urgent steps should be undertaken to correct the above to implement the law both in letter as well as in spirit.

- To effectively implement the law-

Avoid criminalisation of female infanticide. Do not victimize victims
Otherwise will not be able to reach out to these backward social groups

2. Unless we actively look for female infanticide, we will not find it.

- Gender disaggregated data on children born, as well as percentage of female foetuses aborted should be gathered and studied for trends which can specifically point to particular doctors / hospitals / nursing homes / ultrasonography clinics where female foeticide is being practiced.
- Information should be collected to estimate the incidence as well as to understand some of the causes. Female foeticide is seen almost exclusively amongst Hindus. Religious leaders could be urged to spread awareness about gender issues, violence against women and the evil nature & consequences of female foeticide & infanticide.

3. IMA and Medical fraternity should:

- Disseminate information about Prenatal Diagnostic Techniques Act,1994 among doctors on a war footing.
- Sensitize doctors on the gravity of the situation caused by selective female foeticide.
- Socially boycott known offenders.

4. To change attitudes and behaviour of men:

Engage in IEC activities with men, women, girls and boys, in relation to violence and sexuality so that they value women's roles and responsibilities, engage only in consensual sex between partners, arrive at peaceful settlements of conflict within the family and participate equally with their spouse in decisions and practices relating to contraception and to enable women to exert greater control over their own security and sexuality through gender awareness.

5. To provide timely referral of women to health problems derived from male violence against women.

Train the health staff in gender issues related to violence and sexuality to enable them to raise awareness in the community about such issues, and in diagnosing health problems that derive from violence such that they can effectively refer clients to appropriate services.

Recommendations to deal with Child Sexual Abuse:

The Health Education Programmes should include facts about Child Sexual Abuse, through including the fact that this is a crime punishable by law.

Parents, teachers and health personnel should be trained teach children about body parts that are private to them, how to avoid "bad touch" and to report any misbehaviour at once to them.

They should be trained to recognize signs of abuse which can include psychiatric problems, abnormal or inappropriate sexual behaviour, physical signs like genital / anal injuries / bleeding , staining of underwear, pain while passing urine or stools; sores / ulcers in and around genitals, anus or mouth, STDs etc.

Long term psychological support for sexually abused children of a trained counseller / psychologict / psycho-social worker / psychiatrist should be identified within the Health system.

Legal, social and rehabilitative support for children abused by a close relative should be ensured through W&C department.

Recommendations for Empowerment of women:

1. **Income- generation schemes:**

- Income- generation schemes amongst women strengthen sustainable health programmes as well and should be encouraged. These should be supported by capacity building in managerial, accounting and banking skills for women's groups.
- General information about opportunities, threats and options; technology etc. as well as government schemes for the benefit of rural women related to income generation, welfare, health and education should be made available through local women's groups and panchayat. Information on land rights of women and instruments of local governance should also be available.
- The ground reality around the micro-credit and other development schemes for women should be analysed by gender and development experts.
- Occupational health and safety measures and if possible additional measures such as provision of creates at the work place and staggered work-timings to suit the convenience of women will improve the overall productivity of women workers.

2. Role of Panchayat:

- Panchayat members at all levels especially at the village level should be sensitized on gender issues and oriented with regard to their responsibilities, entitlements and duties to the community.
- More women should be encouraged to become Panchayat members.
- They should be trained in and encouraged to participate in activities and programmes pertaining to empowerment of women, health, RCH, ICDS, school health, literacy etc. They should also ensure involvement of local youth and women's associations.
- The panchayat system should ensure empowerment by first creating awareness and later, through community involvement and active participation of the people, to prepare village health action plans to meet specific local needs.
- It should also ensure inter sectoral coordination with related programs such as sanitation and water supply, Health Promotion, Literacy etc.
- It should ensure genderization of all functionaries, plans and programmes at the grass roots level.
- It should ensure that the community recognizes and acknowledges all facets of women's role in society. Men and women should be aware of the cost of the "unpaid work" done by the average woman at home & outside.
- Measures should be taken to make people aware of services available and the "cost of services" by displaying these details on notice boards in hospitals and by issuing bills for services rendered indicating full or part subsidy given, depending on user fee charged. This should include the detailed list of free services, drugs etc. available.

3. Empowerment training:

Empowerment training of women, women's groups and Panchayat women members should be implemented. Apart from information on Health, gender issues, available services etc. it should include components of skills building, enhancement of self esteem, life skills, communication skills and their rights and responsibilities.

A pilot training programme for women's empowerment was tested in Bangalore rural, Bidar, Bellary, Chamrajnagar and Koppal in 1999-2000. This GOI supported programme provided training kits and manuals (which were translated into Kannada). Mahila Samakhya and NGOs were involved in its implementation. This should be evaluated, improved upon and implemented in all districts, especially Northern districts with poor HDI.

4. Health Education:

Health Education for the community, especially women, adolescents, the poor and the marginalized will form part of the empowerment process to help them make informed choices in issues relating to their health. It will have to be addressed as a long-term, separate, planned activity.
Aggressive health education programmes should be integrated with health and medical care programmes, with emphasis on:
Environmental health
Personal hygiene
Nutrition education
Healthy habits.

Section on Underdevelopment and Health

THE UNTOLD STORY: HOW THE HEALTH CARE SYSTEMS IN DEVELOPING COUNTRIES CONTRIBUTE TO MATERNAL MORTALITY

T. K. Sundari

This article attempts to put together evidence from maternal mortality studies in developing countries of how an inadequate health care system characterized by misplaced priorities contributes to high maternal mortality rates. Inaccessibility of essential health information to the women most affected, and the physical as well as economic and sociocultural distance separating health services from the vast majority of women, are only part of the problem. Even when the woman reaches a health facility, there are a number of obstacles to her receiving adequate and appropriate care. These are a result of failures in the health services delivery system: the lack of minimal life-saving equipment at the first referral level; the lack of equipment, personnel, and know-how even in referral hospitals; and worst of all, faulty patient management. Prevention of maternal deaths requires fundamental changes not only in resource allocation, but in the very structures of health services delivery. These will have to be fought for as part of a wider struggle for equity and social justice.

The high maternal mortality rates in most of the developing countries, despite advances in health care, have prompted several studies analyzing the main causes of maternal death and groups at risk, so that medical care can be appropriately directed. However, the role of the health services system itself, both in preventing a woman with a complication in pregnancy or delivery from seeking medical help and in providing a woman who reaches a medical facility with appropriate care, has rarely been looked into. Of the several links in the chain of events that culminate in a maternal death, the role of an inadequate health care system characterized by misplaced priorities seems to be vital. This article attempts to put together evidence to this effect, using data from maternal mortality studies in several developing countries.

It is common practice for hospital-based studies on maternal mortality to look into "avoidable factors": factors that, if avoided, could have prevented the maternal death. In a number of cases, the researchers state explicitly that the avoidability of deaths was evaluated by standards realistic under the circumstances prevailing in that country at that time. The discussions in this article are based on such accounts.

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"PATIENT FACTORS," OR INACCESSIBLE HEALTH SERVICES?

One of the standard categories into which avoidable factors are classified is what are known as "patient factors." Patient factors, as the name suggests, are deemed faulty action on the part of the patient, for which the health care system is not responsible and about which it is helpless to do anything. Table 1 gives an overview of the proportion of maternal deaths attributed to various patient factors in different studies (1–8).

Table 1

Maternal deaths with "patient factor" as an avoidable factor in selected developing countries

Country: hospital/region (reference no.)	Factor	No. of all maternal deaths (%)	Years
Malaysia: all government health facilities in Krian district (1)	Refusal to go to hospital	95 (10%)	1978–1981
	Handled by traditional birth attendant and relatives; delayed medical aid	182 (20%)	
	Handled by traditional birth attendant alone; no medical aid	164 (18%)	
Vietnam: 22 institutions (2)	Patient not presented	22 (17%)	1984–1985
	Patient noncompliance	13 (10%)	
Pakistan: Civil Hospital, Karachi (3)	Patient's or relations' attitude	85 (67%)	1979–1983
	Deficient management by traditional birth attendants	11 (9%)	
Malawi: Kamuzu Central Hospital, Lilongwe (4)	Patient delay	29 (48%)	1985
Tanzania: Muhimbili Medical Center, Dar-es-Salaam (5)	Delay in arrival	11 (7%)	1983
	Interference with pregnancy	2 (1%)	
India: 41 teaching institutions (6)	Delay by patient or relatives	2,109 (45%)	1978–1981
India: Anantapur district (7)	Lack of early and adequate antenatal care	18 (8%)	1984–1985
	Termination of pregnancy by unqualified personnel	18 (8%)	
Zimbabwe: Harare Maternity Hospital, Harare (8)	Late presentation	8 (16%)	1983
	Refusal of treatment	2 (4%)	
	Unbooked	5 (10%)	

Delayed Arrival or Nonarrival at a Health Facility

Of the various patient factors identified in studies, patients' nonarrival and delayed arrival at a medical facility feature prominently. It is also mentioned in some cases that the patient's and her relatives' attitudes were incorrect, leading to a preference to deliver at home with the help of relatives and/or traditional birth attendants, rather than go to a hospital or health center. Instances of the patient's refusal of treatment are also mentioned. (Delays due to distance and transportation problems are discussed later.)

There may be a number of reasons why women do not seek medical care during pregnancy and delivery. The first of these is probably a lack of awareness of the seriousness of the problem. In Anantapur, India, when family members of women who died were asked if they were aware of the seriousness of the problem, more than one-fifth indicated that they did not comprehend the seriousness of the patient's condition. Of those who knew about the seriousness, the great majority took steps to call a health worker/doctor or to move the patient to a hospital (7). Studies of maternal deaths in the Tangail and Jamalpur districts of Bangladesh indicate that women who developed complications during pregnancy more often received medical help prior to death than women who developed complications during labor and delivery or post partum (9, 10). These studies indicate that the seriousness of complications encountered during pregnancy, and of specific complications such as toxemia that lead to convulsions, is probably more apparent than the seriousness of prolonged labor or postpartum sepsis. This illustrates the failure of the health care system to reach out to the population with important health messages. If women knew how to identify danger signals that call for immediate medical attention, a large majority of them would certainly attempt to reach a health facility.

Poorer and higher parity women remain uncovered by medical services, whereas relatively well-off and lower parity women who are not at any special risk benefit the most (11). Poorer women and women with large families may find it difficult to get away from work at home and on the farms, often at the cost of their lives. In Zaire, for example, 13 of 20 maternal deaths occurred during the first five months of planting and harvest, seasons when the need for women's work in the field can make women reluctant to go to the hospital (12). Lack of available money is, of course, a major deterrent to seeking medical help. That economic factors are an important intervening variable in access to health care is evident from a study in Oran, Algeria, between 1971 and 1980 (13). The maternal mortality rate plunged from 157/100,000 live births in 1971–1975 to 91/100,000 in 1976–1980. One of the reasons for this decline was that after 1974–1975, when fees for medical services were waived in public hospitals, the number of unassisted home deliveries was greatly reduced.

There may be a number of other reasons why women prefer home delivery assisted by a traditional birth attendant or relatives. These include the unfamiliar setting at the health facility where the woman would be attended to by strangers, in the absence of her family and friends and the physical and moral support they offer; the possibility of being attended to by male doctors, unacceptable in some cultures; the nontolerance by hospital staff of cultural practices related to childbirth, such as consumption of special foods and practice of certain rituals; the total lack of sympathy and understanding on the part of

health personnel; and not least, the belief that childbirth does not need medical interference. All of these reasons are valid and cannot be ignored or disclaimed.

Failure to Seek Legal Abortion, or Interference with Pregnancy

Another patient factor often mentioned is the failure to seek a legal abortion, or interference with pregnancy. A detailed discussion of the complex issues surrounding why women do not seek legal abortions, or why they interfere with their pregnancies instead of preventing a pregnancy, is beyond the scope of this article. Some of the underlying reasons may be similar to those that explain why women do not seek medical help during childbirth: not knowing that abortions can be legally obtained; lack of information about where such services are available; and lack of resources. There are, however, many essential differences arising from laws that severely restrict abortions in several countries, and the social, cultural, and religious pressures against seeking an abortion where it may be available. In addition, the degree of privacy afforded by a traditional abortionist may be a factor. The least that can be said is that "failure to seek a legal abortion" cannot be classified neatly as a patient factor for which the woman alone is responsible.

Whatever the reasons for a woman's not going to a medical facility for pregnancy-related problems, the consequences are serious enough to warrant corrective action. To give an example from Kenya, several women who died of maternal causes in the Kenyatta National Hospital between 1972 and 1978 arrived in a poor condition after futile management had been attempted at home for many days (14). This was especially true of women who had illegal abortions. Most of those who died of puerperal sepsis had delivered at home. One patient who had delivered at home with the assistance of a midwife had been treated for nearly a week before she was admitted to the hospital. In Togo, again, women referred to the Centre Hôpitalière Universitaire de Lome during 1977 included many with uterine rupture that had occurred several days earlier at home and had not been detected (15).

Nonuse of Antenatal Care

The next most important patient factor mentioned in studies is the nonuse of antenatal care by pregnant women. This is disturbing given the overwhelming evidence that the lack of antenatal care increases the risk of maternal death.

According to the famous Zaria maternity survey that monitored 22,725 deliveries in Ahmado Bello University Hospital in Nigeria, antenatal care was associated with a reduction in maternal mortality in all age–parity groups (16). In American University of Beirut Medical Centre, Lebanon, the maternal mortality rate for those who had antenatal care was 19/100,000, whereas the rate for those without antenatal care was 197/100,000 (17). In Vietnam, only 34 percent of women who died had attended antenatal clinics, compared with 74 percent in the control group, a statistically significant difference (2).

Early antenatal care is important. In Thailand, mothers who started antenatal care in their first and second trimesters of pregnancy had lower maternal mortality rates than those who did not start antenatal care until the third trimester (18). It is also necessary to

make several antenatal visits spread over the gestation period, so that complications that arise at different stages may be identified and followed up. In Zaire (1981–1983) the maternal mortality rate was 250/100,000 live births for those who had made four or more antenatal visits, 270/100,000 for those who had made between one and three visits, and a very high 3,770/100,000 for those who had no antenatal care at all (12). Similarly, in a study of three hospitals in Senegal, 20 percent of the women who died had no antenatal care, compared with only 2 percent in the control group; and only 40 percent of them had made three or more visits, compared with 75 percent in the control group (19).

The case for early and adequate antenatal care is clear. The obstacles to use of antenatal care need to be investigated. There are some clues to the possible reasons for nonuse in these same studies. A community study from Ethiopia found that just as in the case of institutional delivery, it is the better-off and lower parity women who use antenatal care adequately (11). Use of antenatal care decreased with increasing parity, both in hospitals and in the Maternal and Child Health clinics. The extent of nonattendance among the high-risk women who were currently para 5 to para 8 was 35 percent, and that for women who were now para 8+ was 44 percent. Sixty percent of those who did not receive antenatal care had unwanted pregnancies. Women with unwanted pregnancies who did receive antenatal care tended to visit Maternal and Child Health clinics, which were free of cost.

The failure of higher parity women to seek antenatal care may not only result from lack of time and money. They may feel it is unnecessary to seek antenatal care, especially if their earlier pregnancies were problem-free. In the case of unwanted pregnancies out-of-wedlock, hesitation to seek antenatal care is understandable. As for high parity women with unwanted pregnancies, the very reasons for which the pregnancy was unwanted may also impose constraints in seeking antenatal care. The women may also not feel motivated for self-care.

The deficient quality of antenatal care may be another major deterrent. A study of Primary Health Centers in India found that women attending antenatal screening were not screened either for anemia or for high blood pressure or proteinuria to detect the risk of eclampsia (20). This can be a costly shortcoming, as judged from a study in Mozambique: more than 80 percent of the women who died had attended antenatal clinics, and yet there were deaths from preventable causes such as anemia and eclampsia (21, 22). Poor quality of antenatal screening and the indifferent attitude of health personnel in health facilities can destroy women's faith in the usefulness of antenatal care. Dare we blame the women if they decide that it is not worth expending their scarce resources on what may be a futile exercise?

Transportation Problems

In many instances, the late arrival of a patient at a hospital, usually classified as a patient factor, is the result of lack of transportation methods. Poor roads, lack of ambulances or other means of transportation to health facilities, and inadequate means of transporting emergency cases from peripheral to referral hospitals make the essential difference between life and death in most developing countries. In a heart-rending and extreme example from a Tanzanian study, a rural woman had to walk 70 kilometers after the onset of labor to reach a hospital, only to collapse on arrival (23).

Late arrivals and referrals account for a disproportionately large number of maternal deaths in hospitals. The following examples illustrate the magnitude of the problem:

• In Centre Hôpitalière Universitaire de Cocody, Abidjan, Ivory Coast, in 1986, the maternal mortality rate was 2,000/100,000 deliveries for those who had been transferred from within the urban zone, 3,000/100,000 for those who had been transferred from the suburban area, and 6,000/100,000 for those who had been transferred from rural areas (24).

• In the Maternity Hospital, Katmandu, Nepal, 40 percent of the women who died arrived in a very poor condition; 17 percent were unconscious. Forty-five of the 81 deaths (56 percent) occurred within the first day, 38 of them within the first eight hours (25).

• In an Aden Hospital, 73 percent of deaths were of women from rural areas who had to travel a long way. Ten percent of the women who died were dead on arrival, and another 15 percent died within an hour of arrival (26).

• In Zaire, all but two (90 percent) of the women who died were admitted in a critical condition. The most common complication was prolonged labor (greater than 18 hours) due to feto-pelvic disproportion or malpresentation. Sixteen of the 20 women who died had been in labor for more than 18 hours, and nine of these had been in labor for 48 hours. The risk of death was more than 400 times greater for those who had been in labor for more than 48 hours than for those who had labored 12 hours or less. Prolonged labor resulted in a ruptured uterus in 14 cases, which increased the risk of death more than 100-fold (12).

• In Togo, women referred to Centre Hôpitalière Universitaire de Lome during 1977 included cases of uterine rupture that had occurred several days earlier (15).

• In a study of 48 hospitals throughout Tanzania in 1986, 63 percent of the 247 women who died had to travel more than 10 kilometers to the hospital where they eventually died. Of these, 37 percent lived more than 30 kilometers away (27).

• In Krian district, Malaysia, 73 deaths (8 percent) were due to poor transportation methods, and a further seven deaths occurred en route from one hospital to another (1).

When the hospital is far away, not only the distance but also the mode of transport becomes an important determinant of how soon medical help becomes available and, consequently, of survival chances. In Anantapur, India (1984–1985), 41 percent of all maternal deaths occurred at home, and 9 percent en route to a hospital. Of 140 women who were taken to hospital in a serious condition, 96 (69 percent) were transported by public bus, 27 (19 percent) by bullock carts, five (3 percent) by manually drawn rickshaws, and only 12 (9 percent) by motor-driven vehicle or by ambulance. Twenty-four women died on the way to hospital, and another 54 died immediately on arrival (7).

These problems are accentuated when the cause of death is a difficult-to-anticipate complication such as postpartum hemorrhage. In Gambia, where an extremely high maternal mortality rate has been recorded (2,360/100,000 live births), 11 of a total of 15 deaths occurred within four hours after deliver and were associated with hemorrhage or sudden collapse; there were no resuscitation facilities at the nearest dispensary, and the government hospital at Banjul was several hours' journey away, including a ferry crossing of the river Gambia (28).

Weather conditions may also affect the possibility for rapid transportation to hospita A study covering three hospitals in Senegal found that maternal deaths from hemorrha and uterine rupture occurred 1.7 times and 3.5 times more frequently in the four w months between July and October, and suggested that this is probably because of th way rain paralyzes transportation on mud roads and foot paths through which patien have to be transported (19).

All of the patient factors discussed above are a consequence not only of geograph inaccessibility but of the social, cultural, and economic inaccessibility of health service to pregnant women. Could we not consider attributing responsibility for these factors t the patient a case of "victim blaming"?

FAILURES IN THE HEALTH SERVICES DELIVERY SYSTEM

When other obstacles are overcome and women with a complication in pregnancy c childbirth finally reach a health facility, there may be yet other problems that jeopardiz their chances of survival. Personnel and equipment are scarce, and health facilities ar often unable to cope even with the small proportion of affected women who arrive. Th quality of care is far from satisfactory, and may be summed up as "doing too little, to late." Table 2 shows the proportion of maternal deaths attributed to various "healt service factors" in different studies (2, 6, 8, 29, 30).

Shortage of Trained Personnel

Many countries have a shortage of trained personnel not only at the specialist level but all down the ladder to the midwife. An extreme example is that of Gabon, wher there is a shortage of trained obstetricians-gynecologists: six of the nine provinces o Gabon do not have the services of a specialist obstetrician. In addition, health center and even provincial hospitals do not have 24-hour services (31).

Even where the situation is not quite so bad, understaffing of health facilities is a common problem. In Malawi, at Kamuzu Central Hospital, Lilongwe, medical staf were at times required to be at the Central Hospital and the Old Wind Maternity three kilometers away at the same time, and this alone had contributed to maternal death in some cases (4).

Another problem is that staff have inadequate or inappropriate training and canno cope with obstetrical emergencies. Cameroon is a unique case in point. A hospital study in Yaounde found that the incidence of deaths from ruptured uterus was high not only because of the poor standards of midwives in rural hospitals, but because specialists in referral hospitals were trained abroad and could not handle cases of uterine rupture (32).

Health personnel interviewed in a 48-hospital study in Tanzania stated that, in their opinion, the following were among factors contributing to high maternal mortality (27)

- Scarcity of medical and paramedical personnel, especially in rural areas;
- Poor on-the-job training of health staff at all levels;
- Low salaries, poor working conditions, etc., for health workers, leading to lack of motivation.

Table 2

Maternal deaths with "poor patient management in hospital" as an avoidable factor, selected developing countries

Country: hospital/region (reference no.)	Factors	No. of all maternal deaths (%)	Years
Vietnam: 22 institutions (2)	Delay in diagnosis	68 (53%)	1984–1985
	Wrong diagnosis	28 (22%)	
	Delay in treatment	80 (63%)	
	Wrong treatment	47 (37%)	
	Delay in referral	77 (60%)	
	Inappropriate referral	1 (8%)	
Malawi: Health centers and referral hospitals in Central Region (29)	Medical staff factors	30 (28%)	1977
	Nursing staff factors (includes failure to diagnose, failure to initiate appropriate treatment, delay in referral)	26 (24%)	
Zimbabwe: Harare Maternity Hospital, Harare (8)	Failure to diagnose/delay in diagnosis	4 (8%)	1983
	Failure to operate/ delay in operation	5 (10%)	
	Failure to give appropriate treatment	2 (4%)	
	Poor operative technique	2 (4%)	
	Overtransfusion	2 (4%)	
	Anesthetic problem	1 (2%)	
South Africa: 267 hospitals throughout the country (30)	Delay in diagnosis	11 (1%)	1980–1982
	Delay in consultation or transfer	25 (3%)	
	Judgment errors in diagnosis	11 (1%)	
	Treatment given "too little, too late"	87 (11%)	
	Surgical and anesthetic problems	24 (3%)	
India: 41 teaching institutions (6)	Defective obstetric care	1,525 (32%)	1978–1981

The unsatisfactory working conditions of lower-level health workers often tend to be overlooked, but may be a key cause of the scarcity of health personnel so vital to the improvement of coverage of maternal health services.

Lack of Equipment and Facilities

The absence of a blood bank or of facilities for transfusion can be one of the most catastrophic inadequacies in a health facility, and yet is one of the most frequently encountered. A patient with hemorrhage may not survive to reach the referral hospital.

In Gabon, a study from Centre Hôpitalière de Libreville mentions that patients suffering from hemorrhage often were kept waiting until a donor with a matching blood group was found, before operative intervention (31). In some studies showing a high incidence of deaths from hemorrhage, absence of a blood bank was often a contributing factor. For example in Vietnam, where 48 percent of maternal deaths in selected hospitals during 1984–1985 were from hemorrhage, lack of blood led to deaths in 46 cases (36 percent) (2). In Kenyatta National Hospital, Kenya, no blood was available for a patient admitted in a highly anemic condition due to postpartum hemorrhage, until she died a day later (33).

Lack of other facilities and equipment is mentioned in many other studies. For example, the study of L'hôpital Arsride le Dantec, L'hôpital Principal, and Centre Abbas Ndao in Senegal (1986–1987) found that 70 percent of the 152 maternal deaths were attributable to lack of equipment and facilities (19).

In the hospital at Libreville, Gabon, mentioned above (31), there was overcrowding, with a bed occupancy rate of 130 percent. Supplies of drugs were inadequate, and treatment was delayed until the patient's family bought the drugs from a pharmacy. There were even inordinate delays in transferring the patient to the operative block. In Vietnam, lack of drugs was responsible for 26 deaths (20 percent), and lack of other equipment for 14 deaths (11 percent) (2).

The study of maternal deaths in Kenyatta National Hospital also mentions overcrowding; patients often had to share beds and mattresses, leaving them vulnerable to cross-infection within the hospital. There was not enough clean linen, and even basic equipment such as gloves and antiseptic solution fell short of requirement (33). The lack of basic equipment in conjunction with overcrowding and the scarcity of trained personnel has led to an increase in in-hospital sepsis rates. Sepsis deaths increased from 8 percent of maternal deaths in 1953–1960 to 17 percent in 1961–1971, and stood at 12 percent in 1975–1982 in a hospital study from Durban, South Africa; during this period the maternal mortality rates also rose (34, 35). The reasons for this increase were overcrowding and nonadherence to aseptic and antiseptic principles when doing vaginal examinations, among other things. In Sudan, deaths from puerperal sepsis in the Khartoum Teaching Hospital, Khartoum, increased from 10 percent of all maternal deaths in 1968–1972 to as high as 32 percent in 1978–1982 (36). And in Venezuela, a study in Concepción Palacios maternity hospital, Caracas, covering the period 1939–1974, found that while the maternal mortality rate declined from 196/100,000 live births in 1939–1963 to 125/100,000 in 1964–1972, it subsequently rose to 144/100,000, owing to an alarming increase in post–cesarian section and puerperal sepsis deaths during the last ten years of the study (37).

Lack of equipment is a more acute problem in most peripheral hospitals; the Kenyan study found that of 92 women referred to Kenyatta National Hospital from peripheral hospitals, in 43 cases the anesthetist or the medical officer-in-charge was not available. In 19 of these cases the hospital had no facility for operative delivery, in 21 no blood was available, and in nine cases the hospital had no water or electricity. An added problem was that the hospital admitted high-risk patients when it had no facilities to tackle the problem, or had diagnosed the problem too late, delaying referral (

Poor Patient Management

Inappropriate action by health staff in treating patients has been identified in several studies as a factor contributing to maternal deaths.

Delay in diagnosis and treatment and inadequate treatment are often responsible for maternal deaths. There seem to be inordinate delays in initiating treatment even when the patient's condition is critical, for reasons quite apart from lack of equipment and facilities. Crucial decisions are delayed, and not infrequently, wrong decisions are made. Standard procedures for patient management are often absent, which makes it difficult for nursing staff and junior doctors to take appropriate action in emergency cases. Also, decision-making and initiation of sophisticated procedures in hospital settings are frequently concentrated in a small number of senior doctors and specialists, while other members of staff are restricted to carrying out instructions.

A study of Kenyatta National Hospital illustrates some cases of poor patient management. Lack of proper investigations of the etiological causes of infection led to an inappropriate choice of drugs and nonresponse of the microorganism to therapy. Decisions for operative interventions were at times taken too late, and the operations were entrusted to junior doctors. In one instance, a woman admitted for sepsis following abortion had to undergo one colpotomy and two laparotomies within a space of 10 days because the pelvic abscess was not properly drained in the first two procedures. Another instance of patient mismanagement in the same hospital was of two women with ruptured ectopic pregnancies who virtually lost their entire blood volume before they received laparotomy because cross-matching of blood for transfusion was inordinately delayed. Both women died following laparotomy (33).

In another study from the maternity and children's hospital in Saudi Arabia (1978–1980), mismatched blood transfusions were a factor in two of 29 deaths, one from hemorrhage and one from septic abortion (38). Delays in decision-making by the health personnel occurred in two instances: in a case of uncontrollable hemorrhage during cesarean section and in a patient with antepartum hemorrhage, in which case there was delay in deciding about definitive surgery. In another instance the avoidable factor was clinical, namely, combining major surgery with cesarean section in a peripheral hospital with limited facilities. Delay in decision-making and failure to initiate prompt intensive care were responsible for several first-hour deaths in R.M.C. Hospital, Imphal, India (39). In five cases, immediate surgical interventions by experienced obstetricians could have prevented death.

A confidential inquiry into all maternal deaths in Jamaica between 1981 and 1983 gives a very useful analysis of avoidable patient management factors with respect to three major causes of maternal death: hemorrhage, sepsis, and eclampsia (40).

According to this inquiry, some of the factors contributing to deaths from hemorrhage were:

- Delays in midwives' appreciating the extent of blood loss and contacting a doctor;
- Delays in starting and inadequate resuscitative procedures for blood loss, partly due to unavailability of blood or plasma in many of the smaller hospitals;

- Delays in manual removal of the placenta in patients with retained placenta, or attempting this procedure without the necessary preliminary establishment of a reliable intravenous infusion;
- Inadequate use of ergometrine.

In the case of deaths from sepsis the avoidable factors were:

- Inadequate surveillance of body temperature in women with a prolonged first stage of labor, and post delivery;
- Not giving antibiotics to women with prolonged rupture of the membranes;
- Inadequate bacteriological investigations in women with puerperal pyrexia;
- Reluctance to use aggressive treatment with broad-spectrum antibiotics for women with puerperal pyrexia.

Avoidable in-hospital factors that were responsible for deaths from eclampsia included:

- Absence of relevant information on antenatal surveillance symptoms and signs (e.g., weight gain, blood pressure readings) at the time of admission to hospital;
- Inadequate monitoring of patient's blood pressure and urine, particularly on admission and immediately following delivery;
- Delay by hospital staff in initiating appropriate treatment when signs of preeclamptic toxemia were found or the patient had convulsions, the delay being due to lack of coordination among various levels of staff;
- Lack of a clear-cut clinical-therapeutic strategy for dealing with patients with eclampsia.

Problems related to operative techniques and administration of anesthesia also claim a large number of maternal lives, and routinely appear as a cause of death in most hospital studies of maternal mortality. One of the highest rates for maternal deaths from complications of anesthesia has been reported from Ivory Coast (110 deaths/100,000 live births) (41), and high rates of death associated with cesarean sections have been reported from Egypt (222/100,000 live births) (42) and Malawi (142/100,000 live births) (4).

A good proportion of deaths related to complications of cesarean section and anesthesia may in fact be related to the poor condition of the patient prior to the operation. Surgical procedures are often undertaken on emergency admissions as a last recourse, with the knowledge that survival chances are limited. However, the sharp increase in post–cesarean section sepsis in instances such as in Caracas, mentioned above (38), point to faulty in-hospital procedures. In Cuba, again, cesarean delivery was identified as a risk factor associated with maternal death in a study covering the period 1980–1984 (43). Forty-one of the 54 cases of death from sepsis during that period followed a cesarian section, and 13 deaths from complications of anesthesia were also simultaneously associated with cesarean section. In another example from Sudan, a study of all cesarean sections carried out in the Khartoum hospital between 1978 and 1982 found

that of 24 maternal deaths following cesarean section (of a total of 140 maternal deaths), only six could be attributed to underlying causes (36).

Clearly, the performance of medical systems in saving maternal lives entrusted to them is far from satisfactory. This is unfortunate, considering the difficulties that women must overcome in order to reach a referral facility. They have to leave their families behind, expend a great deal of money in finding a quick means of transportation, and find a suitable person to accompany them. The person accompanying has to find the means and money to stay in a strange town or city during the period of the patient's treatment. And if the patient should die, quite apart from the fact that it would greatly distress her to be away from family and friends in her last hours, transporting the body back home would prove both difficult and expensive.

We hope that the existence of a number of studies looking into avoidable in-hospital factors in maternal deaths demonstrates a commitment to effecting the required changes wherever possible.

CONCLUSIONS

The prevention of maternal deaths requires far-reaching social and economic changes beyond the confines of the health care system. The factors that make the natural processes of pregnancy and childbirth highly risky and even fatal for poorer women are structural; so are the factors that influence the value women place on their personal well-being, and those that influence their ability to seek health care for themselves. The last depends crucially on resources such as time, money, and information that women have at their disposal, and whether they have the authority for decision-making.

However, this does not absolve the health care system of its responsibility to make fundamental changes in both the structure and the delivery of health services. From the discussions in this article, certain areas stand out as priorities for action. These are presented not as policy recommendations to the medical status quo—whose priorities are, more often than not, determined by the interests of those in power and by their own professional interests—but rather as a proposal for action by health activists.

The starting point of an agenda for action would be to call for a drastic reallocation of national resources with a larger share for the health sector, and a substantial allocation within the health budget for the health care of women, of which maternal health care is one component. The health expenditure of a vast majority of countries falls short of 5 percent of gross national product. Less than half of this is allocated to "primary health care" (a term that has come to be used to define all health care below the secondary and referral levels, as opposed to the principle enunciated in the Alma-Ata Declaration). A minuscule amount of this allocation is spent on maternal and child health care, in which child health and family planning get the lion's share of the resources compared with maternal health. And although it is well known that maternal health cannot be improved without improvement of women's health in general, as far as the health care system is concerned women count only as mothers and have no existence prior to or after a pregnancy and delivery. Also, the disproportionately large share of resources allocated to family planning programs (often a euphemism for population control programs), at the cost of other aspects of maternal health care, is in no way be justified.

Appropriate reallocation of resources for women's health care would have to beg with strengthening health services at the community level. Women who are in greate need of health care, and who run the greatest risk of maternal death, have the lea resources to seek medical help. They can only be reached if services are available clo to home, and ideally at their very doorsteps. What is needed is the deployment thousands of community health workers who are also equipped for maternal health car Training traditional birth attendants and local women to provide domiciliary care perhaps one of the best ways to invest resources. However, action in this direction h been disappointing. Far from being one of the cornerstones of the strategy for preventir of maternal mortality and morbidity, it remains a low-priority activity, carried out in sporadic and haphazard manner.

The next step in appropriate resource allocation would be to equip the first referr levels with the necessary supplies, equipment, and personnel. The World Healt Organization guidelines on essential obstetric functions at the first referral level identif eight groups of functions that should be available at a health facility catering to population of 100,000. Among these are surgical functions such as performing cesarea sections, surgical treatment of severe sepsis, and laparotomy for treatment of uterin rupture; anesthetic functions; and blood-replacement functions. This would bring abou an estimated 5 percent reduction in the number of maternal deaths (44).

Shortage of trained personnel is often cited as a major barrier to upgrading firs referral facilities. This is usually the result of the strict hierarchy in the division of labo among health personnel, and inflexible notions held by doctors regarding the ethica propriety of entrusting complicated interventions to lower level staff. The Centre Medical Evangelique's Nyakunde, Aba, and Aru hospitals in the Upper Zaire regio have successfully overcome such barriers. Here, nurse practitioner surgeons deliver al types of labor, normal or complicated. A study of their performance has shown that the outcome of complicated labor in the hands of the nurse practitioner surgeons is com parable to the outcome of such cases in the hands of physicians (45). Training nursing and midwifery staff to deal with complicated deliveries is clearly a viable option but may not be welcome to the medical establishment, which would resent such ar encroachment on its territory.

There have been a number of such creative interventions aimed at better utilization of scarce resources for maternal health care. In Ekedwani hospital, Malawi, for example, an antenatal waiting shelter was opened for "high-risk" women, to deal with the problem of distances and transport. This greatly reduced the maternal mortality rate, obstetric emergencies having become a thing of the past (46).

The second major area for action is improving the quality of care in health facilities. This involves more than ensuring the availability of equipment and supplies and trained personnel; it also entails making the health services more socially accountable. There should be careful record-keeping, and records should be accessible to the public. Every maternal death and every complicated delivery should be carefully scrutinized. Preventing the recurrence of an "avoidable factor" should be a medical priority. Inappropriate organizational and managerial procedures that cause inordinate delays in instituting care must be challenged: it is not unusual for a patient to be kept waiting while paperwork is being completed or because the person authorized for decision-making is not present. More importantly, seeking health care should cease to be the dehumanizing experience

it now is, devoid of respect and consideration or even compassion on the part of health personnel.

The third and perhaps most urgent area for action is to assist and equip those most affected by the problem of high maternal mortality—women (and men) from the most deprived sections of society—to actively participate in demanding the changes outlined above.

The existing state of affairs in the health care system that contributes to high maternal mortality is not the consequence of mere inept planning or poor organizational and managerial capabilities. It is a reflection of the priorities set by an elitist system in which the poor and powerless do not count. We do not expect the demands made in these pages to be handed down from above. They have to be fought for, as part of a much wider struggle for equity and social justice.

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SOWING THE SEEDS OF NEO-IMPERIALISM: THE ROCKEFELLER FOUNDATION'S YELLOW FEVER CAMPAIGN IN MEXICO

Armando Solórzano

The Rockefeller Foundation's campaign against yellow fever in Mexico sought to advance the economic and political interests of U.S. capitalism. The campaign was implemented at a time of strong anti-American sentiments on the part of the Mexican people. With no diplomatic relationships between Mexico and the United States, the Rockefeller Foundation presented its campaign as an international commitment. Thus, Foundation doctors became the most salient U.S. diplomats. At the same time they made sure that the Mexican yellow fever would not spread to the United States through the southern border. The by-products of the campaign went beyond the political arena. Special techniques to combat the vectors allowed the Rockefeller Foundation's brigades to change the anti-American sentiments of the people. When the campaign ended, the Foundation had already set in place the foundation for the modern Mexican health care system. Benefits from the campaign also accrued to President Obregón, who used the campaign to strengthen his position of power. Mexican doctors adopting a pro-American attitude also allied with the Rockefeller Foundation to gain reputation and power within the emerging Mexican State.

The Mexican health care system is clearly an extension of the U.S. model of medicine (1–3). Was this the result of a benevolent flow of medical and technological assistance from the United States, as some authors might claim (4, 5)? Or should the historical process of the formation of the medical system in Mexico alert us to examine the broader influences of foreign medical programs in the social, political, and medical institutions? The overwhelming ideology of philanthropic institutions and the rhetoric of international medical cooperation compel the social analyst to question what is behind altruistic intentions (6). The critical approach represented by the Political Economy of Health maintains that the introduction of medicine in less-developed societies sets in motion very complex interactions affecting the productivity of the local labor force (7–9). Other transformations brought by medicine are perceived in the political balance of a country (10, 11), in the institutions of medical education (12), and in the production of a class-based delivery of health care services (13). The extensive involvement of medical philanthropy in Central and Latin America makes it necessary to analyze the consequences of their public health and medical programs. It is not an exaggeration to

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TOO FAR TO WALK: MATERNAL MORTALITY IN CONTEXT

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Abstract—The Prevention of Maternal Mortality Program is a collaborative effort of Columbia University's Center for Population and Family Health and multidisciplinary teams of researchers from Ghana, Nigeria and Sierra Leone. Program goals include dissemination of information to those concerned with preventing maternal deaths. This review, which presents findings from a broad body of research, is part of that activity.

While there are numerous factors that contribute to maternal mortality, we focus on those that affect the interval between the onset of obstetric complication and its outcome. If prompt, adequate treatment is provided, the outcome will usually be satisfactory; therefore, the outcome is most adversely affected by delayed treatment. We examine research on the factors that: (1) delay the decision to seek care; (2) delay arrival at a health facility; and (3) delay the provision of adequate care.

The literature clearly indicates that while distance and cost are major obstacles in the decision to seek care, the relationships are not simple. There is evidence that people often consider the quality of care more important than cost. These three factors—distance, cost and quality—alone do not give a full understanding of decision-making process. Their salience as obstacles is ultimately defined by illness-related factors, such as severity. Differential use of health services is also shaped by such variables as gender and socioeconomic status.

Patients who make a timely decision to seek care can still experience delay, because the accessibility of health services is an acute problem in the developing world. In rural areas, a woman with an obstetric emergency may find the closest facility equipped only for basic treatments and education, and she may have no way to reach a regional center where resources exist.

Finally, arriving at the facility may not lead to the immediate commencement of treatment. Shortages of qualified staff, essential drugs and supplies, coupled with administrative delays and clinical mismanagement, become documentable contributors to maternal deaths.

Findings from the literature review are discussed in light of their implications for programs. Options for health programs are offered and examples of efforts to reduce maternal deaths are presented, with an emphasis on strategies to mobilize and adapt existing resources.

Key words—maternal mortality, obstetric complication, developing countries, health services utilization

INTRODUCTION

Every year about 500,000 women worldwide die due to complications associated with pregnancy and childbirth [1, p. 1]. Unfortunately, maternal aspects of Maternal Child Health have all too often been relegated to secondary priority within the child survival revolution [2]. However, emerging information and concern with this high rate of maternal mortality precipitated the foundation of the Safe Motherhood Initiative (SMI) and the Prevention of Maternal Mortality Program (PMM) in 1987.

The Safe Motherhood Initiative (SMI) was formally launched at a conference held in Nairobi, Kenya. It calls for concerted action at the local, national and international levels to reduce the high rates of maternal mortality and improve women's health in the developing world [3]. SMI differs from other health initiatives in that it focuses on the well-being of women as an end in itself. The prevention of death of pregnant women is considered to be the key objective, not because death adversely affects children and other family members, but because the women are intrinsically valuable.

Within SMI, there are proposals for a variety of interventions. These include programs aimed at improving the health status of women who become pregnant, at improving women's access to health services during pregnancy and at improving the quality of medical care available to women who experience complications during pregnancy and delivery.

There are several similarities between the problems experienced by health planners and promoters within SMI and those experienced by other health initiatives, including issues of distribution, utilization and quality of services. PMM thought it worthwhile to see what findings from research in related fields might be applicable to the challenges faced by SMI. The PMM Program is a collaborative effort of Columbia University's Center for Population and Family Health (CPFH) and multidisciplinary teams of African researchers in Nigeria, Ghana and Sierra Leone.

Sponsored by the Carnegie Corporation of New York and the John D. and Catherine T. MacArthur Foundation, this partnership seeks to strengthen the capabilities of African institutions in developing, implementing and evaluating preventive programs. Furthermore, an essential component of our program is to disseminate information useful to researchers, program planners and policy makers concerned with preventing maternal deaths. This review is part of that activity.

We conducted a multidisciplinary literature review to gather information that can guide programmatic effort in the prevention of maternal mortality.* In reviewing a broader body of literature than that dealing strictly with maternal mortality, we are viewing maternal mortality as an instance of a generic problem. Our aim in doing so is to derive insights from a broader body of research and experience, notably in the social sciences, that can be applied in SMI. The articles we selected cover the developing world, with an emphasis on Africa.

We are not claiming to consider all possible factors that may contribute to maternal deaths. For example, we are not dealing here with background factors such as nutrition.† The focus of our review is the interval between the onset of an obstetric complication and its outcome. The reason is that even among well-nourished, well-educated women who receive prenatal care, a sizable proportion develop serious complications during delivery. While there is still a lively debate within SMI about the relative importance of various kinds of interventions, there can be no doubt that the interval we have chosen to concentrate on is crucial to reducing maternal deaths [4].

This paper first presents a conceptual framework—the three phases of delay—which identifies obstacles to the provision and utilization of high quality, timely obstetric care. We then present the findings of our literature review as they relate to these three phases of delay. Potential applications of the findings and directions the PMM program has taken are then discussed. The review points to an approach which prioritizes practical, measurable interventions designed to improve the availability and accessibility of services, which should in turn mitigate factors which impede the decision to seek these services.

THE CONCEPTUAL FRAMEWORK: THE THREE PHASES OF DELAY

We know from the clinical literature that about 75% of maternal deaths result from direct obstetric causes, such as hemorrhage, obstructed labor, infection, toxemia and unsafe abortion [5]. We also know from this same literature that a majority of these deaths could have been prevented with timely medical treatment. Delay, therefore, emerges as the pertinent factor contributing to maternal deaths. Hospital-based investigators of maternal mortality have long bemoaned patients' delay in coming for care. However, to blame the patient for the delay would be simplistic. We view delay as having three phases:

Phase I delay

Delay in deciding to seek care on the part of the individual, the family, or both. Examples of factors that shape the decision to seek care include the actors involved in decision-making (individual, spouse, relative, family); the status of women; illness characteristics; distance from the health facility; financial and opportunity costs; previous experience with the health care system; and perceived quality of care.‡

Phase II delay

Delay in reaching an adequate health care facility. Examples include physical accessibility factors, such as distribution of facilities, travel time from home to facility, availability and cost of transportation and condition of roads.

Phase III delay

Delay in receiving adequate care at the facility. Relevant factors include adequacy of the referral system; shortages of supplies, equipment, and trained personnel; and competence of available personnel.

Although some proportion of maternal mortality is a result of all three phases of delay, any one phase can prove fatal. 'Phase' here connotes placement in a temporal order, from the onset of complications to treatment. While there does exist complex interplay between phases, one type of delay is not linked inextricably with another. Anticipating concerns that a universal model such as this loses sight of the specific pathways exhibited in different places, we will simply note that maternal death in areas where distances to health facilities are large and services poor are comparable to maternal deaths in New York City, where a woman may live next door to a high technology hospital but still die because of poverty and its attendant impact on the decision to seek care.

*We produced short abstracts of the studies reviewed, entering them in a computerized database. This database is available to anyone interested in using it, modifying it, or adding to it. Interested persons will need to have PROCITE, the bibliographic software used to enter, edit, and retrieve abstracts. For more information, contact Ana Pagan at the following address: Center for Population and Family Health, Columbia University School of Public Health, 60 Haven Avenue, New York, NY 10032, U.S.A.

†Readers interested in the literature on these background factors are referred to the excellent review by J. Leslie and G. Rao Gupta. *Utilization of Formal Services for Maternal Nutrition and Health Care in the Third World.* International Center for Research on Women, Washington, DC, 1989.

‡Except where otherwise noted, our discussion of the decision to seek care and the utilization of health care services focuses exclusively on modern medical care, since the major complications we are concerned with are not treatable at the traditional health care level. Therefore, when we talk about seeking care, we mean modern medical care.

The model as presented is universal insofar as both of these cases fit the framework.

FINDINGS

Our findings are presented chronologically: prospective patients begin their health-care-seeking process with the decision to seek care, then they try to reach a health facility where they can receive care. Figure 1 is a schematic representation of how the various factors discussed affect the interval between onset of illness (specifically, an obstetric complication) and its outcome.

Phase I Delay: Decision to Seek Care

The factors that affect the decision to seek care are often those discussed as 'barriers' or 'constraints' to the utilization of services in the literature on health care seeking behavior. Numerous researchers have observed that increasing the availability of services (for instance, by building more facilities or expanding health programs) does not always increase the use of services. This finding has stimulated research into factors that might account for the underutilization of services.

Our review indicates that the barriers most

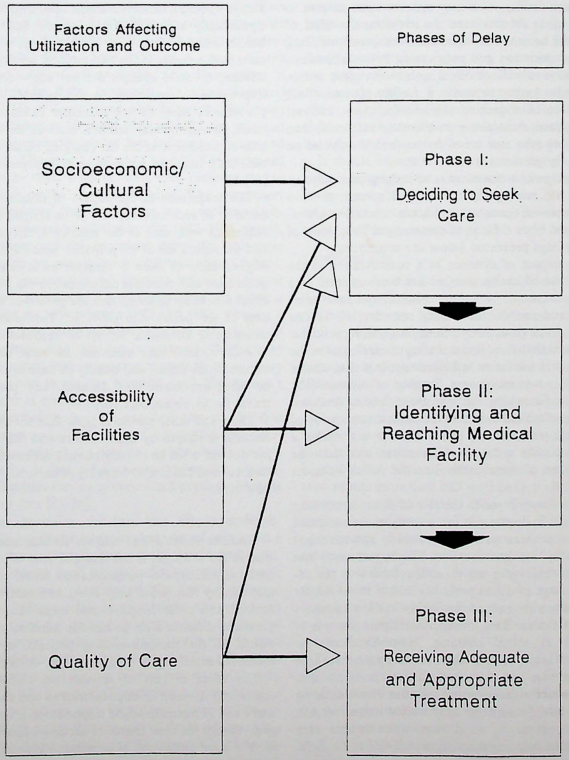

Fig. 1. The three delays model.

commonly studied and discussed are distance, cost, quality of care and sociocultural factors. In what follows, we present findings concerning the influence of each of these factors on the decision to seek care. We also present our assessment of the relationships among these factors and the hierarchy of their influence on the decision to seek care.

Distance

The distance separating potential patients from the nearest health facility has been shown to be an important barrier to seeking health care, particularly in rural areas [6–10]. Distance exerts a dual influence: long distances can be an actual obstacle to reaching a health facility, and they can be a disincentive to even trying to seek care. In addition, the effect of distance becomes stronger when combined with lack of transportation and poor roads. Potential patients who have to walk or ride a mule over rugged terrain will take longer to reach a facility. Distance will therefore be a greater obstacle for them, and act as a greater disincentive to efforts to seek care, than for those who can travel by motorized vehicles on relatively good roads.

Distance as a disincentive to seeking care plays an important role in Phase I delay. However, the two influences—disincentive and actual obstacle—are related and often difficult to disentangle. Thus, some of the findings presented below are conjectural.

The impact of distance as a consideration in the utilization of health services has been assessed in a variety of ways, including community-based interviews and analysis of facility records [11]. In one series of interviews in Oyo State, Nigeria, respondents explained that they had not sought care because the facility was too far or, alternatively, that their choice of facility was made as a function of distance [12].

In studies using records from health facilities, findings often indicate that the highest proportion of users are located close to the facility—e.g. within a radius of five miles or kilometers—and that the proportion of users declines as the radius increases [6, 13, 14].

A third way in which the role of distance has been assessed is by looking at the severity of the condition in which patients arrive at the facility and relating it to how far they had to travel. The hypothesis is that those patients who arrive at the facility in an advanced stage of illness probably had to travel further than those who reached the facility in a less advanced stage of illness. This scenario highlights the role of distance as actual obstacle. However, some researchers extrapolate further, and propose that those patients who had to travel further probably also waited until the illness became serious before deciding to seek care. Presumably they waited longer because distance was acting as a disincentive to seek care earlier, thus delaying their decision [14]. For example, a case-control study of bacterial meningitis among Navajo children in New Mexico revealed that the total distances travelled by cases and controls were similar. However, the mean distance travelled on unpaved roads was 10 miles for cases, compared to 1–4 miles for controls. The author suggests that the distance travelled on unpaved roads acted as a disincentive and delayed the caretakers' decisions to seek care until complications of the initial disease developed [15]. In a Nigerian study, the percentage of individuals seeking treatment within one week of illness onset declined as distance from the treatment facility increased [10].

Some studies indicated that contrary to investigators' expectations, physical proximity does not necessarily increase utilization [16]. As one study in Kenya's Meru District illustrates, road improvements significantly reduced travel distance and time to health centers in the district. However, admission rates and patterns at the two mission hospitals most affected by these changes did not show substantial improvement. According to the author, road improvements alone do not guarantee increased utilization, as institutional barriers, such as the financial cost of treatment at the fee-charging mission hospitals, may limit the advantages of shorter distances [17].

The magnitude of the impact of distance on the decision to seek care appears to be shaped by other factors as well, such as the severity of the condition and the reputation of the provider. Stock's data from Nigeria show an effect of distance on utilization, yet he stresses that there are differences in the size of the effect according to illness and the perceived effectiveness of the health care provider. Tuberculosis, for instance, is an illness for which respondents considered medical care essential. In such cases, the nature of the illness and quality of care appeared to be more important than distance, and people did travel far to obtain care [10].

These and other studies suggest that the impact of distance is shaped by other factors and that reasons for nonuse often lie in institutional accessibility factors, such as the cost and quality of care, to which we now turn.

Cost

Another variable that receives considerable attention in the literature is the financial cost of receiving care, which includes transportation costs, physician and facility fees (when they exist), the cost of medications and other supplies, and opportunity costs. Cost and distance often go hand in hand as considerations in the decision-making process, as longer distances entail higher transportation costs [18].

The effect of cost of services on utilization is commonly assessed through interviews and surveys of users and nonusers in which respondents are asked to give reasons for their choice of actions when they are ill. If a large proportion of respondents give financial constraints as a major reason for not seeking care, or for seeking one form of care rather than another, this

indicates that cost of services was an important factor affecting utilization. Much to our surprise, the literature indicates that compared to other factors, the financial cost of receiving care is often not a major determinant of the decision to seek care [12]. A survey conducted among a sample of 680 Ibo, Yoruba and Hausa people in Nigeria revealed five factors that influenced people's decision to seek traditional or western medical care: Respondents ranked cost and distance fourth and fifth, respectively [19]. Kloos *et al.* reported that in Ethiopia, cost of services was often a less important consideration in utilization than were the quality of services and perceived efficacy of the treatment [20].

We found only a few studies that assessed the effect of changes in the fee structure on utilization levels [21]. Recent data from Nigeria show a drastic decline in hospital births, apparently as a result of the country's deepening economic crisis. Researchers at the Ahmadu Bello University Teaching Hospital (ABUTH) in Zaria found that obstetric admissions declined sharply between 1983 and 1985, the year that the government instituted fees for prenatal care and delivery. Obstetric admissions to ABUTH decreased further in 1988, when patients were required to pay for some of the essential supplies. The researchers note, however, that admissions for complicated obstetric cases increased during the 1983–1988 period, suggesting that the increased price did not deter utilization by women with obstetric complications. Further examination of hospital records indicated that the incidence of maternal deaths in the hospital increased by 56% between 1985 and 1988, whereas it had remained stable between 1983 and 1985. Hospital staff believe that this rise in maternal deaths may be associated with increasing costs that act to delay the decision to use the hospital until the woman's condition is critical [22].

Unfortunately, we did not find any studies that compared actual fees charged by various providers and then related the fees to income levels and to utilization. In fact, a few studies suggest that government facilities may be underutilized precisely because they are free [23, 24].

More generally, the literature simply does not provide systematic evidence that cost of services is a major barrier to seeking care in the developing world. These findings seem to contradict anecdotal reports from developing countries such as those mentioned above. Perhaps other study designs are needed to fully explore the circumstances in which the cost of services poses a major and a definitive barrier to care.

In addition to fees for services, there is evidence in the literature that the cost of medications is often very high [24, 25]. The cost of medicines is most likely to affect compliance with prescribed treatment. However, to the extent that the cost of drugs figures in the decision to seek care, it can be expected to delay or discourage that decision. The financial cost of health services in the form of provider fees and the price of medication are only some of the cost considerations facing individuals in their decision to seek care.

The other important component is the opportunity cost of the time used to seek health services. Time spent getting to, waiting for and receiving health services is time lost from other, more productive activities, such as farming, fetching water and wood for fuel, herding, trading, cooking and so on. As women carry out a large majority of these tasks, the value of their time and the competing demands made on it are important to consider.

In many parts of the developing world, prospective patients, especially women, do not travel alone to a health facility: They are accompanied by other adults and by children who cannot be left at home alone because caretakers are not available. All these additional people swell the cost of transport [27]. Often, family members accompanying patients must incur the costs of staying in a town where the health services are offered. Furthermore, the availability of others to help with household chores, to look after children or to accompany patients to the facility can be a factor in the decision to seek care [13].

It should be stressed that the cost/benefit ratio of using medical services may be viewed very differently in emergency cases [24]. However, we did not find information on factors influencing decision-making under emergency conditions.

Quality of care

Quality of care is an important consideration in the decision to seek care. Our review found that where potential patients have access to more than one facility, their perception of the quality of care offered at these facilities often takes precedence over concerns about distance [28]. Annis found that in the Guatemalan highlands, government health posts seemed to be conveniently located, yet that proximity did not guarantee utilization, probably because the facilities were understaffed and underequipped and thus unable to provide quality care. Detailed on-site inspection of 83% of the operating health posts showed that more than half were understaffed, underequipped, or both. Annis thus stressed that "the current low utilization of Ministry facilities reflects poor quality of services—and certainly not physical access nor mysterious 'cultural barriers' " [16, p. 522].

The role that quality of care plays in the decision to seek care is related to people's own assessment of service delivery, which largely depends on their own experiences with the health system and those of people they know.

The two mechanisms through which quality of care affects the decision to seek care are satisfaction or dissatisfaction with the outcome (e.g. effectiveness of the treatment and remedies prescribed), and satisfaction or dissatisfaction with the service received (e.g. staff attitudes, hospital procedures, availability of supplies, efficiency) [10, 19, 29]. When patients are dissatisfied with services, the reason more often than

not lies in institutional factors, such as the procedures performed, staff attitudes and long waiting times. These factors will act as inhibitors of future utilization, thus affecting the decision to seek care [30].

Furthermore, modern medical facilities have a culture of their own, which often clashes with the culture of potential users [30]. The lack of emotional support and privacy in the hospital setting, compared with the home, and disruption of household responsibilities as a result of hospital confinement are some of the complaints which contribute to women's dissatisfaction with maternity services [23, 31].

Although a focus on cultural barriers to seeking modern obstetrical care may inappropriately de-emphasize institutional inadequacies and economic considerations, several studies have shown that beliefs associated with traditional birth practices act as disincentives to seeking such care. For example, Sargent's ethnographic studies of the Bariba in Benin suggest that where infanticide is still practised, modern medical culture comes into conflict with beliefs, creating barriers. Traditional Bariba belief holds that witches may be identified at birth, and an entire cosmology provides a rationale for infanticide. Although the values and beliefs of that society are in flux, and witches are increasingly 'managed' through less drastic procedures, infanticide persists.

In Pebunko (Benin), extrinsic factors such as distance, time, and lack of support services rendered cosmopolitan support services unavailable to most women. But even where cosmopolitan practitioners were available to attend home deliveries, this alternative was viewed with suspicion for fear that witch detection and management might be obstructed. Moreover, the rural ideal was solitary delivery in which a woman demonstrated her courage and stoicism, enhanced her prestige, and had the flexibility to keep or reject the child [32, p. 206].

While Sargent's most recent and far-reaching material acknowledges the saliency of time, distance, cost and government policy factors, and that "modifications in medical and religious beliefs and practices occur in conjunction with hospital use," [32, p. 23], she maintains that belief is central to the decision-making process [*ibid.*]. Our review suggests that beliefs, as they relate to the etiology of illness and maternal complications, also play some part in the decision whether to seek modern obstetrical care. However, these beliefs play less and less of a role as societies change through urbanization and increasing recognition of the efficacy of modern medical treatment.

In addition to the above examples of what may be seen as general hospital policy, there are those procedures specific to childbirth that women dislike or fear [33]. Women may feel uncomfortable having to expose their genitals in the hospital ward [23], or they may intensely dislike the positions favored by hospitals for delivery [34]. Other specific hospital procedures that inhibit utilization because women may fear them include surgical operations such as cesarean sections [35] and episiotomies [36].

Finally, how the prospective patient expects to be treated by providers and staff at the health care facility is an important dimension of the patient's assessment of the quality of care. If the facility has a reputation for unfriendly staff, rude service providers and humiliating treatment, the prospective patient may delay the decision to seek care until the seriousness of her condition necessitates overcoming all barriers [24, 30, 31, 37, 38].

Leslie and Rao Gupta identify corruption as another important dimension of staff attitudes [39]. Where 'little presents' help to get medicines and supplies, corruption may indeed delay the decision to seek care by increasing patient dissatisfaction and, of course, by swelling the costs of seeking care [24].

We have sketched some of the interactions between distance, cost and quality of services as they appear from our review of the literature on utilization of services. A fuller understanding of the decision to seek care needs to take into account other factors related to the illness itself.

Illness factors

The literature clearly shows that health-care-seeking behavior is strongly influenced by the characteristics of the illness as perceived by individuals. To begin with, prospective health care users must *recognize* that an abnormal condition exists. The perceived *severity* and the perceived *etiology* of the disorder then shape the decision to seek care. The studies we reviewed describe one or more of these illness factors without necessarily drawing conclusions about their role in the health-care-seeking process.

Recognition. Before deciding to seek treatment, people need to recognize that they have a condition requiring specialized attention [40].

A recent survey conducted in six of Senegal's 10 regions indicated that women in these regions lack basic information on signs and symptoms of obstetric complications. One-quarter of the women interviewed could not name a single complication. Only 13 percent recognized fever, and 10 percent prepartum hemorrhage, as important danger signals. Some women even said that fever, dizziness and pallor were signs of a normal pregnancy [41].

Although pregnancy is considered a normal life event among respondents [to a qualitative survey in Jamaica], a childbirth was perceived as potentially dangerous to the majority of the women interviewed. However, most women were familiar with only the common symptomatic complaints of pregnancy, and less than 10% of women could identify any specific risks or danger of pregnancy or birth [31].

Recognition of illness is defined by the patient's view of reality, not by the health professional's medical criteria, with which it may or may not coincide [42, 43]. Moreover, individuals' assessment of a health condition can be influenced by the prevalence of the condition. In a classic study in medical sociology, Zola emphasized that in populations

where a particular condition is widespread, it is perceived as normal, natural, inevitable "and thus to be ignored as being of no consequence" [44, p 615]. In addition, the perception of a condition as inevitable is often accompanied by the perception that it is not amenable to treatment, that nothing can be done to manage it [20].

Pregnancy and childbirth are ubiquitous events. Although acknowledged as potentially risky, pregnancy and delivery are commonly considered natural, normal work for women. In other words, they are often not seen as illnesses for which medical expenses are justified and a hospital room booked [23, 36, 45]. Furthermore, just as pregnancy is considered a normal event, death during labor and delivery may sometimes be considered 'normal' or inevitable. Such fatalistic views can lead to the perception that the condition is not amenable to treatment, and can thus act as effective barriers to a timely decision to seek care. The recognition of a health condition can also be shaped by sociocultural prescriptions and interpretations. Among the Bariba of Benin, for example, labor that lasts up to a day is considered normal and thus is not recognized as dangerous [33, 46].

In parts of Africa, prolonged obstructed labor is taken to be a sign of the woman's infidelity [45, 47–49]. Obstructed labor is thus interpreted as punishment for adultery and not recognized as a medical problem. It is believed that the woman must 'confess her sins' so that the delivery will progress smoothly, thus precluding the decision to seek medical care for the complication.

Finally, mention should be made of situations in which a health problem is recognized, but care is not sought because of the fear of social or legal sanctions. Those suffering from a condition they view as shameful or stigmatizing may recognize its seriousness, yet the fear of punishment and ostracism can prevent them from seeking appropriate care. For example, venereal diseases are often denied, unreported and untreated [20]. Vesicovaginal fistulae and complications resulting from unsafe induced abortion often remain unreported, therefore untreated, because of ostracism and shame in the former and the fear of sociolegal sanctions in the latter [34, 50–53]. Certainly in the case of an unwanted pregnancy, the condition and the need for care are both recognized. However, fear, shame and desperation can act as powerful barriers and lead to disastrous consequences as women seek illicit and unsafe abortion, attempt to self-abort and, in extreme cases, commit suicide [54–57].

Severity. In addition to recognition of a health condition, the perceived severity of an illness is a very important factor in the decision to seek care. Utilization of services appears to be influenced by the recognition of symptoms *and* the assessment that the symptoms are serious enough to justify medical care [18, 42, 58].

The perception of a condition as normal or minor interacts with cost and distance in the decision to seek care. Just as certain conditions (such as pregnancy) are perceived as 'natural' and therefore not requiring medical care, conditions that are perceived as minor also do not justify the expenses of money, time and travel effort often involved in medical care [10, 20]. Cosminsky and Scrimshaw report that residents on the Guatemalan plantation that they studied tended to use low-cost remedies to treat minor conditions and then move to more expensive resources if the illness progressed [59].

It is important to note that we did not find any studies showing that illness severity was not an important factor or that it played a lesser role than other variables as a consideration in the decision to seek care. This is in contrast with the findings of studies examining the role of distance, cost and beliefs about illness causation, all of which reveal much variation in the importance of these factors.

The aforementioned studies indicate that the perceived severity of the condition may well be an overriding factor in the decision to seek appropriate care. Furthermore, there is an interaction between severity of illness and other factors involved in the decision. Specifically, there is a reluctance to incur costs when the disorder is perceived as non-threatening or self-limiting. However, the perception of these expenses as a barrier seems to decrease dramatically when the disorder is perceived as serious, debilitating or life-threatening, and the perceived benefits of seeking care seem to outweigh the constraints. As perceived severity increases, utilization of services increases and the impact of distance and cost in decision-making decreases.

It should be noted that most of the studies we reviewed assume that the decision to seek care is a process that occurs in stages. While this may be the case for conditions with a slow onset, it is unclear what happens in medical emergencies (e.g. postpartum hemorrhage).

Etiology. Once the decision to seek care is justified by the perceived severity of the illness, a key factor in determining the type of care (self, traditional, modern or a combination of the three) that will be sought is the cause to which the illness is attributed by patients and their families.

Our review indicates that while beliefs about illness causation do sometimes play a role in the decision to seek medical care, this role is not as important as it might have been a few decades ago, when the efficacy of medical care was less well accepted in the developing world [27]. Furthermore, while traditional medicine is still relatively more available than modern medical care in rural areas, there is ample evidence from most parts of the developing world that the trend is toward utilization of both systems for treatment of most conditions.

Medical anthropologists and sociologists, such as Cosminsky and Scrimshaw [59], Foster [27], Lasker

[24] and Young [18] reject the view that beliefs about illness causation generally lead to decisions not to seek medical care. They argue that people are empirical and pragmatic, as opposed to 'unscientific,' or 'irrational,' that they base their health care decisions on an assessment of available and accessible resources.

The important lesson from anthropological studies of health beliefs is that a narrow focus on 'cultural barriers' obscures the role that institutional inadequacies and economic considerations play in the decision to seek care. Nonetheless, variation across cultural groups and across health conditions remains great, and beliefs about illness causation do sometimes affect the decision to seek medical care. As we noted earlier, the belief that obstructed labor is caused by a woman's infidelity is widely held—for example, in Sierra Leone, Liberia, Ghana and Zimbabwe. It should serve as an important reminder of the types of factors that need to be identified by research and addressed by programs. It also illustrates that at the heart of many factors that limit access to care is the status of the women in the society.

Women's status

Women's status is composed of the educational, cultural, economic, legal and political position of women in a given society. While women's status generally underlies and shapes women's access to health services, there are specific ways in which it directly affects and delays the decision to seek care. In this section, we focus on how women's access to health services is limited by constraints on their autonomy.

In countries as diverse as Nigeria, Ethiopia, Tunisia, India and Korea, studies show that women do not decide on their own to seek care: the decision belongs to a spouse or to senior members of the family [10, 20, 23, 41, 60–62]. Furthermore, women's mobility is limited in certain areas because they need permission to travel. Often this permission must be granted by the spouse or the mother-in-law [10]. Where women's mobility is severely restricted because of such cultural prescriptions, efforts to seek timely care may be thwarted. According to Harrison, in Zaria, Nigeria, "no matter how obvious the need for hospital management becomes for the girl who develops obstructed labor, permission to leave home for hospital can usually be given only by the husband; if he happens to be away from home, those present are often unwilling to accept such responsibility" [34, p. 385]. In Ethiopia, women tend to use those primary care facilities within walking distance from their homes, because of "cultural restrictions placed on [their] travel outside the community" [20, p. 1013].

For a woman with obstetric complications, access limited to the nearby primary care centers is not of much help. These facilities are usually not equipped to deal with obstetric complications, and further delay can occur through staff errors and misdiagnosis.

In addition to identifying the major factors generally shaping the decision to seek care, our review indicates that these constraints often apply unequally to women. Consider the example of distance. We have discussed how overcoming this barrier largely depends on mobility: individuals with access to motorized vehicles are more mobile than those with access only to bicycles or donkeys, who are in turn more mobile than those who can rely only on their feet. Yet among the strict Muslim communities of northeastern Nigeria, women are not allowed to ride bicycles or donkeys. Although these means may be physically present in the community, they are effectively unavailable to women [10].

Women's status also interacts with the cost of treatment in the decision to seek care. The literature on the preference for male children provides evidence that the consideration of cost in the decision to seek care is applied unequally to males and females [26]. Witness for example the impact of son preference on access to health services, a phenomenon best documented for Asia, specifically India and Bangladesh, and to a lesser extent, for the Middle East [63] and Africa [38, 64].

In Bangladesh, as elsewhere, private physicians' fees are much higher than those of other providers. Parents consulted private physicians three times as often for their sons as for their daughters. Moreover, the purchase of drugs prescribed by physicians was about three times as frequent when the prescription was for a boy as when it was for a girl [65].

Especially where resources are scarce, parents' health care seeking behavior and expenditures often reveal a preferred investment in their sons' health. Even where health care services and transportation were both free of charge, such as in Matlab, Bangladesh, parents still used the services far more frequently for injured or ill boys than for girls [66]. It is evident that the low value placed on females adversely affects their utilization of health services. However, this link has been generally overlooked. As Royston and Armstrong have recently pointed out, "sex discrimination as a contributory factor to maternal mortality has been largely ignored, [and] has been hidden within the general issue of poverty and underdevelopment which is assumed to put everyone . . . at an equal disadvantage in health terms" [67, pp. 45–46]. Stemming from the low status of women, reluctance to allocate resources or assign importance to female health inhibits the decision to seek modern medical care when complications associated with pregnancy and childbirth arise.

In many parts of the developing world, women consider childbearing as their only means of gaining status. Thus, women often find themselves in a paradoxical situation: high fertility is their main channel to improving their status, but it increases their risk of maternal death. Even in some societies

where women are financially independent, they derive pride and prestige chiefly from their roles as mothers [68]. Sargent's study of the Bariba of Benin illustrates yet another way in which pregnancy and childbirth confer status on women.

> To the Bariba, birth represents a rare opportunity for a woman to demonstrate courage and bring honor to both her family and that of her husband by stoic demeanor during labor and delivery. The woman who manages to deliver without calling for assistance until the child is born is especially esteemed [33, p. 291].

In such situations, a woman's efforts to gain esteem and enhance her status have direct implications for the recognition of complications and delays in the decision to seek care if they do develop.

None of the studies reviewed examines utilization of services by women who are financially independent, who are autonomous in their decision-making and who derive status and prestige from roles other than motherhood alone. Furthermore, the role of women's informal power is rarely addressed. Research in such contexts is much needed. It might mitigate some of the gloominess described above.

The potential contribution of such research can be gleaned from preliminary results of focus-group research conducted in Enugu, Nigeria. Women participating in the focus groups argued that although their husbands are the overall decision-makers, the women are financially independent. Access to cash, they stated, was the most important factor in the decision to seek care. This means that in case of a medical problem, the women do not need to wait for their husbands, as they have ready access to cash and are able to pay for the expenses incurred [69].

Economic status

The literature describes statistical associations between economic status and the utilization of services. However, the mechanisms through which this association operates are not specified. Possibilities include: (1) income constraints; and (2) characteristics of the health care facilities serving the poor that may discourage use [20, 70, 71]. What is clear, however, is that morbidity and mortality rates are higher among groups of low economic status [20, 52, 56, 72–74].

Most of the studies reviewed indicate that economic status affects the use of health services. In general, these studies find that utilization increases as economic status increases [9, 12, 75]. In studies by Kwast *et al.* in Addis Ababa, Ethiopia, economic status was measured by income, house ownership and occupation. The lowest rates of prenatal clinic attendance and the highest rates of home delivery were found among women from the lowest economic status groups [56, 73]. Data from Iraq show that consultation rates for all health facilities rose from 67 per 100 illness episodes for low-income households to 103 for those in the high income bracket [13]. In Calabar, Nigeria, distance did not deter patients from using the family health clinic: Patients living further away were of higher economic status and more commonly owned cars or motorcycles than did those living closer to the clinic [7].

Educational status

Education is measured by the number of years of formal schooling. In developing countries, men generally have higher educational levels than women. Our review reveals two major findings with respect to the role of formal education in the decision to utilize health services: (1) that its role is not clear-cut; and (2) that the mechanisms through which education may play a role are not well understood.

Most of the studies reviewed show that utilization of medical services increases with increasing levels of education. The positive association repeatedly documented is that between mother's education and use of child health services and child survival technologies [76–78]. The presence of a positive association between educational level and use of adult health services is not as consistent [75]. However, survey results from Ethiopia, Jordan and the Philippines indicate a significant positive association between use of prenatal care services and level of womens' education [56, 58, 78].

The mechanisms through which education might affect the decision to use health services are not well understood. It has been hypothesized that education affects individuals by introducing them to a new 'modern' culture [77]; that increasing levels of education increase knowledge and awareness by shaping thought patterns—for example, by acting as "medication against fatalism" [76]; and that education increases access to information. A related hypothesis is that education increases self-confidence and imparts respect and influence [76].

There is evidence in the literature that higher levels of education may not guarantee higher levels of health services utilization [11, 24, 42, 43]. Some studies suggest that with increasing education, individuals depend more on self-care and self-prescribed medication and postpone the visit to a facility until after these methods fail to produce a cure. However, it may also be that the better educated are generally healthier, thus requiring less care than the less educated.

Although there are not many studies that show a negative relationship between education and utilization of health services, they are important, because they illustrate that the explanation of differential utilization cannot be reduced to one variable. In addition to their education, literate and illiterate individuals alike rely on their past experience of health services as a source of information. Furthermore, focusing on education as a main factor in poor utilization levels in effect lets the health system 'off the hook.' It obscures the fact that there are often institutional factors that deter utilization and it ignores the potential effect of outreach activities.

The experience of declining infant mortality independent of education in countries such as Cuba,

China, Costa Rica and Sri Lanka illustrates what Cleland and van Ginneken call the "equalizing influence of health services" [78]. Declines in infant mortality were sharp among offspring born to illiterate mothers in China and to those with less than four years of schooling in Costa Rica. Over time, accessibility and availability of medical services in these countries reportedly decreased differentials in infant and child mortality that had been associated with levels of parental education.

By contrast, there are instances where neither strong national investments in education nor achievement of a high literacy rate appeared to have any effect on that country's high mortality rate. Bullough has pointed out that countries with high under-five mortality rates spend about three to five times as much on education as on health. He further notes that Paraguay and Tanzania are examples of countries that "manage to combine high literacy rates with high maternal mortality rates: adult female literacy 85 percent and 80 percent, maternal mortality rate 469 and 370/100 000 live births" [80, p. 1119].

In its purest form, the decision to seek medical care is a behavioral response to a perceived need created by an illness. The complexity of the real world, however, introduces variability and constraints into this process. It is therefore simplistic to relate people's underutilization of services to their ignorance, illiteracy, poverty, laziness or superstition. Rather, underutilization is often related to people's knowledge, based on previous experience, that facilities are far away and often difficult to reach, that they may be closed, that needed drugs may be out of stock, and that staff are often less than helpful and polite. In other words, the actual accessibility of services is often at the heart of the matter (Fig. 2).

Phase II Delay: Reaching a Medical Facility

The accessibility of services plays a dual role in the health-care-seeking process. On the one hand, it influences people's decision-making, as outlined under the rubric of Phase I Delays. On the other hand, it determines the time spent in reaching a facility after the decision to seek care has been made. This latter effect we term Phase II Delay.

Interviews with pregnant women in rural Kenya indicated that 47 percent of the women intended to deliver in a hospital, 40 percent intended to deliver at home and 13 percent had not yet decided at the time of the interview. Of those who had decided to deliver in a hospital, only 36 percent actually did so. The rest had not changed their minds—they were simply not able to reach the hospital [81].

The data further indicate that 84 percent of the women in the sample had received prenatal care; that the majority of the women and their relatives could recognize risk factors; and that women who experienced difficulties with previous deliveries were significantly more inclined to plan for a hospital delivery than were those who had a history of uncomplicated deliveries. Yet a sizable proportion of women could not act on their informed decision because they lived far from the hospital, which they could reach only by walking or by waiting for a passing lorry [81].

Here, distance and the unavailability of public transportation were not considerations that delayed the decision to seek care. They were actual obstacles that prevented women from reaching the hospital. Factors that create Phase II Delays include the location of health facilities, the travel distances that result from this distribution and the transportation means necessary to cover the distances. In other words, Phase II Delays result from the actual accessibility of health services.

Phase II delays are very common, particularly in rural areas, yet they are not systematically documented in the literature. Rather, researchers have typically focused on the individual and institutional characteristics that inhibit the timely use of services. The perspective that users and providers are the only actors in the health-care-seeking process prevails throughout the literature. By focusing exclusively on the two poles of the health-care-seeking process, this perspective fails to take into account all that happens on the way to the health care facility.

Phase II delays have important programmatic implications. For instance, it is of little use to identify high-risk pregnant women who should deliver in the hospital and to raise the community's awareness of risk factors if the women are unable to reach the hospital, as in the Kenyan example cited above. Gathering data on delays that face patients who are trying to reach a facility is thus an important research effort that can serve to guide programmatic interventions.

Distribution of facilities

There is a general shortage of medical care institutions in the developing world. In addition, existing facilities are more often than not concentrated in and around urban areas. Governments plan to have rural areas served by a network of regional and district hospitals in large towns, primary health centers, health posts and dispensaries. In many cases, however, this network does not function as planned. All studies reviewed indicate that inhabitants of urban areas have better access to health facilities than do rural inhabitants [20, 24]. In the Syrian Arab Republic, 30% of all government and 19% of all private hospital beds are concentrated in Damascus, the capital city. Also, 65% of the nation's health centers are located in urban capitals of governorates. Health care providers are also in short supply and unevenly distributed. Of the country's 221 obstetricians, 78 (35%) practice in the capital city. In contrast, only nine obstetricians practice in the rural areas, and four of them are located in Damascus governorate. This means that there are only five obstetricians in the country's remaining 13 governorates [82].

A concern for equitable distribution seems to have guided the allocation of health resources in a few countries. According to Cardoso, the Cuban Ministry of Health has paid particular attention to the rural areas in establishing a network of hospital

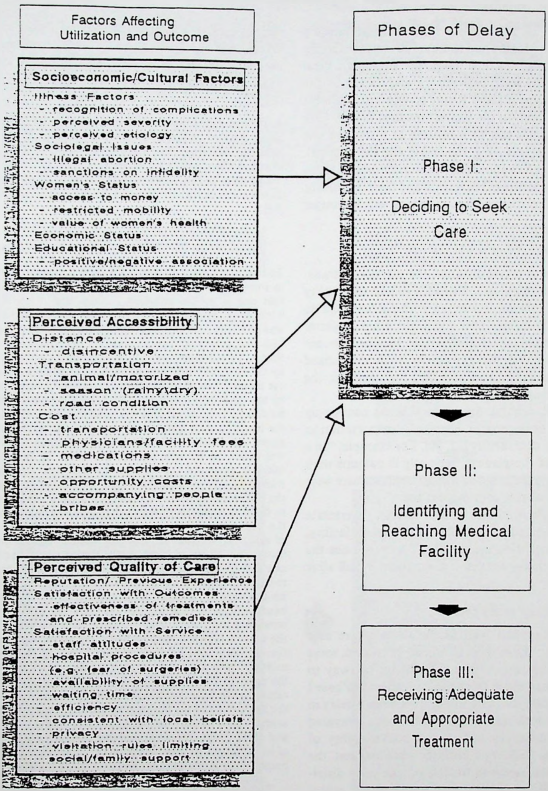

Fig. 2. Phase I delay, detail.

facilities that would be accessible to the entire population. Existing hospitals were enlarged and new hospitals were built in the rural areas [83].

Unfortunately, the Cuban model does not appear to be widespread. Of course, Cuba is a relatively small country, a factor which probably facilitates the implementation of such policies. Still, there are many small countries where distribution of resources is much less equitable.

Travel distances

The uneven distribution of facilities has implications for travel distances between women and even the closest facility, let alone a specialist referral hospital. The issue of access is therefore an acute problem for rural inhabitants in most developing countries. Examples of actual travel distances cited in the literature gives an idea of the magnitude of the

problem [11, 23, 52]: People from a rural farming community in Mexico had to travel 30 km to reach the nearest medical facility [84]; in Ethiopia, rural patients had to walk between 15 and 18 km to the nearest town where Land Rover service was available to transport them to the nearest medical facility [20].

Travel distance can be measured as a straight line between two points—e.g. the house and the hospital. But people often cannot follow a straight line to reach a facility. The nature of the terrain and the condition of the roads often dictate that distances will be longer [69, 85].

Transportation

In addition to travel distance, the scarcity of transportation in developing countries is also a harsh reality [24, 88]. In Tanzania, a woman with placenta previa "died only 20 miles from the Consultant Referral Hospital because the Land Rover assigned to her medical center was being used by an unauthorized person at the time, and she bled to death at the roadside waiting for a taxi" [89, p. 104].

As a result, inhabitants of rural areas commonly have to walk or improvize means of transportation to reach a health care facility [72, 90]. For example, "In a remote area of Bangladesh, seriously ill patients were often carried to the clinic on a chair because there were no vehicles available to transport them" [14].

The patient's condition can, of course, deteriorate with increasing delays in reaching a treatment facility, making the condition more difficult to treat once the facility is reached—that is, if the patient is still alive upon arrival.

Deaths on the way to the hospital

Not all individuals who decide to seek care at a medical facility arrive there in time to be treated; some die while trying to get there. Deaths on the way to seeking care may result from the joint effect of Phase I and Phase II delays: There might have been a delay in the decision to seek care, which was further aggravated by the long distances and/or the unavailability of transportation. But it is entirely possible that the decision to seek care was timely, yet the poor distribution of facilities and the resulting distances separating people from services accounted for the delay and therefore caused the death.

In addition, it must be specified that reaching a health facility does not necessarily mean the end of the health-care-seeking journey. If the nearest facility is a peripheral health center not equipped to treat the condition or even to administer essential first aid, seriously ill patients will have to go on to another, better equipped institution. By the time the patient reaches an adequate health facility, the delays will have further increased the risk of a death *en route*.

Data on such deaths are scarce. Hospital-based studies are not helpful, since they include only deaths that occur in the institution. Community-based research is more relevant, but deaths on the way to seeking care are sometimes counted as deaths at home. Of all studies reviewed, the literature on maternal mortality proved to be the richest source of data on deaths occurring on the way to seeking care [76, 91, 92] (Fig. 3).

A 1984 investigation of maternal mortality in 287 Chinese cities, districts and counties revealed that 15 percent of all recorded maternal deaths occurred on the way to the hospital. They were all in rural areas [93].

In Addis Ababa, 13 percent of maternal deaths recorded over a two-year period occurred on the way to the hospital [94].

Phase III Delay: Receiving Adequate Treatment

Today, Mary, the lady who helps us in the house, came late to work. I told her off for being late and asked why. She said that one of her townswomen . . . had died in the hospital while giving birth to a baby. This was her fifth delivery. She was not from a far off village but from Sokoto city itself. She had not gone too late to hospital but rather gone on time. . . . By the time they found a vehicle to go to hospital, by the time they struggled to get her an admission card, by the time she was admitted, by the time her file was made up, by the time the midwife was called, by the time the midwife finished eating, by the time the midwife came, by the time the husband went and bought some gloves, by the time the gloves were brought to the hospital, by the time the midwife was called, by the time the midwife came, by the time the midwife examined the woman, by the time the bleeding started, . . . by the time the doctor was called, by the time the doctor could be found, by the time the ambulance went to find the doctor, by the time the doctor came, by the time the husband went out to buy drugs, IV set, drip and bottle of ether, by the time the husband went round to look for blood bags all round town, by the time the husband found one and by the time the husband begged the pharmacist to reduce the prices since he had already spent all his money on the swabs, dressings, drugs and fluids, by the time the haematologist was called, by the time the haematologist came and took blood from the poor tired husband, . . . by the time the day and night nurses changed duty, by the time the day and night doctors changed duty, by the time the midwife came again, by the time the doctor was called, by the time the doctor could be found, by the time the doctor came, by the time the t's had been properly crossed and all the i's dotted and the husband signed the consent form, the woman died. Today the husband wanted to sell the drugs and other things they never used to be able to carry the body of his wife back to their village but he could never trace [the body] again in the hospital [95].

This excerpt from a letter sent to us by a colleague provides a vivid illustration of Phase III delays—those that occur at treatment facilities. Delays in the delivery of care are symptomatic of the inadequate care that results from shortages of staff, essential equipment, supplies, drugs and blood as well as inadequate management. Late or wrong diagnosis and incorrect action by the staff are other factors that contribute to delays in the timely provision of needed care. All these deficiencies in the quality of the care provided at health facilities are frequently mentioned in the literature.

In addition to identifying the diagnoses in cases of maternal death, some hospital-based studies determine whether or not the deaths were avoidable. They generally find that while a small number of maternal deaths are unavoidable, the large majority are either

entirely or probably preventable. For example, 98% of institutional deaths studied in Tanzania [87]; 94% of maternal deaths studied in Cali, Colombia [96]; 88% of those studied in Vietnam [97]; and 80% of those studied in Jamaica [98] and in Lusaka, Zambia [88], were judged preventable by the respective investigators.

Insufficient and unqualified staff, clinical mismanagement of patients, unavailability of blood, shortages of essential drugs and missing supplies and equipment limit individuals' access to lifesaving procedures. According to a technical working group formed by the World Health Organization in 1986, these deficiencies "represent a failure on the part of the health services to seize the last chance to save a woman" [99, p. 2]. This technical working group also identified seven obstetric functions that are essential at the first referral level to save the life of emergency obstetric patients. Accordingly, district and subdistrict hospitals should be able to perform cesarean sections, administer anesthetics and blood transfusions, perform vacuum extraction, carry out suction

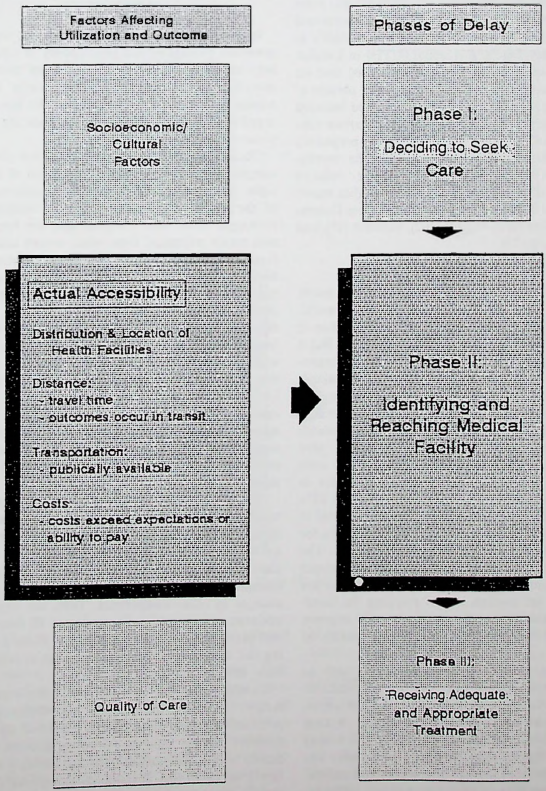

Fig. 3. Phase II delay, detail.

curettage for incomplete abortion, insert intrauterine devices and perform tubal ligation or vasectomy. The capacity to perform these essential obstetric functions provides a guideline against which to evaluate the quality of care described in the following findings.

Ill-staffed facilities

Insufficient numbers of medical and nursing personnel at a facility necessarily lead to delays in patients' receiving the care they need. This shortage is often not only a matter of staff numbers, it is also a matter of competence. In other words, there is a shortage of trained, qualified personnel [57, 87, 98, 100]. In a study of maternal mortality at the University Teaching Hospital (UTH) in Lusaka, Zambia, "the most worrying finding [was] that an avoidable hospital factor was present in 52 percent of cases" [88, p. 77]. Hospital factors identified included poor intrapartum assessment, failure to correct anemia, missed diagnosis of ruptured ectopic pregnancy and unavailability of the anesthetist. The investigators argue that all these factors could be "reduced or eliminated" [*ibid.*]. Numerous other studies report similar cases of clinical mismanagement from Colombia [96], Kenya [101], Malawi [102], Vietnam [97], and Zambia [88, p. 77].

Ill-equipped facilities

A lack of equipment and supplies plagues health facilities in most regions of the developing world. There is little question that this situation is due in part to the very real issue of limited resources. But it is often perpetuated by poor management and organization of the available resources. Difficulty obtaining blood for transfusion assumes paramount importance in the management of several major obstetric complications and is often identified as an avoidable factor delaying the provision of adequate care [56, 103, 104]. For example, blood shortages were implicated in 35% of hospital maternal deaths in rural Tanzania [89], 39% in Malawi [102], and 36% in Vietnam [97]. At Korle-Bu Teaching Hospital in Ghana, prepartum hemorrhage was an indication for 9% of the cesarean sections performed in 1971. The investigators argue, however, that patients who might be treated conservatively if blood were available are sectioned as the quickest way of stopping the bleeding. They maintain that the situation would improve considerably if the maternity unit had its own blood bank [105].

Inadequate supplies of essential drugs, such as antibiotics and ergometrine, are other avoidable factors that contribute to phase 3 delays. Such shortages occur at all levels of the health system [16, 26, 56, 87, 97]. In Ilorin University's Teaching Hospital in Nigeria, some patients were without any antibiotics until the third day after a cesarean section, because their relatives were not able to buy the drugs immediately and they were not in stock at the hospital pharmacy. Sepsis caused 82% of the deaths in this hospital study. Most of these would have been prevented with a course of antibiotics [106].

In brief, the vast body of literature documenting medical and nursing staff shortages, failures in the clinical management of complications and shortages in essential supplies indicates that the quality of care in many institutions is inadequate. These studies show that blaming the patient for seeking care late obscures the fact that the health care system often fails the patient (Fig. 4).

DISCUSSION

In the preceding sections of this paper, we have presented findings from a great variety of studies to help us elaborate some of the factors that may contribute to delay in preventing deaths among women with obstetric complications. We now piece together these various factors to examine the larger picture.

Obtaining medical care for women with obstetric complications begins with the recognition of danger signs. Access to such information and understanding of the gravity of symptoms, such as bleeding or prolonged labor, help a woman and her family to seek timely treatment. Even when women and their families recognize danger signals and understand the need for medical care, they are also aware that there is not much the medical facility can do for her when there is no trained doctor or nurse-midwife, when blood shortages are regular and when equipment is frequently broken. People do not bother to seek care when they know that they probably will not be cured, that they are even likely to die in the hospital. Unfortunately, and despite the efforts of many dedicated and hardworking health providers, this is the state of affairs in many facilities in the developing world. Under such circumstances, people's decisions not to use the health facilities available to them make sense.

The process of obtaining medical care unfolds within the confines of the health care system. In defining the components of this system, it is important to speak not only of the providers, but also of the users as part of that system. As with any system, changes introduced into one component can effect changes in other components. Thus, the objective obstacles encountered in Phases II and III feed back into the subjective decision-making of Phase I, linking the user of health services and the provider of these services into the same system.

To apply what has been learned in this literature review, one can begin with a brief discussion of program strategies. The factors identified as contributing to delay were the following: distance, cost, quality of care, illness characteristics, women's status, economic status and educational status. As Fig. 1 showed, these factors all influence a woman and her family in their home as they decide whether to seek medical care for her. Interventions designed to affect

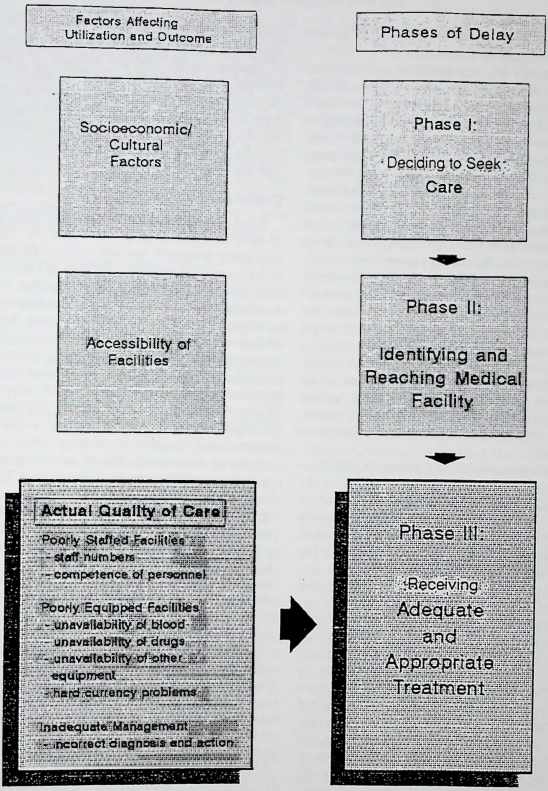

Fig. 4. Phase III delay, detail.

these factors, however, must operate at quite different levels.

Consider, for example, distance and cost. Both these factors affect people's decisions to seek care; there is, however, relatively little that individuals or families can do to influence these factors. Rather, in order to make systematic and widespread changes in these factors, the government must take steps to improve the distribution and financing of medical care. Even so, there are some actions that can be started on a smaller scale and may help reduce the toll of maternal deaths. Some of these are discussed below.

Distance

The physical distance between people and medical care in developing countries is a problem that will take a substantial amount of time, money and political will to solve. However, there are several comparatively inexpensive measures that could reduce maternal deaths by reducing travel distance to health services. Simply expressed, either pregnant women

have to move closer to the services, or the services have to move closer to the women.

The first option has been implemented in the form of maternity waiting homes, which provide modest accommodation close to the hospital for pregnant women who live far away. These women can live in the home during the last few weeks of their pregnancy, then be transferred at the onset of labor or any complication to the nearby local hospital for delivery. A number of countries—such as Cuba [107], Colombia, Uganda and Zaire—are experimenting with maternity waiting homes. Unfortunately, there are no studies to date that evaluate the impact of maternity waiting homes on deaths among women from complications. Such programmatic research is much needed.

While maternity waiting homes will be practical and useful in some situations, they are not the solution to the uneven distribution of obstetric care in developing countries. To deal with this problem, a number of programs are being planned in which community members will be helped to prepare for the eventuality of obstetric emergencies either by setting aside funds to pay for public transport or by arranging with owners to make their vehicles available in emergencies.*

The second option—that of moving the services—was endorsed by a WHO Working Group on the Organization of Maternal Health Care, which stressed that "programmes should be guided by the axiom that all services should be provided at the most peripheral level of the health system at which this can be done effectively" [99, p. 9].

It is not reasonable to propose that definitive treatment of obstetric complications (such as cesarean section) be made available at all health facilities. Even so, many women's lives would probably be saved if health centers in rural areas were at least able to provide first aid to women with complications. In three isolated Gambian villages, the single most important factor contributing to mortality declines "has apparently been the on-the-spot, 24-hr availability of a physician or qualified midwife" at the clinic [108 p. 912]. In addition, free transportation to and from the clinic was provided, and the clinic physician or midwife assisted at home deliveries. According to the authors, transfer to a hospital in cases of major difficulties could be achieved within 3 hr. No pregnancy-related deaths have been recorded in the project area since 1975. This is in contrast to statistics from a nearby non-project village where, in 1981–83, there were 24.2 maternal deaths per 1000 women of childbearing age.

One of the common suggestions for extending the coverage of maternity care services is to train traditional birth attendants (TBAs), since there are many societies where they still conduct a large proportion of the deliveries. While there may be other benefits to such training (e.g. reducing the incidence of tetanus among newborn infants), it does not address the problem of major obstetric complications, many of which cannot be predicted. For most major complications, there is little that a TBA can do in the way of treatment, although existing training programs would do well to include more on first aid measures.

Quality of care

Some of the program options for improving quality of care have already been mentioned, for instance, upgrading peripheral facilities to provide obstetric first aid and even treatment. But there are also actions that can be taken to improve the services in large hospitals. For example, in a major teaching hospital in Nigeria, the obstetric operating theatre has been closed for more than a year because the anesthesia equipment needs repair. Consequently, women who need emergency obstetric surgery have to wait until they can be operated on in the hospital's all-purpose theatre. Reducing Phase III Delay in this case does not require equipping a whole operating room, it just requires repairing the available equipment.

As noted in our review, lack of essential supplies is a common problem in developing countries. Usually, this is part of much wider economic problems, involving devalued currencies, reduced purchasing power, poor balance of trade and stringent structural adjustment policies. Such issues are, for the most part, beyond the scope of health programs. Even within these difficult conditions, however, there is often something that can be done to reduce their impact. In an African country, PMM staff have observed a 'people's store' set up in the courtyard of a large clinic. This store operates on a revolving fund started with clinic money. It sells items that are out of stock in the clinic pharmacy (which depends on the government's central store for supplies). The people's store buys its supplies from merchants in the town at wholesale prices. Thus, the people's store saves patients and their families both time and money.

There are many other options for improving quality of care in health facilities, including training programs and expanding roles for nurses and midwives. The few mentioned above are intended only to illustrate that relatively simple innovations are possible even under very difficult economic conditions.

Cost

This is one of the most difficult factors for which to propose program options at any level. In the past decade, household incomes and purchasing power have been declining in many countries along with government spending in general and for health care in particular. In addition, importing drugs and supplies requires hard currency, which many countries must allocate instead to servicing their debts with foreign banks.

*These programs have been planned in the context of the PMM collaboration with teams of African researchers. Implementation began in 1993.

At the same time, grass roots development continues in the face of these constraints. Farmer-run cooperatives already allow individuals to pool limited resources and negotiate a better deal in the marketplace. Similarly, a community group, such as a women's organization, could use the profits of an income-generating activity toward the bulk purchase of generic drugs to stock a local clinic. Such a group could cooperate with an area hospital toward the same end, making the drugs available to patients at cost. The need for creative experimentation and the involvement of interested nongovernmental organizations is great and may be the most fruitful direction at present.

Economic educational and women's status

Here again, extensive changes will require policy changes at a very high level. Policies and measures to improve women's status, for instance, are being adopted at the global, national, and local level [109].

The United Nations Convention on the Elimination of All Forms of Discrimination Against Women is, in effect, an international bill of rights for women. The convention was adopted by the United Nations General Assembly in 1979 and by early 1988, it had been ratified by 94 nations [110].

Lasting change lies in the structure of a society and change must occur at the top as well as at the grass roots. Thus, people in health programs must put government proclamations into action, and even anticipate them, if necessary, to ensure that women's status becomes more than a topic at cabinet meetings.

'Your wife's health is important; look after her' was the theme for a community education program in northern Nigeria. Men in the communities targeted were reminded of the importance of women's health and the need for maternal care through posters and radio broadcasts. In addition, separate discussion groups were held with men and women (most of whom are in purdah). Participants were told about activities to promote the role of women in development locally, nationally and globally. Women's health needs were also discussed and experiences and perceptions of home and hospital delivery were exchanged [111].

Illness characteristics

The literature reviewed indicated that people's recognition of illness and their perception of its severity are important influences on the decision to seek care. From a program point of view, this is an encouraging finding, because the recognition of danger signs during pregnancy, labor and delivery can be addressed through community-level programs. A Senegalese survey revealed that women lacked information about obstetric complications. In response, the government of Senegal plans to provide community education on pregnancy care and obstetric complications through women's groups [41]. In other countries, lack of information may not be a problem. Women and their families could have enough knowledge to seek care in a timely fashion. They may face other obstacles, such as distance, the cost of services and their inadequate quality.

The PMM experience

Many of the practical applications of our conclusions from the literature review become apparent in the above discussion. Indeed, several aspects of the PMM program take their cues from the conclusions we suggest here. As mentioned earlier, the PMM program works through a network of teams of researchers and practitioners in Ghana, Nigeria and Sierra Leone. In each country, solutions to problems associated with maternal mortality are different. As a part of their operations research projects, teams first conducted situational analyses of health facilities and focus group research to determine barriers to utilization of services and areas where the quality of these services may be improved. The PMM Network's activities to date have focused attention on hospitals (improving the availability of drugs and supplies, improving hospital management and quality of care), on secondary health facilities (expanding and decentralizing provision of emergency obstetric care, improving staffing and skills), and finally on communities (improving emergency transportation, improving the availability of blood, providing first aid, and encouraging the early treatment of complications). The PMM project has adopted a strategy of meeting the community halfway, feeling that it is counter-intuitive to educate and motivate the community about seeking emergency obstetric care until services and accessibility are adequate.

Although women experience delays beginning with the decision to seek care, the PMM approach starts at the other end—with receiving care at the emergency obstetric care facility. The schematic diagram in Fig. 1 is helpful in pointing out our rationale; all the factors affecting utilization and outcome of Phase II and III Delays—distance, transport, roads, cost and quality of care—are crucial variables in the Phase I decision-making process.

Programs must recognize that even 'low risk' women develop obstetric complications, and that provision of prenatal care, food and vitamin supplementation programs, and training of traditional birth attendants in safe, hygienic birthing practices may be of limited efficacy. Additional locally relevant research should be conducted when designing more community-based interventions, such as involving traditional birth attendants in the reduction of maternal mortality. Prenatal screening programs, whether these involve traditional birth attendants or not, may not bring the benefits they intend to bring, since their epidemiologic sensitivity has traditionally been disappointingly low. Also, it is widely assumed that traditional birth attendants are influential in encouraging or discouraging patients and their families from seeking necessary obstetric care; clearly, more research is needed in this regard. Certainly research and education efforts should be directed at decision-makers as they are identified—e.g. mothers-in-law, husbands, religious leaders, etc. The PMM

Network works with community leaders to encourage their participation as educators, advisors and mobilizers.

CONCLUSIONS

In conclusion, we believe that given large gaps in the literature regarding factors affecting the utilization of health services, high priority should be given to field-based research that can elaborate the factors leading to delay in different settings by focusing simultaneously on circumstances facing women in the community and in the health facility. We believe that programs to reduce maternal deaths are more likely to succeed if they are based on gathering data on these various components and then devising interventions that will address them.

The next step is thus for people involved in the Safe Motherhood Initiative to assess the situation in their respective regions and implement program options based on their findings. We also urge people to evaluate their interventions: only if programs are systematically evaluated will we be able to say whether they were effective in reducing delay.

We hope that this article encourages a fresh perspective on the prevention of deaths among women with obstetric complications.

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ADVANCE UNEDITED VERSION

Committee on the Elimination of Discrimination against Women
Twenty-second session

17 January-4 February 2000

Consideration of reports of States parties

India

Initial report

1. The Committee considered the initial report of India (CEDAW/C/IND/1) at its 452nd, 453rd and 462nd meetings, on 24 and 31 January 2000 (CEDAW/C/SR.452, 453 and 462).

(a) Introduction by the State party

2. The representative informed the Committee that India had ratified the Convention in July 1993 with two declarations and one reservation. She indicated that the preparation of the report had been preceded by wide-ranging consultations with a number of women's organizations. She noted that India had ratified a number of international human rights instruments and that the Indian Constitution prohibited discrimination on the basis of sex, as well as providing for affirmative action for women. India had initiated a consultative process in preparation for the Fourth World Conference on Women and was among the first countries to unreservedly accept the Beijing Platform for Action.

3. The representative indicated that among recent achievements in the implementation of the Convention had been the establishment in March 1997 of a parliamentary committee on empowerment of women, and the passage of constitutional amendments to reserve for women 33.33 per cent of the seats in the *Panchayati Raj* institutions at the local self-government level in rural areas and municipalities in urban areas. She also stated that a bill had been introduced in late 1999 which would reserve not less than one third of the total numbers of seats filled by direct elections in the *Lok Sabha* (House of the People) and State Legislative Assemblies for women.

4. The representative described the national machinery for women's advancement coordinated by the Department of Women and Child Development, which is headed by a cabinet minister assisted by a minister of state. The National Commission for Women, established in 1992, served

as a statutory ombudsperson for women, while the Central Social Welfare Board networked with nearly 12,000 women's NGOs. Institutional mechanisms for women's advancement also existed at state level. The representative highlighted the ninth five-year plan (1997-2002), which had identified the empowerment of women as a strategy for development and mandated early finalization of a national policy on empowerment of women. She indicated that pending the adoption of the national policy, many mechanisms identified therein had already been put in place. Recently, the Prime Minister's Office had directed that a review be made of the impact of gender mainstreaming in ministries and departments.

5. The representative indicated that progressive legislation to promote the interests of women existed at both state and central levels, and that the Government had tasked the National Council of Women to oversee the implementation of constitutional and legal safeguards for women. The review of 39 laws was under way; recommendations for amendments, including those with regard to the Immoral Traffic (Prevention) Act, had been submitted; and a draft bill on violence against women had been prepared. *Lok adalats* (people's courts) and *parivarik mahila lok adalats* (family women's courts) had been established to provide less formal systems of justice delivery. India had a tradition of public interest litigation and the Supreme Court had issued landmark judgements, including on sexual harassment at the work place and child prostitution. Several training institutes had also introduced gender sensitization training for judicial officials.

6. The representative described steps which had been taken to revise curricula and textbooks from a gender perspective, and the efforts of the Ministry of Information and Broadcasting to ensure projection of positive images of women in the media. Measures to address prostitution and trafficking in women had included a proposal to amend the Immoral Traffic (Prevention) Act to widen its scope and increase penalties; the appointment of special police officers; and the establishment of protective homes and child development and child-care centres for the children of sex workers. A plan of action to combat trafficking and commercial sexual exploitation of women and children and to integrate victims into society had been developed, and India had actively participated in the drafting of the South Asian Association for Regional Cooperation (SAARC) Convention on Preventing and Combating Trafficking in Women and Children for Prostitution.

7. The representative indicated that at the Fourth World Conference on Women, India had committed itself to increasing investment in education to 6 per cent of gross domestic product (GDP), but that target had not been achieved to date although the overall growth in literacy among women had been higher than that of men in recent years. Intensive efforts to address gender differentials in literacy and education were continuing, and included the establishment of girls' learning centres in order to meet the needs of girls who were unable to access formal education.

8. The representative informed the Committee that International Labour Organization (ILO) standards were reflected in Indian labour laws and the

Government had been seeking to extend maternity benefits to all women, and to provide child care for working women. Guidelines for employers with respect to sexual harassment had been established in a Supreme Court judgement, and legislation reflecting those guidelines was being prepared. Efforts to recognize women's work in the informal sector and reflect it in the national census and to provide workers in the sector with labour protection had been initiated.

9. Significant improvements in women's health had been achieved in the last decade, although the high maternal mortality ratio remained a concern. The recently launched reproductive and child health programme sought to address women's health in a holistic manner. Measures to address HIV/AIDS had been introduced and legislative and other strategies to confront female infanticide and sex-selective abortion had also been adopted.

10. The representative indicated that rural women constituted almost 80 per cent of the female population, and the Government had introduced quotas and women specific schemes to ensure that they received an equal share in rural development and agricultural programmes.

11. The major religious communities' personal laws had traditionally governed marital and family relations, with the Government maintaining a policy of non-interference in such laws in the absence of a demand for change from individual religious communities. However, the Family Courts Act, providing that family matters, such as marriage and maintenance, came within the jurisdiction of the family courts, which incorporated informal procedures and counselling services, had been adopted. The representative drew attention to legislation concerning dowry-related violence and the provision of the Penal Code and Evidence Act regarding cruelty to a wife by her husband or his relatives.

12. In conclusion, the representative emphasized India's determined, concrete and sustained efforts to eliminate poverty and social disability and empower the poor and vulnerable.

(b) Concluding comments of the Committee

Introduction

13. The Committee welcomes the submission of the initial report of India. While noting that the report conforms to the Committee's guidelines, it does not provide adequate information relating to implementation of some articles and the general issue of violence against women. The Committee further notes that the report was submitted with some delay. The report also does not contain information on measures taken to implement the Beijing Platform for Action. The Committee appreciates the detailed written and oral responses of the delegation during the consideration of the report, which provided important additional information.

14. The Committee notes that the report and the oral and written responses do not provide adequate statistical data, disaggregated by sex and the States of the Union, and information on the implementation of affirmative action measures for scheduled castes.

15. The Committee notes with concern that the Government does not intend to review the declarations entered to article 16(1) and 16(2) of the Convention.

Positive aspects

16. The Committee recognizes that India has guaranteed in its Constitution fundamental human rights that can be enforced by an application to the Supreme Court. The Committee commends in particular the recognition of a fundamental right to gender equality and non-discrimination, and a specific enabling provision on affirmative action in the Constitution.

17. The Committee appreciates the contribution made by the Supreme Court of India in developing the concept of social action litigation and a jurisprudence integrating the Convention into domestic law by interpreting Constitutional provisions on gender equality and non-discrimination.

18. The Committee commends the introduction of a range of policies and programmes by the Government of India over the last years to improve the situation of women. It notes with appreciation that those programmes have contributed to some extent to improving the quality of social indicators for women in various states of the union. The Committee welcomes the proposal to formulate a new gender empowerment policy and the directives sent from the Prime Minister's office to mainstream gender issues and a rights approach to development at the national level.

19. The Committee commends the Government of India for establishing the National Commission for Women and state commissions for women with responsibility for developing action plans on gender and proposals for law reform.

20. The Committee commends the Government for introducing affirmative action measures that have enabled 33 per cent of seats in local government bodies to be reserved for women. It welcomes the proposed bill to reserve 33 per cent seats in state and national assemblies for women, and the assurance in the oral presentations that 30-40 per cent coverage will be provided for women in programmes that give access to credit.

21. The Committee commends the Government for introducing legislation that has banned sex-selective abortions. It welcomes the amendments to the law on nationality, which confer equal rights on men and women.

Factors and difficulties affecting the implementation of the Convention

22. The Committee notes that India has a very large and mainly rural population living in absolute poverty and that feminization of poverty and growing income disparities prevent the advantages of economic development being transferred to women.

23. The Committee considers that widespread poverty, such social practices as the caste system and son preference, as reflected in a high incidence of violence against women, significant gender disparities and an adverse sex ratio, present major obstacles to the implementation of the Convention.

24. The Committee notes that the existence of regional disparities is an impediment to the effective implementation of the Convention.

Principal areas of concern and recommendations

25. The Committee notes that the Convention and the Beijing Platform for Action have not been integrated into policy planning and programmes. While there have been several national plans in the pre and post-Beijing period, the Committee notes that these adopt a welfare approach toward women.

26. The Committee recommends that the proposed gender empowerment policy integrate the Convention and the Beijing Platform of Action and a rights-based approach.

27. The Committee considers that inadequate allocation of resources for women's development in the social sector and inadequate implementation of laws are serious impediments to the realization of women's human rights in India.

28. The Committee urges the allocation of sufficient and targeted resources for women's development in the social sector, as well as full implementation of relevant laws.

29. The Committee notes that there are many gaps in the legislative framework. The Committee considers that there is an urgent need to introduce comprehensive legislative reform to promote equality and the human rights of women.

30. The Committee recommends that proposals of the National Commission of Women on law reform be used in preparing new legislation, and that the Commission be entrusted with the task of developing working papers on legal reform in critical areas, within a time-frame.

31. The Committee notes that steps have not been taken to reform the personal laws of different religious and ethnic groups in consultation with

them so as to conform with the Convention. The Committee is concerned that the Government's policy of non-intervention perpetuates sexual stereotypes, son preference and discrimination against women.

32. The Committee urges the Government to withdraw its declaration to article 16 (1) of the Convention and to work with and support women's groups as members of the community in reviewing and reforming these personal laws. The Committee also calls upon the Government to follow the directives principles in the Constitution and Supreme Court decisions and enact a uniform civil code which different ethnic and religious groups may adopt.

33. The Committee is concerned that India has not yet established a comprehensive and compulsory system of registration of births and marriages. The Committee notes that inability to prove those important events by documentation prevents effective implementation of laws that protect women and girls from sexual exploitation and trafficking, child labour and forced or early marriage. The Committee is also concerned that failure to register marriages may also prejudice the inheritance rights of women.

34. The Committee calls upon the Government to provide adequate resources and establish a system of compulsory registration of births and monitor implementation in cooperation with women's groups and local bodies. It urges the Government to withdraw the reservation to article 16(2) of the Convention.

35. The Committee is concerned that the fundamental right to education under the Constitution recognized by the Supreme Court has not been realized by providing girls with equal access to primary and secondary education. It notes that budgetary allocation for education is still far below India's commitments with regard to the Beijing Platform for Action.

36. The Committee urges the Government to take affirmative action, set a time-frame and provide adequate resources for primary and secondary education so as to give girls equal access to education and eradicate adult illiteracy among women. It calls upon the Government to make primary and secondary education compulsory by introducing and enforcing relevant regulations.

37. The Committee is concerned that the fundamental rights recognized in the Constitution can be enforced only against state actors and in the event of inaction on the part of the state. It also notes that the private sector, where a great number of women are employed and which is expanding in a period of transition to market economic policies, is not covered by Constitutional standards.

38. The Committee recommends that a sex discrimination act be introduced to make the standards of the Convention and the Constitution applicable to non-state action and inaction.

39. The Committee is concerned that there is a high incidence of gender-

based violence against women, which takes even more extreme forms because of customary practices, such as dowry, *sati* and the devadasi system. Discrimination against women who belong to particular castes or ethnic or religious groups is also manifest in extreme forms of physical and sexual violence and harassment.

40. The Committee urges the Government to implement existing legislation prohibiting such practices as dowry, devadasi and caste-based discrimination. It calls upon the Government to strengthen law enforcement and introduce reforms proposed by the National Commission on Women and women activists in regard to the law on rape, sexual harassment and domestic violence.

41. The Committee recommends that a national plan of action be developed to address in a holistic manner the issue of gender-based violence, in line with the Committee's general recommendations 19 and 24. It calls upon the Government to provide statistics and information on violence against women in its next report.

42. The Committee is concerned that women are exposed to the risk of high levels of violence, rape, sexual harassment, humiliation and torture in areas where there are armed insurrections.

43. The Committee recommends a review of prevention of terrorism legislation and the Armed Forces Special Provisions Act, in consultation with the Human Rights Commission, the National Commission of Women and civil society, so that special powers given to the security forces do not prevent the investigation and prosecution of acts of violence against women in conflict areas, and during detention and arrest. The Committee recommends that women be given an opportunity to make their contribution to peaceful conflict resolutions.

44. The Committee recommends the introduction of gender sensitization and human rights programmes for the police, the security forces and medical professionals, in addition to programmes already undertaken.

45. The Committee is concerned with the continuing discrimination, including violence, suffered by women of the Dalit community, despite the passage of the Scheduled Castes and Scheduled Tribes (Prevention of Atrocities) Act of 1989.

46. The Committee urges the Government to enforce laws preventing discrimination against Dalit women and prohibiting the devadasi system. It urges the Government to introduce affirmative action programmes in such areas as education, employment and health so as to provide life chances to Dalit women and girls and create an environment conducive to their progress. The Committee calls upon the Government to set a time-frame for those interventions and provide information on the progress made in the next report.

47. The Committee is concerned that women and girls are exploited in prostitution and inter-state and cross-border trafficking. It is also concerned

that those women are exposed to human immunodeficiency virus/acquired immunodeficiency syndrome (HIV/AIDS) and health risks and that existing legislation encourages mandatory testing and isolation.

48. The Committee calls upon the Government to review existing legislation on trafficking and forced prostitution and to strengthen law enforcement. It recommends the development of bilateral and inter-state controls and reintegration and advocacy programmes to prevent the exploitation of women and girls in forced prostitution and trafficking.

49. The Committee notes with concern that maternal mortality rates and infant mortality rates are among the highest in the world. It also notes the adverse sex ratio and the incidence of sex-selective abortions due to son preference despite the law banning that practice. It notes that family planning is only targeted for women.

50. The Committee recommends the adoption of a holistic approach to women's health throughout the life cycle in the country's health programme. It urges the Government to allocate resources from a "women's right to health" perspective, following the guidelines of the Committee's general recommendation 24. The Committee calls upon the Government to elicit the support of medical associations in enforcing professional ethics and preventing sex-selective abortions. The Committee also recommends that the Government obtain the support of the medical profession in creating awareness on the urgent need to eliminate practices associated with son preference.

51. The Committee is concerned with the low participation of qualified women in the administration and the judiciary, including family courts and *lok adalats* or conciliation tribunals.

52. The Committee urges the Government to take affirmative action to increase women's participation in the judiciary and *lok adalats*, and provide gender-disaggregated data in its next report.

53. The Committee is concerned with significant disparities in economic activity rates for men and women. It is concerned that the practice of debt bondage and the denial of inheritance rights in land result in gross exploitation of women's labour and their impoverishment.

54. The Committee requests the Government to enforce laws on bonded labour and provide women with self-employment opportunities and minimum wages in home-based production and the non-formal sector. It calls upon the Government to review laws on inheritance urgently and to ensure that rural women obtain access to land and credit.

55. The Committee is concerned that the National Commission on Women has no power to enforce its proposals for law reform or intervene to prevent discrimination in the private or public sector. It notes that the National Commission and state commissions are not supported by adequate financial and other resources. It also notes that the National Commission on Women is not as well resourced or as empowered as the Human Rights Commission

of India, and that it has no formal link with the state women's commissions.

56. The Committee recommends that NGOs be represented on the National Commission of Women. The Commission's powers should be as wide as those of the Human Rights Commission and include a complaints procedure. The Committee recommends that state commissions be placed on a legal basis, be established in all States, and strengthened and linked with the National Commission.

57. The Committee is concerned that despite the willingness of the Government to work with NGOs and women's groups women activists and human rights defenders are exposed to violence and harassment in the communities in which they work.

58. The Committee urges the Government to strictly enforce the law and protect women activists and human rights defenders from acts of violence and harassment.

59. The Committee encourages India to deposit its acceptance of the amendment to article 20, paragraph 1, of the Convention concerning the Committee's meeting time.
60. The Committee urges the Government to sign and ratify the Optional Protocol to the Convention as soon as possible.

61. The Committee requests that the Government responds in its next periodic report to the specific issues raised in its concluding comments.

62. The Committee encourages the wide dissemination in India of the present concluding comments in order to make the people, civil society and Government sectors aware of the steps that have been taken to ensure *de jure* and de facto equality of women, as well as further steps that are required in that regard. It also requests the Government to disseminate widely in all local languages the Convention, its Optional Protocol, the Committee's general recommendations and the Beijing Declaration and Platform for Action.

Concepts on Comprehensive Health Care of
The Community specialy women and Children.

1. The Health Care system should be tpwards positive and correctional rather than on the curative approach.

2 The system looks at the root of the problem, seen, observed, or even discussed rathan at the problem per -se.

3 Realisation of the fact that the system should be location specific and the programme to be reliable and acceptable to the community.

4 Helath care is not to be considered as a temporary measure but should be treated as a continued effort towards tne Human development.

5 This calls for the effor to involve the community at the time of planning itself, promote organisations of the peopleto take charge of their Health and gradually reduce the dependancy on the Government alone.

6. To have a "sustained health" it necessarily should have lonkages horizontally which also effect or affect the health status in a community, food production hygiene safe drinking water environmental situation are such linkages.

7 In order to have an action plan for the activities the health educational level of the community is vital

8 The groups which take the responsibility need to plan a system to maintan as an integral part of system

9 Within the overall efforts thespecial needs of the section of the community need to be attended to in endemic areas like malaria, goitre fluorosis and others

7. The growth of children in the community should be the indicator on the health status within the community.

NUTRITION:

1. Children in the age of 7 months and 2 requires nutritional supplements as the foundation of Health.

2. I rrespective of the fact whether a group requires are not all the children in the community need to be involved in the programme

3. Designining a diet with local foods have more chances of the chil receiving the food and accepting it.

4 One hot meal need to be provided for the infants and pre-schoolers.in order to ensure availability of the nourishment,

5 Special foods need to be given separately to the children needing these nutrients like iodine but by and large normal food should be the pattern (to give more of what they have)

6. Mothers who need nutrtional care should also be given the food (cooked food foe some time) in order to protect the child to be born

7. Ensuring the aviaslbility of these foods in the PDS should be treated as a requirement and part of the approach.

8. Nutrition education as support communication need to be planned at the begining and the messages to be location specific.

9 Gramsabhas need to be involved in selecting the needy mothers of the community.

10. Economic capability of the mothers should be part of the nutritional planning,

11. Status of the girl child need to be focussed in the whole approach.

Some Random Thoughts

Independant body to monitor provide feedback under CEO.

District committee to make the policy assessment of the implementation of tne programme.This body to realise the interfacing of the actvities as well. specifically the food production socio-economic action plan
(Feedback to the State).

Nutrition programme to be under the women and childwelfare with the support of coordinating committee.

PHE to be responsible for the drinking water

Establishment of training unit for two or three districts

Promotion of women Health cooperatives for a cluster of villages

Special cell in the district for the diseases like TB.Malaria Aids

Development of norms of indicators for the positive health

Promotion of gram panchyats to fixup priority

Strengthening the existing the Institutions as per the details of TASK FORCE,including man-power improvement

Involvement of local district colleges for study on going assessment, and research.

Central body to be given resposibility for the Research and coordination

Sustained effort on Health Nutrition Education and FAMILY POPULATION

Information support for the people who are involved.

High mortality despite good care-seeking behaviour: a community study of childhood deaths in Guinea-Bissau

M. Sodemann,[1] M.S. Jakobsen,[1] K. Mølbak,[2] I.C. Alvarenga Jr.,[3] & P. Aaby[4]

The care-seeking behaviour of mothers of 125 children deceased aged 1–30 months was investigated by verbal autopsy in an urban area of Guinea-Bissau. A total of 93% of the children were seen at a health centre or hospital during the 2 weeks before death. In a previous survey covering the period 1987–90 we found that 78% of the children who died had presented for consultation (8); despite this increase in care seeking, infant mortality had not decreased. Comparison of elapsed time from disease onset to first consultation between children who died and matched surviving controls indicated that the interval was shorter for children who died than for those who survived (odds ratio (OR) = 0.7; 95% confidence interval (CI): 0.5–0.99). Of the 125 terminally ill children, 56 were hospitalized. A total of 20 children died on the way to hospital or while waiting in the outpatient clinic. Lack of hospital beds resulted in 15 mothers being refused hospitalization for their child. Of hospitalized children, 42% were discharged as improved or recovered during the 30 days preceding death. These results reveal a need for improved hospital admission criteria, improved recognition of the symptoms of serious illness, better discharge criteria, and the implementation of quality assurance systems for health services.

Introduction

Many studies have reported a significant decrease in child mortality following general improvements in primary health care (PHC) (*1, 2*). Such decreases are mainly the result of improvements in antenatal care and vaccination coverage; the effect of diarrhoeal disease programmes is less unequivocal. However, as vaccines and antenatal care cannot entirely eradicate the problem of excess childhood mortality in developing countries, better case management of severely ill children is clearly needed.

Improvements in the management of severely ill children are often based on audits of case histories with fatal outcomes (*3*). However, few studies in developing countries have investigated care-seeking behaviour prior to death in serious childhood illness in order to improve case management (*4–6*). Mortality surveys have found large variations in the proportion of children seen at a health facility before dying (*7–10*). It is important to explain why mortality remains high among under-5-year-olds in settings with easy access to health care facilities. For example, in a rural area of the Gambia, where 80% of children were fully immunized and PHC programmes had been active for 10 years, infant mortality was still 120 per 1000 live births in 1990 (*11*). In the Bandim suburb of Bissau, Guinea-Bissau, we previously reported that the infant mortality was 94 per 1000 and under-5-year-old mortality 215 per 1000, despite the presence of two health centres, a mother-and-child health clinic and an outpatient clinic (*8*).

We conducted the present study on patterns of care-seeking behaviour prior to a child's death to investigate child mortality on the basis of the mother's experience. The aim was to obtain individual case histories that could be used to improve patient management in primary health care programmes and thereby lower childhood mortality in developing countries.

Subjects and methods

Study area

The study was carried out in the suburbs Bandim 1 and Bandim 2 of the capital Bissau, Guinea-Bissau. The population of approximately 25000 persons

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is served by two local health centres (with senior nurses consulting), one mother-and-child health clinic (with physicians consulting) as well as an outpatient clinic at the paediatric ward of the national hospital (with hospital paediatricians consulting). All inhabitants live within 1 km of a health centre and within 3 km of the mother-and-child health clinic and outpatient clinic. Apart from a small one-time charge levied for a child's vaccination chart, no fees were charged at health facilities in Bissau during the study period. Since 1979, the area has had a demographic and health surveillance system that covers the following: registration of all pregnancies and births; and for children less than 3 years of age, routine collection, by means of 3-monthly visits to all houses, of information on vaccinations, infections, nutritional status, migrations and deaths. Morbidity and care seeking are monitored by weekly household interviews. Traditional remedies for severe diseases are not generally the first treatment choice.

Study population

The cohort followed in the present study consisted of all 1347 children born in Bandim 1 or 2 between 1 May 1992, and 30 April 1993. Deaths were ascertained by means of the routine surveillance system. Two additional rounds of data collection were carried out in 1993 and 1994; furthermore, a census of the entire population was performed in 1994. Verbal autopsies were conducted by two of the authors (MS & ICA) and a specially trained Guinean midwife. Interviews were carried out from July 1992 to November 1994, by which time the youngest children in the study cohort were 18 months of age and the oldest children 30 months of age. Median time from death to interview was 7 months (25–75th percentile: 6–9 months). The immediate cause of death was determined by combining information from the verbal autopsy, the morbidity survey, and a register of hospital diagnoses. Morbidity information was considered valid if the child had been followed up until death, and hospital diagnoses were considered valid when the child had been hospitalized for more than 24 hours. Hospital records were available for 43 of 56 hospitalized children (76.8%). A probable cause was determined for 93% of all deaths. In this study, "hospitalization" was defined as hospitalization at any time during the 30 days preceding death, regardless of subsequent discharge from hospital. Households with deaths were divided into two socioeconomic status groups: group 1 (50 mothers) consisted of households with two or more of the following: corrugated iron roof, television, inside toilet, and electricity; group 2 (75 mothers) consisted of households with less than two of these characteristics. Socioeconomic information was obtained from the health surveillance system.

Statistical methods

Sample means were compared with the Student's *t*-test for normally distributed data, but the Kruskall–Wallis test was used when sample variances were significantly different. In bivariate analyses, background factors were controlled for by means of a Mantel–Haentzel stratified analysis of two-by-two tables. A nested case–control study was carried out by matching a control to each fatal case. The control was chosen from among children in the study population participating in a weekly morbidity survey, age-matched (±1 month), had experienced an episode of disease within the same month as the fatal case, was seen at a health centre or a hospital, but survived at least 3 months following the episode. Time to consultation was measured as the number of days between the onset of illness and the first consultation. The odds ratio was calculated as the ratio of discordant pairs, and 95% confidence intervals (CI) were calculated with Miettinen's test-based approach (*12*).

Results

Childhood mortality in the study group

All deaths of live-born children (248/1347) were investigated by verbal autopsies with the mother, or the nearest relative if the mother was absent. The circumstances, timing, and location of each contact with health care personnel during the fatal illness were recorded during the interviews. The proportion of stillbirths was 55 per 1000 births, perinatal mortality was 81 per 1000 births, and infant mortality 91 per 1000 live births. However, only post-neonatal deaths (125/1347) were included in this analysis.

Of the 125 such cases, 114 had verifiable information on care seeking. Of these, 106 children (93%) were seen by a health professional during the 14 days preceding death. Of the eight others, two died on the way to consultation, three died suddenly and unexpectedly, and three from diseases ascribed to traditional ceremonial causes. Compared with our previous mortality survey in the same city, the behaviour reported here represents a significant reduction in the risk of not being brought to a health facility (risk ratio = 0.3; 95% CI: 0.2–0.7) (*8*). Moreover, 33 (26.4%) of the deaths occurred in hospital, whereas in the previous survey 45% of deaths occurred in hospital. A total of 23 children (18.4% of deaths) died

Table 1: Cause of death and pattern of care seeking

	Median duration of illness (days)[a]	Median days to first consultation[a]	No. of children, by place of first consultation:[b] Health centre	Outpatient clinic	Other[c]	No information	No consultation	No information on care seeking[b]	Total
Acute diarrhoea	7 (3–22)	2 (2–4.5)	13 (56.5)	4 (17.4)	4 (17.4)	2 (8.6)	0 (0.0)	0 (0.0)	23
Fever	4 (3–25)	2 (1–5)	10 (31.3)	10 (30.3)	7 (21.1)	1 (3.0)	4 (12.1)	1 (3.1)	33
Pneumonia	10 (5–30)	3 (1–5)	9 (56.3)	7 (43.8)	0 (0.0)	0 (0.0)	0 (0.0)	0 (0.0)	16
Malaria	8 (2–20)	3 (2–5)	3 (50.0)	3 (50)	0 (0.0)	0 (0.0)	0 (0.0)	0 (0.0)	6
Other[d]	7 (2–30)	1.5 (0–15)	4 (11.4)	11 (34.3)	4 (11.4)	2 (5.7)	4 (11.4)	9 (25.7)	35
Chronic diarrhoea	30 (25–60)	14.5 (1–46)	8 (66.7)	2 (16.7)	1 (8.3)	0 (0.0)	0 (0.0)	1 (8.3)	12
Total			47	38	16	5	8	11	125

[a] Figures in parentheses are the 25th–75th percentiles.
[b] Figures in parentheses are percentages.
[c] Mother-and-child health clinic or regional hospitals in the interior.
[d] Malnutrition (n = 5), measles (n = 8), congenital diseases (n = 8), sudden death (n = 3), unknown (n = 11).

at home after being discharged from hospital. No information on the location of death was available for seven children.

Time to consultation

To determine whether mothers delayed consultation in fatal cases, we performed a nested case–control study. It was possible to match a surviving control for 93 cases. Equal delay occurred in 9 of the matched pairs. In 35 matched pairs, the case exhibited the longest delay and in 49, the control. Cases were more likely to have a shorter delay than controls, with an odds ratio of 0.70 (95% CI: 0.50–0.99).

First consultation and hospitalization

The place of first consultation according to cause of death is shown in Table 1. The median time from onset of symptoms to first consultation was independent of child's age, ethnic group, mother's education, socioeconomic status, and cause of death.

Of the 47 children first seeking care at a health centre, only 23 (49%) were admitted to hospital and, of these, 20 only after the mother sought consultation more than once. Of the 38 children first seeking care at the outpatient clinic at the paediatric ward, 22 (58%) were admitted to hospital. Immediate hospitalization was more likely among children presenting at the outpatient clinic first than for children presenting at the health centre (risk ratio = 5.0, 95% CI: 2.0–12.5). Children taken to a health centre survived longer (median, 8 days; 25–75th percentile, 2–24 days) following first consultation than children initially taken to the paediatric ward (median, 2 days; 25–75th percentile: 0–8 days; $P = 0.01$). No difference in survival time after first consultation was found between children hospitalized immediately ($n = 18$) and others ($n = 20$; $P = 0.8$). After controlling for mother's education, socioeconomic status, and child's age, there were no differences in place of first contact with the health system. However, children with diarrhoea were more likely to contact a health centre first. Of those children surviving at least 2 days from first consultation without hospitalization, 39 (84.8%) later reattended a health facility.

Hospitalization: reasons for refusal or discharge

Of the 114 deaths for which we have information, 103 children (90.3%) presented at hospital one or more times during their terminal illness. Of these, 10 children died on the way to hospital and 10 while waiting for treatment in the outpatient clinic (Table 2). Of the remaining 83 children, 56 (67.4%) were admitted either at the first visit ($n = 22$) or at a subsequent visit; of those admitted, 18 children died the day of admission. For the 61 children not admitted at first consultation, 15 of the mothers stated they were turned away from the outpatient clinic having been informed that their child should be hospitalized, but that there were insufficient beds. Refusal of admission did not depend on mother's education, socioeconomic status, or child's age ($P = 0.9$). Elapsed time since disease onset (>14 days) increased the risk of refusal (risk ratio, 2.4; 95% CI: 0.9–6.6).

Of the 56 children admitted to hospital, [illegible] (41.7%) were discharged before death, with the [illegible] of discharge being independent of socioeconomic status ($P = 0.44$) and child's age ($P = 0.35$). Of these, 9 children were discharged as "cured", 10 as "improved" or "recuperating", 1 was discharged by the mother, and 2 had no status information at discharge.

Case histories

Six representative case histories depicting the management problems of severe childhood illness in the study area are shown in Table 3.

Discussion

Despite a high percentage of children with fatal illness obtaining treatment from a health professional, infant mortality in the study suburban area of Guinea-Bissau has continued to be high: (1987–90: 94 per 1000; 1992–93, 91 per 1000). The proportion of children who later die after presenting for consultation both at health centres and hospitals has increased significantly since our previous mortality survey (*8*).

Among physicians and other health care workers in developing countries, a common explanation for high childhood mortality is that, as mothers are believed to be incapable of caring for a severely ill child, children are brought to care too late. Moreover, they do not recognize severe symptoms and may seek traditional care first. However, the present study indicates that mothers sought care sooner in cases of fatal illness than in other cases.

Conceivably, seriously ill children would have a better chance of survival if they were treated at the outpatient paediatric ward than at a health centre. The ratio of mothers choosing a health centre as site of first consultation to mothers choosing the paediatric ward was the same, regardless of mother's education, socioeconomic status, child's age, and ethnic group. Moreover, the chance of being admitted im-

Table 2: **Place of first consultation and subsequent care seeking**

	Hospitalized:			Not hospitalized:					
Place	Directly	After one or more reconsultations	Total hospitalized[a]	Died at home[b]	Died on the way to outpatient clinic	Died while waiting for consultation at outpatient clinic	Total not hospitalized	No information on place of death	Total
Health centre	3	20	23 (11)	19 (11)	2	3	24	—	47
Outpatient clinic	18	4	22 (6)	7 (6)	3	6	16	—	38
Mother-and-child health clinic	0	2	2 (1)	2 (1)	0	1	3	—	5
Hospital or health clinic in the interior	1	4	5 (2)	3 (2)	3	0	6	—	11
No information on place	—	—	4 (3)	—	—	—	1	—	5
No consultation	—	—	—	6	2	—	8	—	8
No information on consultations	—	—	—	4	—	—	4	7	11
Total	22	30	56 (23)	41 (20)	10	10	62	7	125

[a] Figures in parentheses are number of children subsequently discharged who died outside hospital.
[b] Figures in parentheses are number of children dying at home after one or more reconsultations.

Table 3: Typical case histories

Girl, 9 months of age, presents at health centre with diarrhoea and vomiting after 2 days of illness; given oral rehydration salts and sent home; next day mother seeks care for child at another health centre; after 2 more days, mother presents child at outpatient paediatric clinic, where the child is given oral rehydration salts and sent home; 20 days later child dies without receiving additional care
Boy, 4 months of age, presents at outpatient paediatric clinic with diarrhoea and vomiting after 2 days of illness; given oral rehydration salts and sent home; 3 days later mother seeks care for child at outpatient paediatric clinic; child given oral rehydration salts and sent home; 10 days later, child collapses at home and mother takes child to outpatient paediatric clinic, child is sent home without treatment and dies same day.
Boy, 14 months of age, presents at outpatient paediatric clinic with high fever after 1 day of illness; given medication and sent home (mother told not enough hospital beds); child suffers generalized seizures at home, and next day mother returns to outpatient paediatric clinic with child comatose, after waiting 2 hours, child sent to laboratory for tests and dies without receiving additional care.
Boy, 9 months of age, hospitalized twice within 2 months for high fever and multiple boils; each time discharged as "cured"; 2 weeks after last discharge child dies at home with fever and convulsions.
Girl, 7 months of age, presents at mother-and-child health clinic with high fever and chills after 2 days of illness; given chloroquine and paracetamol and sent home; same day child worsens, and mother seeks care at outpatient paediatric clinic; child dies before receiving additional care.
Boy, 12 months of age, presents at health centre with fever, vomiting, and constipation after 1 week of illness; child given lemon juice and sent home; after no improvement, mother seeks care same day at outpatient paediatric clinic; child admitted after waiting more than 1 hour for a blood sample, and then waiting for the father to buy the necessary drugs (which were not in stock at hospital); child dies without receiving additional care.

mediately to the paediatric ward of the hospital was remarkably lower for children presenting initially at a health centre than for children presenting initially at the outpatient paediatric ward. It is therefore possible that health centres retard needed hospitalization. As health centers were visited more frequently than in our previous mortality survey, this could have serious implications.

Apart from five children dying suddenly at home or on the way to their first consultation, only five children were not presented for consultation at hospital, which is a marked decrease from our previous survey. However, it is significant that so few fatally ill children were admitted to hospital, even from among those who first presented at the outpatient paediatric ward. In many cases, the reason was a shortage of beds. There were nine terminally ill children attended by a paediatrician at the outpatient clinic 48 hours prior to death without being admitted. The risk of refusal of admission after consultation at the outpatient paediatric ward was higher if symptoms had a duration of more than 14 days, indicating that chronic illness was less likely to be seen as requiring hospitalization. This is significant, as the two most common chronic illnesses, persistent diarrhoea and malnutrition, both have a very high mortality (*8*). Since children not returning for a second consultation died rapidly (median survival, 1 day) mothers' lack of knowledge does not explain why children were not hospitalized. Children not hospitalized after a first visit to the outpatient paediatric clinic died as rapidly as those who were; it is therefore unlikely that refusal of admission was based exclusively on clinical criteria. Hospitalization was not influenced by socioeconomic status, mother's education, child's age, or ethnic group. However, verbal autopsies suggested that hospitalization was obtained more easily if a mother knew a staff member in the outpatient clinic.

A considerable proportion of children died waiting for consultation at the outpatient clinic or laboratory. Some of these deaths could probably have been avoided by means of a revision of clinic procedures and by training health personnel to recognize children requiring immediate care.

A major problem is the high proportion of children dying at home after discharge from hospital. In light of discharge status, this could not have been caused by mothers fleeing the hospital with dying children. No sociocultural factors were related to risk of discharge, suggesting that inadequate recognition by medical staff of the potential consequences of illness or nosocomial infections may have been responsible. If so, this problem has been aggravated since our previous mortality survey, since a larger proportion of hospitalized children later die at home. The number of beds in the paediatric ward remained constant between the two surveys. Hence, demand for limited bed space may have contributed to some premature discharges. Hospital beds can be occupied for long periods of time by chronically ill children suffering from malnutrition, persistent diarrhoea, complications resulting from cerebral malaria, or tetanus. A clearer distinction between acute and long-term illness in terms of management and the need for care, as well as a more strict set of rules for admission and discharge could potentially lower demand for bed space.

The present mortality survey consists of case histories with a fatal outcome. Since medical consultations for terminally ill children represent only a small fraction of all consultations for sick children, this survey may be biased as an evaluation of the adequacy of health system procedures. However, the present study does point to a number of specific problems in case management. Previous studies ana-

lysing care-seeking behaviour have focused particularly on traditional beliefs and practices that prevent mothers from seeking proper medical care (*5, 6, 9*). However, our experience suggests that it may be equally important to examine the quality of the medical care provided. This is supported by a Mexican study using verbal autopsies in a similar way. In an area where no household was farther than 30 minutes from a health facility, 60% of the deaths in children occurred at home and 80% of these children had received qualified medical care within 3 days of death (*4*).

For dealing with problems associated with severely ill children WHO/UNICEF recommends "integrated management of the sick child", which combines the principles learnt over the past 15 years in disease-specific health programmes into a unified approach to managing childhood illness (*13*). This initiative focuses on improvements in health-worker performance and changing family behaviour in relation to sick children. Training courses for the inpatient case management of sick children have also been developed.

The present analysis clearly supports the need for such initiatives. Surveys analysing fatal cases can be a valuable tool, and can serve as a cost-effective means for health care workers to identify areas for improvements in the case management of severely ill children. Improving the management of such children may be as important for decreasing childhood mortality as vaccination and antenatal care programmes have been, especially in countries with poorly educated and badly paid health care workers. Inadequate supplies, physical facilities, and equipment may also contribute to the persistence of high childhood mortality in Bissau. Such constraints emphasize improved health system management as a means of better using available resources.

A key step in improving case management should be the establishment of an effective triage system that singles out seriously ill children as soon as they come to a health facility and ensures that appropriate action is taken. More formal criteria for admission, referral, and discharge are also needed, accompanied by clinical and system-management training of staff. Finally, measures should be taken to assure the quality of services provided by health care workers, e.g. by medical audit or the use of epidemiological methods such as those used here. These findings could be extended to the health services of other developing countries; however, important differences may exist depending on available resources, personnel, and payment systems. Hence, additional studies investigating the case management of severe illness at the primary health care and hospital levels in other countries are warranted.

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Résumé

Une mortalité élevée malgré la recherche de soins appropriés: résultats d'une enquête communautaire sur les décès d'enfants en Guinée-Bissau

Bien que de nombreuses études aient fait état d'un déclin significatif de la mortalité infantile à la suite d'améliorations générales des soins de santé primaires, la vaccination et les soins prénatals ne peuvent supprimer à eux seuls la surmortalité infantile dans les pays en développement. Une prise en charge plus efficace des enfants gravement malades est donc nécessaire. Rares sont les études qui ont été faites dans les pays en développement sur la recherche de soins appropriés comme moyen d'améliorer la prise en charge des enfants gravement malades. La présente enquête sur la demande de soins avant le décès a été conduite pour analyser le problème de la mortalité infantile en fonction de l'attitude de la mère. Il s'agissait de recueillir des antécédents médicaux individuels en vue d'améliorer la prise en charge des cas dans le cadre de programmes de soins de santé primaires et ainsi, de réduire la mortalité infantile dans les pays en développement.

La demande de soins par les mères de 125 enfants décédés entre 1 et 30 mois a été étudiée au moyen d'autopsies verbales dans une zone urbaine de Guinée-Bissau. Tous les habitants sont à moins de 3km d'un centre de santé. Au total, 93% des enfants avaient été reçus dans un centre de santé ou un hôpital dans les deux semaines ayant précédé leur décès. Notre précédente enquête, sur la période 1987–1990, avait montré que 78% des mères des enfants décédés les avaient montrés en consultation; toutefois, malgré cette augmentation de la demande de soins, la mortalité infantile n'a pas baissé. Si l'on compare le temps écoulé entre l'apparition de la maladie et la première consultation pour les enfants décédés et des témoins survivants appariés, il apparaît que cet intervalle avait été plus court pour les enfants qui sont décédés que pour ceux qui ont survécu (odds ratio = 0,7, intervalle de

confiance à 95% = 0,5–0,99). Sur les 125 enfants qui étaient en phase terminale, 56 ont été hospitalisés. Vingt sont décédés lors du transport à l'hôpital ou en attendant d'être vus en consultation dans un dispensaire. Faute de lits disponibles, 15 mères se sont vu refuser l'hospitalisation de leur enfant. Sur les enfants hospitalisés, 42% ont été déclarés en meilleure santé ou guéris et renvoyés chez eux dans les 30 jours ayant précédé leur décès. Ces résultats montrent qu'il est nécessaire d'améliorer les critères d'hospitalisation, la reconnaissance des symptômes des maladies graves et les critères de sortie et de mettre en oeuvre des systèmes d'assurance de la qualité des services de santé.

La solution préconisée par l'OMS et l'UNICEF pour le traitement des enfants gravement malades est la "prise en charge intégrée de l'enfant malade" qui associe les principes acquis depuis 15 ans dans le cadre de programmes de lutte contre des maladies déterminées en une approche uniforme et cohérente de la prise en charge des maladies de l'enfance. La présente étude montre très clairement que de telles initiatives sont nécessaires. Les enquêtes sur les cas mortels peuvent être un instrument précieux et fournir aux agents de santé un moyen d'un bon rapport coût/efficacité de déterminer les domaines dans lesquels des améliorations doivent être apportées à la prise en charge des enfants gravement malades.

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WH-2.

How we have the 'movement' but the fascists have the women!

"IT is a time to listen to the different resonances of women in song, in folk tales, in grandmother's stories, in symbols; a time to create new spaces, to seek new knowledge, to find new possibilities for our times."

So said the invitation to the Fourth National Conference on Women's Movements in India, to hundreds of women activists across the length and breadth of this country. But even more loud and clear from audio and video cassettes around the country can be heard the shrill and hysterical shrick of a woman :

"Declare without hesitation that this is a Hindu Rashtra, a nation of Hindus..... We have come out to strengthen the immense Hindu Shakti into a fist..... Do not display any love. This is the order of Ram..... The Koran exhorts them to lie in wait for idol worshippers, to skin them alive, to stuff them in animal skins and torture them until they ask for forgiveness..... Let there be a conflagaration than this slow torturous simmering..... We could not teach them with words, now let us teach them with kicks..... Let there be a bloodshed once and for all..... Now we will not only shed our own blood, but the blood of others, too..... That Mahatma Gandhi led you to ruin..... Tie up your religiosity and kindness into a bundle and throw it in the Jamuna maiya..... Any non-Hindu who lives here does so at our mercy....."

Ominous and blood-thirsty words these; and that too from the mouth of a woman — Uma Bharati, elected to the highest body of the land — Parliament. And she is not the only woman spewing communal, nay fascist hate and poison amongst the people today. There's Sadhvi Ritambhara who has come out of her ashram and vowed not to rest content till a *Hindu Rashtra* is established. Listen to what she has to say:

"We want to teach the Muslims a lesson — either they come to heel and surrender to our will in Ayodhya, or we shall take it by force..... We don't believe in this kind of secularism....."

Which are the times in which we women activists from all over India are meeting today? Those of the invitation or those of Uma Bharati, Vijayaraje Scindia and Sadhvi Ritambhara? Will these fascist women permit the crores of women of our country to quietly listen "to the different resonances of women in song"? Or is it increasingly going to be the 'fate' of our women to hear only the wails of bitter anguish as their homes are looted or burnt down, or the screams of outrage as a husband or infant is stabbed to death?

And folk tales—will it be tales from the Panchatantra or the Jatakas, or will it only be sinister and gory tales of "how Babar destroyed a mandir to build a masjid, how the Muslims demanded partition and Pakistan and got it, how the Sikhs and Kashmiris are terrorists and butchers, etc., etc."

And as for grandmothers' stories, will they be like those of yesteryear, full of the milk of human kindness, about repentance even if an ant is killed underfoot, about the teachings of our great Indian sages, sants and saints who down the years taught the people of their times as well as future generations to show care and concern for the wretched of the earth? Or will grandmothers and mothers now teach their sons and grandsons only about revenge and how they must avenge the murder and slaying of their near and dear ones, the cruel destruction of their hearts and hearths and the crushing underfoot of their lives and livelihoods?

And symbols — will they continue to be of women's life-giving and life-sustaining *shakti*, of her destructive powers over evil and wrongdoing symbolised in Kali, of her deep knowledge of life and society symbolised in Saraswati? Or are today's symbols increasingly going to be bricks and jyots, trishuls and swords, acid bulbs and AK 47s.

"A time to create new spaces....." Where, one might well ask? Where will the women victims of Gonda and Baroda, Ahmedabad and Hyderabad, Agra and Aligarh, Chandigarh and Srinagar and of innumerable other towns and cities too shameful to enumerate, create new spaces? In burnt-out *bastis* and strife-torn *mohallas*? In makeshift refugee camps or disease-filled migrant colonies?

"We must find new possibilities for our times....." What new possibilities are there for women caught in the throes of a fundamentalist mania that has engulfed entire towns and cities, talukas and districts, making them simmering cauldrons that can be ignited and set aflame at the slightest rumour or whisper!

We have been asked "to express our ideas and experiences, feelings and problems through a cultural medium of our choice". To express ourselves through "songs, skits, plays, paintings, tableaus" etc. Honestly, can we really sing and dance with gay abandon and joy while a ghastly death dance is enacted all around us? Do we wish to enter the footnotes of history as women who fiddled while India burnt?

Not merely fundamentalism, but FASCISM!

We are aware that some of the feminists gathered here will dismiss our views as alarmist. Perhaps to them all talk of fascism is an unnecessary phobia. So simple to dismiss the present communal conflagration as just another bout of riots which have regularly erupted in our country since 1947. So easy to make believe that sooner or later the riots will be quelled and the women's movement left in peace to discuss patriarchy in the home, sexual stereotypes in the mass media and how women should regain control over their bodies. So simple to satisfy our feminist consciences by just ritualistically having a sub-theme in the National Conference on the "topic" of religious fundamentalism, in which we plod through the same old groove of personal laws and Shah Bano, Roop Kanwar and *sati*, when the country is threatened with **not merely fundamentalism but fascism.**

Let's wake up. Fascism is a million times more rapacious and bestial than fundamentalism. Fundamentalism mobilised the people of its community "to defend religion" from the interference of our half-hearted secular state. Fascism is a ferocious mass movement which aims to make fundamentalism the state power itself. Fundamentalism primarily stifled working and toiling women. Fascism will not spare even 'liberated' and 'emancipated' women from the bourgeois and petty bourgeois class.

Kashmir is already in the control of Muslim fascists who are not merely fundamentalists. These fascists are beyond caring whether section 125 of the Cr.P.C. goes against the Shariat or not. They are fighting for secession and an Islamic state joined to Pakistan. The Khalistanis in Punjab are already a state within a state, while the Hindu fascists have made it clear that their aim is a *Hindu Rashtra*. This cataclysmic transformation from our present half-hearted 'secular and democratic' state to theocracy and fascism has already unleashed the most rabid criminalisation and militarisation of social life. Senas of armed thugs control every city and town.Their fascist attacks have been defended by sane, educated sections of society as "teaching those anti-national Muslims a lesson". Huge parts of the country are under military rule, with its house-to-house raids, its inevitable rounding up of innocents, imprisonment without trial, and torture.

This brutalisation of our people has in a flash exposed how the so-called gains of the women's movement have indeed been built on sandy foundations. It has brought to the fore as never before, the inherent impotence of the women's movement as we know it today, to deal with the monster of fascism.

Of what use?

Of what use are workshops on "women studies and the national planning policy" to the millions of Kashmiri women who are being kept within the Indian nation only at the point of a gun? Can the most stringent tightening of rape laws help when women are gang-raped during a communal holocaust or while under military occupation? Do the much-trumpeted family courts set up to 'sympathetically deal' with marital disputes, have any chance in front of the Khalsa courts of the Khalistanis? What property rights can we talk of for women whose families have lost whatever property they possessed in communal riots or terrorist violence? Is it not a joke to exhort women "to unite and reclaim the night" when fascist lumpen elements control the towns after sundown? Can our preoccupation with how daughters and mothers eat last and least, have any meaning when entire families are being pushed into semi-starvation and destitution due to weeks-long curfews; when traders make use of the breakdown of all civil life to hoard, blackmarket and sell onions for Rs. 40 a kg, never mind other foodstuffs and foodgrains? Can our talk of women having rights in the matrimonial home or in the ancestral property, have any meaning when they have lost hearth and home and are rotting in refugee camps? Some feminists have taken patriarchy to such absurd levels by claiming "Men kill. Women give birth"! What meaning and direction can such anti-male chauvinism give us in such troubled times, when fanatic sadhavis are exhorting people to kill their non-Hindu neighbours! When the majority who have fallen victims to the bullets of the fundamentalists happen to be men struggling against fascism! For 40 years, our feminist sisters have boldly proclaimed, "Sisterhood is powerful"! Can we talk of any sisterhood with the likes of Uma Bharati and Ritambhara and thousands of other fanatic women who teach hatred, revenge and aggression!

In fact, the most uncomfortable question forced by life on the women's movement today is: How come the fascists with all their backward views about women's inequality, with all their support for reactionary personal laws, have succeeded in winning over millions of women to their cause? On the other hand, how come the women's movement with all its opposition to reactionary personal laws, with all its progressive views about women's equality is impotent to break the stranglehold of the fascists on women? It is time to ask ourselves: **How come the feminists have the 'movement', but the fascists have the women?** This question demands soul-searching from all of us, who believe that an awakened womanhood can stand between democracy and fascism, between social peace and communal anarchy, between sanity and collective madness.

Can there be herstory without her concerns?

The first point to realise is that the women's movement has by and large refused to make the **primary concerns of the majority of women its special concern.** The majority of the women of our country are working and toiling women, homeless, landless and overworked — bordering between survival and death. Their primary concern has been that under 40 years of 'secular rule', their self-worth has been raped, their collective identity has been shattered, their self-respect has been destroyed,their dignity has been insulted, their will has been broken and their dreams and future torn to shreds.

When women lose their homes over and over again due to brutal evictions, what self-worth can she cling to ? When she and her family are hunted like animals from one forest to another by corrupt forest officials, what is left of her pride? When she is forced to defecate on railway tracks and has to fight for even a bucket of water, what is left of her dignity? When she is constantly forced to fall at the feet of one labour contractor or another, when unscrupulous middlemen rob her of her hard-earned labour, when she is reduced to begging and pleading with vicious moneylenders, is there anything left of her will? When she has to bear up with the sexual assaults of the landlords, just in order to get work the next day, what is left of her self-respect? When landlessness and debt forces her family to migrate to the city pavements, what is left of her collective identity? When she sees her tiny children working from dawn to dusk just in order to survive, when she sees her married daughters reduced to skin and bones due to hard work and drudgery, is there any future to live for? When she sees her husband forced into unemployment and reduced to an alcoholic, what rainbow-like dreams are there for her?

Let's do some soul-searching

Has not the women's movement by and large insulated itself from this collective degradation suffered by the overwhelming majority of women? Have not most women's organisations (exceptions granted) regarded mass evictions of slum dwellers and tribals from their homes as not "women's issues", and hence of no direct concern to the women's movement? Have not many in the women's movement (exceptions granted) consciously closed their eyes to the millions of families reduced to landlessness due to landlordism and moneylending, claiming these are not specifically "women's problems"? Has not the women's movement by and large failed to protest against the pernicious contract system which has strangulated millions of women at work, including those involved in household industry — all under the plea that this is a trade union problem and does not concern the women's movement! Have not feminists time and again declared that adulteration and blackmarketeering of rations denial of drinking water and toilets, extortion of donations for school admission etc, etc, are not women's problems but "general problems".

When the women's movement has by and large bypassed the overwhelming majority of women all these years, is it surprising that these women are bypassing the women's movement today? And can there be any real struggle against fascism, unless these women are organised and mobilised?

In fact by overlooking these women, the women's movement has left the field open for the fascists to play on the emotions and hopes of our women. Is it surprising then that they are attracted to the fascists who constantly talk of restoring the pride of their respective communities, who boast of reclaiming back their lost dignity and identity, who magnetically draw the degraded unemployed youth and their mothers with visions of a new future? Is it surprising then that the fascists appear as saviours of women when they forcibly close down liquor shops and cinema halls showing obscene films, when they promise jobs and small business to their sons by driving out the "outsiders" or getting rid of "the other community"? When our so-called secular state has robbed women not only of their meagre possessions but insulted and humiliated them adding insult to injury, is there any reason for women to defend this state from the clutches of the fascists?

When obsession leads to regression

The second point to realise is that the primary obsession of the women's movement has been the discrimination between the sexes — a burning and immediate question for women of the bourgeois and climbing middle class, **but of marginal importance to the overwhelming mass of working and toiling women.** The women's movement has been over-concerned with how daughters are given less food than sons in the homes of the poor, while the major concern of the woman of the house, has not been this discrimination but how to feed her half-starving family. The women's movement has fought for property rights for women, but what appeal can this have for the millions of women who belong to the propertyless class? The women's movement has spoken of land *pattas* and house *pattas* for women, but to women who are landless and homeless, the *patta* is all-important, rather than whether she or her husband will be the owner. The women's movement has demanded that the matrimonial home should be in the name of the woman, while women living in the slums are less afraid of being thrown out by their husbands than by the government's demolition squads which make her whole family homeless. For the women's movement, the giving and taking of dowry is an insult to womanhood and a reflection of her

Majlis-e-Itehadul-Mussalmeen (MIM), responsible for the present riots in Hyderabad, runs among other things an ITI, a polytechnic, an engineering college, a medical college, an Institute for Islamic and Arabic studies etc.,all of which not only receive money from the Islamic fundamentalist regimes of Saudi Arabia and Pakistan but also from the Secular Democratic Republic of India. Even more widespread and pernicious has been the stranglehold of the RSS (indicted in several riots by government commissions) over education. The RSS runs more than 10,500 institutions and institutes all over the country, with again lavish grants from the Secular Democratic Republic of India.

While this state was in the few and far between times giving women activists of the 'autonomous women's movement' access to the government mass media like Doordarshan and AIR, it was hourly opening up this mass media to the fundamentalists of all religions. Also note, how while the Jamaat-e-Islami, the Shiv Sena, the Khalistanis, the VHP, etc., have used the mass media in print and celluloid, audio and video, to spew their communal poison, the state has pretended to see no evil and hear no evil.

While our 'democratic and secular' state was attempting to set up a few family courts as token gestures of its 'concern for women in distress', it was giving full and free rein to the fundamentalists forces to set up their own Personal Law Boards, with legal sanction to decide in vital matters of family life such as marriage, divorce, maintenance, custody and guardianship of children, inheritance, etc. Further, these "protectors of religion" were being allowed to maintain a tight grip over their communities as well as to brutally excommunicate, boycott and ostracise all those who even questioned, let alone opposed their slavish fatwas and edicts.

We ask all women activists to look around them. Who runs more trusts meant for the welfare of women? Progressive women organisations or fundamentalist organisations? Who runs more orphanages, ashrams, destitutes homes, boardings for deprived children? Progressive women groups or fundamentalist organisations? Who runs more clinics, dispensaries, ambulance services, hospitals (all of urgent importance to mothers)? Progressive women or fundamentalist organisations? Who runs more hostels or homes for women? Progressive women's trusts or fundamentalists' trusts? Just find out how many crores of rupees in government grants, tax exemptions, exemptions from Urban Land Ceiling Acts, have been provided by our 'secular and democratic' state to these fundamentalist organisations. Only then will we understand how the women's movement has received crumbs while the fundamentalists have gobbled up the cake.

Our tragedy

The tragedy is that the women's movement has by and large gratefully accepted these crumbs, believing that with a little bit of more petitioning and pressure, the crumbs will become morsels. Today leave aside getting more, the growing fascist forces are snatching even the crumbs from our mouths. E.g. in Chandigarh, Khalistani fascists are forcibly preventing college girls from even wearing clothes of their choice, while our 'secular and democratic' state watches helplessly.

The worst sufferers are those who belong to the so-called 'autonomous women's movement'. We say so-called, because this movement has in fact been tied to the patronage and apron strings of this very 'democratic and secular' state. Instead of being autonomous of **all political parties** who swore by the merits of this 'secular and democratic' state, it was miserably tied to their outlooks. Is it surprising that in a period of rising fascism when these 'secular and democratic' parties become irrelevant, like in Punjab and Kashmir, the 'autonomous women's movement' has become impotent and paralysed?

Let's be honest. All this talk of autonomy was meant primarily to segregate the women's movement from any emerging revolutionary and democratic movement. In short, to isolate the women's movement from the very forces capable of taking on the fascists.

Why the exploiters need fascism

Today the most reactionary sections of the exploiter classes do not have much use for even the facade of a 'secular and democratic' state which has served their purpose for 40 years. Today their interests can only be protected by a fascist party presiding over a repressive state machinery, purged of secular and democratic elements, and supported by fascist senas from the outside. Today, since the exploiter classes cannot even promise, let along give, the basic necessities of life to the masses, they need fascist organisations which will constantly whip up fundamentalist frenzy and keep the masses divided and in a state of fanaticism. If this requires that entire regions of the country be under military rule, so be it.

Only through such a fascist 'stability' can the imperialists get their huge foreign debt serviced every year on the sweat and blood of the people. Only through such a 'stability' can the masters of the fascists get further loans to buy more guns and extort more commissions. Only through such fascist control can India compete internationally as the land of sants, mahatmas, and spiritualism as well as the source of the cheapest of cheap labour. Only through this brutalization can our exports be made 'competitive' in international markets.

This drive for cheap labour will demand the dismantling of whatever meagre protective legislation exists for women. eg., restrictions on night duty, working in underground mines, etc. However, the fascists need not take the ignominy of this crime on their heads. Some feminists have already demanded the withdrawal of all protective legislation under the plea that this protection violates "gender equality" and affects women's employment.

Breakdown of sisterhood

Through all this it is becoming increasingly clear that the growth of fascism will break asunder the "oneness and unity of sisterhood" which has been an article of faith for many feminists. Leave aside the Uma Bharatis, many women especially from the growing middle class who have acquired the goodies of life can only be afraid of losing them due to the growing insecurity and the anarchy of social and political life. It is not difficult to sell them the need for a strong repressive state. Many women have been 'liberated' enough to own shares and play the stock market. Such women may even sneer at Advani's Toyota Yatra, during parties and social gatherings. But will they be able to resist the appeal of the BJP which will more and more appear to them as the only party which can prevent a stock market crash?

There is no need to mourn the breakdown of this sisterhood. The anti-fascist women's movement can only be strengthened by such polarisation. In the days to come, this anti-fascist women's movement will attract the best daughters of our land who refuse to seek their liberation outside the emancipation of the millions of exploited and oppressed women of our country. Today such activists are struggling alongside contract workers, dalits, tribals, landless, homeless and other oppressed sections of the population. The growing forces of fascism will make it necessary for them to be autonomous of state patronage and the outlook of the so-called secular and democratic parties like the Congress. It will make it necessary for them to be more linked to the anti-fascist revolutionary movement. **It is these women activists who will radically redefine the women's movement as India enters the turbulent 90s.**

This anti-fascist women's movement can only grow from strength to strength — despite repression, despite fascist attacks, despite momentary losses and defeats. As the ugly face of fascism bares its fangs, this women's movement will receive the support and protection of millions of working and toiling women — simple women whom bourgeois feminists have hitherto sneered or dismissed as "backward, illiterate, superstitious and religious".

The anti-fascist women's movement will give rise to its own irony. It's ranks may be depleted of many 'liberated, secular, rational' feminists who will desert the movement, while women who religiously fast for their husbands or go to pilgrimages for a son will turn out to be its strongest allies.

22 December 1990

Presented at the Fourth National Conference on Women's Movements in India, at Calicut, Kerala, December 28-31, 1990.

AN APPEAL

TODAY our country is on the brink. Fundamentalists of all religions are increasingly using fascist methods to achieve their ultimate goal — of a fascist theocratic state. What this will mean for the men and especially the women of our country, can well be imagined.

We believe that the power and strength of the AWAKENED women of our country can combat and stem the forces of fascism. But for this the women's movement will have to re-direct itself and grow into a strong anti-fascist women's movement.

It is for this reason that we have put down our views sharply and critically, in order to initiate a healthy debate on the present weaknesses, and more importantly, on the crucial and historic tasks that face the women's movement today. We hope that our criticism will be taken in the spirit in which it has been made.

We call upon all those interested to add to, correct and criticise what we have put forward, so that together we can fulfil the responsibility that is ours TODAY.

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