Jejeebhoy, Shireen J: Addressing Women's Reproductive Health Needs: Priorities for the Family Welfare Program. Economic and Political Weekly. March 1997, 32(9 & 10).p.475-484.

Addressing Women's Reproductive Health Needs: Priorities for the Family Welfare Program

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A growing recognition that population dynamics, quality of life and women's status are closely inter related argues strongly for a fresh look at India's population program. Strategies to broaden the narrow focus of services, and more important, to put women's reproductive health services and information needs in the forefront are urgently required. What are the gaps in women's reproductive health care? What is the constraints women face in accessing quality health care?

India's national family welfare program has two stated objectives: to address the needs of families, notably women and children, and to reduce population growth rates. In reality, the program has not lived up to its title of 'family welfare'. The thrust of the program, as is well known, has been disproportionately focused on achieving demographic targets by increasing contraceptive prevalence and notably female sterilization. In this process, women's needs have been generally overlooked by the program and the consequences of this neglect, in terms of poor reproductive health, are disturbing. There is an urgent need to reorient program priorities to focus more holistically on reproductive health needs and on woman-based services, that is, services that respond to women's health needs in ways which are sensitive to the socio-cultural constraints women and adolescent girls face in acquiring services and expressing health needs.

What are the gaps in women's reproductive health and what are the priorities for reshaping the family welfare program in a way that better responds to women's needs? Before going further into a description of the situation in India, and given the focus on reproductive health, it is appropriate, here, to define what is meant by reproductive health: a reproductive health orientation means that people have the ability to reproduce as well as to regulate their fertility; that women are able to undergo pregnancy and childbirth safely; that obstetric and gynecological disorders are addressed; that the outcome of pregnancy is successful in terms of maternal and child health and well-being; and that couples are able to enjoy sexual relations free from the fear of disease. Reproductive health is affectedly a variety of socio-cultural and biological factors on the one hand and the quality of the delivery system and its responsiveness to women's needs on the other. A

woman-based approach to reproductive health is one which, responds to the needs of adult women and adolescent girls in a culturally sensitive manner.

Women's unequal access to resources, including health care, is well known in India, in which stark gender disparities are a reality. While disparities in life expectancy may be narrowing, unequal sex ratios and higher female infant and child mortality rates in large parts of the country continue to reflect the general devaluation of women. In other areas also, women remain at a considerable disadvantage in many areas in the quality of that life both within the home and outside it. For one, female literacy and enrolment rates lag far behind that of males in most states: enrolment ratios for females are lower and gender disparities in school enrolment are wider in India than in almost every other region of the developing world. Gross enrolment ratios suggest that even in the 1990s, only 88 per cent of all girls aged 6 to 10 (compared to over 100 per cent of all boys) are enrolled in school; by the upper primary stages, fewer than half of all girls (47 per cent) compared to three quarters of all boys are enrolled. Of even greater concern is the fact that only about one in three girls aged 6-14 actually attended school, compared to about three in five boys.

Women's lack of control over economic resources is widespread. While the majority of rural Indian women are economically active, their work goes largely unrecognized and poorly remunerated. No more than one in five women is reported to be working and no more than one in seven working women are in the organized sector. Where women work, they are about six times as likely as men to be marginal workers, they work fewer days per year, earn lower wages including a lower cash to kind ratio than that awarded to men. While there are several government –sponsored poverty alleviation schemes (e g, Integrated Rural Development Program), women are underrepresented among the beneficiaries. For example, in 1987-88, against a target of 30 per cent female beneficiaries anticipated by the IRDP, Rajasthan achieved as little as 15 per cent. Women are considered unskilled, ignorant and poor debtors and hence unqualified, in practice, for credit facilities or for the upgrading skills.

The above inequalities severely constrain the ability of women and adolescent girls to acquire good health and woman-centered health services. At the household level, these disparities translate into a lack of autonomy and control over household resources - both material and knowledge. Women have little decision-making authority and freedom of movement: few women, including working women, have any control over the household's economic resources. Seclusion practices and other behavioral norms further reinforce women's lack of freedom of movement, self-confidence and their acceptance of self-denial, including in matters relating to health seeking and food intake. Violence against

women, rape and incest are all part of women's lives and yet remain invisible in that there are few services that address these issues.

In short, women's poor reproductive health in India is affected by a variety of socio-cultural and biological factors. Underlying poor reproductive health among Indian women is their poor overall status on the one hand and an inadequate delivery system to cater to the needs of secluded, shy and devalued women on the other. Thus, efforts to improve women's education; raise enrolment and attendance rates of girls in school; and reduce the drop-out rate on the one hand and enhance women's income autonomy on the other, are fundamental, in the long run, for improvements in women's and families health; no less important are improvements in equality and breadth of services catering to reproductive health needs.

Gaps in the Program

India's family welfare program, as is well known, has been disproportionately focused on achieving demographic targets by increasing contraceptive prevalence and notably female sterilization. Woman-based services, or those responding to women's health needs in ways which are sensitive to the sociocultural constraints women and adolescent girls face in acquiring services and expressing health needs, have been largely, lacking. Since 1952, the Indian family planning program has evolved through a number of stages has changed its focus and has vacillated in terms of intensity and manner of commitment to it. In the early years, the program witnessed a period of caution and its impact was hardly felt; in the decade 1965-75, the program was strengthened and consolidated and the integration of family planning with maternal and child health services was introduced. It was also during this decade that abortion was legalized and the ratio of health workers to population was increased. At the same time, the minimum needs program was formulated which combined health and nutrition with fertility reduction and the incentive system was stepped up. Following the declaration of national emergency in 1975, family planning and politics became closely linked and, as is well known, the program became aggressive and highly coercive. Subsequent governments have cautiously stressed the voluntary nature of the program; however, despite its commitment to a cafeteria of methods and integration with maternal and child health, it continues, in practice, to be heavily biased in favor of sterilization, financial incentives (frequently supplemented by additional incentives in cash and kind) and target achievement. More recently, there has been a recognition that the singular focus on sterilization neglects the contraceptive needs of young couples, on the one hand, and the health needs of women and children. The health system operates through a network of 20,847 primary health centers and over 1,30,000 sub-centers; domiciliary services are expected to be provided by the large number of health workers (ANMS) attached to the various centers; despite this, outreach continues to be poor.

Health and family planning services in India have not been sensitive to the situation of women or to the constraints they face in seeking services or even expressing health care needs. Two major shortcomings of the program are that it is designed centrally and that it is based on demographic targets. Women at the grass roots are the program's main clients, but the program all but, ignores them in its priorities, in its service delivery and communication strategies. What is urgently required is a greater client focus, and-more specifically a health and family planning program that is based on what women want and need and appropriate and culturally sensitive ways of addressing these needs. By this we mean that such needs of Indian women as domiciliary services, sensitive probing of obstetric and gynecological problems, interaction with service providers which is not threatening and above all, a more holistic approach to their health rather than the current stress on family planning.

India's maternal mortality ratio is estimated at 555 per 1,00,000 live births [Mari Bhat et al 1992] - about 50 times higher than that of many industrialized nations and six times as high as that of neighboring Sri Lanka [UNICEF 1991; Acsadi and Johnson-Acsadi 1990]. Within a global perspective, it is estimated that India accounted for 19 per cent of all live births world-wide, and for as much as 27 per cent of all maternal deaths. Comparative data on maternal mortality are limited but what is available underscores wide regional disparities. For example, the maternal mortality ratio (maternal deaths as a proportion of births) is almost twice as high in the four large northern states (823 per 1,00,000 births) as in the rest of India (457). Maternal deaths account for about 1 per cent of all deaths and 2 per cent of all female deaths annually-but this translates in to over 10 per cent of all deaths among women of reproductive age and 13.2 per cent among rural women in 1987 [UNICEF 1991]. A large proportion of these deaths - up to two thirds by some accounts - are preventable [Agarwal et al 1982; Bhaskar Rao 1980; Panat and Mehendale 1987, Roy Chowdhury et al, 1982; Mitra and Khara 1983; Sinha 1986; Bhatia 1988]. Leading causes of death include hemorrhage (which accounts for 16-22 per cent of all deaths), toxemia (10-12 per cent), sepsis (8-13 per cent.) and complications of abortion (10 per cent). A major related cause of death is anemia, which accounts for 17-25 per cent of all maternal deaths [Registrar General 1987; Bhatia 1988].

Much more pervasive is reproductive morbidity and lack of care during pregnancy and childbirth, including both the obstetric conditions listed above and gynecological conditions, such as reproductive tract infections, cervical cell changes and genital prolapse. Data on reproductive health and constraints to good reproductive health are notoriously limited. Generally, data on mortality

and morbidity come from hospital studies, but little is known about their levels and patterns in community settings. Estimates based on hospital studies tend to over estimate maternal mortality, since hospitals are often seen as a last resort for women with difficult pregnancies or deliveries. On the other hand, estimates based on hospital studies will underestimate morbidity, because they miss the high proportion of women who endure poor health and especially poor reproductive health as their lot in life. It is difficult, hence, to assess the magnitude of and the factors underlying women's reproductive morbidity.

There are a few community-based studies, which have tried to fill this gap in our knowledge of reproductive tract infections and other aspects of reproductive health. For example, the Bang et al (1989) investigation of rural, tribal women in Maharashtra, reports a high incidence of reproductive tract infections. Physical examinations found that some 92 per cent had one or more gynecological diseases: infections of the genital tract including pelvic inflammatory disease, vaginitis and cervicities, contributed half of this morbidity. Despite this high prevalence, only 8 percent had undergone gynecological examination and treatment in the past. High levels of reproductive tract infections have also been observed in other studies in rural and urban Gujarat [SEWA-Rural 1994; Baroda Citizen's Council 1994; rural and urban West Bengal [CINI 1994] and Bombay slums [Streehitkarini 1994].

Unsafe motherhood is still a reality in much of India and particularly in its rural areas [Jejeebhoy and Ramarao 1993]. Few women have access to antenatal care, high risk cases go undetected, anemia is acute during pregnancy, deliveries are conducted largely by untrained attendants in unhygienic conditions and knowledge of health and nutrition needs during pregnancy and the post-natal period are poorly understood. Disparities in women's access to care at delivery are evident from the fact that nationally, only one in three births are delivered by trained attendants; and this proportion ranges from 21 per cent in the four large northern states to over two in five (43 per cent) in the rest of the country (see Table). The official program for maternal and child health reaches few pregnant and lactating women. Maternal health activities are unbalanced, focusing on immunization and provision of iron and folic acid, rather than on sustained care of women or on the detection and referral of high risk cases.

Table: Maternal Mortality and Health Indices

	Maternal Mortality Ratio 1982-86	Per Cent Deliveries Assisted by Health Professionals 1992- 93	
India	555	34.2	5848

Andhra	402	49.3	1924
Pradesh			
Assam	1028	17.9	3536
Bihar	813	19.0	8750
Goa	NA	88.4	3411
Gujarat	355	42.5	2523
Haryana	435	30.3	13976
Himachal Pradesh	NA	25.6	11705
Jammu and Kashmir	NA	31.2**	5350
Karnataka	415	50.9	1884
Kerala	234	89.7	1457
Madhya Pradesh	535	30.0	7213
Maharashtra	393	53.2	6803
Manipur	NA	40.4	1179
Meghalaya	NA	36.9	2629
Mizoram	NA	61.5	5357
Nagaland	NA	22.2	5123
Orissa	778	20.5	5401
Punjab	NA	48.3	6985
Rajasthan	938	21.8	5642
Sikkim	NA	NA	3295
Tamil Nadu	319	71.2	4297
Tripura	NA	33.5	1165
Uttar Pradesh	931	17.2	3822
West Bengal	551	33.0	15438
Four Large Northern States*	823	20.8	5997
Rest of India	457	43.4	5750

Notes: * Bihar, Madhya Pradesh, Rajasthan and Uttar Pradesh **Jammu Only

Sources: Mari Bhatt, P N, K Navaneetham and S Irudayn Rajan (1992): 'Maternal Mortality in India:

Estimates from an Econometric Model', Population Research Center, Dharwad, Working Paper 24, January (col 1).

International Institute for Population Sciences (IIPS)(1995):National Family Health Survey (MCH and Family Planning), India 1992-93. Bombay, (col 2).

Ministry of Health and Family Welfare (1 991): Family Welfare Program in India: Year book 1990-91, Ministry of Health and Family Welfare, New Delhi, (col 3).

Urgently needed is greater insight into underlying risk factors, into why women's reproductive health needs remain unmet. Equally important is the need to structure the reproductive health services to respond to the gynecological and obstetric condition's women experience, and which take into consideration the social, cultural and economic constraints that women face in expressing these conditions and in accessing services for them. What are the leading reproductive morbidity conditions observed in community settings? What are the leading conditions observed for different age groups –those in the reproductive ages, adolescents, and women beyond the reproductive ages? What are the sociocultural constraint women face in acquiring good reproductive health and safe pregnancy and delivery? What kinds of interventions can be designed to respond to these needs?

Health facilities at the community level are poorly equipped to deal with gynecological and obstetric morbidity's, since they have neither the diagnostic facilities nor the drugs to treat them. Moreover service providers are not trained to detect such morbidity's; nor, to provide sensitive counseling. The prevention and treatment of common RTIs is not complicated and can be treated at the first level of care. What is needed at the primary health center level are facilities for routine diagnosis of gynecological conditions, improved obstetric care, sensitive counseling and sound referral services.

Improving access to safe abortion should also form part of an overall reproductive health strategy. Despite the fact that abortion has been legal for over 20 years, limited availability and poor quality have kept safe abortion beyond the reach of most poor women. Roughly five million abortions continue to be performed annually; of these, only about half a million abortions are performed under the health services network while another estimated 4.5 million occur illegally, [UNICEF 1991]. And the growing tendency to misuse sophisticated prenatal diagnostic techniques to abort female fetuses suggests the disturbing possibility of increased abortions and repeat abortions. As a result, complications resulting from unsafe abortion exact a heavy toll, and constitute a major source of reproductive mortality and morbidity: over 10 per cent of all maternal deaths are due to abortions. Safe abortion services are available only in urban areas since registered practitioners are rarely available in rural areas: in 1984 for example, only about 1,000 physicians of a total of roughly 15,000 doctors trained to perform abortions worked in rural areas. Nor is information and counseling about legal termination services available to rural women; there is limited publicity about the law and there is a widely held perception that abortion is illegal. Also, abortion can involve a cost to the patient, and this cost can be prohibitive for the average rural women. And finally, the quality of abortion services and care at approved centers can be impersonal and intimidating Frequently, for example, women who seek abortion are denied confidentiality or are coerced to accept an IUD or sterilization as a precondition for the abortion.

Despite this, little attention has been paid to research, advocacy and program issues concerning abortion in India. Little is known about abortion practices and behavior. There is, for example, a paucity of rigorous social science research outlining poor women's perceptions, needs and decision-making process with regard to abortion, as well as their actual abortion behavior and experiences. Also absent has been strong advocacy from women's groups, in large part because of their concerns for its misuse in relation to sex selection. Also, little attention has been paid to operational research on lacunae in current abortion services. Most disturbing, the program has failed to integrate safe abortion into its family welfare services.

In short, much more attention needs to be paid to the context in which abortion occurs, and to the provision of safe and affordable abortion services as a part of primary health care. As far as understanding the context of abortion is concerned, we need to know why women resort to abortion, and especially illegal abortion, in large numbers; we need to have a socio-cultural profile of abortion seekers, the constraints they face in obtaining legal abortions in the one hand and contraception on the other and a woman's perspective of the quality of abortion services available. As far as services are concerned, above all. we need a reproductive health approach, which incorporates the need for ready access to reliable information, sympathetic counseling and safe abortion services.

Little evidence is available on the levels and patterns of infertility in India. Evidence from the 1981 census [Ministry of Health and Family Welfare 1990] and a village level study in Maharashtra [Bang et al 1989] suggest that infertility may be more prevalent in India (6-7 percent) than in other developing countries [2-3 percent, Sai and Nassim 1989]. Factors underlying infertility include, among other things, women's poor health and nutrition status, which can lead to repeated miscarriages and foetal wastage, unhygienic obstetric and abortion procedures and even such debilitating diseases as tuberculosis. And infertility can have serious consequences for female well-being in a culture, which prizes reproduction - preventing her from achieving her desired family size and posing her to various kinds of emotional harassment or marital disharmony.

Again, little is known about the levels, patterns, determinants or consequences of infertility in India. And health services are rarely comprehensive enough to

provide access to reliable information, sympathetic counseling and services to infertile couples. What is required is a sound referral system for infertile couples, along with primary health care, which can provide basic information and counseling.

Information on levels and patterns of sexually transmitted diseases, which have severe implications for the reproductive health of both women and men, come predominantly from studies of patients of STD clinics and rarely from community based investigations. The limited community- level evidence available suggests a relatively high prevalence of STDs: an intensive village level investigation of 650 women in Maharashtra [Bang et al 1989] suggests that a disturbingly large proportion of women were suffering from syphilis (10.5 per cent) and gonorrhea (0.3 percent). Other estimates suggest that about a million men and women are suffering from HIV/AIDS with dangerous potential for its wider spread. In studies of patients attending STD clinics, as in the Bang study, syphilis accounts for the highest proportion of patients, male and female - the difference is that while the majority of male patients had primary syphilis, the large majority of women (over 75 per cent) had secondary syphilis. And over the five-year period 1986-87 to 1991, there has been a steady rise in HIV prevalence among men and women attending STD clinics, reportedly from 1-5 per 1,000 to 5-50 per 1,000; in Bombay, scropositivity-rates among commercial sex workers rose from 2 per cent to 30 per cent within a span of two years (1988-90) [Ramasubban 1992]. Even so, awareness of HIV/AIDS remains cursory; misperceptions abound about its transmission and even about whether or not it is curable [Mane and Maitra 1992].

There has been a tendency for both research and services to focus on high risk groups commercial sex workers, men partners, truck drivers and within them, on high risk areas (Maharashtra, Tamil Nadu, the north eastern states and metropolitan areas). Relatively neglected is a potentially very high-risk group - monogamous women with non-monogamous partners. While community level data are unavailable, studies of patients of STD clinics suggest that while the majority of male patients were infected by commercial sex workers and casual contacts and not a single male was reportedly infected by his wife, one-third of all female patients were reportedly infected by their husbands [Ramasubban 1992]. Also neglected are another high risk group - adolescent and young men, who, although sexually active, tend to be largely ignorant of sexually transmitted diseases, their modes or transmission and prevention, and the extent to which they are life threatening.

Urgently needed is a primary health care system, which caters to the growing problem of STD's; counseling, and referral at the peripheral level along with improved diagnostic facilities at the primary health center level. Also needed are

rigorous studies of the socio-cultural aspects of sexual behavior and the context of high-risk behavior and transmission of infection. At the same time, not enough has been done to educate the larger population and especially secluded, invisible and powerless women about STD's and HIV/AIDS, their prevention, symptoms, modes of transmission and treatment. On the one hand, strategies need to be devised, which are sensitive to women's lack of control over sexuality and which can provide information at the doorsteps of secluded women. On the other hand, strategies need to be devised to inform, sensitize and communicate with men, and particularly young men. Men are an important audience for such communication; both in their own interests and because of the role they play in conveying information - and disease - to women. Young and adolescent males are a highly vulnerable group, generally ignorant of STD's and their prevention and information strategies need to include these groups.

Risk Elements Affecting Reproductive Heath

- (a) Malnutrition: Underlying reproductive morbidity and exacerbating women's vulnerability to obstetric, gynecological and sexually transmitted morbidity is poor nutrition, and such consequences as anemia and physical immaturity. Disparities in feeding patterns are evident from infancy [Das Gupta 1987. Khan et al 1988]; and studies, which have monitored growth and nutritional status among children [Srikantia 1989; Government of Maharashtra and UNICEF-WIO 1991], confirm gender disparities in growth and severe malnutrition from an early age. Poor adolescent weight and height result: it is estimated [Gopalan 1989] that 47 per cent of 15-year-olds in India have body weights less than 3 8 kg and 39 per cent have heights less than 145 cm, recognised as obstetric risk factors. Another consequence is high levels of anemia [Chatterjee 1989]: between 40 per cent and 50 per cent of urban women and between 50 per cent and 70 per cent of rural women are estimated to suffer from anemia [UNICEF 1991; Kapil 1990; Mathai 1989]. While nutrition and iron supplementation programmes for pregnant and lactating women do exist, the little available evidence suggests that they neither reach their intended populations, nor have been successful in reducing the prevalence of anemia among those they do reach [Ministry of Welfare, Department of Women and Child Development 1991; UNICEF 1991).
- (b) Adolescent girls: Adolescent girls, most of whom are out-of-school, constitute a sizeable proportion of the female population. They are particularly vulnerable and neglected, coming under the purview of government programs only once they are pregnant- the majority are out of school and are neither serviced by educational or school health programs nor by child health and nutrition services. At the family level too, girls are highly vulnerable: son preference is pervasive, resulting in gender disparities in health care, food intake, school attendance and labor contribution of children, from an early age. Moreover, typically, marriage

and childbearing are early and universal. There are strong cultural pressures on parents especially in the northern states, to marry their daughters early; in addition; few economic advantages accrue to parents in delaying their daughters' marriages. As many as 6.2 per cent and 43.4 percent of girls aged 10-14 and 15-19, respectively, were already married in 1981 (higher in the northern states). India has been notoriously unsuccessful in raising the age at marriage of its females: between 1971 and 1981, for example, the mean female age at marriage increased from 17.2 to 18.3 and six of the 14 major states recorded average ages of marriage below the legal minimum age at marriage. Early marriage leads to early onset of childbearing: 10-15 per cent of all births annually occur to women in their early teens [Mathai 1989; Kapil 1990], occurring before the female is physically fully developed. Complications of pregnancy, pre-natal and neo-natal mortality and low birth weight are much higher among adolescent women than among older women. And not only does early childbearing further deplete the already malnourished adolescent, but it also can result in severe damage to her reproductive tract [Ramachandran 1989].

The sluggish pace of increase in age at marriage is an important factor underlying both the slow fertility decline and the poor reproductive health situation in the country. Efforts to raise age at marriage have to take a holistic perspective on adolescent girls their education, enhancement of work oriented skills, as well as measures to delay their marriages and enhance their autonomy and sense of self-worth within their families. Measures to reduce drop out of school among adolescents, and to provide non-formal education and training to school dropouts are fundamental for enhancing women's control over their own lives and ability to have say in marriage choices. And recognizing the link of early marriage and child bearing to both reproductive health risks and social development risks, measures to delay marriage or enforce the law pertaining to minimum age at marriage need to be taken more seriously. In short, adolescent childbearing can best be prevented through innovative and indirect interventions which cater to the health, educational and employment needs of adolescent out-of school girls.

There have been few systematic efforts in India to address the needs of adolescent girls. What is essential are programs which look to the overall development and 'value' of the adolescent girl to her natal family. There have been few programs aimed at retaining girls in school or giving them employment. In particular, the development needs of out-of-school adolescent girls have rarely been acknowledged or addressed: there are few programs that ensure basic education, a vocational skill and the potential for income and, at the same time, exposure to new ideas regarding family life and health [see, for example, Bose 1987]. In the 1990s for the first time, one government program, the Integrated Child Development Scheme (ICDS), extended its activities, although

on a limited scale, to include adolescent girls. The ICDS program originally intended to provide nutritional supplementation and health and nutrition education for pregnant and lactating women and nutritional supplementation and early childhood education for their pre-school-aged children. It has recently expanded its services to incorporate programs for out-of-school adolescent girls, aged 11-18 years. This program operates through 'girls' clubs (balika mandals) and its activities are limited to the provision of nutritional supplementation and health check ups, along with some health education. There is, however, little attention paid to enhancing literacy, skill development or income generation. Adolescent programs currently operate in 507 blocks, are well attended, and are expected to be extended to additional blocks. Although its activities are limited, the program is notable because, for the first time, the health and nutrition needs of adolescent girls have been specifically addressed.

A comprehensive focus on adolescent girls to improve their nutritional levels, access to health services and increase their ages at marriage - would thus address an important reproductive health need at an early stage in the life cycle. Given the particularly constrained situation of out-of-school adolescent girls, such a focus would cater directly to the service and information needs of adolescents and their parents, as well as indirectly through measures to enhance literacy, health and reproductive health education and vocational skill development. Such measures are fundamental for enhancing the situation of adolescent girls both within, and outside the household and for enabling them say in their own lives. And recognizing the link between early marriage and childbearing to both reproductive health and social development risks, measures to delay marriage or enforce the law pertaining to minimum age at marriage need to be taken more seriously, both direct measures such as information campaigns directed at parents, as well as more indirect measures, such as providing acceptable earning opportunities for adolescent girls, need to be considered. Finally, enhancing adolescent 'girls' control over economic resources is a fundamental means by which this vulnerable group can attain some say in their own lives on the one hand and become perceived as more valuable by parents on the other.

Sexual activity of unmarried young people is rarely considered a concern in the Indian context; neither research nor action hence focus on the sexual information and contraceptive needs of young unmarried men and women. Yet there is a growing body of evidence which suggests considerable ignorance of sexual matters on the one hand and considerable sexual activity on the other, among young unmarried youth in both rural and urban areas. There is evidence, for example, of tremendous lack of awareness of their bodies and sexual behavior, both among girls and boys; there is considerable interest among them in filling this gap in knowledge [Bhende 1993]. As far as sexual activity is concerned, a study in a rural and tribal setting of Maharashtra [Bang and others 1989] reveals,

on the basis of physical examination, that nearly half of all unmarried girls had experienced sexual activity. While these high levels are probably atypical for rural India as a whole, they are certainly suggestive of sexual activity among unmarried girls in rural areas. And in urban India, a recent study among students at elite schools in New Delhi finds that a large number of students are involved in high risk sexual activities - about 60 per cent of the male students, for example, are involved in sexual activities with commercial sex workers or older women in their neighborhoods. Even girls are observed to be sexually active, though considerably fewer than boys. As many as 80 per cent of all students are aware of AIDS/HIV and its modes of transmission; however, much fewer girls than boys are aware of the use of condoms in minimizing the risk of infection. And even though a large proportion of boys are aware that use of condoms can minimize infection, few boys use condoms [Chaudhary and Francis 1994].

What is therefore urgently required for both adolescent girls and adolescent boys are programs which help deal with they're own well-being, their health, their bodies and their sexual lives. This is particularly important in light of the HIV epidemic and in light of growing evidence of both ignorance in sexual matters on the one hand and considerable sexual activity among young unmarried people in the other.

(c) Contraceptive patterns; though contraceptive prevalence rates have been increasing (over the decade of the 1980s(1980-81 to 1989-90) there has been a virtual doubling of the couple protection rate a measure of contraceptive prevalence using service statistics), and 42 per cent of all currently married women in the reproductive ages or 61 million women, practice some form of contraception. Again, regional disparities are wide: whereas about one in three currently married women of reproductive age currently practices contraception in the four large northern states (32.6 per cent), about half of all women in the rest of the country do (50.3 per cent).

The emphasis is on terminal methods and female methods: few (only 12 per cent) use a. non-terminal method, reflecting the unbalanced focus of the family planning program on terminal rather than reversible methods. As many as 30 percent (42 million) were protected by sterilization (mostly female), 6.3 per cent (9 million) by IUDs, 5 per cent (7 million) by condoms and under 2 per cent (2.7 million) by oral pills. As a result of the emphasis on terminal contraception, young and low parity women remain unprotected from repeated and closely spaced pregnancies: only 16 per cent of women below 30 practice any form of contraception, compared to 55 per cent of all women aged 30 to 44 years. The average age of sterilization acceptors is over 30 years and parity is over three; these have declined moderately at best over the last 15 years. This selectivity by age and parity is one reason why the relatively high overall rates of contraceptive

prevalence have not been translated into correspondingly low levels of fertility for the population as a whole. And the resulting repeated and closely spaced pregnancies at younger ages enhance chances of reproductive morbidity.

Many barriers to contraception remain even among women who have the number of children they want. First awareness of non-terminal methods is generally poor and correct knowledge of their use worse. Second, though a cafeteria of methods is theoretically available, most women do not have the wide choice that the list of theoretically available methods implies. For the most part, the prospective acceptor is informed only of methods considered appropriate by the service provider and does not participate in the selection of the methods she will use. Third, male involvement is weak and needs to be more actively sought in terms of both male method utilization - even though vasectomy is simpler, cheaper and safer than tubectomy, it continues to be neglected by men, women and service providers - as well as a greater sensitivity to the effect of repeated pregnancies on mother and child. Fourth, services tend to be poor, impersonal, threatening or simply unavailable to women; domiciliary visits to secluded women or village-level outlets for them have been, in practice, irregular and unresponsive to the needs of women, personnel have been observed to be quite uncaring of women's dignity [Khan and Ghosh Dastidar 1985] and quite lax in offering either pre-acceptance counseling or post-acceptance follow-up.

So it is not surprising that there is considerable unmet need for family planning (currently married women who want no more children but are not using a method of contraception). Estimates of unmet need for India are of the order of 20 per cent: if women who wanted no more children were able to avoid another pregnancy, it is estimated that maternal mortality ratios would fall by up to 40 per cent in India [Acsadi and Johnson-Acsadi 1 990].

As of 1990, there were 141.9 million eligible couples in the country of whom about 61 million are, protected by some means of contraception. In another 10 years India expects to have 170 million eligible couples and if an NRR of one is to be achieved, it is estimated that as many as 102 million eligible couples will have to be using some form of contraception by the year 2000. In other words, over the next 1 0 to 11 years, India aims to double the number of its protected eligible couples. Given the current thrust of the program and the socio-economic and demography situation, this is an ambitious target, one unlikely to be met.

Today, awareness of the fact that fertility can be controlled is almost universal; unfortunately, only one method is widely known and that is sterilization. Also, a large majority of the population approves of family planning. These two criteria are necessary but not sufficient conditions to raise the demand for family planning services. More important, the extent of demand for any form of

contraception is linked up with family size preferences. And in India, a family size of at least two sons and a daughter is considered essential to most parents (and some three to four children and two to three sons in the northern states). Since the composition cannot be made to order, actual fertility can be much higher than desired and, though awareness is nearly universal and attitudes positive, far fewer couples are motivated to actually limit family size, especially in the four large northern states in view of the large preferred family size.

In short though a large proportion of Indian women are motivated to limit or space childbearing they are constrained from doing so for reasons which are rooted in the inadequacies of the program on the one hand and by socio-cultural factors on the other. The focus on sterilization, target fulfillment and incentives has resulted in obscuring the spacing needs of women and their right to exercise informed choice. Service delivery strategies and quality of care have been largely insensitive to the needs of women, the constraints the average woman faces in seeking services, in voicing fears and side-effects and their right to have complete pre-acceptance counseling including information on potential side-effects and complications and post acceptance follow-up.

(e) Quality of reproductive health services: Little systematic evidence exists in India about standards of care in the family welfare program or specific steps, which can be taken to improve it. More attention has been paid to physical infrastructure, personnel and equipment than on quality of care especially from the women's (client's) perspective. Quality care comprises several dimensions: (1) availability of a wide range of contraceptive, MCH and other services; (2) accessible, complete and accurate information about contraceptive methods, including their health risks and benefits. (3) Safe and affordable services along with high quality supplies; (4) well-trained service providers, with 'skills in interpersonal communication and counseling; (5) appropriate follow-up care; and (6) regular monitoring and evaluation of performance, incorporating the perspectives of clients and beneficiaries. Thus far, these elements of quality of care have been largely missing.

The little available evidence on utilization of maternal health services attests, for example, to the poor outreach of maternal health services: no more than 40-50 percent of all pregnant women in India are estimated to receive any ante natal care [Singh and Paul 1988; Starrs and Meashain 1990; Acsadi and Johnson-Acsadi 1990] and at the time of delivery, no more than 20 per cent of all women have some contact with medical or paramedical personnel. Deliveries are largely conducted by untrained personnel and in unhygienic conditions, both of which contribute significantly to poor maternal health. Maternity benefits are woefully absent for the large majority of women in the unorganized sector, a factor which

compounds maternal ill health; the recent talk of restricting maternity benefits in the organized sector to two children has serious implications for both maternal and child health.

The health delivery system has been largely insensitive to the reproductive health care needs of women and the constraints they face in expressing these-let alone the constraints they face in obtaining services. Doorstep services are essential for secluded women and these are rarely undertaken and where undertaken, focus largely on contraception rather than on reproductive health in general. Health workers themselves are poorly informed about reproductive morbidity (especially gynecological conditions), can be insensitive in probing and recognizing symptoms and are preoccupied with meeting contraceptive targets rather than offering a range of reproductive health services. And given women's lack of autonomy and decision-making authority, it is unlikely that sick women will take the initiative in obtaining health care for themselves. In particular there is a tendency to endure obstetric and particularly gynecological morbidity as a fact of life and a shyness to reveal these conditions to or discuss them with health care providers.

Despite the fact that the large majority of births continue to take place and are attended by untrained personnel, the incorporation of trained traditional dais (TBAS) in the provision of ante natal and natal services has not been a priority in the health system. Since younger generations are unwilling to become dais, there is the likelihood of a serious shortage of delivery attendants. While there have been programs to train traditional dais and provide them with materials and safe delivery kits, there has been little rigorous assessment of the impact of this training, and from all accounts, success has been limited. The SEWA (Ahmedabad) experience, however, suggests that dais can be realistically brought into the health service network. Dais are trained for ante and postnatal care and delivery as well as primary health care, child health and family planning. At the same time, dais have been trained to provide fee-based services, resulting not only in enhancing the status of the dai, but making her more accountable. Even so, there is a paucity of evidence on the impact of services delivered by trained traditional birth attendants.

The persistence of an unmet need for contraception is further evidence of the poor quality of services and care since women are inclined to prefer an unwanted birth rather than accept available contraception services. A cafeteria of methods is rarely provided to the potential user, nor is counseling or advice on side effects - despite the fact that study after study has shown that method acceptance and continuation depend largely on the quality of care. Moreover, morbidity arising from contraception is cause for concern. In particular, the camp approach to sterilization and the increasing focus on IUDs have been associated with a

variety of side effects. More serious conditions ranging from excessive bleeding to pelvic inflammatory disease have also been reported and point to a need for more hygienic service delivery conditions in general and a program which is sensitive to the needs of and constraints facing women, in particular.

At the service delivery level, there are few examples of sensitive; client oriented family planning and reproductive health services. The government program remain focus on fertility reduction, with reproductive health remaining of secondary concern, a few examples of client-center programs in the NGO sector these examples remain undocumented few clear cut strategies for replication for service programs. In short, there is a need for a rigorous quality of care to be incorporated into both interventions for service provision and research.

As far as service delivery is concerned, need to learn from successful small reproductive health program on the one hand and expand the programs of other NG0s to include comprehensive reproductive health program based on the needs of women on the other. These include (1) quality outreach services in ways which are sensitive to a cultural milieu which inhibits women from expressing their reproductive health needs health needs or seeking health services, (2) services which go beyond the current exclusive focus on contraceptive method acceptance to a more comprehensive program which includes safe motherhood, treatment of gynecological and obstetric infections, abortion and infertility services as well as greater attention to continuity of care, sensitive counseling, screening follow up and treatment of complications as well as access to a wide range of services; (3) more attention to women's information needs through culturally acceptable media and messages; and (4) more attention to the quality of service provider-client interaction.

The recent controversy about provider dependent methods including Norplant and injectables raises concern about the implications of introducing these methods into a program whose quality raises doubts about adequate counseling and follow-up. Introduction of these new methods has therefore raised fears about their safety, the health consequences for women of poor follow-up or loss to follow-up and of the potential for coercion and abuse.

As far as research is concerned little is available from the perspective of individual clients and women in particular on the kind of services and care they receive; on the linkages between how women perceive health care services and their utilization of these services; on how women's perceptions of quality of care affect their lives. Social scientist tends to have a narrow interpretation of reproductive health, rarely addressing, for example, the user's perspective of health care services. Moreover, it is increasingly clear that in order to document women's perceptions, experiences and needs, what is required is a blend of both

in – depth qualitative research as well as the more familiar quantitative survey methodology.

Finally, there is concern about how new economic policies will affect measures to improve quality of care. Firstly, the social sector spending is reduced; resources for the health sector will certainly be curtailed. And second, the trend toward increased privatization of health may also have implications for both access to health care among the poor as well as to accountability in terms of the kind of services and care provided. This is of particular concern for preventive and promotive care activities, which are almost entirely provided through the public health system, rather than for curative health care where about 70 per cent of all services are already in the private sector.

- (f) Women's health seeking behavior: While poor quality of care can inhibit women from seeking health care, women's lack of autonomy in decision-making or movement is also an important constraint on women's health seeking. Women are, by and large, taught self-denial and modesty from an early age and are hence unlikely to acknowledge a health problem, and particularly a gynecological problem, unless it is very advanced [SEWA-Rural 1994]. For example, large numbers of women experience white discharge but consider it as part of there lives and rarely seek medical care for such a problem. Lack of decision-making freedom of movement and time can restrict visits to health centers, even where a health problem has been recognized. Moreover, pelvic examinations are strongly resisted by women. And even if a problem has been diagnosed, treatment is frequently not followed through because it is seen as an unnecessary expense or too demanding. Often, in addition, the focus on allopathic medicine has tended to alienate women; generally more exposed to traditional medicines; more needs to be known about these traditional treatments, their health benefits and the way women perceive them. There is, unfortunately, little rigorous research on women's constraints to health seeking in the area of reproductive health. Moreover service delivery strategies remain oblivious to the real constraints women face in acquiring good health care.
- (g) Health information needs: Communicating new ideas to poor, illiterate and secluded women is no easy task. We have already seen that literacy and school enrolment levels are generally low and school dropout rates are relatively high in India, especially among women. Given these low literary levels, it is not surprising to observe that relatively small proportions of rural women are exposed to the media.

Activities promoting communication about population issues have been undertaken as part of the Indian population program. Once again, however, the aim of the IEC component of the family welfare program is limited to raising

awareness of the small family norm [Ministry of Health and Family Welfare 1993]. Extension education has been given little priority or importance and as a result workers have not maintained regular contacts, domiciliary or otherwise, with the communities they are to serve. Messages have been a regular feature of radio (radio programs on family welfare have appeared 75,000 times during the year) and more recently on television; their content has traditionally related to contraception and more recently to such issues as immunization, antenatal care, age at marriage and dowry. A near complete revamping of communication strategies took place after studies highlighted a high degree of awareness of contraception among the population: new strategies were designed which began to stress other issues such as lactation, immunization, age at marriage, safe motherhood and equal treatment of daughters and sons. The family welfare program also promotes messages through traditional folk media, which are widely accessible to rural India.

Poor, rural women are the least likely to be exposed to the electronic or the print media. For them, traditional media continue the major source of information and most important among these is interpersonal discussions, at their doorsteps. In recognition of this, not only health workers, but also. 'anganwadi' workers are expected to convey health and family welfare messages to rural women on a regular basis. In addition, women's groups (mahila swasthya sanghs) have been created; these groups are expected to assist ANMs in their activities while at the same time provide a forum for discussion of family welfare issues. In addition, there is the link women scheme aimed at promoting greater participation of village women in the delivery of family welfare messages. There are now almost 30,000 link women, who are chosen from the village community and trained by health workers to communicate family welfare messages in their villages. The success of these schemes, like the success of the interpersonal contacts, is unclear, but what is clear is their singular focus, thus far, on family planning and child survival. Another limitation is the fact that messages and media tend to be uniform throughout the country and are rarely tailored to respond to differences in culture, language and needs at the local level.

(h) Sex education: There is a glaring lack of attention to sex education in the official program. What little education exists is imparted largely through the formal school curriculum and textbooks. As a result, large segments of out-of-school youth are excluded. Sex education, and even knowledge of menstruation or of AIDS for example, is extremely limited and vague, especially among youth and females [Bhende 1993].

If even well educated adolescent girls and boys do not have a comprehensive knowledge of AIDS, its severity and how to prevent it [Chaudhary and Francis 1994], the levels of ignorance and risk taking among poorly educated slum and rural adolescents must be much higher, making a focus on innovative sex education programs all the more urgent.

Although the NGO sector has tried to fill the gap in attention to sex education for some their efforts have, by no means, been sufficient. For example, the activities of the Indian Health Organization, the Family Planning Association of India, the Parivar Seva Sanstha, which have focused on family life education and sex education for both in and out-of-school youth, are hardly adequate given the cultural diversity in the country and the generally limited knowledge of the most basic aspects of reproduction and reproductive health, especially among women. There is also the problem that few people acknowledge that there is much sexual activity among adolescents and young unmarried people or approve of sex education. Chaudhary and Francis (1994) for example encountered considerable difficulty in even gaining access to many schools in the New Delhi area for their study of sex education and awareness of AIDS at the high school level.

In short, there is a need to reorient communication and education activities to incorporate a wider interpretation of reproductive health; to focus attention on the varying information needs of women, men and youth and to the media most suitable to convey information to these diverse groups. This kind of reorientation of priorities requires not only a fresh look at messages and media but also at training of communicators.

IV

Developing a More Woman-Centered Focus on Reproductive Health

The Indian family welfare program continues to be driven by demographic objectives, notably increasing contraceptive prevalence rates and reducing fertility. Women remain one of the most under served segments of the Indian population and a focus on their health and other needs is of special importance. A woman-centered approach is necessarily holistic; looking broadly at women's health needs, as well as their poor economic status, their lack of decision-making autonomy and their limited access to new knowledge.

The singular focus of the Indian family welfare program on female sterilization has meant the neglect of many areas of women's reproductive health. As the earlier sections have shown, there is an urgent need to expand the focus of services, referral systems, IEC and research beyond FP to include safe motherhood, abortion services, services for gynecological and obstetric morbidity; infertility; sexual behavior and STDs; and even non-terminal contraception. Little is known for example of the extent of gynecological morbidity among women; the little known suggests that the majority of women

suffer from one or more RTIs. Similarly, although abortion is widespread, it continues to be performed under illegal and unsafe conditions. With the growing HIV epidemic, while high risk groups such as commercial sex workers (CSWs) and their clients have been studied, little has been accomplished in the larger population, and particularly among women, regarding STD and HIV education.

Improvement in the quality of reproductive health care is a critical need. We need to learn from successful small-scale reproductive health programs on the one hand and expand the programs of other NG0s to include comprehensive reproductive health programs. These include quality outreach services delivered in ways, which are sensitive to a cultural milieu, which inhibits women from expressing reproductive health needs or seeking health services. Viable service delivery models, which can be held up to government, need to be supported. Grass roots level programs need to be strengthened so that they become models for provision of services. More needs to be known on how women perceive the service delivery system as it currently exists. A more in-depth understanding of traditional medical practitioners, the use of traditional medicine and local health traditions in catering to women's health needs to be taken seriously, its advantages incorporated into health service strategies and its limitations widely discussed.

Quality of care concerns extends also to the incorporation of new contraceptive technologies into the program and to redressal mechanisms for poor contraceptive or reproductive health care. The implications of introducing new technologies usually highly provider-dependent into a program whose quality raises doubts about adequate counseling and follow-up need to be better assessed. At the same time there is a need for greater accountability in the program and one means of achieving this is to evolve and strengthen redressal mechanisms for complications which arise from poor quality of services and care.

A focus on the health needs of adolescent girls - their reproductive health needs, their nutritional status, and the risks of early marriage and childbearing - is urgently required. At the same time, the health information needs of adolescent girls are rarely addressed and adolescent girls remain particularly ignorant about their bodies and about sexual behavior and pregnancy; filling these gaps is a critical need. More generally, efforts to enhance the status of adolescent girls, through measures to keep them in school, to provide non formal education to dropouts and provide skill development and income generating opportunities is an integral part of a really holistic approach. While boys are more likely to be in school and more likely to receive health and nutritional care than their sisters are, the health and sex education needs of adolescent boys are about as neglected.

There is surprisingly little social science research, which reflects the range of issues included under the rubric of reproductive health. There is, for example, little understanding of the socio-cultural context of reproductive health, of women's actual access to health care and the constraints women face in acquiring good health. Whether we consider the prevalence of RTIs, or abortion, or the prevalence and consequences of infertility or the needs of adolescents or constraints to women's health seeking or even the context of demographic change or unmet need for contraception, we are confronted with a glaring paucity of rigorous evidence on either their prevalence or their socio-cultural context. Nor is there solid empirical evidence in support of successful NGO projects. NG0s have been particularly lax about maintaining baseline and followup data tracking change in the communities, which they serve and this can be a major stumbling block when it comes to holding up viable service delivery models to government. Finally, there is a need for more action research. We need to know, for a start, the current service delivery system and its approach to women's needs. Second, where innovations are introduced in terms of quality of services or care or the incorporation of a woman's perspective, or more integrated services, we should like to know whether they have succeeded in encouraging more clients to avail of services; and above al1, whether they have succeeded in improving women's health situation.

First, recognizing that poor, rural women are largely unlikely to be exposed to the electronic and print media, it is important that communication activities directed to them continue to rely on traditional media and interpersonal, doorstep contacts. It is important that communications becomes part of the holistic approach recommended above and that model service delivery projects incorporate locally appropriate communications activities as an integral part of their reproductive health services. Training or retraining of communicators is essential.

Finally, there is an urgent need to support programs of sex and HIV/AIDS education both for adolescent girls and boys and for adults. It is time that sex education programs became more realistic in terms of information needs of adolescents and youth, both in and out of school. Equally challenging are strategies to inform adults, and particularly secluded women, of STDs and HIV/AIDS and more generally to get men involved in such issues as sexual health and safe sex on the one hand and responsibility in sexual matters and contraception on the other.

A growing recognition that population dynamics, quality of life and women's status are closely interrelated argues strongly for a fresh look at India's population program. In theory, India has a model population program, which

aims to provide family planning within a broad framework of maternal and child health care, with emphasis on voluntarism and informed choice. In practice however, the program is characterized by a singular focus on sterilization, by poor quality of services and insensitivity to women and their broader reproductive health needs. Strategies to broaden the narrow focus of services, and more important, to put women's reproductive health service and information needs in the forefront are therefore urgently required; at the same time, men's information needs, especially in the area of STDs and AIDS cannot be ignored. In the long term however, the pace at which improvements in quality of life in general and women's health in particular occurs is powerfully constrained by low levels of education and control over material resources among Indian women. The importance of programs to promote universal primary education for girls and non-formal education, skill and employment generation for women cannot be sufficiently emphasized.

[I am grateful to the Mac Arthur Foundation for permitting me to use parts of a paper prepared for the Foundation on reproductive health would like to acknowledge comments and suggestions made by Elaben Bhat and Mirai Chatterjee of SEWA, Ahmedabad, Cannen Barroso, Kavita Rarndas and Leni Silverstein of the Mac Arthur Foundation, Michael Koenig of the Ford Foundation, George Martine of ISPN, Brazil and the participants at the Ahmedabad Workshop, and research assistance provided by Shantha Raigopal.]

References

- 1. Acsadi. George T F and Gwendolyn Johnson-Acsadi (1990): 'Safe Motherhood in South Asia: Socio-Cultural and Demographic Aspects of Maternal Health', Background Paper, Safe Motherhood South Asia Conference, Lahore.
- 2. Agarwal, V S Patil and S Khanijo (1982): 'Study of Maternal Mortality', *Journal of Obstetrics and Gynaecology* 32, No 5 (October): 688-92.
- 3. Bang, R A et al (1989): 'High Prevalence of Gynecological Diseases in Rural Indian Women', *The Lancent*. January 14.
- 4. Baroda Citizen's Council (1994):'Gynecological Morbidity among Women in Slums of Baroda: Results of a Cross-sectional Survey by Baroda Citizens Council' (unpublished).
- 5. Bhende, Asha (1993): 'A Study of Sexuality of Adolescent Girls and Boys in Underprivileged Groups in Bombay', paper presented at the workshop

- on Sexual Aspects of AIDS/STD Prevention in India. Tata Institute of Social Sciences, Bombay.
- 6. Bhasker Rao, K (1980): 'Maternal Mortality in India A Co-operative Study', *Journal of Obstetric and Gynecology*. 30,6 (December): 859-64.
- 7. Bhatia, J C (1988): A Study of Maternal Mortality in Anantpur District, Andra Pradesh, India, Indian Institute of Management, Bangalore.
- 8. Bose, Ashish (1988): From Population to People. BR Publishing Corporation, New Delhi.
- 9. Chatterjee, Meera (1989): 'Socio-Economic and Socio-Cultural Influences on Women's Nutritional Status and Roles' in C Gopalan and Suminder Kaur (eds), *Women and Nutrition in India*, Nutrition Foundation of India, New Delhi.
- 10. Chaudhary, Shankar and Paul Francis (1994): 'Pilot Study of Knowledge of AIDS and Sexual Activity among Delhi School Children'. NGO- AIDS Cell, All India Institute of Medical Sciences, New Delhi (unpublished).
- 11. Child in Need Institute (1994): 'Gynecological Morbidity's among Women in West Bengal', (unpublished).
- 12. Das Gupta. Monica (1987): "Selective Discrimination against Female Children in Rural Punjab, India', *Population and Development Review*, 13. 1 (March).
- 13. Gopalan, C (1989): 'Women and Nutrition in India General Consideration' in C Gopalan and Suminder Kaur (eds), *Women and nutrition in India*, Nutrition Foundation of *India*, New Delhi.
- 14. Government of India, Planning Commission (1992): Eighth Five Year Plan 1992-1997, Government of India, New Delhi.
- 15. Government of Maharashtra and UNICEF-WIO (1991): Women and Children in Dharni: A Case Study, after Fifteen Year of ICDS, UNICEF, Western India Office, Bombay.
- 16. Jejeebhoy, Shireen and Saumya Ramarao (1993): 'Unsafe Motherhood: A Review of Reproductive Health in India' in

- 17. M Das Gupta. L Chen and T N Krishnan (eds). *Health and Development in India*. Oxford University Press, New Delhi.
- 18. Kapil, U (1990): 'Promotion of Safe Motherhood in India', *Indian Pediatric*, 27, No 3 (March), 232 38.
- 19. Khan, M E, Richard Anker, S K Ghosh Dastidar and Sashi Bairathi (1988): 'Inequalities between Men and Women in Nutrition and Family Welfare Services: An In-depth Enquiry in an Indian Village', *Social Action 38* (October-December).
- 20. Khan, M E, S K Ghosh Dastidar and R Singh (1986): 'Nutrition and Health Practices among Rural Women A Case Study of Uttar Pradesh, India', *Journal of Family Welfare*, 33, No 1 (September).
- 21. Khan, M E and S K Ghosh Dastidar (1985): *Women's Perspective in Family Planning* Program, (sponsored by the. Division of Family Health, WHO, Geneva). Operations Research Group, Baroda.
- 22. Mane, Purnima and S Maitra (1992): Soci-cultural *Aspects of Sexual Behavior in India*, Tata Institute of Social Sciences, Bombay.
- 23. Mari Bhat, P N, K Navaneetham and S Irudaya Rajan (1992): 'Maternal Mortality in India: Estimates from an Econometric Model'. *Population Research Center. Dharwad: Working Paper* 24 (January).
- 24. Mathai, Saramma T (1989): 'Women and the Health System' in C Gopalan and Suminder Kaur (eds). *Women and Nutrition in India*, Nutrition Foundation of India, New Delhi.
- 25. Ministry of Health and Family Welfare (1986): Revised Strategy for National Family Welfare Program: A Summary, Ministry of Health and Family Welfare, New Delhi.
 - (1990): Family Welfare Program in India: Yearbook 1988-89, Ministry of Health and Family Welfare, New Delhi.
 - (1990): *India's Population, Demographic* Scenario1990, Ministry of Health and Family Welfare, New Delhi.
 - (1993): Family Welfare Program in India: Annual Report 1991-92, Ministry of Health and Family Welfare, New Delhi.

- Ministry of Welfare, Department of Women and Child Development (1991): 15 Years of ICDS. An Overview, Government of India, New Delhi.
- 26. Mitra, J and B N Khara (1983): 'Maternal Mortality (A Review of the Current Status in a Teaching Institution)', *Journal of Obstetrics and Gynaecology*, 33, No 2 (April): 209-13.
- 27. Panat, S P and S S Mchendale (1987): 'Maternal Mortality-Review of Six Years', *Journal of Obstetrics and Gynaecology* 37, No 3 (June): 527-29.
- 28. Ramasubban, Radhika (1993): 'Patriarchy and the Risks of HIV Transmission to Women in India ' in M Das Gupta, L Chen and T N Krishnan (eds), Health and Development in India Oxford University Press.
- 29. Registrar General (1983): Census of India 1981: Primary Census Abstract: General Population, Series 1 India. Part IIB(i). Office of the Registrar General. New Delhi.
 - (1985): Census of India 1981: Social and Cultural Tables, Series 1 India, Office of the Registrar General, New Delhi.
 - (1987): Survey of Causes of Death (Rural): Annual Report 1984 and 1986. A Report, Series 3 No 17 and 19. Office of the Registrar General, New Delhi.
- 30. Roy Chowdhury, N N and K Sikdar (1982): 'Factors Influencing Maternal Mortality', *Journal of Obstetrics and Gynaecology*, 32, 4 (August): 507-10.
- 31. Ramachandran, Prema (1989): 'Nutrition in Pregnancy' in C Gopalan and Suminder Kaur (eds), *Women and Nutrition in India*, Nutrition Foundation of India, New Delhi.
- 32. Ramachandran, Prema (1989a): 'Lactation Nutrition-Fertility Interaction' in C Gopalan and Suminder Kaur (eds), Women and Nutrition in India, Nutrition Foundation of India, New Delhi.
- 33. Sai, Fred T and Janet Nassim (1989): 'The Need for a Reproductive Health Approach', International Journal of Gynaecology and Obstetrics. Supplement 3: 103-13,
- 34. SEWA-Rural Research Team (1994): 'Gynecological Aspects of Women's Health: A Cross Sectional Study' (unpublished).

- 35. Singh, Meharban and V K Paul (1988): Strategies to Reduce Prenatal and Neonatal Mortality *Indian Pediatrics*, 25, 6 (June): 499-509.
- 36. Sinha Jyoti(1986): 'A Five Year Study of Maternal Mortality: Analysis of Its Causative Factors (1976-1980)', *Journal of Obstetrics and Gynaecology*, 36, 3 (June): 404-06.
- 37. Srikantia, S G (1989): 'Pattern of Growth and Development of Indian Girls and Body Size of Adult Indian Women' in C Gopalan and Suminder Kaur (eds), *Women and Nutrition in India*, Nutrition Foundation of India, New Delhi.
- 38. Srikantia, S G (1989a): 'Nutritional Deficiency Diseases' in C Gopalan and Suminder Kaur (eds). Women and nutrition in India, Nutrition Foundation of India, New Delhi.
- 39. Starrs, Ann and Diane Measham (1990): *Challenge for the Nineties: Safe Motherhood in South Asia*, The World Bank and Family Care International, New York and Washington.
- 40. Streehitkarini Bombay (1994): 'Report of Ford Foundation Project Gynecological Disorders of Women in the Slums of Bombay Adopted by Streehitkarini', (unpublished).
- 41. UNICEF, India (1991): Children and Women in India: A Situation Analysis. UNICEF, New Delhi.