
Patriarchy and the Risks of STD and HIV Transmission to Women

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Introduction

The focus on mother and child health as a key element in Indian health policy evolved out of what was identified as one of the strongest explanatory factors for continued high fertility, viz., the high infant mortality rates. The policy of targeting pregnant women and babies in order to sustain infant survival is likely to come under increasing strain in the coming years, as the pressures of a possible HIV pandemic open up other related issues impinging on women's health.

It is well known that seropositive mothers can pass on HIV infection to their unborn children with ease; perinatal infection is estimated to occur in 20 to 130 percent of infants born to seropositive women. The progression of the disease, which may span an eight to ten year period in adults, is much more rapid in infected infants: 50 per cent of such infants die before they reach the age of 2 and over 90 per cent do not live to see their fifth birthday (ICMR 1991).

But the confounding issues are several. One, HIV infection has no obvious symptoms of its own but masks its manifestation through commonly encountered opportunistic infections. Its detection therefore becomes difficult in a population unserviced by extensive and good quality health care facilities, and not educated into the required changes in their health behaviour. Two, women specifically are more vulnerable to HIV infection due to penetrative heterosexual contact being an important mode of transmission. Their protection from HIV infection through this mode requires action on the part of others, viz., the use of condoms by their male partners. Three, women's reproductive physiology and the conditions under which they play out their reproductive role, add further dimensions to their vulnerability.

The above issues raise fundamental questions about state intervention in the areas of health, education and family welfare, and about individual behaviour. They throw the

canvas open in ways which go far beyond the current paternalistic approach to monitoring the health of pregnant women and infants as passive agents of a family planning oriented developmental strategy. They raise questions about sex and sexuality, socialization and self-worth, gender relations, family structure and female autonomy. They bring women to centre-stage, not as passive bodies and minds to be steered by a patriarchal social and political structure; rather, the prevention and control of HIV hinges crucially on women as active and autonomous agents of their bodies and social relations.

This paper discusses some of the negative factors inherent in the conditions governing women's health, which have implications for women becoming prey to possible STD and HIV Infection. According to available estimates, between one-third and one-half of HIV-positive persons in India to date are women (ICMR 1991). While many of these women belong to the particularly vulnerable group of prostitutes (commercial sex workers), a sizeable, proportion belong outside this group, infected through heterosexual transmission largely within the institution of marriage. Most are in the asymptomatic phase, unaware that they are infected.

The Setting

How would women acquire the HIV virus in the first place? It has already been established that in India, as in the rest of Asia, one of the main modes of transmission of HIV is through heterosexual contact, the others being through the perinatal route, through blood and blood products and associated infected needles. The last-mentioned are the most efficient method of transmission (with a 90 per cent transmission rate), with perinatal infection coming next. Sexual transmission in fact is the most inefficient method. Yet, heterosexual transmission assumes importance in the Indian cultural context primarily due to the large size of the population and the frequented of exposure. The prevailing cultural norms of universal marriage early age at marriage and early onset of coital activity and childbearing, as well as the prevailing demographic structure, imply that an overwhelmingly high proportion of the population comes within the sexually active age group.

What makes women particularly vulnerable in the context of the growing possibility of an HIV epidemic, is the state of their sexual and reproductive health. There are a range of biological and social factors at work here. Since infected semen remains in the vagina for a while, penetrative sexual contact is a critical route for the transmission of the HIV virus. Men therefore can infect women more effectively than vice versa. Present affliction with or past history of STDs in one or both partners, particularly those that

cause genital lesions or inflammation has also been established as a risk factor for increased infectiousness or increased susceptibility to HIV infection among heterosexual individuals.

The incidence of STD prevalence in the country is high, particularly of those STDs that produce genital lesions. But it is from the preponderantly male population reporting to public STD clinics that we glean this. Most STDs are asymptomatic in women due to the complex female reproductive physiology, and in part due to women's acceptance of discomfort and suffering as part of their lot. Further, the ignorance among the general population regarding the causes, early symptoms and means of prevention and cure of STDs is abysmal. As much to blame is the low status of STDs as a teaching specially in medical colleges and therefore, the poor availability of trained doctors outside a few metropolitan enclaves. Finally, the inability of women to protect themselves from being infected and reinfected if prostitutes by their clients and if wives by their husbands--due to the nature of power relations between men and women in the larger society and in its microcosm, the family, contributes to women's vulnerability.

Also prevalent among women is a range of other sexually and non-sexually transmitted/sustained infections where, again, inflammation of the reproductive tract occurs. These are caused variously by trauma to the reproductive tract arising out of the complex web of early marriage, frequent and hazardous conditions of childbirth, induced abortions, and IUD insertions. These interact with other risk factors such as anaemia, lack of access to good quality health care facilities throughout the reproductive years, lack of knowledge of early and advanced symptoms of morbidity, and poor availability of adequate water and sanitation facilities. These reproductive tract infections (RTIs) contribute to adverse outcomes of pregnancy such as foetal loss, low birth weight and prematurity, and perinatal infection. Recent evidence points to RTIs, too, as risk factors for HIV.

Quite clearly, the negative dimensions arising out of STD and HIV infection are graver for women's general and reproductive health than they are for men. Integrating an AIDS dimension into health policy requires a holistic approach, in which the aspect of women's health goes beyond looking at pregnant women alone, missing out the preceding linkages.

Inequitous feeding practices which favour boy infants and children over girl infants and children stunt physical growth and lay the basis for steady accretion of nutritional anaemia among little girls. Inequitious access to education results in girls being barely permitted to go beyond primary school if they are sent to school at all, thus leaving

them bereft of any basis in education and denying them access to information about and ability to negotiate with the world outside. Early marriage of girls and onset of coital activity soon after the start of menstruation is accompanied by pressures to begin early and repeated childbearing in a state of anaemia, pelvic immaturity, lack of knowledge of sex, reproduction, contraception or symptoms of reproductive morbidity, absence of antenatal care, and economic, social and emotional subservience to the husband and family elders.

Finally, dire poverty among, large sections of the population drives huge numbers of destitute women into crippling prostitute.

In the sections that follow, an attempt will be made to sketch some broad congruences between women's social status and women's health, focusing on risk factors for STDs and HIV infection within the larger context of gender roles and gender inequalities in Indian society, i.e., the social construction of women's sexuality and their reproductive role in relation to their other extra-domestic roles.

Sexuality and Heterosexual Behaviour

Research interest in sexuality and patterns of sexual behaviour is still at in embryonic stage in India and little reliable data exist on frequency of sex partner change in the general population (a factor which is of consequence to both STDs and HIV). The forces that govern sexual behaviour must therefore be reconstructed from prevailing gender relations. This has been dealt with in some detail by this author elsewhere (Ramasubban 1992). Only a brief recapitulation follows here in order to set the stage.

The cultural definition of female sexuality as all-devouring and as destructive of the women and of others around her has been central to the organization of gender hierarchy in Indian society. Female sexuality is depicted in both major classical texts and proverbs across the country as primeval and therefore potentially more powerful than social sanctions. In the Brahminical scheme of society, women (along with *shudras)* were the lowest order-polluted, polluting, menial and subversive. Given the importance of women as childbearers, the only manner in which society could chain women's sexuality was by subordinating it to their identity as mothers. Marriage arranged at an early age, with its built-in requirement of early childbearing for the girl to be accepted by the conjugal family, evolved as an institutional solution to this problem. And within this patriarchal family, the socialization of ever-newer generations of women into the passive and pliable lower order has come to be perpetuated.

The patriarchal family is the dominant family form in India and it is within its institutional framework that descent, cultural traditions, occupational skills, family reputation and aspirations, and property are sought to be nurtured. This is done under the hegemony of men who control the levers of economic, social, political and ritual power. Women given in marriage, the main transaction through which the family as an institution is renewed, are as powerless as men are powerful. Among the most grievous of their disabilities is that traditionally women neither inherit nor own/control property and are hence totally dependent on men for survival. Further, since family virtues are believed to be transmitted by blood, the purity of the blood of the woman being married-the symbol of her sexuality and her reproductive role-becomes crucial to the marriage transaction, and men define this purity. The economic protection of the woman and the protection of her purity thus takes place by and large within the monogamous family whose rules are stringently enjoined upon her. Before she is married she is under the protection of her father, brothers and other male elders. In her conjugal home this role is played by her husband and father-in-law among other male elders. After her husband's death she must come under the protection of her son. In return for her physical, financial and emotional security a woman must continually demonstrate her adherence to the rules calculated to protect her chastity and, after her marriage, successfully play out her reproductive role by bearing sons. She thus comes to symbolize the family's 'honour', the guardianship of which over-rides all other considerations.

The abstraction of the physical fact of sexuality into the social symbol of honour, requires rendering the female body-the repository of that unspeakable sexuality-powerless to perform an but the socially sanctioned tasks defined by family and caste: reproduction, housekeeping and economic maintenance. Through her reproductive role the woman is expected to secure the continuity of the family with the birth of sons and, thereby, it's social identity. Through her contribution of domestic labour a woman ensures the maintenance of the household. And among the lower castes where women also labour outside the home, the woman contributes to the family's subsistence as well. Physical reinforcement of ideological controls begins early, through a combination of willful neglect and devaluation of self-esteem. Discriminatory feeding practices begun even in infancy are complemented in childhood by denial of opportunities for physical play, thus laying the ground for chronically poor physical growth and nutritional anaemia; and denial of opportunities to go to school thus pre-empting participation in the world outside the home. The onset of menstruation marks the beginning of seclusion from the public gaze, of further restrictions on deportment even within the house and of a retreat into an inner world of shame, fear and silence about the body. It would seem that honour and purity in the cause of the family would require fearing one's body as a polluting, unclean and dangerous thing. This fear binds both the growing girl and the instruments of her socialization, her mother and mother-in-law,

respectively, into a common silence regarding anything to do with their reproductive organs even as their different positions in the family hierarchy cleave them, denying them mutual support.

It is paradoxical that women must carry the burden of this shame and fear and yet play a sexually active role that can satisfy their husbands. Patriarchal family norms operate differently for men and for women. While men are expected to by and large remain within the confines of a monogamous marriage, there is social indifference to their indulging in extra-marital sex. At the base of this is the recognition of their sexuality as unbridled, and condonation of their preoccupation with it. The commonest situation for extra-marital sex is when the man has to live away from home, earning a living in the city. Other circumstances are: when the wife is menstruating, during her pregnancy and post-partum period, when she is away visiting her parents, on religious days when women fast and pray for the family's welfare, a wife's inability to bear children, her poor health, her inability to come up to the household's expectations of her domestic and/or extra-domestic labour, her inability to offer 'interesting' and 'varied' forms of sex (this is the reason given by a considerable proportion of male STD patients at STD outpatient departments of hospitals, who admit to frequenting prostitutes). In general, a wife's inability to perform her sexual, biological, social as well as status-enhancing roles to her husband's satisfaction may all become threats to effective monogamy.

Premarital sex among teenage boys, while frowned upon and sought to be avoided through early arranged marriage is, nevertheless, common (between 12 and 25 per cent of male STD patients are in their teens) (Chaudhary et al. 1988; Arora et al. 1984; Siddappa et al. 1990; Chopra et al. 1990). In patriarchal societies where pre- and post-marital chastity for women are overriding values, violation of this norm by women would require overcoming the barriers of fear, strict surveillance and threats of terrible retribution of both divine and human origin. Among the upper castes the combination of seclusion and ideological conditioning would possibly cripple any such initiatives by women, while conversely providing them with protection from outright sexual assault. Among the intermediate peasant and poorer labouring castes and tribal communities, on the other hand, where women are required to engage in farm or wage labour, violence wielded by male family elders (primarily the father or husband) might have to replace seclusion as an instrument of control.

The exposure of the sexuality poorer women makes them vulnerable to sexual and economic exploitation and even rape by men of both upper and lower castes. Concomitantly, it may also afford opportunities for sexual experimentation. Either way, in the absence of knowledge about contraception or STDs, young girls may become victims of STDs or unwanted pregnancies and consequent illegal abortions. Dramatic

stories of sexual exploitation of young girls in remote rural and forest/tribal areas break into the national press from time to time. Quack abortionists run lucrative practices in these areas where outsiders (traders, forest contractors, etc.) vie with powerful insiders in sexual exploitation of the hapless local women belonging to the poorer sections.

Generally, the patriarchal extended family provides a few spaces for women and men to express their sexuality outside marriage, yet within the family framework. There are permitted joking relationships between cousins, or with a husband's younger brother or wife's younger sister, for example. In South India where cross cousin and uncle-niece marriages are permitted and are indeed the norm in several communities, intimacy with a potential marriage partner may not be uncommon. It must be remembered, however, that by and large men enjoy greater power within the family, and it is plausible to believe that degrees of male coercion may be at work in such relationships which women dare not reveal for fear of losing family sympathy and security.

The other dimension of this inequality is that men also enjoy greater degrees of sexual freedom *outside* the family framework, which may hive serious implications for the health of their wife/other sexual partner(s) within the extended family and friendship framework. The majority of male patients visiting STD clinics is repeaters (between 30 and 40 per cent are repeaters) are found to have had their first sexual experience while in their teens, the average age being 16 to 18 years (as mentioned earlier, between 12 and 25 per cent of STD patients are in their teens, the age group below 30 years constituting between 80 and 90 per cent of all STD patients). While this first encounter is often with a prostitute, others who also figure as first-time partners are acquaintances, friends, relatives or neighbours. For subsequent fulfillment of the desire for sexual gratification (whether due to peer pressure, desire for variety, absence of wife, or her ill health, etc.), these men more often than not resort to prostitutes (the single most important source of STD infection). But having unpaid sex with friends or relatives, neighbours or casual acquaintances continues to figure in their profile, although in, smaller proportion. Admittedly, our understanding of sexual mixing is largely derived from studies of patients at STD clinics. Even casual observation, however, reveals that extra-marital affairs in both rural and urban areas are much more common than is apparent.

One cannot help observing an interesting difference between northern Indian and southern Indian studies of STD patients, in this regard. In the course of a comparison of a selection of such studies one finds that in the southern Indian studies, between 65 and 92 per cent of STD male patients cite visiting prostitutes as the most important source of their infection. Between 55 and 63 per cent of these patients are married. Those citing extra-marital/pre-marital relationships within the family are a significantly small

proportion (within 5 per cent) (Ramanaiah et al. 1981a and 1981b; Jeyasingh et al. 1984; Kannappan et al. 1984; Jeyapaul et al. 1985; Jeyasingh et al. 1985b; Murugan et al. 1986; Vijay Kumar et al. 1990; Meeran Saheb et al. 1990: Siddappa et al. 1990). Only from one study do we glean that non-frequent visitors to prostitutes (about 24 per cent of the STD patients studied) had sex with relatives, very often with the future spouse who was also a blood relative (Baskaran et al. 1982).

In the northern Indian studies, on the other hand, the proportion-visiting prostitutes are somewhat lower--between 35 and 65 per cent. But between 11 and 21 per cent cited relatives and friends as sex partners (obviously unpaid), a study in Delhi even finding that 53 per cent of the men cited non-professional sexual contacts as against 47 per cent who traced their current infection to prostitutes. Again, a significant proportion of the women attending the STD clinics in the north Indian studies are married women (Dutt et al. 1971; Garg et al. 1980; Bhargava et al. 1981; Ganguli et al. 1983; Ganguli, Sundharam and Bhargava 1983; Arora et al. 1984; Ganguli et al. 1985; Nigam and Mukhija 1986; Chaudhary et al. 1988; Bhargava et al. 1988, Chopra et al. 1990; Meeran Saheb et al. 1990; Singh et al. 1990). In the study by Chopra et al. in Patiala, 35 per cent of the women with STDs had got the infection from friends and relatives and 20 per cent from casual acquaintances. On the other hand, 51 per cent of the men cited prostitutes as the main contact; 14 per cent cited female friends and relatives and 9 per cent cited casual acquaintances. While 28 per cent of women said they got the infection from the spouse, hardly any men reported this.

It would be difficult to explain this without resorting to a combination of observation, deduction and conjecture. Admittedly, STD patients reporting to public hospital outpatient departments are a heavily biased source of evidence. They would comprise those within access of a city, since all the hospitals are located in important towns (although a high percentage of the patients identify themselves as rural dwellers). These patients are very often among those who have come to the hospital as a last resort after doing their rounds of the quacks. They contain a heavy proportion of repeaters. Nevertheless, in the absence of the availability of wide-ranging community based studies of sexual behaviour, they do give us some clues to sexual behaviour patterns in the general population.

More than half the male patients visiting STD clinics are married (four-fifths of the women attenders are married), and up to a fourth are students or teenagers who will go on to marry (over 50 per cent of the married men have a history of premarital sex). There is a nearly 70 per cent representation among them of rural dwellers. They are drawn from among the poor labouring classes--agricultural labourers in the villages or unskilled workers such as coolies, rickshaw pullers, sweepers in the city-or from among

the lower socioeconomic groups generally, such as truck, bus and taxi drivers, policemen, etc; they are largely illiterate or primary school leavers/drop-outs and are generally among the more disadvantaged in terms of both STD awareness and access to new knowledge about HIV and the risk factors involved. This description holds across both northern and southern Indian studies.

The higher proportion of male STD patients in the southern Indian studies reporting contact with prostitutes as against contact with relatives and friends, could be a function of easier access to prostitutes in the relatively more urbanized southern Indian states. The pattern of increase in STD incidence between states, in fact, reflects the rate of growth of urban population in the different states with its concomitant feature of presence of medical facilities in these urban centres (Ramasubban 1992). Easily identifiable concentrated pockets of prostitutes exist in big urban centres and district and taluka towns and are rapidly becoming a feature of smaller urbanizing agglomerations and major inter-state highway truck-halting points. The tradition of relatively large and active concentrations of prostitutes in urban agglomerations also has something to do with the continuing cultural practice of the ancient tradition of temple prostitution in some of these regions of the Deccan peninsula. Among very destitute groups in these regions, sending daughters into prostitution is one way of coping with poverty. Generally from among the poorest of the poor, these women are pushed into this form of survival by miserably deprived natal homes where parents are unable to conform to the norm of early marriage. In other cases where parental control is minimal, or where other family members themselves engage in illicit liquor trading or paid sex, or where they are victims of violent beating or desertion by the husband, women enter into alliances with strangers who promise companionship, marriage or employment but who eventually sell them to city brothels.

In the northern Indian states, while prostitutes continue to be the single most important contact for male pre- and extra-marital sex, the relatively lower extent of urbanization could be expected to render them relatively less easily accessible to an average rural dweller. Concomitantly, the lower degree of autonomy that women in this culture region enjoy which guarantees them greater economic and social security within the extended family may, paradoxically, be conducive to men and women known to each other in the extended family network entering into sexual relationships, either through male coercion or women's submissiveness in return for protection, or even the latter's quest for Intimacy in a non-authoritarian relationship.

Quite clearly, despite the overarching framework of the patriarchal monogamous family, a certain amount of sexual mixing among friends and acquaintances, neighbours and relatives would seem to be a fact both in rural and urban areas, although neither

the extent nor the different patterns of such sexual behaviour that might obtain among different groups in the population have been mapped out so far. In what would seem to be a rather extreme case, a study of gynaecological diseases among women in a rural population found, on clinical examination, the existence of premarital sexual activity among 46.7 per cent of unmarried girls (Bang et al. 1989). (We do not know the extent to which women of tribal background are represented in the sample, since the district concerned is a tribal area; tribal societies are furthest removed from Brahminical norms, and sexual freedom among adolescents, teenage mixed dormitories and trial marriages are socially sanctioned institutions among several tribal communities in the country). Another survey, this time a self-administered questionnaire among educated male readers of a metropolitan English glossy (which features pin-up pictures of women as one of its attractions), revealed that almost 80 per cent had premarital sexual experience and 55 per cent claimed to engage regularly in extra-marital sex (quoted in Savara 1992).

But by and large, the patriarchal family with its characteristic economic and social protection of women through their subordination, constitutes the norm. This subordination makes for the vulnerability of women's reproductive health. And the degrees of freedom enjoyed by men constitute threats to women's sexual health as well. Where even the protection is missing, women's subordination and helplessness as among prostitutes is total.

Sexually Transmitted Diseases

The prevailing scientific wisdom is that an important determinant of STD prevalence is the existence of an. STD 'core group' (the particular social group in question may differ from society to society), wherein the rate of partner change is critical enough for the STD pathogens to persist in the population. Between 40 and 60 per cent of patients attending STD clinics of hospitals in different parts of India report having picked up their infection from prostitutes. We are also aware that prostitutes, particularly in cities, may have an average of seven partners in the course of a night's work. And, given the structure and norms of the patriarchal family, for the majority of men seeking pre- or extra-marital sexual relations, paid sex with prostitutes is the principal option. All these would seem to point to commercial sex workers as the STD 'core group' in the Indian cultural context.

This variable needs to be considered in conjunction with another factor, namely, the extent to which partner change in this group is mediated by recourse to preventive and curative health care. One set of factors abetting the maintenance among prostitutes of a

level of infection which exceeds the threshold in the larger society is their poverty, low level of health awareness, and fatalistic acceptance of venereal disease as an occupational hazard, as well as the lack of autonomy to seek qualified medical care and (in the event of gaining such access) to abstain from plying their trade for the duration of the treatment period. A sizeable proportion of these sex workers may be found to suffer from simultaneous affliction of up to two or even three STDs (one study found the proportion with two STDs to be 41 per cent, while a little under 10 per cent had three STDs concurrently; the rest had one STD: Kunhilakshmi et al. 1980). Again, these sex workers are powerless to negotiate the use of condoms by their clients. Among both prostitutes and their clients there is widespread ignorance about the means for the prevention of infection an reinfection and means of cure. The steadily rising incidence of reported STD cases against this backdrop may perhaps explain why the infection rate is high enough and constant enough for STDs to constitute the third most important communicable disease in India after malaria and tuberculosis.

What is worrisome in the context of the discussion here is the untargetable group: the unpaid sexual partners of those men who are STD sufferers; women who, overwhelmingly through marriage and to a marginal extent through pre-marital/extra-marital contact, constitute a large population at risk of contracting STDs and even HIV. 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 to 5 per 1000 to 5 to 50 per 1000. In Bombay seropositivity rates among commercial sex workers rose from 2 per cent to 30 per cent within a span of just two years, i.e. 1988-90 (ICMR 1991). The vast numbers of prostitutes, their clients and the wives/relatives/friends/acquaintances of these clients who do not attend public STD clinics situated in cities, remain beyond the pale of statistical estimation. Epidemiological data would seem to suggest that undetected asymptomatic seropositive persons who may remain asymptomatic for 7 to 10 years play an important role in HIV transmission.

The danger of HIV transmission is not the only reason for alarm regarding the vulnerability of women to possible STD infection. The complications and sequelae of most non-HIV STDs and even other non-sexually transmitted reproductive tract infections (RTIs) commonly found among women in the sexually active age-group are so serious as to cause untold distress with even fatal consequences, given their already imperiled health, status in the family and self-worth. Bacterial infections like syphilis, gonorrhoea and chlamydia, viral infections like genital herpes, and protozoan infections like trichomoniasis all cause genital lesions/inflammation which may remain asymptomatic for long periods or cause vague and non-specific symptoms even in their advanced stages, due to the structure of the female reproductive system. For anatomic reasons, again, the diagnosis of these infections is more difficult in women (requiring

internal examination and often laboratory confirmation by qualified health care providers under hygienic conditions and laboratory facilities, respectively). And social reasons may render effective diagnosis impossible. Further, the potential for the spread of infection to the upper reproductive tract is high in the case of women, mediated by nutrition and immunity. And if symptoms become manifest-itching, burning while urinating, ulcers, pain, discharge-women are most often too afraid and confused to bring this to the notice of the family and thereby pave the way for access to medical care, both because they are not supposed to have such problems in the first place and also because they are socially deemed to be the polluters, the originators of sexual problems. Male ignorance of STDs and of their own role in infecting their wives works as the most effective barrier. The movement of infection to the cervix and upper reproductive tract-fallopian tubes, uterus and ovaries may result in pelvic inflammatory disease (PID) causing chronic and acute abdominal pain (for which they are often given analgesics by general practitioners), foetal wastage, low birth weight and prematurity, infertility, debility, and cervical dysplasia, which may lead to cancer and death.

Infertility could be an assault on a woman's already low status and self-esteem, since childbearing is a prime guarantor of protection within the patriarchal family. The presence of RTIs may also make it difficult for the sufferer to sustain a pregnancy for the full term. This may be a spur to repeated pregnancies. It also carries with it the additional danger of the inherent infection getting exacerbated with every successive pregnancy, as a previously lower RTI moves upwards to cause serious complications (Wasserheit and Holmes 1992). Since the majority of deliveries are not conducted under aseptic conditions, unhygienic delivery practices such as insertion of fingers or instruments may act to intensify the already present infection. If a woman is fitted with an IUD as a spacing device, the trauma to the reproductive tract may result in inflammation which may lead to PID; if the woman already suffers from an infection, the IUD insertion may aggravate it and push it further upward into the reproductive tract. Induced abortions-commonly-resorted to-are also a contributing factor in the exacerbation of reproductive morbidity.

Syphilis, gonorrhoea, chancroid, lymphogranuloma venereum (LGV) and granuloma inguinala (GI) account for between a third to half of the STDs found in STD clinics across the country. The other widely prevalent STDs are venereal warts, genital herpes, non-gonococcal urethritis (NGU) and candidiasis. There is a large omnibus category of 'other STDs' under which chlamydia, trichomoniasis, etc. requiring laboratory tests for their correct diagnosis--are included (Ramasubban 1992).

While men by far exceed women in the STD patient profile (Kapur 1982 and the studies cited earlier), for the medical and social reasons pointed out above, the number of male

patients should be seen as an indicator of the actual (as against reported) number of female sufferers. The fact that the infected male to uninfected female route works more efficiently than the infected female to uninfected male route, underscores this further. In the case of syphilis-the predominant STD in India, accounting for around 40 per cent of all reported cases-men with primary infection may be found in size-able numbers reporting to STD clinics given the short incubation period and painful early symptoms in males (visible genital sores). Among women, on the contrary, primary syphilis remains undetected as the lesion is in the internal genitalia and is symptomless. Overwhelmingly, among women patients with syphilis, it is the secondary and latent syphilis which are to be seen.

In a study in Chandigarh, syphilis accounted for the highest number of patients, both male and female. While among male syphilis patients 48 per cent had primary syphilis, 39.3 per cent had secondary infection and 9.5 per cent had the disease in its latent stage, among the women patients primary syphilis accounted for only 6.9 per cent, while secondary syphilis accounted for 75.8 per cent and latent syphilis claimed 13.8 per cent (Bhushan Kumar et al. 1987). The nearly 40 per cent of male secondary syphilis patients may in part be due to spontaneous healing of the primary symptoms and in part due to a recently emerging problem, namely, the inadequate and indiscriminate administration of penicillin by private practitioners (allopathic and herbalist) which causes the primary symptoms to disappear without curing the infection effectively. In another study at a predominantly women's hospital in Delhi, syphilis was found to account for 55.6 per STDs. All primary cases-4.4 per cent of the sufferers--were male, secondary syphilis accounted for 17 per cent (male-female ratio 1:2.18) (Arora et al. 1984). In yet another study, this time in Allahabad, of the women syphilis sufferers 40 per cent had secondary syphilis as against 4.4 per cent with primary symptoms. The corresponding figures among male syphilis patients were 3.3 per cent and 12.3 per cent (Singh et al. 1990). In a ten-year study in Tirunelveli, syphilis accounted for nearly 31 per cent of all STDs, and women between 21 and 30 years of age formed about 30 per cent of syphilis cases (Murugan et al. 1986).

Latent syphilis presents a strikingly high figure in the Delhi women's hospital study cited earlier, and in some studies going back to the 1970s and early 1980s the figure ranges between 38 per cent and 53 per cent. Among the highest must be the finding in a Srinagar study of a 92 per cent incidence of latent syphilis (cited in Kapur 1982).

In women, the interval from initial infection of the reproductive tract to development of complications is quite long in the case of syphilis, often years. One of the outcomes is congenital syphilis; nearly 3 per cent of women patients at the Delhi women's hospital were suffering from this condition. A review of published and unpublished studies

over a 20-year period (1968-88) found syphilis seropositivity among pregnant women to range from 7 per cent to 23 per cent as determined by VDRL testing (Bhargava 1988 cited by Luthra et al. 1992). Congenital or perinatal infection is not the only adverse outcome of syphilis patients who become pregnant, although it is the most serious. Foetal wastage and low birth weight or prematurity are also outcomes. They are believed to be higher in the case of this STD than in the case of other RTIs such as chlamydia, gonorrhoea, bacterial vaginitis or trichomoniasis (Wasserheit and Holmes 1992). Indian studies have found abortions in syphilitic women to range between 27 per cent and 50 per cent (Pavithran 1988). Syphilis has also been found to be the most commonly implicated STD among HIV positive STD patients, accounting for around 60 to 65 per cent of HIV positive cases (Mathai et al. 1990; Baruah et al. 1988; Rama Krishnaiah et al. 1989).

Among the genital ulcer producing STDs that are prevalent in India, genital herpes carries long-term complications for women's reproductive health. Increasingly encountered in STD clinics around the country, it has been commonly found to be one of the risk factors related to cervical cancer. Its presence, like that of other ulcerating STDs, could facilitate HIV transmission nearly seven-fold. In order to induce transmission it is believed to require repeated exposure with predisposing factors such as trauma, or low immunity (common in people on low protein diet). The tendency of herpes to become chronic and difficult to root out and the socio-economic status of attenders at STD clinics and their partners could be risk factors in themselves. Primary genital herpes has the most negative consequences for pregnancy among the STDs in terms of predisposition to foetal death, low birth weight and prematurity; in 30 to 50 per cent of cases of infected pregnant women, congenital infection or perinatal infection could be an outcome (Wasserheit and Holmes 1992). It has been suggested that vaginal delivery may enhance the risk of neonatal infection. In a study in southern India, the proportion of primary genital herpes was found to be significantly higher in women than in men, although the prevalence of herpes itself did not differ significantly between the sexes (Jacob et al. 1989). A study of risk factors for cervical cancer found that 39 per cent of cases and 42 per cent of controls were positive for the herpes simplex virus (HSV-2) (Gupta et al. 1988, cited in Luthra et al. 1992). The infection would appear to be fairly common among women, although the precise dimensions are at present difficult to estimate.

Among the STDs that come next to syphilis in prevalence, gonorrhoea is particularly problematic for women. Almost all gonorrhoea patients at STD clinics are men. This is because the symptoms are perceptible and acute among men while in women gonorrhoea is virtually symptomless, thus pre-empting even aware and motivated women from seeking health care. Yet, the risk of infection with gonorrhoea is much higher from male to female than with the reverse route, even a single exposure carrying

a risk of infection as high as 20 to 30 per cent. Further, gonorrhoea has a short incubation period and the period between the development of acute symptoms and the development of complications such as PID in women is also believed to be short. Gonorrhoea may be transmitted to the offspring by pregnant infected women, and although not as severely as syphilis, gonorrhoea is a contributing factor to low birth weight or prematurity. The role of gonorrhoea in facilitating HIV transmission is also believed to be considerable (Wasserheit and Holmes 1992). Timely treatment is therefore essential if women are to escape such complications. Yet the absence of symptoms remains a confounding factor, a factor which also serves to retain a reservoir of infection among prostitutes.

The high rates of male gonorrhoea in India-between 10 and 25 per cent of all STD patients are probably a reflection of the considerable recourse to prostitutes by men seeking pre- and extra-marital sex that we have referred to earlier. Very nearly 50 per cent of male gonorrhoea patients are in the 15 to 24 age group and if we were to take the 15 to 30 age groups this would account for 80 per cent of patients. A number of these patients--between 30 and 39 per cent are repeaters (Bhargava et al. 1981; Ganguli et al. 1982). And the proportion of single men is not significantly higher than those who are married. These characteristics would seem to indicate the potential of these men to infect their present or future wives, who in turn can be expected to remain symptomless even as they function as a source of reinfection for their husbands. That 21 per cent and 53 per cent respectively, of male gonorrhoea patients in a Delhi hospital who were investigated at two different points in time, cited a non-paid sexual contact-friend, acquaintance, generally a known person-as the source of their infection, might be seen as a proxy for how this ping-pong process might be working (Bhargava et al. 1981; Ganguli, et al. 1985). A serious problem in the case of gonorrhoea (as also in the case of syphilis) is the tendency of repeaters to indulge in self-administration of drugs; the problem of drug-resistant strains is only just beginning to be recognized.

The most effective known method of controlling female gonorrhoea in the community is contact tracing of partners of male patients for prompt treatment. Given the ignorance among men regarding the mode of transmission and the balance of power within the household, men have no accountability to their wives and women have little freedom to refuse sex within marriage. Male patients at STD clinics have shown a pronounced reluctance to bring in their wives/other sexual partners for examination. The high proportion of young married women between the ages of 14 and 25 among the women patients at STD clinics-probably drawn largely from urban areas-confirms that most women begin their sex life within marriage, given the low age at marriage.

We therefore know little about the prevalence of gonorrhoea in the general population and among women in particular. One approach to identifying this has been to screen women attending antenatal clinics for check-ups or attending Ob/Gyn outpatient departments (OPDs) for non-specific symptoms like vaginal discharge or for serious problems like PID or infertility. A study in Chandigarh observed 2 per cent of the patients to be harbouring gonococcal infection while another in Varanasi found less than 1 per cent of such patients (Luthra et al. 1992; Mishra et al. 1988) There is some controversy in India about the wisdom of routinely screening all women who attend antenatal clinics for gonorrhoea, as is advocated in the U.S.A. for example. Some advocate the screening only of contacts of males with diagnosed gonorrhoea, or patients with a history of past STDs or known promiscuous persons (a survey of PID among women in after-care and state protective home found STDs to be the most important cause: Jain et al. 1981; see also Mishra et al. 1988). It has also been argued that there is not sufficiently strong evidence in India of gonorrhoea as a cause of PID as compared with, for instance, tuberculosis of the genital tract, puerperal sepsis or post-abortive infections (Brabin et al. 1991). Certainly, the Varanasi study found that of the 14.7 per cent patients with PID, in 87 per cent of the cases the cause was abortion or some surgical procedure and not gonococcal infection.

The point, however, is that nowhere do women have easy, non-stigmatized access to good quality diagnostic and curative facilities which take into account both their sexual and reproductive health. STD clinics would tend to be avoided by women (and even by men other than the very poor), private practitioners of whatever hue being the preferred, option. While most STD clinics lack the more accurate (and at present expensive) diagnostic facilities, private practitioners (of whom most are general practitioners or quacks with little or no correct knowledge of or formal training in STDs), would be severely lacking in skills. Obstetrics and Gynaecology clinics of many public hospitals, and antenatal clinics, do not have facilities for STD diagnosis. And unmarried adolescent girls are not catered to by them.

The question therefore remains an open one. The low rate of gonococcal infection in hospital based studies could be a function of the selected groups studied. Most women in India do not visit gynaecologists or attend antenatal clinics, all of which facilities are concentrated in urban areas. Those who do attend, do so only in the last trimester of their pregnancy. Again, most women do not avail of the above facilities for check-ups that are non-pregnancy related, even under the stress of acute PID. And STD screening is not a part of routine antenatal, family planning and gynaecological care. This, in fact, is one of the greatest obstacles to screening pregnant women for HIV infection and to counselling them if they are found seropositive. Women who come to antenatal or Ob/Gyn clinics for check-ups, as against, men attending STD clinics, could be expected to be quite a different social group-urban, with effective access to medical facilities--

from the uneducated and in other ways socially and economically disadvantaged and largely rural based women whom one would expect to find as wives/ other sexual partners of the male gonorrhoea patients reporting to public STD clinics.

Our inadequate knowledge about the extent of gonorrhoea in women is matched by uncertainty regarding the prevalence of chlamydia trachomitis, which shares many of the features of the former and is often found to occur along with it. Chlamydia, like gonorrhoea, is to be found among women in the most sexually active age-group, it is more efficiently transmitted from male to female and may remain asymptomatic for a long period in women, detection is easier in men and reported incidence higher among them under the rubric non-specific urethritis (NSU) or non-gonococcal urethritis (NCU). Among women it is put under the general label of non-specific genital infection (NSGI). The reason for these omnibus categories is that laboratory diagnostic facilities for the range of chlamydial infection are as of now expensive and rare even in metropolitan STD clinics although the infection itself is easily curable with antibiotics.

Like gonorrhoea, chlamydia can result in PID. Chlamydia was found to be 6 per cent in acute and 29 per cent in chronic PID cases in a Delhi study of women with PID (Luthra et al. 1992). Its role in causing low birth weight or prematurity, stillbirth, abortion, postpartum fever and congenital infection is somewhat more pronounced than the adverse outcomes induced by gonococcal infection (Wasserheit and Holmes 1992). The risk of foetal or neonatal death is believed to increase tenfold if the mother has chlamydial infection during pregnancy (Schacter et al. 1975). And there is also some evidence to link chlamydia in pregnant women with the risk of infant pneumonia (Pavithran 1988). The use of IUD in the presence of chlamydial infection is believed to heighten the risk of PID and, indeed, higher chlamydial infection has been found among IUD users (1 to 15 per cent) at various family planning centres in the country than among controls (WHO 1981; Luthra et al. 1992). The reported prevalence of this discharge syndrome among 20 to 30 per cent of men attending STD clinics in the country, and the evidence that it is also to be found among sexual partners of men thus affected, particularly among those belonging to lower socio-economic groups, is a glimpse of the proverbial tip of the iceberg. Regular condom use is an effective preventive measure, as it is with all STDs. There is also growing evidence that non-ulcerative STDs such as chlamydia, gonorrhoea and trichomoniasis may also facilitate HIV transmission in the way that genital ulcer-producing STDs such as syphilis, chancroid, herpes, etc. do and that the presence of both types of STDs increase the risk of transmission at least three- to five-fold (Wasserheit and Holmes 1992).

Other Reproductive Tract Infections

Besides the STDs discussed in the foregoing account, women also suffer from a range of other RTIs--specific and non-specific inflammations-which may or may not be sexually transmitted, which are important causes of reproductive morbidity, and which may even be risk factors for cervical cancer and HIV transmission when chronic and left untreated. These are a range of bacterial and parasitic infections whose chief symptom is white discharge. Found to be a very common problem among Indian women during the sexually active years, these infections are triggered off by a range of factors such as poor sexual hygiene (due to ignorance, lack of access to adequate and clean water or clean menstrual cloths, etc.), drop in immunity, use of IUDs, induced abortions, and bacterial infestation.

Trichomonlasis and candidiasis have been found to be among the common inflammatory conditions, which are sustained through sexual transmission. In a study conducted among a combined sample of women attending the STD clinic and Ob/Gyn clinic of a hospital, the most frequent causes of white discharge were found to be candidiasis and trichomoniasis-almost 60 per cent-with almost half the patients in each group being asymptomatic. An additional 13.2 per cent of patients were found to have both infections (Mishra et al. 1988). There is a wide variation in the symptoms of these infections, ranging from mild to severe and short-lived to chronic, and the extent to which discharge is regarded as a symptom of ill health would depend on the social construction of the symptom by the sufferer. Trichomoniasis has been found to be the commonest RTI among pregnant women. If left untreated it may cause low birth weight or prematurity. Trichomoniasis infection of the baby takes place during birth and has been found as an incriminating factor in neonatal pneumonia (Pavithran 1988). Among women reporting to STD clinics, infection with an STD such as syphilis has often been found to be accompanied by trichomoniasis infestation (Jeyasingh et al. 1985a).

Transmission more often takes place from the female to male partner during sexual intercourse. In some cases the male may remain asymptomatic and contribute to recurrent infection in the female. The transmission rate is high in this range of infections---50 per cent in candidiasis, over 60 per cent in trichomoniasis and around 55 per cent in chlamydia. Trichomoniasis (and indeed each of the above-mentioned inflammatory conditions) has been found to come down considerably when barrier methods of contraception are used. In one study of trichomoniasis and candidiasis in male partners of women with the two infections, it was found that only 14.6 per cent of men using condoms developed infection while 86 per cent of those not using condoms developed it (Pradeep Kumar et al. 1990).

Even where specific pathogens are not present, vaginitis may occur. Bacterial flora may remain the same as in a healthy vagina but the number may increase several-fold and under these conditions some normally present micro-organisms may become opportunistic pathogens. Much of the vulvo-vaginitis cases reporting to STD clinics-these account for 50 per cent of all women STD patients in some studies-have been found to be due to low body resistance (Siddappa et al. 1990). How widely prevalent specific and non-specific inflammations are, can be seen from other studies as well. A community based study in Bengal found that 77 per cent of women reported symptoms of white discharge, lower abdominal pain and backache. Clinical examination and laboratory diagnosis were able to confirm the presence of non-specific inflammation among 62 per cent of women. These findings were not dissimilar to those of a hospital based study wherein only 27 per cent of women were normal; the remainder suffered from inflammation of one kind or other (both cited in Luthra et al. 1992). In the community-based study in Maharashtra cited earlier, laboratory diagnosis confirmed that nearly 92 per cent of women suffered from gynaecological disorders, the average number of disorders per woman being 3.6. Among other ailments, bacterial vaginitis accounted for 62 per cent of women, and 24, per cent and 14 per cent of women, respectively, suffered from PID and trichomoniasis. Cervicitis and cervical erosion accounted for 49 per cent and 46 per cent, respectively (Bang et al. 1989).

Inflammatory conditions are also caused by IUDs. Between 30 per cent and 54 per cent of IUD users have been found to develop non-specific chronic inflammation within nine months of insertion. The complication rate is higher with duration of insertion, acute inflammation going up to 63 per cent in the case of those using IUDs for over a year (Butt et al. 1991; Anupama et al. 1989; Sarbajna 1991; Luthra et al. 1992). White discharge, menstrual irregularity and backache have accounted for nearly 70 per cent of the causes of removal. The poor service provision for follow-up-poor knowledge on the part of health workers about contraindications for IUD insertion and about frequency of physical examination is the main factor that keeps this particular spacing method unpopular. But the estimated 5 million IUDs inserted annually give an idea of the magnitude of life-threatening morbidity faced by women who must demonstrate their fertility yet also protect themselves from its negative consequences through contraceptive technologies that cause severe trauma to their reproductive health.

By far the most commonly adopted fertility control device is induced abortion, another major cause of inflammation and reproductive morbidity, and mortality While nearly all illegal abortions result in severe injury and sepsis, thus accounting for almost 75 per cent of maternal deaths due to this form of fertility regulation, between 25 and 50 per cent of complications-injury, sepsis, incomplete abortion, pelvic infection-are the handiwork of ill-trained, inexperienced and careless `qualified' medical personnel who in any case are not available outside urban areas. Thus even two decides after the

Medical Termination of Pregnancy Act, the legal availability of abortion remains a weak option. Poor sexual hygiene, low nutritional status and flaring up of existing cervicitis have also been found to be important factors in post-MTP complications, making for around 12 to 15 per cent of such cases (Konar 1992; Mondal 1991; Ratna Sanyal et al. 1991; M.K. Sanyal et al. 1989; Nitwe et al. 1989). The high incidence of maternal deaths due to induced abortions legal and illegal has been well-documented (above-cited studies also Jejeebhoy and Rao 1992). I t would suffice here to draw attention to the potential of this form of fertility regulation, as practised under the prevailing conditions of service availability-qualified and unqualified-and complicated by pre-existing health status, to set off RTIs with their attendant complications.

Conclusion

The spread of HIV in India touches some of the innermost spaces in Indian society in ways that no other infectious disease has done so far. If other areas of health and morbidity have linkages with wider social, economic and environmental dimensions that defy target-driven, wholly vertical approaches, HIV lends itself even less to a blinkered perspective.

HIV in its heterosexual transmission mode, with pre-existing STDs and RTIs as risk factors, calls into question the cultural construction of female sexuality, one of the bulwarks of the patriarchal family structure, which provides the framework for the prevailing gender relations in Indian society.

The definition of female sexuality as something threatening to society and requiring male control has had several consequences for women's socialization. Growing up in ignorance, fear and shame regarding their bodies, women's subordination begins early in-life, through male definition of their autonomy and overall domestic and social value. The prescription that their sexuality be channelized through early marriage and speedy demonstration of their reproductive ability, has meant denial of even school education and of exposure to information, generally, and the lowering of the age at marriage to levels that threaten their sexual, reproductive and general health.

Early onset of coital activity and the frequency and unprotected nature of this activity result in early and closely spaced births and repeated deliveries under hazardous conditions which traumatize the young female body. If due to unwanted pregnancies, women are pressurized to go through induced abortions in order to achieve the family size and gender composition of offspring desired by the husband and his kin, they may succumb to a range of RTIs inflammatory conditions that will persist and escalate

through the sexually active years--arising out of the conditions under which these abortions generally take place.

The patriarchal family with its norm of early, universal and monogamous marriage is ideally expected to constitute a secure environment for heterosexual relations. But the degrees of sexual freedom enjoyed by men may constitute threats to women's health. If men have had unprotected premarital sexual experience or continue unprotected sexual activity outside marriage, undiagnosed and untreated STDs may add to women's reproductive morbidity and further endanger their childbearing role either through adverse pregnancy outcomes or through infertility.

The health and family planning programmes have failed to see women outside their role as mothers, that is, they have failed to pay attention to their survival as infants, their nutritional development in childhood, their persistence through school education, their complex reproductive physiology which puts them at a disadvantage in exposure to STDs and RTIs, and the monitoring of their sexual health. Their instrumental manipulation by a family planning programme that has targeted them for sole responsibility for contraception has left women with no choices other than questionable invasive technologies for fertility regulation. And STDs are a devalued academic discipline, thus limiting the availability of skilled medical and paramedical personnel even in big cities. The shortage of specialists and the lack of STD diagnostic skills among graduate doctors also contribute to a flourishing market for quacks. The low status of the specialty has also meant the failure of research and development to generate diagnostic technologies for detection of STDs and RTls among women that are cheap, reliable and easy to use under Indian field conditions.

It is against this complex backdrop that HIV prevention in the context of heterosexual relations needs to be viewed. Where women's health is so fraught with danger from the early years of life, the risk factors for HIV infection would seem to be everywhere and, therefore, difficult to encapsulate into a focused vertical programme of prevention, diagnosis and counselling for HIV alone. For HIV is the most difficult of all diseases to identify, having no specific symptoms of its own but associated with opportunistic infections which are anyway rampant and important causes of mortality. There would seem to be no easy escape to intervention strategies that take a holistic view of women's sexual and reproductive health.

The common ground for state intervention and changes in individual behaviour is education. One of the major obstacles to any strategy for improving sexual, reproductive and general health of women is that there is no way in which women may

be reached regularly at all, since they are invisible in any institutional context. Health programmes to monitor children's nutrition and growth, counselling of parents to keep girls in school and defer marriage until a safe age, can be accomplished more tangibly in a school contest, rather than through reliance primarily on the electronic media with no means of face-to-face follow-up, however commendable the quality of the television programmes. Enhancing the coverage and quality of school education generally, and including health and environmental education and specifically sex education for both boys and girls, could lay the basis for an informed participation by people in their own health care. It would also make for better understanding and absorption of health education in adulthood, when information tends to come through more impersonal communication channels such as television or hoarding or wall posters/writings, etc.

Self-reporting is the surest way of tackling morbidity and there is evidence that when non-formal specific education, i.e. health education, is received on a substratum of general education, it is absorbed and retained more effectively by adults than when the latter basis is missing. And in the urban context, at least, it would appear that the presence of school-going children in the household can even compensate for lack of formal education on the part of parents (Ramasubban et at. 1990). Is education then such a potent building block in making for self-esteem that it can impart the ability and confidence to evacuate and absorb even text information that is not immediately relevant to the individual concerned?

In the case of women, health awareness in the context of a growing self-awareness and general awareness of one's environment may gradually help women overcome their low self-worth, which at present prevents them from consciously and confidently constructing the symptoms of their reproductive morbidity. This may also give them the confidence to negotiate non-harmful sexual relations, such as the use of condoms and abstinence while dealing with a health problem, to seek antenatal care, etc.

Education through the media and through community and workplace outreach programmes about HIV, STDs and reproductive morbidity, and about health aspects of the micro and macro environment generally, is a necessary complementary process. Men are an equally important audience for such communications, both in their own interests and because of the role that they play in the lives of women. Men often act as a source of information for their wives. It might be necessary for men to back some services with their approval and, if need be, with active participation, in order to encourage their wives to accept these services. Male support for improving women's reproductive health is necessary also because women are not financially independent. Even where women do engage in income-earning activities, men often withdraw their household contribution (spending it on liquor and visiting prostitutes, instead), and

women's earnings go into purchasing food, health care and education for the children but not health care for themselves. Finally, men must share the responsibility for sexual relations, through protecting themselves from STDs when engaging in pre- or extra-marital sex, and, through condom use again, share responsibility for contraception so that women are protected from the negative consequences of their fertility without severe trauma to their reproductive health.

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