

**Myths and Misconceptions:
Barriers to Reversible Contraception Use in a Rural Indian Village**

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Introduction

India's national family program has succeeded in lowering the nation's total fertility rate to 2.97 from a high of 5.97 in 1950 (United Nations 2001). The most prevalent form of contraception is female sterilization, which accounts for 76% of all use among women (Pathak *et al.* 1998). Research suggests, however, that female sterilization is unlikely to contribute to further fertility decline (Pathak *et al.* 1998; Bongaarts and Greenhalgh 1985). Rates of use of temporary modern methods of contraception are very low. Previous studies have found barriers to contraceptive use to include the monetary and time costs of obtaining contraception (Lewis 1986; Janowitz and Bratt 1996), the social stigma of using contraceptives in an unsupportive setting (Bongaarts and Bruce 1995; Nag 1984), lack of knowledge (Basu 1984; Chaudhury 2001) desire for more children (Athavale and Athavale 2003; Kumar *et al.* 1999; Santhya 2004), the costs of acquiring additional information (Pritchett 1994), worry over possible side effects and fears that reversible methods are ineffective (Bongaarts and Bruce 1995; Athavale and Athavale 2003; Rajaretnam and Deshpande 1994; Chaudhury 2001). This paper examines the attitudes and beliefs of women towards the use of temporary contraceptive methods in a rural village in Maharashtra, India. The paper seeks to understand the range of individual and familial factors that influence a woman's choice of contraceptive method. A greater understanding of both the decision making process involved in contraceptive choice and the role of others in this process has the potential to inform programs that seek to increase the uptake of temporary contraceptive methods in rural India.

Background

The Indian National Family Planning Program

With the founding of the Family Welfare Program in 1951, India became the first nation in the world to establish a national program with the intent of encouraging development by slowing population growth via contraception (Visaria *et al.* 1999). The program initially focused on the rhythm method, though other methods began to be recommended after the initial program had little success in lowering the fertility rate (Ledbetter 1984; Freymann 1963). The Family Welfare Program chose a strategy of “target-setting”, where the number of new contraceptive acceptors needed to achieve population growth reduction goals was calculated and quotas assigned to each district (Donaldson 2002). The Indian government has included temporary methods in its population programs since the second five year plan in 1956, but by the late 1960s, with population rates outstripping those of agricultural and economic development, the Ministry of Family Planning and Health began to emphasize sterilization procedures (Donaldson 2002), which were highly effective and required only one visit with a health care provider.

Initially, program efforts concentrated mainly on vasectomy, although due to mass unpopularity, later shifted focus to female sterilization (Ledbetter 1984; Dhanraj 1991). This pattern has continued to the present, despite the Indian government’s decision in 1996 to terminate method-specific targets and integrate family planning methods into a broader reproductive health context (Visaria *et al.* 1999). Despite the introduction of other modern temporary methods, the vast majority of contraceptive users rely on female sterilization, especially in south India (Pathak *et al.* 1998; Visaria *et al.*

1999; Donaldson 2002; Donovan 1995; Säävälä 1999; Mishra *et al.* 1999). An estimated 75% of all contraceptive users (84% of those who use a modern method of contraception) in India rely on sterilization, while vasectomy is used by just 2% of contracepting couples (Santhya 2004).

Family Planning and Method Use in India

For many women female sterilization is the first and only contraceptive method they use (Zavier and Padmadas 2000). The median age at sterilization is 25.7, but this varies from a low of 23.6 in Andhra Pradesh in southern India to 30.5 in Manipur in eastern India (Padmadas *et al.* 2004). Women marry early—the median age at marriage in India is 16.7 years, and though cohabitation often does not occur immediately after marriage, the median age is still low at 17.4 years (Remez 2001). The low median age at marriage means that women are having children early, quickly, and completing their family size at younger ages. Overall, the age at sterilization is dropping, while median age at marriage is steady or rising, reducing the number of years of exposure to unwanted pregnancies and indicating widespread adoption of small-family norms (Padmadas *et al.* 2004; Stephenson 2006). While female sterilization is an effective method to limit family size, the impact of its use on birth rates is dependent on the user's age and parity; evidence suggests that women who do get sterilized tend to have a higher number of children than those who do not (Rajaretnaram and Deshpande 1994; Rajaretnaram 1990), leading to a lesser impact on birth rates (Pathak 1998). Additionally, during the interval between 1970 and 1988, the total married fertility rate (TMFR) fell just 1.1 births per woman (Operations Research Group, 1990), despite a quadrupling in the total contraceptive prevalence rate from 10% to 40, due primarily to women undergoing

sterilization (Rajaretnaram and Deshpande 1994). Women in India currently have a large unmet need for contraception-- 8.3% for spacing and 7.5% for limiting (Chadhury 2001).

Though targets were set for temporary methods, and were often reached and exceeded in government programs, researchers could find no evidence of corresponding increases in the contraceptive prevalence rate (CPR), indicating that the actual numbers of users were much smaller than reported by government employees (Pathak *et al.* 1998; Visaria *et al.* 1994). In 1996, the government abandoned the use of targets and adopted policies that incorporated family planning and reproductive health into overall health care (Donaldson 2002), but the CPR of reversible methods has remained low; while supplies of reversible contraceptives are available free of cost to women, demand remains weak (Rajaretnaram and Deshpande 1994).

One result of a reliance on female sterilization is relatively short spaces between births, as women have their desired number of children closely together shortly after marriage. Birth intervals of less than three years have been implicated in increased maternal and child morbidity and mortality (Whitworth and Stephenson 2002; Setty-Venugopal and Upadhyay 2002; Conde-Agudelo and Belizan 2000; Miller 1989; Conde-Agudelo *et al.* 2005). Additionally, Evidence suggests that women who have undergone sterilization are more likely than users of reversible methods to report gynecological morbidity, even controlling for potential confounders such as socio-economic status and parity (Bhatia and Cleland 1995; Gogate *et al.* 1998; Brabin *et al.* 1998).

The Adoption of Reversible Methods

Research has indicated that providing a range of contraceptive methods is a fundamental way to increase reversible methods uptake (Nag 1984; Ross *et al.* 2002). Provision of free contraception and monetary incentives for their use have met with limited success in India (Sunil *et al.* 1999; Stevens and Stevens 1992), suggesting that there are social and cultural factors that keep women from using reversible contraception. Despite the need to increase uptake of temporary contraception, little research has been undertaken to determine the reasons that women offer for their lack of desire to use reversible methods; of special note are those women who do want to limit their family size or postpone additional births but who still do not use or intend to use contraception (Chaudhury 2001). Research has identified individual factors for avoiding reversible method use into several broad categories: cost, in both time and money (Nag 1984; Janowitz and Bratt 1996); concerns regarding side effects, particularly those that invoke taboos (predominantly increased menstrual bleeding and vaginal discharge) and overall health (Rani and Bonu 1993; Char 2001; Athavale and Athavale 2003); external pressures to conform to prescribed social roles and expectations regarding childbirth, son preference, and family size (Säävälä 1999; Chacko 2001; Blanc 2001); women's limited autonomy and resulting lack of access to reproductive health services (Stephenson and Tsui 2002); individual beliefs and values, such as reverence for sexual continence, religious prohibitions, and reservations about expressing reproductive needs, that create psychological barriers to method use (Nag 1984; Säävälä 1999; Rajaretnaram and Deshpande 1994); and limited knowledge regarding family planning methods and (Basu 1984; Baveja 2000). The historical and in some areas continuing emphasis on female

sterilization, by health providers also limits uptake of reversible contraception, though this effect can be mitigated by educating women and providing informed consent (Bertrand et al. 1995; Baveja 2000; Donaldson 2002).

The extent to which each factor influences contraceptive method choice is dependent on the social, cultural, religious and economic context of a given community. Women's use of contraceptives is influenced not only by their own education but by the education of women in their community (Moursund and Kravdal 2003). Regional differences in method mix and use may arise from "learning in social networks", as women with little access to reproductive health education often base their decisions on the experiences that other women have related to them regarding methods, side effects and costs, though whether this is a function of social influence or social learning (Kohler 1997; Kohler and Behrman 2001). This pathway likely leads to negative perceptions of reversible methods use: method-related problems are major factors in discontinuation of contraceptive methods (Santhya 2004) and women who lack understanding of the mechanisms and side effects of contraceptive methods communicate their distress to women in their community who may be considering adopting a contraceptive method.

Data and Methods

The study village is located on the Konkan Coast of Maharashtra State, India. Two thousand people live within the village, which is sub-divided into twelve smaller hamlets divided along family and caste lines. The majority of adult men migrate to the nearby cities of Pune and Mumbai for work. Those men who remain participate along with the women in the village in cultivation. A small health clinic is located

approximately 4 kilometers from the village, where a small public hospital is located. A larger hospital with surgical facilities in the *taluka*¹ capital is located 20 kilometers to the east and can be reached by buses that leave hourly throughout the day. All three facilities provide contraceptive pills, IUDs and condoms, as do pharmacy shops in the fishing village and the *taluka* capital. Sterilization procedures for both men and women and abortion services are available only in the larger town.

Qualitative data in the form of focus groups and in-depth interviews were collected in the village between May and July, 2005. Ever-married women 18-49 years of age were informed of the study in the spring of 2005 during a village-level household census conducted by a local NGO and invited to participate. Those who wanted to participate in focus groups gave their names and five groups were arranged. Each group consisted of 8-14 women from one of 12 smaller hamlets of differing social and economic status into which the village was divided.

Focus groups were stratified by age into two groups: three groups of women 29 years and older and two groups of women 28 years and younger. According to the NHS-II (2001), the average age at sterilization of women in Maharashtra is 25.3 years and the median age at last birth (calculated for women 40-49) is 27.4 years (NHS 2001). The average age at marriage among women interviewed in the village was nineteen. Therefore, twenty-eight years was selected as the point at which women could be stratified into groups of those who had completed their family size and/or undergone tubal sterilization and their peers and those women who had not yet completed their families. Stratifying by age also separated mothers-in-law and those daughters-in-law who were still contemplating additional children into separate groups. Many women

¹ “Talukas” are administrative divisions midway between the village and district levels in India.

identified their spouse's parents as powerful actors in their own fertility decisions; we felt that women would be less likely to answer openly and truthfully in the presence of older family members, especially on sensitive topics such as contraception (Saavala 1999).

Focus group methodology provided a way to explore the experiences of women with family planning in their own words, using their own vocabulary. Discussion topics were ordered from more general issues, such as ideal birth intervals and whether family planning methods were used among women in the village to those more sensitive, such as women's own experiences of contraceptive use, women's perceptions of men's opinions regarding family planning and methods, and the level of reproductive autonomy afforded to women in the study village. The initial topic guide was pre-tested in a neighboring village to a group of 11 women whose feedback and opinions on improving the guide were then solicited and incorporated into the final instrument. The interviews were conducted in Marathi and taped recorded and transcribed and translated into English.

Data from the focus groups was translated and briefly analyzed in the field in order to generate a list of topics for discussion in individual interviews. A total of 15 women were interviewed using a 27-item question guide, with questions regarding ideal and actual birth intervals, women's own use of contraceptives, and their knowledge of and access to modern contraceptives. Interview candidates were gathered using a "snowball" sampling technique, whereby the local research assistant recruited several women who had indicated interest in participating in the study during the earlier census and public meeting. These women were then in turn asked to recruit other village women. Though such sampling is non-random, and has the potential to introduce bias as subjects tend to identify other potential subjects by their mutually identifying characteristics, it

allowed the researcher unparalleled access into the homes and lives of women of varying social status, literacy, age and parity by establishing credibility and trust among research subjects.

The in-depth interviews allowed much more detailed exploration of the themes surrounding method selection than the focus groups. Additionally, the interviews provided a way for the respondents to more easily frame their experiences and beliefs in a confidential setting without the careful facilitation and guidance needed in a group setting (Britten 1995). Interviews allowed women to speak openly, not only about the methods women use but about the reasons behind their reluctance to discuss them.

All focus groups and interviews were taped. After data collection was complete, all interviews and focus groups were translated and transcribed into English from Marathi for analysis. The materials were imported into VERBI Software's MAX Qualitative Data Analysis 2 (MAXqda2) program and were analyzed thematically using a series of conceptual codes relating to specific methods and attitudes toward their use, the perceived advantages and disadvantages of family planning use, and the social phenomena surrounding method choice.

Results

Family Planning Use

Women in the study village uniformly express positive attitudes towards the use of family planning methods. The national population program's campaign to instill a two-child family norm appears to have been accepted and embraced, though more so by younger women than older women or men. The women's beliefs on which methods to

use to achieve these ends, though, were much less aligned with the national program's emphasis on modern contemporary methods of contraception. Female sterilization is by far the most prevalent method of family planning in the village; a very small number of women use the Copper-T IUD with even fewer using the contraceptive pill. Several older men in the village have had vasectomies but none of the younger men have undergone the procedure due to its perceived risks.

Women in the study almost uniformly identified a three to five year interval between births and the two-child norm as ideal. They expressed a wide range of attitudes towards individual methods. Those women who approved of and/or used temporary methods often had more education and were of higher relative socio-economic status. The women in the study cited several reasons for maintaining a three-to-five year gap between children, such as the mother's need to recover from delivery, the inability to properly attend to household duties when looking after more than one infant, and to provide a full course of breastfeeding to each child.

"Only educated people might be using them [contraceptives]; illiterates do not even know. They might be afraid of side effects of using such things because they have to work on their fields." Interviewee, age 40

"A woman gets exhausted after the delivery. She needs strength to recover as well as to look after the baby." Interviewee, age 36

“One keeps crying, one needs to be taken to school, [I have to do] cooking and other household things...to keep everything in its place, a 3 years’ gap must be there.”

Interviewee, age 32

Literacy and educational level was closely related to social status in the village, particularly among women. The need to provide for an adequate education for children was frequently cited as a main motivation for using contraception to limit family size.

“If we have only two [children], then we can afford to send them to school as per our [financial] capacity. If there are more, we won’t be able to look after them. If we are not capable, then why make the children suffer [by having more]?” Interviewee, age 32

“After two children, there’s no use repeating pregnancies. Children need proper education, clothing etc...If some women decides not to use [contraceptive tools] she may have [any] number of children.” Focus group participant, above 28 years of age

Despite the lack of contraceptive use among couples where neither member is sterilized, women in the village often achieved these intervals and limits. Exclusive breastfeeding is the norm in the village for very young infants but is rare after the infant reached six months of age. When women were asked what means had been used to achieve their desired spacing, women used the term “self control”, a term which may refer to either withdrawal or abstinence, depending on context. The ability to control oneself sexually is regarded as an important personal virtue. When asked their opinion of families who had many children, several women commented that the parents lacked self-control.

“I think we can control ourselves. Sterilization is not necessary.” Interviewee, age 36

“If both husband and wife control themselves then pregnancies could be avoided. But not all men can control themselves. At least one of the men will go near his wife [to have sex] and in such cases, how can one guarantee that there will be no pregnancy?” Focus group participant, above 28 years of age

Self-control was often used as an adjunct to the “days” method of contraception, a form of the rhythm method that many women in the village were familiar with and claimed success using. Paradoxically, while most women in the area were aware that there were certain times during a woman’s cycle when she was more likely to conceive, they believed that in order to avoid pregnancy they should abstain from intercourse during the first five to ten days of their cycle and the last five to ten days. The interval when they believe sex will not result in conception is actually the time in a woman’s cycle where she is most likely to conceive. The success that women attribute to this method may be due to the fact that the likelihood of conceiving, even when using no method of contraception, is low when intercourse can only occur during short two to three week intervals several times a year: most village men migrate to larger cities for most of the year and return only for short periods during festivals. Women acknowledged that the economic migration of men was the primary reason that they did not use temporary methods of contraception; most felt that they would use contraception if their husbands lived in the area.

“Yes, self-control...I keep myself away from him at the time of ejaculation.” Interviewee, age 35

“I have never used them [contraceptives]... I never felt the need. My husband stays in Mumbai.” Interviewee, age 25

Women who already view temporary methods of contraception as risky do not want to adopt methods that they believe must be taken even when their partners are living in other areas. In the time periods when the village men return, the power differential between husbands and wives makes it difficult or impossible for women to request that their partners use condoms. This also increases the risk for women of exposure to sexually transmitted infections, as STI and HIV rates are highest in cities where there are many economic migrants who visit commercial sex workers and then return home infected. While many women had heard of HIV/AIDS through public health campaigns in the media, few were aware of its symptoms and routes of transmission.

“The women whose husbands stay in Mumbai might be [using condoms] but not all. My friends and I discuss topics like ---if [our] husbands have extra-marital affairs, then there is possibility of AIDS.” Interviewee, age 33

“AIDS is a widespread disease now... not all [men use condoms]; only those who work in Mumbai.” Interviewee, age 33

Abortion was used often as a back-up method of contraception when a woman conceived shortly after giving birth. Though abortion on demand is legal in India, and available in the *taluka* capital, it is an expensive procedure, costing around 1500 rupees, the equivalent of almost two months' wages for a woman working in the fields. Abortion is also regarded as shameful and women are forced to conceal them.

“Nowadays, some women do not use Copper-T or pills but get an abortion secretly if they are impregnated.” Interviewee, age 36

“If the first baby is merely 5 to 6 months old and that woman gets pregnant again, then she gets abortion. But she keeps that as a secret and tells to nobody... they should not have the abortion because they will suffer more than they suffer at the time of delivery. It is a sin.” Interviewee, age 53

Social Risks: Family Pressures and Expectation

Varying degrees of son preference were expressed, ranging from women who believed that a son was so necessary that they were compelled to give birth until they bore one, to women who felt that their family was complete with only daughters.

“A son is must. Who else will perform the final rituals after one’s death? Also, he is needed to manage the estate. A son is needed as heir to continue our family in the future. In my case, because of our family’s insistence, we took a third chance for a son after two daughters, and as per God’s wish we have a third son.” Focus group participant, under 29 years of age

“A daughter looks after both families. What if a son doesn’t care for the parents in their old age?... We both desired only one daughter, but the family members insisted upon having another chance.” Interviewee, 33 years old

The women in the village often described an ideal of reproductive autonomy within the extended family that was at odds with the experiences they related of attempts

to limit family size. Joint families consisting of a husband and wife, their children, and the husband's parents, and often other relatives, are the norm in the village. Most women state that the decision when to have children and when or if to continue bearing children should be made by the husband and wife together, with the wishes of other family members a secondary concern. The role of elder relatives living within the extended household in determining family size varied among the families of the women in the study. Several women bore one or more children beyond their desired number in order to appease their in-laws; a few found their in-laws to be supportive and encouraging in their use of contraception.

“There may be arguments about your decision [to get sterilized], but you both must remain firm with your decisions. The husband should not bend because of his families’ pressure.” Focus group participant,

“Mothers-in-law insist that a son is needed as an heir, and since the parents are able to provide, then why not continue till one has son? The husband has to explain this to his parents about the high cost of living, expenses of children’s education, etc.-- they will never listen to their daughter in law.” Focus group participant, under 29 years of age

The close proximity of extended family members sometimes prevented use of contraception by women, even those who have the consent of their husbands. Older relatives may pressure couples to continue bearing children and forbid them to use contraception; as most couples in the village share close quarters with parents and children, they may be unable to use any methods of contraception. A strong menstrual taboo exists in the area, and women are prohibited from cooking, entering the kitchen,

touching eating utensils, sleeping in the conjugal bed with their husbands and engaging in religious activities for the first three days of their menstrual cycle. The monthly changes in women's household routines provides a convenient way for all members of a family to monitor the fertility patterns of reproductive age women.

“My husband wants (a son) but I don't...they (other family members) won't allow us to get the operation. We can have the operation (secretly) but they will soon come to know as I won't get pregnant.” Interviewee, age 28

“Elderly people in community tell their daughter in laws, “Why are you thinking of any contraceptive tools? When we are in a position to provide a large number of children, why do you say two are sufficient?” so even if younger generation is ready to go for contraceptive tools, the elder generation does not allow them.” Focus group participant, above 28 years of age

Side Effects

Copper-containing intrauterine devices are the most commonly used temporary method, but the perceived increased bleeding and cramping associated with their use make women wary both because they believe that the IUD is damaging their uteruses and health and because the menstrual taboo imposes a psychological burden on them. Several women expressed the belief that IUDs require monthly check-ups, a prohibitive expense in terms of time spent away from the household and fields. Many women thought that failure to remove the copper-T promptly at three years would result in complications.

“A lady of my acquaintance [was] fitted [with a] copper-T and forgot to remove it; as a

result, she faced lot of problems and suffered a lot. I don't know all the details but, it seems her uterus was damaged because of the copper-T removal." Focus group participant, over 28 years of age

"I have implanted Copper-T but removed it later on...it caused heavy discharge."

Interview 3

Village women are aware of the existence of oral contraceptive pills but few use them. Instead, they take one or several pills over a small number of days to delay menstruation so that they may participate in religious and family celebrations. The majority of the women in the focus groups and in interviews had taken pills for this reason. This use of pills is common but women often describe symptoms of severe pain in the abdomen, vomiting and nausea, vertigo, infection, and greatly increased vaginal discharge. Information on the actual dosage that women take was not collected, but the information given by one woman who was prescribed pills by a doctor in order to delay her menses and who experienced no side effects suggests that many women do so without guidance by a physician and may be taking large doses of hormones, leading to an increased risk of side effects.

"I had to take those [pills] once in Ganpati Festival for five days, but I had to go through pains. So my husband warned me not to use them again as I was not able to work due to those pills." Interviewee, age 53

"Before marriage, I had taken some pills for 2-3 days...[the side effects were] heavy discharge and pain in my tummy." Interviewee, age 25

Vasectomy and Tubal Ligation

Female sterilization is more prevalent in the village than any other method, but male sterilization is extremely uncommon. Both operations are available for no cost in a nearby town easily reachable by bus. Though female sterilization is a more invasive most village women feel that tubectomy is a better option for their families, regardless of the willingness of their husbands to undergo the procedure. Rice and fruit farming are the primary income-generating activities in the village; both may involve stooping, bending and tree climbing. Men's economic contributions are more highly valued than women's non-economic contributions to the household: despite the fact that women believe that tubectomy causes back and abdominal pain, and can be potentially disabling, they feel that it is better for the woman to be debilitated than the man. Women in the study worry that vasectomy might permanently disable their husbands, removing the household's primary source of income.

“Men who underwent the operation in earlier [years] are still suffering. [When] they climb trees, etc., so they feel pain in the waist. We women can bear lot of pains while men can not. Those men who go to an office (a table job), they can opt for an operation. While men working in farms, where climbing trees is a must, these men can not bear pains in the waist and are unable to climb trees.” Focus group participant, over 28 years of age

“If a woman falls sick after operation, then the husband can manage the household. Whereas if the husband is earning [wages], and after the operation he falls sick, then the house can not be run on women's meagre wages of 30 rupees [per day].” Focus group participant, over 28 years of age

“I won’t let him get a vasectomy. Sterilization is preferable...They have to work for the whole day and why should the men suffer for us when they are earning for the family?”

Interviewee, age 45

This stated desire for economic stability in turn provides an additional motivation for sterilization: if a woman feels that her husband may not be able to provide financial support, or that she will be disabled by additional pregnancies and births, she may feel that it is in her best interest and that of her existing children to limit her fertility. Village women also believe that vasectomy damages men’s sexual potency and overall strength.

“Suppose I am in service (government or private, fixed salaried job), then I can run my household with my money. But with my daily wages of 25 rupees how can I support my family? Those 5-6 men who underwent operation are sitting at home and are not earning much.” Focus group participant, over 28 years of age

“I am afraid of that [tubal ligation]. My husband is ready. My mother has told me about big machines, scissors and I am scared of that...But we should not let them [get vasectomies] because men suffer more after the operation. They have to climb trees. I will probably get the operation (sterilization).” Interviewee, age 28

The majority of men in the village who have had vasectomies underwent the procedures during sterilization campaigns. These men attribute various illnesses and general weakness to the procedure. Misconceptions about the mechanics of vasectomy—that part of the penis is removed, that a main nerve is severed, that a major artery is cut—contributes to women’s disapproval of the operation and may influence the men’s own

perception of disability. The potential of vasectomy failure was also cited as a strong disincentive for use, not because of the risk of unplanned pregnancy, but because of the doubt such failures cast on the fidelity of a wife.

“After listening to whatever problems earlier generations faced, no wife allows her husband to opt for operation.” Focus group participant, over 28 years of age

“Sterilization is better because vasectomy fails sometimes. And then if a woman gets pregnant, the husband suspects her.” Interviewee, age 33

However, several women disagreed that female sterilization was a better method than vasectomy. None of them, though, believed that village men would find vasectomy acceptable, despite what they perceived as its advantages, nor did they feel that economic incentives would address the problem.

“Men are not ready for it. They push their wives in this (family planning) matter... I have asked him [my husband] once [to get a vasectomy]. But he said he can't. He can't get even a single injection; the operation is a far distant thing. He said to me you are bold, you get it done.” Interviewee, age approximately 32

“The men get money for getting vasectomy done. So probably they may get it done for money only but not for any other reason. They will waste all that money for alcohol. They will get the money for drinks only.” Interviewee, age 53

Lack of Information

The women in the study village had varying levels of knowledge of contraceptive. The main route of information was school for those women who were literate and had attended secondary school; for those women who were not literate, the primary mode of information was other women. Though various health workers are charged with educating women about family planning, women in several hamlets stated that they had never been visited by family planning officials, while others had had negative experiences with nurses. Several focus group and interview participants were nursery school teachers who were instructed to “get cases”, that is, find women in the village who wanted sterilization and act as a liaison with the local hospitals.

“The earlier ANM used to yell at us. She never talked with us as human beings. [She] only used to gather cases for operation. Even if she was asked to conduct a delivery for a poor pregnant woman, the lady in delivery pains used to curse herself for asking for the ANMs help.” Focus group participant, over 28 years of age

“We have been told only about operation, and we talk with interested women only and register them for operation, that’s all. No information about pills or Nirodh [condoms] etc. is given to us.” Focus group participant, under 29 years of age, employed as nursery teacher

The women in the study village expressed a wish to learn more about family planning methods, both for themselves and for their daughters. Many women stated that

the only method that they were given information about was sterilization, and that they knew little about other methods. Though such information is available through doctors, many women cannot afford the time and money to travel to a clinic for what they view as a non-essential part of health care. The interviewer was a local woman who had offered reproductive health workshops through a local NGO and study participants often asked questions both during focus groups and interviews and afterwards and mentioned that they had more trust in her than in government health workers and doctors.

“Dr. [name] comes for sterilization but he doesn’t tell anything about contraceptives.”

Interviewee, age 40

“They [government health workers] will give the true information but women won’t trust them if the person is unfamiliar. I know you very well, so that I can answer your questions properly.” Interviewee, age 32

Discussion

Virtually no women in the study used modern temporary methods of contraception. The primary barriers to temporary method uptake were mistaken beliefs and myths regarding the mechanisms and side effects of temporary methods of contraception and vasectomy. These can be divided into three categories: women’s rejection of temporary methods of contraception as unnecessary due to their ability to achieve their fertility goals without them; the physical and social risks women associate with use of temporary methods; and their conviction that sterilization is superior to

temporary methods and vasectomy, which they consider physically harmful and socially and economically unacceptable practices. The women in the study area are able to achieve their desired birth intervals and limits, due largely to the absence of village men due to economic migration. However, not all men migrate, and even for those women whose husbands do migrate, the frequent use of abortion as a back-up method is expensive (equivalent to well over a month's wages for a female field worker) and physically taxing for women.

In the study village, access to contraceptive services and supplies is not a limiting factor in women's use of reversible modern methods. A range of temporary family planning methods (including oral contraceptive pills, IUDs, and male condoms) are available free at health posts and at nominal cost at pharmacies. Distance from health providers and preferences regarding private versus public providers also do not appear to play a major role; when women desire services, they readily avail themselves of the medical termination of pregnancy and female sterilization services in the *taluka* capital.

Sexual restraint is an important virtue in the study village. Many women felt that they did not need contraception, because they and their husbands were able to use "*self-control*". Expressing a need for contraception is tantamount to admitting that they do not have self-control. For many couples, too, using self-control is a way of negotiating fertility decisions without having to violate social norms of modesty and limited interest in sexual activity by openly discussing different contraceptive methods and sexual practices. Those women who value self-control but whose husbands cannot or will not

engage in withdrawal or abstinence need access to information and supplies but are unlikely to seek out information on other methods of contraception.

An additional barrier is lack of knowledge; women demonstrated poor knowledge of temporary methods. Though some of the hamlets were visited frequently by health workers and informed about family planning, some were never visited. Most villagers do not own a radio or television, and access to media is limited for all but the wealthiest families. Women's lack of correct knowledge regarding mechanisms and side effects directly affects the risks that they perceive in using the temporary methods that are available to them. These perceptions are largely formed by the experiences other women relate to them, which in turn are colored by a lack of understanding and confusion about the mechanisms. This social learning process, though, also offers a potentially powerful way to educate women about contraception by training other women in the community to teach them. Those women who had lived in urban areas, who were literate, and who had attended secondary school were often looked up to by other women in the village as a source of contraceptive and general knowledge, and such women could potentially be utilized in the dissemination of family planning information to the women in the village.

Myths and misperceptions regarding different contraceptive methods limit women's interest in reversible methods of contraception and are commonly passed along by word of mouth from woman to woman. The misperceptions that women have regarding individual methods can be divided into two categories. The first is mistaken beliefs about the mechanisms and side effects of reversible female methods and vasectomy— that IUDs need monthly check-ups from health care provider, that they

cause extensive damage to the female reproductive tract if not removed promptly, and that they cause vaginal and uterine prolapse; that vasectomies are performed by removing part of the penis, severing a nerve, or cutting a blood vessel. The second category of misperceptions is those surrounding the experience of side effects of reversible methods. Most of these side effects, such as nausea, dizziness, increased vaginal discharge and weight gain with oral contraceptive pills, and increased bleeding and cramping with IUDs, are well documented in the medical literature. However, for the women in the study who have used these methods or who have heard other women speak of their experiences, such events take place with little or no understanding of the physiological underpinnings of each method. The belief that OCPs cause severe vertigo, stomach pain, and nausea is likely due to the practice of taking large doses of the pills for brief periods in order to delay menses.

Familial and social expectations play a large role in women's decisions to limit or space births and the means used to do so. Son preference, though not as strongly expressed in this area as in some others in India (Arnold *et al.* 1998; Shelley 2000; Gupta 1987; Arnold *et al.* 2002), is present in the village. Women expressed that they felt expected to provide sons, but women who bore multiple daughters were regarded as lacking sexual restraint. The strong disapproval that women in the study felt for vasectomy demonstrates the central economic role of men's wages to households, despite the fact that many women also worked outside the home in the fields. The non-wage labor that women contribute to the household is considered to be of lesser value than men's work. The fear of loss of male work is one of the factors perpetuating the reliance on female sterilization.

Conclusion

It is clear that the low use of reversible family planning methods is driven by social norms of sexual self-control and modesty and a set of myths and misconceptions regarding reversible methods of contraception. In the study setting, the supply and provision of contraceptive services and supplies are not limiting factors for women's use of modern temporary methods of contraception. These factors limit demand for reversible methods even among women who clearly express an unmet need for contraception.

These results highlight several possible policy interventions. In order to increase utilization of such methods, interventions should focus on increasing demand by educating women in order to reduce the role of myths and misperceptions as barriers. Community-based outreach programs can facilitate public discussion of family planning and help destigmatize admission of unmet need to contraceptive providers. Women rely on other women within their social network for information regarding health in general and family planning in particular. It is therefore of vital importance that those women who do choose to use reversible methods are counseled before and during contraceptive use and give informed consent. Failure to do so may result not only in discontinuation on the part of the user, but also in a domino effect preventing other women with an unmet need from using contraception. Within the village, those women who have some secondary education are admired and respected; workshops and trainings that educate these women about family planning can lead to the dissemination of knowledge via a source that women trust.

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