A study of involvement of men in reproductive health in Jammu & Kashmir-India

Introduction

Reproductive health has long been viewed as solely a woman's issue, family planning and reproductive programmes have largely focused exclusively on women. In most locales around the world, whether in developing or developed countries, men are little involved in their partners' health care during pregnancy. Biology however demands that men play a central role not only in reproduction and sexual health. Men's involvement in pregnancy care has been emphasized in different studies identifying the sectors where men can contribute for the well being of their pregnant wives (Drennan, 1998). Some of the important ways by which men are supposed to contribute their cooperation are:- a) plan their families, b) support contraceptive use, c) stress and participate in acquiring maternity care, d) ensuring nutritious food for their wives during pregnancy e) arrange for skilled care during delivery, f) avoid delays in seeking care, g) help after baby is born and h) can be a responsible fathers (UNICEF, 1998). Men are often the ones who decide when a women's condition is serious enough to seek medical care (Drennan, 1998). Thus, Men's decision and action during the pregnancy, delivery and after the baby is born often make the difference between illness and health, life and death (Thaddeus and Maine, 1994).

Reproductive health services that focus only upon women have limited impact and effectiveness. The Cairo (International Conference on Population and Development, ICPD) 1994 and Beijing, 1995 conferences have brought necessity of involving men as partner under sharp focus. "Male involvement" in reproductive health and family planning programmes is not just promoting the use of male methods of contraception, but men's supportive roles in their families, communities and workplaces to promote gender equity, girls' education, women's empowerment and sharing of child rearing and caring. In particular it was argued that further progress in attaining reproductive health goals would depend on men changing their attitude and behaviour towards reproductive health and gender issues. It also suggests the importance of responsible, respectful and non-coercive sexual behaviour and of shared reproductive decision making (UNFPA, 1995). In addition, the AIDS crisis has made the need to address men in reproductive

health policies and programs not only clear but also urgent. As a result, interest in and commitment to involving men in reproductive health has intensified during the 1990s. Therefore, interest has emerged to know the role of men in reproductive health.

Several demographic studies have shown that men may want larger families than their wives (Anderson). In West Africa, men want four more children than women, though in Bangladesh, East Africa, Egypt, Morocco and Pakistan, men and women express similar desires in terms of family size (Ezeh, Seroussi, and Raggers, 1996). Historically, most countries have overtly targeted women in family planning programmes (Lasee and Becker, 1997; Bankole and Singh, 1998), while males have largely been excluded from such programmes that provide family planning services (Edwards, 1994). Most modern contraceptive methods are designed to be used by females. Men seem to be less concerned than women about family planning, perhaps because the former do not carry the burden of pregnancy and child birth directly. The lack of male involvement in contraception is also related to the limited methods available for men (Ringheim, 1993). The technology has been slow to produce contraceptive methods for men (Anderson, 2001) owing to limited funding and lack of commercial interest in male fertility regulation (Ringheim, 1995). The studies indicate than even if wife wants to use contraception, it is the men who have a potentially important role to determine whether women adopt family planning. Husband's approval was found to be most important determinant of contraceptive use in Indonesia, (Joesoef, Baughman and Utomo, 1988) while in Kenya the wife's perception of her husband's approval of family planning emerged as most powerful in explaining contraceptive use (Lasee and Becker, 1997). Other studies revealed that poor communication between husband and wife is an important barrier to the adoption of contraception (Omondi-Odhiamb, 1997). The success of contraception depends on the agreement and cooperation of husband, while communication between spouses also improves the chance of effective family planning. In addition, there are barriers to the expansion of male participation in family planning. While men should share the responsibility with their, those who want to take the responsibility for contraception have limited choices, either undergo a vasectomy or use condoms. Ideally, a basket of contraceptive methods should be available to men.

A few studies on the involvement of men in reproductive health services and the problems in involving men have been conducted in India. A study conducted in Uttar Pradesh-India has found that men have limited knowledge of women's reproductive health matters (Moore, 1999). Around 78 percent men were unable to correctly identify the fertile period in the menstrual cycle and one-half could not correctly identify a symptom of serious pregnancy or childbirth complications. About 71 percent did not know that symptoms were not always apparent with a sexually transmitted disease (STD). Approximately 47 percent were not aware that STDs could be transmitted from a pregnant woman to a foetus or a newborn. The findings of this study are supported by another study in Maharashtra, which shows that though majority of the men are aware of the need for antenatal, delivery, and postnatal care but fewer know details an fewer husbands accompany their wives for care; husbands are more likely to be present for care of problems than for routine care (ICRW 2005).

So far as pregnancy care is concerned, a study conducted in Maharashtra found that majority of husbands in the State accompany their wives for the first check up to confirm pregnancy; but the women generally went alone or with the other female members of the family for subsequent visits (Barua, 1998). It also found that husbands ignore wife's health care during pregnancy, except for the awareness for the need for antenatal registration and a nutritious diet. Delivery and post delivery periods were found to be exclusively women's affairs. An important study however has shown that it is not the men alone who are responsible for their poor involvement in RCH services but one of the major obstacles to increase male involvement and responsibility in reproductive health stems from the service delivery systems, which are almost entirely oriented to women and often provide little or no information about male contraceptive methods (Pachauri, 1997a). Physicians often show negative attitudes toward vasectomy, and health workers are sometimes poorly trained in counselling men about safer sexual practices, contraception and delivery care (UNFPA, 1995). Poor knowledge of men related to contraception, pregnancy and delivery care coupled with women's dependence on men for accessing healthcare is one of the barriers for poor utilization of reproductive and child health care services (Murthy, et al., 2002). However, an intervention study by Population Council indicated that men are interested in participating in maternity care and can take more contraceptive responsibility if they are provided adequate information and counselling about maternity care and contraception (Population Council

India Study). The study clearly demonstrated that allowing men to participate in their wives' antenatal and postpartum care by providing information through individual and joint counselling increased couples' discussion and use of contraception, knowledge about pregnancy and family planning.(Population Council India Study).

But there are far-fewer surveys of men than of women. Cultural and programmatic barriers often have impeded efforts to survey men on such topics as fertility and family planning, as they have impeded men's participation in family planning programs themselves. Some family planning programs have neglected men, assuming that men are indifferent or even opposed to family planning. Some countries, especially those with low HIV prevalence, lack interest in surveying men, while other lack the funds to survey men. Many service providers and program designers have concluded that neglecting men and their reproductive health is a losing strategy with adverse consequences for both men and women

Of late the surveys around the world increasingly are interviewing men and reporting on their contraceptive use, reproductive preferences, attitudes toward family planning, and sexual behaviours. Before 1990 only four nationally representative surveys of men were conducted. Since 1990, 76 surveys of men in 48 countries have been conducted as part of the Demographic and Health Surveys (DHS) and the Reproductive Health Surveys (RHS) programs, including the Young Adult Reproductive Health Surveys (YARHS). But most of these surveys of men have been conducted in sub-Saharan Africa. Only a handful of countries in Asia have surveyed men. The increase in men's surveys reflects widening recognition of men's importance in sexual and reproductive health. Although the Ministry of Health and Family Welfare, Government of India, is committed to implementing ICPD Programme of Action, but enough attention has not yet been given to involvement of men in maternal and child health care. This study assumes interest to know the role of men in maternity, delivery and post-delivery periods extended by them to their wives. But there are very few studies that have studied the role of men in the utilization of reproductive health care in India. Very recently NFHS-3 has collected information from men but this huge data set has not yet analysed at the State level. We therefore plan to use the NFHS data for Jammu and Kashmir.

Main objectives:-

The main objectives of this study will be as follows:

1. To study the socio-economic and demographic characteristics of the respondents.
2. To know the attitudes of men regarding the family size preferences, family planning and women's health.
3. To know the involvement and participation of men in maternity, delivery, post-natal care and family planning.
4. To study the knowledge of men about RTI/STI and AIDS.
5. The study will also try to examine whether there is any scope for some interventional programmes for men in Jammu and Kashmir State in order to involve more and more men to play their role in improving the maternity health care in the state and bring down the maternal and infant deaths to lowest possible extent.

Data and Methods

The study has two distinct components: quantitative and qualitative. For the quantitative analysis we use data from the third round of National Family Health Survey (NFHS-3) conducted in India during 2005-2006. NFHS-3 is the first national level survey which has collected information from men age 15-44. The men's questionnaire covered the following aspects: background characteristics, Reproductive behaviour and intentions, Knowledge and use of contraception, Male involvement in health care, sexual life, health and nutrition, attitudes towards gender roles and knowledge and prevalence of HIV/AIDS and other sexually transmitted infections. The analysis is restricted to Jammu and Kashmir State only. In Jammu and Kashmir NFHS-3 was carried out from April to July 2006 and collected information from 1076 men age 15-54. The variables of involvement of men in maternity analyzed are desire to limit children, use of family planning methods, attitudes towards contraception, helping spouses in availing ANC, PNC and delivery services. We use both bivariate and multivariate techniques to analyse the quantitative data.

A logistic regression model was fitted to identify the significant determinants of the misconceptions of men related to contraception. The response variable is coded as completely misconceived and partially misconceived (reference category). Degree of misconception is computed by combining the responses of the men's perception of contraception attitude agreed or

disagreed with three general statements about contraceptive use and perceptions about the effectiveness of condom use. Of the four indicators of contraception, if a man agrees to at least three of the above statements, he is considered to be completely misconceived otherwise, he is considered to be partially misconceived. The dependent variable has a value of '1' for completely misconceived about contraception and '0' for partially misconceived about contraception.

The demographic and socioeconomic variables included as statistical controls in multivariate models are age (15-19, 20-29, and 30-39 and 40 and above); marital status (unmarried, ever married); education of the women (illiterate, less than middle school complete, middle school complete; and high school or more education); current work status (Not working, salaried, skilled worker, agricultural worker); residence (urban, rural); exposure to mass media (regularly exposed to mass media, not regularly exposed to mass media); Economic status (poor, rich very rich); region of residence (Kashmir, Jammu). We estimate adjusted effects of each of these predictor variables on response variables. In this context, 'adjusted' means that other selected predictor variables are statistically controlled by holding them constant at their mean values. The adjusted percentages are based on a single logistic regression that includes all the predictor variables. In calculating adjusted percentages for categories of any given predictor variable, the set of control variables consist of all other predictor variables, which are controlled by setting at their mean values. In the table we have presented he logistic regression coefficients or the odds ratios. SPSS V. 17 was used to tabulate the data and calculate the regression coefficients.

The quantitative research is followed by focuses group discussions. The formative research comprised of 9 focus group discussions (FGDs) which were conducted with men between November-December 2009. Kashmir valley consists of three geographical regions, namely North Kashmir, South Kashmir and Central Kashmir. We selected Pulwama from South Kashmir, Kupwara from North Kashmir and Budgam from Central Kashmir for FGDs. In each district 3 FGDs were conducted. FGD participants were identified by Anganwadi workers and Health workers and school teachers. Participant selection was purposive to ensure homogeneity in terms of age, education, and marital status. Each FGD lasted for approximately 30-45 minutes and included six to eight participants. Moderators and note takers were given extensive training to

ensure they remained neutral and non-judgmental regarding the sensitive subject matter. Moderators were younger than the respondents. A flexible guideline was used to facilitate the discussions. Informed consent was obtained verbally and the discussion was recorded only after verbal permission was received from the participants. These audiotapes were translated from the local languages (Kashmiri) into English. The main purpose of the qualitative component was to provide more comprehensive in-depth explanation and understanding for the quantitative survey findings.

Area of study

According to 2001 Census, Jammu and Kashmir had a population of 10 million, accounting roughly for 1 percent of the total population of the country. The decadal growth rate during 1991-2001 was about 29.4 percent which was higher than the decadal growth rate of 21.5 percent at the national level. The sex ratio of the population (number of females per 1,000 males) in the State according to 2001 Census was 892, which is much lower than for the country as a whole (933). Twenty- five percent of the total population lives in urban areas which is almost the same as the national level. As per 2001 Census, the literacy rate among population age 7 and above was 55 percent as compared to 65 percent at the national level. Female literacy (43 percent) continues to be lower than the male literacy (67 percent). The Total Fertility Rate of 2.4 in Jammu and Kashmir is slightly lower than the TFR of 2.7 at the All India Level. With the introduction of Reproductive and Child Health Programme, more and more couples are now using family planning methods. As per National Family Health Survey-3 (NFHS-3), about 45 percent of women are now using modern family planning methods as compared to 49 percent in India as a whole. According to Sample Registration System (SRS, 2009), Jammu and Kashmir had an infant mortality rate of 49 per 1,000 live births, a birth rate of 19 and a death rate of 6 per 1,000 population. The corresponding figures at the national level were 53, 23 and 7.4 respectively. According to latest estimates, expectation of life at birth in Jammu and Kashmir has increased to 65.3 years as compared to 62.5 at the national level and the gap between the life expectancy at birth by gender in the State has gradually closed down and currently the female life expectancy is higher (66.8 years) than male life expectancy (64.1 years).

With the implementation of Reproductive and Child Health Programme (RCH) programme more and more women are coming forward to utilize antenatal and post natal care services. As per

NFHS-3, 85 percent of women who gave birth in the five years preceding the NFHS-3 survey had received antenatal care from a health professional. Similarly, more and more women are now utilizing institutional services for delivery as about half of the births in the five years prior to the survey in Jammu and Kashmir took place in a health facility. Jammu and Kashmir is also progressing well in the field of child immunization. More than 90 percent of children have been immunized against various vaccine preventable diseases, however, because of drop outs only two-thirds (67%) of children age 12-23 months in Jammu and Kashmir are fully vaccinated against six major childhood illnesses: tuberculosis, diphtheria, pertussis, tetanus, polio, and measles.

Findings

Men's Fertility preferences

Table 1 shows future fertility preferences of currently married women and men in Jammu and Kashmir and India. The overall percentage of men and women who want no more children is similar in India but lower percentage of men (69 percent) than women (74 percent) in Jammu and Kashmir want no more children or are already sterilized. Besides, while 83 percent of men and women in India with two children want no more children, the corresponding figures in Jammu and Kashmir is 69 percent for men and 78 percent for women. Thus fertility preferences are higher for men than women in J&K.

Table 2 shows the distribution of the ideal number of children stated by women and men age 15-49 in J&K and India. Sixty-nine percent of women and 65 percent of men in J&K consider the ideal family size to be two children or less. Among all men and women who gave a numeric response in NFHS-3, the average number of children considered to be ideal is 2.3 at the national level. But in J&K, the ideal family size considered as ideal is slightly higher for men (2.4) than for women (2.3).

A strong preference for sons has been found to be pervasive in Indian society, affecting both attitudes and behaviour with respect to children and the choice regarding number and sex composition of children (Das Gupta et al., 2003; Mishra et al., 2004; Bhat and Zavier, 2003; Arnold et al., 1998, 2002). In NFHS-3, women age 15-49 and men age 15-54 who gave a numerical response to the question on the ideal number of children were also asked how many of

these children they would like to be boys, how many they would like to be girls, and for how many the sex would not matter. It can be seen from Table 2 that as in many other Indian states, there is a preference for sons than daughters in Jammu and Kashmir as the mean ideal number of sons is 1.1 among both men and women. However, slightly higher proportion of men (24 percent) than women (23 percent) in J&K want more sons than daughters, while as in India as a whole higher percentage of women than men want more sons than daughters. Thus, in Jammu and Kashmir, men have a strong son preference than is found among women.

During the focus group discussions, it was found that apart from various already known reasons for more sons, the ongoing militancy in Jammu and Kashmir is to some extent responsible for a higher son preference among men as can be observed from the FGDs conducted in Pulwama and Kupwara.

"*We have lost more than 50 thousand youth in the ongoing struggle. We do not have any guarantee about the security of our sons. We know of families who had a single son who were lost during militancy. So in order to ensure that there is one son, we have no option but to desire more sons'*

Knowledge of Family Planning Methods

Knowledge of contraception is almost universal in Jammu and Kashmir both among men and women (Table 3). Female sterilization is the most widely known method among women and men. Except for Pill and IUD, higher percentage of men than women in J&K know each method of family planning..The government of India's family planning programme promotes three temporary methods: the pill, the IUD, and condoms. Of these three methods, men in J&K are most likely to know about condoms (92%) and women are most likely to know about the pill (89%). Men in J&K have little knowledge of IUD as four out of 10 men in J&K have not heard about IUD. As the knowledge of at least one modern method is quite high among men the differentials by various background characteristics are not large.

Use of Contraception

The current level of contraceptive use, i.e., the contraceptive prevalence rate (CPR) defined as percentage of currently married women age 15-49 years who are currently using a contraceptive method or whose husbands are using a contraceptive method, is also presented in Table 3. The contraceptive prevalence rate among currently married women is 53 percent, in J&K as compared to 56 percent at the national level. Female sterilization accounts for half of contraceptive use in J&K , down from 57 percent at the time of NFHS-2. Only 2.6 percent are using male sterilization, 8 percent are using male condoms and 6 percent are using withdrawal. Thus male methods account for 17 percent of the total contraceptive use in J&K as compared to only 9 percent at the national level. Male sterilization is highest in Kashmir valley than in Jammu region. It is also higher among men age 40 and above, urban men, illiterate men and among Muslims than other groups. Condom use on the other hand is highest in Jammu region than in Kashmir region. Condom use is also higher among men age 30-39, urban men, those men who have at least completed high school education and among Hindu men than other their counterparts. In general, better-educated men, wealthier men, and men from urban areas are more likely than most other men to use spacing methods, particularly condoms and withdrawal.

Though overall, male methods account for 23 percent of the total modern contraceptive use but male sterilization accounts for only 10 percent of the total sterilization use. However, if we look at the official statistics on the use of sterilization (both male and female) before the onset of militancy, male sterilization accounted for about 25 percent of the sterilization use. Then what are reasons that male involvement has declined in use of family planning. One of the reason for higher use of male sterilization before militancy was the special incentive campaigns introduced by the government for government employees. During these campaigns, employees accepting male sterilization used to get two advance increments. This incentive is no longer in place. Besides, during the militancy, militants launched a campaign against family planning in general and male sterilization in particular. With improvement in situation in the State after 1998, services for female sterilizations were initiated but services for male sterilization have recently been initiated. So even if some men were interested in having male sterilization, non availability of services proved to be a barrier for them. The views expressed by the participants of FGDS in all the three districts proved this point.

I and two more colleagues of mine had a plan to opt for male sterilization and wanted to take the benefit of double advance increments. However, we were told that this scheme has been withdrawn some 7 years back. We than decided to opt for female sterilization, but services were not available at the government health facilities. Consequently there was no option but to avail the services from a private maternity home".

After the militancy erupted, not only the health sector suffered a setback, but there was hardly any doctor willing to offer his services for male sterilizations either at government hospital or private hospital. So male sterilizations were beyond a common's mans reach. Besides, some men who had accepted vasectomy earlier were disgraced and not allowed to offer prayers. This had a negative impact on the perspective users".

Providers also have considered family planning (FP) a woman's issue. They hardly counsel men or motivate them to use male methods of family planning. This is probably because health workers in the government sector have limited skills to implement male friendly services. The current programs has not been successful in involving men and providing them with both the essential information and skills for this to happen.

"Whenever we visit a health facility with our women, health workers hardly talk to us and even do not allow us to enter in the examination rooms. They assume that men are difficult to motivate and that they are resistant to changes in their reproductive attitudes and behaviours. With such a situation how can we get information about family planning and various other aspects related to its use, availability etc".

Poor inter-spouse communication and men's attitude is also a barrier in involving men in contraception. This emerged from the FGDs in Budgam and Pulwama.

"Women do not discuss much about family planning with men. They generally discuss it with their female relatives and friends and also decide about the method to use and convey the decision to men. So when women have taken the responsibility on themselves, why should we bother? We are there to accompany them in case they need it, but finally we have to pay the bill".

Exposure to Family Planning Messages

Exposure to family planning messages is seen as widening the horizon of understanding on issues related to contraceptive use and helping to achieve desired family size. Information contained in Table 4 shows that men are much more likely than women to be exposed to media messages on family planning. Overall, 90 percent of men have been exposed to family planning messages in the past few months compared with 50 percent of women. Radio is the most important source of family planning message in J&K, while as at national level highest proportion of men are more likely to be exposed to family planning message through TV. A higher proportion of men than women reported exposure to family planning messages through each channel of communication.

Men's Attitudes about Contraception

Men's attitudes about contraception may influence their partner's attitudes and eventual adoption of a contraceptive method. In NFHS-3, all men were asked if they agreed or disagreed with three general statements about contraceptive use. Additionally, they were asked one question to judge their perceptions about the effectiveness of condom use. As shown in Table 5, 30 percent of men in Jammu and Kashmir think that contraception is women's business and that a man should not have to worry about it as compared to 22 percent in India as a whole. More than one third of men in the State (37 percent) believe that women who use contraception may become promiscuous as against 16 percent in India. More men in J&K (53 percent) than in India (49 percent) also believe that a woman who is breastfeeding cannot become pregnant. Slightly more than one-third of men perceived that if a male condom is used correctly it does not protect against pregnancy most of the time; as against 33 percent in the country. Thus all indicators of misconceptions related to contraception are higher in J&K than in India. Jammu and Kashmir also has the highest percentage of men who have misconceptions about contraception than any other North Indian State.

Differentials in the responses by background characteristics are substantial. All misconceptions are far higher in Kashmir region than in Jammu region. For example, while only 38 percent of men in Jammu region believe that a woman who is breastfeeding cannot become pregnant, this percentage is as high as 64 percent in Kashmir. Similarly, 20 percent of men in Jammu perceive that women who use contraception may become promiscuous as against 49 percent in Jammu. Though all indicators of misconception regarding contraception are high in

rural areas than in urban areas but differentials are more pronounced in case of third indicator (contraception use leads to promiscuous). Men age 30-40 years, illiterate men., unmarried women, Muslims, men not regularly exposed to media have are more likely to have misconceptions. Relationship between wealth index and misconceptions is not clear although men who have highest wealth index are less likely to have these misconceptions.

Almost two-thirds of men know that if a male condom is used correctly it protects against pregnancy most of the time; 15 percent said it protects against pregnancy only sometimes; and 2 percent said that it provides no protection at all. One-sixth did not know the answer or were unsure. Men from urban areas, men with more education, Jains, and men in households in the upper wealth quintiles were more likely to report that a condom protects against pregnancy most of the time.

Descriptive analysis

Table 5 shows that about half of the men are complete misconceived about contraception. Two third of men in Kashmir Valley are completely misconceived about contraception as compared to one-fourth of men in Jammu region. Men from rural areas are also have negative attitudes about contraception. Men from the religious group other than Islam are likely to have high degree of misconceptions about contraception than their counterparts Younger and unmarried men are less likely to be completely misconceived about contraception than other men. A bi-variate analysis reveals that as the education level of men increases, the percentage of men having complete misconception about contraception decreases. Men who have access to mass media are more likely to have positive attitude towards contraception. Men engaged in professional/managerial/technical jobs are less likely to show complete misconceptions, while men engaged in agriculture are more likely to have high degree of misconception about contraception than their counterparts.

Regression analysis

A logistic regression model was fitted to identify the determinants of 'Degree of husbands' misconception towards contraception' (using SPSS 17.0). The response variable is coded as completely misconceived and partly misconceived (reference category). All the variables listed in Table 5 were considered in the analysis as independent variables and the results are presented in Table 6.

Geographical region is the most important predictor of misconception. Men from Kashmir valley are 5.5 times more likely to have misconceptions about contraception than men belonging to Jammu region. Men who are engaged in agriculture and skilled type of jobs are significantly more likely to have poor degree of awareness about contraception than men who are involved in government/private jobs. Men from rural areas are significantly more likely to have poor degree of awareness of contraception than men from urban areas. Men aged less than 30 are less likely to have misconceptions than men aged 40 years and above. Men who have a medium SLI are significantly more likely to have misconceptions about contraception than men who have a low SLI or High SLI. Men who are regularly exposed to mass media are less likely to have misconceptions than men who are not regularly exposed to mass media.

Male Involvement in Antenatal Care

The Reproductive and Child Health Programme in India envisages the involvement of men in women's reproductive health. Health workers are supposed to provide expectant fathers with information on several aspects of maternal and child care during their contacts with expectant fathers. In NFHS-3, information was collected through the Men's Questionnaire about several aspects of their involvement in antenatal care, including whether the mother of their youngest child had any antenatal check-ups when she was pregnant, whether they were present at any of these antenatal check-ups, and the reason the mother did not have any antenatal check-ups if she did not have any. Men were also asked whether at any time during the pregnancy any health provider or health worker told them about the various signs of pregnancy complications (vaginal bleeding, convulsions, and prolonged labour) and what to do if the mother had any of those complications.

Table 7 presents information on men's involvement during antenatal care visits and information given to them by a health provider or health worker about signs of pregnancy complications. Two-thirds (68%) of men in J&K with a child under three said they were present during at least one antenatal check-up received by the child's mother as compared to only 49 percent at the national level. Presence of men during antenatal care differs slightly by residence in

the State. Three fourth of men in urban areas and two-third in rural areas were present during at least one antenatal check-up received by the child's mother.

Men under age 25 at the time of the birth of their youngest child were less likely to be present for antenatal check-ups of the mother than older men. There is a strong negative relationship between the father's number of children ever born and his presence during any antenatal check-up of the mother, and a positive relationship between both the man's educational level and his wealth status and his presence during antenatal check-ups. For example, men with one child ever born are more than twice as likely (62 percent) to be present during antenatal care than men with four or more children ever born (29 percent). Similarly, men with 12 or more years of education and men in households in the highest wealth quintile are at least two and a half times as likely to be present during an antenatal check-up as men with no education and men in the lowest wealth quintile households. Men in urban areas are more likely than men in rural areas to be present during an antenatal check-up. The man's presence is higher in Kashmir division than in Jammu Division. Muslim men are more likely to accompany their partners for ANC than Hindus.

However, majority of the men (69 percent) who were presented during any of the ANC visits were not told what to do if the mother had a major complication of pregnancy. This percentage is somewhat lower (63 percent) at the national level than in J&K. The situation is even worse in rural areas where only 28 percent of men were told what to do if the mother had a major complication of pregnancy.

Only one-fifth of fathers or less were told about signs of each of the major pregnancy complications: vaginal bleeding (18 percent, convulsions (20 percent) and prolonged labour (23 percent). The percentage of men who were told about the signs of specific pregnancy complications is particularly low among men from Kashmir region than in Jammu region, men who were less than 25 years of age at the time of the birth, men with four or more children ever born, men in rural areas, men with no education, Muslim men, and men in households in the lowest wealth quintile. The pattern is similar with respect to information given to men about the action to be taken in case the mother had any pregnancy complication.

Table 8 shows the distribution of men age 15-49 whose youngest child was less than three years of age at the time of the survey and for whom the mother did not receive any antenatal care by the main reason for not receiving antenatal care. Two out of five men thought it was not necessary for the mother to receive antenatal care. Another 11 percent of men said that their family did not think it was necessary or did not allow the mother to receive antenatal care. It was also mentioned by 12 percent of men that the main reason for the mother not receiving antenatal care was that it costs too much. The reasons given by men for the mother not receiving antenatal care are similar in rural and urban areas.

All men age 15-49 whose youngest living child was less than three years old were also asked whether their youngest child was delivered in a health facility and, if not, what was the main reason the child was not delivered in a health facility and results are presented in Table 9.. More than half of men (47 percent) reported that their youngest child was not delivered in a health facility (half of births in rural areas and one-third of births in urban areas). Thirty five percent of men who said the child was not delivered in a health facility said that either they or their family did not feel it necessary to have the delivery in a health facility (or did not allow it); 18 percent reported that mother of the child did not think it was necessary, 17 percent said that the health facility was too far away or that no transportation was available and 9 percent reported that it costs too much.

Thus, a substantial proportion of men than women in J&K are not convinced about the need to have an Antenatal care or the need to have a delivery in a health facility. These results suggest the need to inform parents and families more about the benefits of delivering in a health facility and to help overcome traditional attitudes and other hurdles that discourage institutional births. In addition, since about one-third of women and men gave reasons dealing with the cost of services and problems of accessibility, utilization of health facilities for deliveries could also be increased by lowering direct and indirect costs and making services more accessible.

Information Given to Men

Men who had a child less than four years of age were asked whether at any time when the mother was pregnant with their youngest child any health provider or health worker spoke to them about family planning or delaying the next children; the importance of delivering the baby in a hospital or health facility; or the importance of proper nutrition for the mother during pregnancy and the information is presented in Table 10. Only 38 percent men were told about the importance of delivering the baby in a health facility. Less than half of men (46 percent) said they were told about the importance of proper nutrition for the mother during pregnancy. About one out of four men were given any information related to family planning or spacing of children. If we compare these statistics with the situation at the national level, lesser number of men in Jammu and Kashmir are given information related to maternity care indicators. In fact, men in Jammu and Kashmir rank last among all the States so far information related to family planning or spacing is concerned. Another important finding which emerges from the analysis is that men from rural areas who need this information the most are much less likely to be given the above information than urban men. Also a lower percentage of men from Kashmir region than Jammu region were given each type of information. The provision of the three types of information increases with the man's education level and the wealth status of the household. For example, 54 percent, 51 percent, and 59 percent of men with 12 or more years of education were given information on family planning, the importance of institutional delivery, and the importance of proper nutrition for the mother during pregnancy, compared with 19 percent, 24 percent, and 26 percent of men with no education. By religion, Muslim men are least likely to be given each type of information.

Men whose child was not delivered in a health facility were also asked whether anyone explained to them the importance of the mother breastfeeding the baby immediately after delivery, of keeping the baby warm immediately after birth, of cleanliness at the time of delivery, and of using a new or unused blade to cut the cord.

It can be seen that higher percentage of men in Jammu and Kashmir had received information on all these four indicators than the Country as a whole. For example while 45 percent of men were told about the importance of breastfeeding the baby and keeping the baby warm immediately after birth in Jammu and Kashmir, this percentage was only 33-36 percent in India as a whole. Similarly, 54 percent were told about the importance of cleanliness at the time

of delivery n the State as compared to 44 percent in India. The percentage of men who were told about the importance of using a new or unused blade to cut the cord was 53 percent in J&K but only 48 percent in India. The pattern of differentials in these four Indicators by background characteristics is similar to the earlier pattern.

Results from Focus Group Discussions

Husbands' awareness of maternal care: During the focus discussions majority of husbands reported that women need care during pregnancy and also are aware that problems can arise any time during pregnancy, but could know the danger signs of pregnancy. Men also lack adequate knowledge about various aspects of antenatal and postnatal care. It was however established that though they may not know the medical details, they help wives follow treatment advice, and are concerned about nutrition and other care within the home environment. Men in Budgam and Pulwama proved this point.

"Everybody now-a-days know that pregnant women need special care during pregnancy so that delivery is normal and there are no problems. Though they should not carry heavy load and not to do much manual work but they should not take much rest otherwise their delivery would not be normal means, they will have to deliver by big operation'.

Husbands' responsibility and participation in wives' care: Discussions with men revealed that most young husbands encourage their wives to go for antenatal and delivery care and a good proportion feel responsible for accompanying their wives for routine care and treatment of problems. But large majority of the men indicated that health care providers, lady doctors and even gynaecologists discourage them to do so. The structure of antenatal clinics in the public sector does not promote attendance as a couple Lady doctors think that husbands should accompany their wives just to pay for treatment of the problems. This is one of the reasons that in both routine care and treatment of problems, husbands have participated more often by paying for care during ANC and delivery than accompanying their wives. One of the husbands whose wife recently delivered a child in the most famous maternity hospital in Srinagar had to reveal this story.

'I gave company to my wife for all the 6 antenatal checkups but was never allowed to enter the consultation/examination room. I always used to wait outside the hospital for hours. I had the expectation that the doctors will also interact with me related to my health of my wife and the

expectant baby or I would be given some importation related to delivery care, but our health system thinks that pregnancy, delivery, child care is women's affair and men have no business to be in the maternity hospitals. My only role during the delivery was to give chai (Bribe) to various paramedical staff mainly women and the amount is also fixed by the women. Men seem to be barriers in stopping this corrupt practice. That is the reasons why health staff does not want men in the maternity hospital'.

Focus group also suggested that another reasons for men to play limited role during delivery is the traditional practice of women going to their natal home for delivery. Participants from Kupwara cited this as a reason for their lower involvement

"Younger women normally go for their delivery to their natal homes. This way the parents of women restrict the involvement of in-laws and the husbands in the delivery care. In case of home delivery, in-laws are informed about delivery after child birth and in case of institutional delivery, they are informed either after the women is admitted in the hospital or after delivery. Parents of the women think it disgraceful to involve in-laws in matters related to delivery care and payments. Thus husbands cannot be blamed for this."

Though NFHS-3 has shown that about two-third of men accompanied their wives when they visited any ANC clinics, however FGDs revealed that this increasing trend of men accompanying women is not the result of any perceptible change in the attitudes towards maternity care but was a compulsion arising due to the deteriorating security conditions in the State. Therefore, militancy which otherwise shattered the peaceful atmosphere and almost all aspects of life, however, compelled the men to accompany their women to visit different places including health care facilities. The views expressed by almost all the FGD participants supported this view.

'Before militancy, Kashmir was perhaps the most peaceful place in the world and a woman would never fear even travelling during night hours alone without any problems. Large majority of the used to seek treatment or advice during pregnancy from the local dai (Traditional Birth Attendant) or any elderly women in the neighbourhood called 'Warun' (a traditional woman who normally would assist in delivery). She could be even called during night time. Only a few who had complications at the time of delivery used to be rushed to a hospital and generally women

used to accompany women, because situation was normal and here was no fear either from the security forces or militants. But after militancy erupted in the State everything changed. Security of life was the main issue. Mobility got restricted and there were times when after five not a bird would move, what to talk of human beings especially women. In such a situation, if there was a delivery in a village, nobody would dare to call a TBA, "Waraen" or any other assistance who can manage the delivery. If somehow a TBA was approached, she would not like to risk her life'. So pregnant women used to be left at the mercy of god to cry and die. However, with the passage of time men and women learnt to negotiate with this type of situation by planning their deliveries. In the initial phase of militancy, women would visit a health facility for delivery in advance during day time. Subsequently, this contact with the doctors at the maternity hospitals both promoted as well as compelled the women to come for ANC care before delivery. However, due to the insecurity, who would like their women to visit a health facility without the company of a man. The best person to accompany woman under the circumstances is none but her husband'.

Thus it is obvious that the abnormal situation through which J&K passes created a window of opportunity for the men to accompany their spouses to avail health care services, but unfortunately our health care system has not taken advantage of this opportunity. This is evident from the NFHS-3 findings that despite 66 percent of men mentioned to have visited a health facility with their spouses for ANC but less than one-third were given any information related to pregnancy complications, maternal care and child care. However, men seem to be interested in being involved than previously believed, but our health care system is not geared to encourage the male participation in maternity. Most of the FGD participants mentioned that our lady doctors neither have time nor do they feel it necessary to discuss issues related to maternity and child care with the men. They do not allow the men to come inside. Large majority of the participants at all the 9 FGDs shared this view. The following experience of a newly father testifies the above finding.

"We are ready to get involved in accessing maternity care to our women. Men do accompany them, pay for their medical expenses, allow them take rest and even help them in sharing the household chores during pregnancy. However, when we accompany them to hospitals during their pregnancy or delivery, our maternity care hospitals have little to offer to men. Neither are we allowed to accompany our spouses in the OPD, nor is there any waiting room for men. Men

have no option but to stand outside the main entrances of the hospitals and create hurdles in the movement of patients and staff. When lady hospitals or maternity wards are out of bound for men, how can you expect them to interact with men'?

Another participant has this tale to narrate to support his involvement.

"Like other responsible husbands I also visited the local hospital a number of times with my wife. After all, she is carrying the nurturing the pregnancy and the expectant child belong to both of us. True I cannot share the pain of pregnancy but I have to support my wife during pregnancy, child birth and even in child rearing and caring. Though I had the impression that lady doctor would talk to both of us but during these ANC visits, I was never called by the doctor to come inside and share information about the progress of pregnancy, any advice and precautions for safe pregnancy, information related to medicines, diet and other such issues. I do not know whether any government hospital in this State has a system to provide any education to male members. Staff working in these hospitals has a negative attitude towards men and they generally say us that men have no business in maternity hospitals".

It can be concluded that men are interested in playing an more active role during pregnancy, delivery and infant care, but that our health care system is not well equipped to meet the demand and mitigate against this.

Conclusion

Men's involvement in Reproductive Health is a priority of the ongoing NRHM Program of India. But not much has been achieved to involve men in the pregnancy care, in terms of their perception, attitude and over all awareness. The program components use to disseminate information regarding various aspect of pregnancy care but the effectiveness of these interventions has not been examined properly.

Since gender inequalities favour men in our society and sexual and reproductive health decisions are made by them, therefore unless men are reached, programme efforts will have limited impact while focusing on women and addressing their reproductive health needs. Again, men's performance against individual program component may not necessarily ensure their good motivation/involvement, because absent of one component may result in ineffective practice. For

example, if a husband knows all the methods of contraception but disapproves its use has little impact from the programme point of view. Similarly, if a husband knows all the complications of pregnancy but disapproves pregnant women of antenatal check and also does not think it necessary that women should deliver in a health facility, his motivation and subsequent practice will end up with unfavourable pregnancy outcome. Therefore, special efforts should be made to encourage men to take responsibility for reproductive health as responsible sexual partners, husbands and fathers.

This paper goes beyond the traditional approach of measuring men's awareness of pregnancy care and considers combining some of the information collected by NFHS to generate a composite indicator named 'Degree of misconception related to contraception" to better understand men's attitudes towards contraception. Though men's involvement in RH and delivery care is still not satisfactory in the state but men from Kashmir division, rural areas, those not regularly exposed to media, and Muslims are lagging behind than their counter parts.

The results, however, show that an increasing number of husbands are accompanying their wives to utilize ANC services during delivery care, though; FGDs have shown that this increasing trend of men accompanying women to health care institutions was initially due to the result of insecure conditions in the State. However, with an improvement in the security scenario in the State, this trend of men accompanying their women has continued and men are now increasingly taking part in the maternity affairs of their women. But, our public health care system is not taking the advantage of the presence of men during ANC and delivery care and impart them any information related to family planning, spacing, pregnancy care, delivery care, child care and other aspects related to Reproductive and Child Health. The results therefore, highlight the need for appropriate intervention at the hospital level to improve men's involvement in maternity. So far as Kashmir valley is concerned, it is feasible and potentially effective to have couple counselling in public sector clinics, even if only a proportion of men will be able to participate and our public health care system should devise a mechanism to interact with accompanying men during maternity.

In addressing men's involvement in reproductive health, it is important to consider how to frame their contact with the health system so that it will encourage their future and continued involvement. The rationale behind choosing the pre- and post-natal periods as good times to encourage male participation is that evidence suggests that men may be more interested in their partners' well-being than is usually the case because of their shared role in producing a healthy child (Ali, M.M. and Cleland J. G. 2001). Therefore, the best way to interact with men is to have counselling/information sessions at the

Hospitals for the men who accompany their spouses during ANC and delivery care. My personal feeling is that such an intervention con be introduced successfully in the State's largest maternity Hospital (Lal Ded Hospital), which caters services to almost 60 percent of the State.

In order for male involvement in the maternity care of their partners to be a success the following challenges also need to be addressed:

- Train more health provider to serve couples and to conduct couple counselling.
- Integrate other reproductive health services such as STI, Family Planning, voluntary counselling and testing, and prevention of mother to child transmission with antenatal and postnatal care.
- Involve hospital staff to support men who may want to be with their partners during delivery.
- Work with the health system should improve conditions – such as lack of privacy – that make it difficult for husbands to participate, and identify other ways health staff could encourage husbands to be present.
- Reorganize public services to be friendly and flexible to both men and women who are working during the day.
- Strengthen monitoring and supportive supervision for all health services.
- Mass media can be involved to improve men's awareness of pregnancy and change their attitudes towards pregnancy. For this we need to develop information that is acceptable and appropriate for the target group, both men and women. Such educational efforts on maternal care with men should go beyond basic information to also include specifics of maternal services, precautions, and problems.
- Undertake wider community outreach so that more men can be persuaded to participate in their partners' maternity care.

Table 1: Percent of currently married men and women who want to limit childbearing by No. Of Living children in J&K and India.				
	JK		India	
No. of living children	Women	Men	Women	Men
1	15.6	16.8	27.7	26.9
2	77.6	68.8	83.2	83.6
Total	73.7	69.2	70.5	70.6

Table 2: Indicators of sex preference by men and women in J&K and India.				
	JK		India	
Indicator of Fertility preference	Women	Men	Women	Men
Ideal mean Sons	1.1	1.1	1.1	1
Ideal No. Of Mean Daughters	0.8	0.8	0.8	0.7
Either sex	0.4	0.5	0.4	0.6
Want more sons than daughters	23.4	23.9	22.4	20
Want more daughters than sons	3.1	2.2	2.6	2

Table 3: Percentage of Currently married men and women knowing different methods of family planning and percent of women using family planning in J&K and India.						
	Knowledge FW				Current use	
	JK		INDIA		JK	India
Method	Women	Men	Women	Men		
Any Method	98.3	98.5	99.3	99	52.6	56.3
Any Modern Method	98.3	99.3	99.3	98.3	44.9	48.5
Female sterilization	96.4	97.7	98.4	93.8	26.3	37.3
Male Sterilization	81.3	92	83.2	90.9	2.6	1
Pill	88.6	84.9	87.2	83.5	4.7	3.1
IUD	79.9	58.1	74.3	60.3	2.7	1.7
Condom	72.2	92.7	76.1	90.3	8	5.2
Withdrawal	42	48	36.3	44.2	6.2	2.5

Table 4: Percentage of currently married men and women exposed to family planning message by source in J&K and India.				
	JK		INDIA	
	Women	Men	Women	Men
Radio	34	60.1	32.8	52.9
TV	39.3	54.9	49.5	64.1
Newspaper	15.6	36.5	22.2	50.1
None	50.2	10.6	38.7	8.1

Table 5: Percentage of men by their contraception related perception and knowledge Men having misconceptions about contraception by Background characteristics in Jammu and Kashmir 2005-2006.

Background characteristic		BFWCNBP[1]	Women's Business[2]	Promiscuous[3]	Condom[4]	Highly Misconceived[5]
		%	%	%	%	%
Region	Jammu	37.7%	17.7%	20.0%	28.9%	25.2%
	Kashmir	63.6%	39.6%	48.7%	40.6%	64.7%
Residence	Rural	49.2%	35.8%	39.9%	36.9%	51.5%
	Urban	60.3%	17.7%	28.6%	32.6%	39.4%
Age in years	15-19	28.3%	26.5%	28.5%	48.4%	37.2%
	20-29	50.2%	30.0%	40.7%	30.1%	48.0%
	30-39	66.9%	33.4%	40.3%	31.7%	55.1%
	40-49	69.4%	31.6%	35.1%	33.7%	53.9%
	50+	56.0%	30.6%	33.4%	34.9%	42.5%
Education	Illiterate	62.8%	36.4%	41.4%	48.4%	60.7%
	<8 years complete	46.6%	30.3%	43.1%	42.5%	47.8%
	8-9 years complete	43.6%	34.1%	33.6%	40.6%	47.5%
	10+ years complete	58.0%	24.7%	33.3%	22.7%	42.4%
Marital status	Unmarried	37.9%	29.0%	35.3%	38.7%	43.8%
	Married	65.4%	32.2%	36.9%	33.3%	51.3%
	Other	68.2%	6.4%	56.7%	18.5%	56.1%
Religion	Hindu	41.6%	17.4%	21.7%	26.2%	26.3%
	Muslim	59.1%	38.3%	46.0%	41.5%	61.4%
	Other	50.0%	19.0%	9.3%	22.6%	19.0%
Regular media exposure	No	48.7%	34.3%	28.2%	51.4%	51.7%
	Yes	53.1%	29.7%	37.7%	33.3%	47.3%
Occupation	Not working	30.0%	24.2%	28.2%	39.6%	35.8%
	Agriculture work	53.9%	37.2%	39.5%	46.8%	58.4%
	Skilled/unskilled	57.1%	31.7%	42.4%	33.1%	51.2%
	Employees	64.2%	30.0%	35.3%	29.3%	48.1%
Wealth index	Poor	46.0%	32.4%	34.3%	50.8%	45.6%
	Rich	54.5%	36.7%	45.4%	36.6%	57.2%
	Richer	52.2%	16.3%	19.7%	25.4%	30.0%
Jammu & Kashmir	**Total**	**52.6%**	**30.3%**	**36.5%**	**35.6%**	**47.8%**
India	**Total**	**48.8%**	**21.6%**	**16.1%**	**34.1%**	**Not calculated**

1. % men who agree that a women who is breastfeeding cannot become pregnant.
2. % men who agree that women who use contraception may become promiscuous.
3. % men who agree that contraception is women's business and man should not worry about it.
4. % men who believe that correct male condom use can protect pregnancy most of the time.
5. % men who are highly misconceived about contraception.

Table 6: Logistic regression parameter estimates for the effect of demographic and socio-economic characteristics on the misconception of contraception related attitudes in Jammu and Kashmir-India.

Independent variable		B	S.E.	Sig.
Intercept		.164	.373	.000
Region	Jammu*			
	Kashmir	5.541	.154	.000
Residence	Rural*			
	urban	.647	.171	.011
Education	Illiterate*			
	Primary	.910	.234	.687
	Middle	1.009	.228	.969
	High	1.081	.247	.753
Marital status	Married*			
	Unmarried	1.182	.190	.379
Age	< 20*			
	20-29	1.001	.192	.997
	30-39	1.501	.232	.080
	40+	1.509	.263	.118
SLI	Poor*			
	Rich	1.494	.207	.052
	Very rich	1.009	.271	.975
Media exposure	No*			
	Yes	.759	.224	.218
Occupation	Not working*			
	Employed	2.042	.235	.002
	Skilled workers	1.958	.251	.007
	Agriculture workers	2.816	.285	.000

* Denotes reference category

Table 7: Among men age 15-49 whose youngest living child was age 0-35 months, percentage for whom the youngest child's mother received antenatal care, percentage who were present during at least one antenatal care visit, percentage who were told by a health provider or worker at any time during the pregnancy about specific signs of pregnancy complications by residence, Jammu and Kashmir, 2005-06

Antenatal/delivery care and information	Urban	Rural	Total
Percentage of men for whom the youngest child's mother received antenatal care	82.4	75.7	77.3
Percentage of men who were present at any antenatal care visit	74.5	65.3	67.5
Percentage who were told by a health provider or health worker about the following signs of pregnancy complications:			
Vaginal bleeding	23.5	16.0	17.8
Convulsion	27.5	18.1	20.3
Prolonged labour	31.4	20.1	22.9
Percentage ever told what to do if mother had any pregnancy complication	39.2	28.5	31.1
Percentage whose youngest child was delivered in a health facility	66.7	48.6	53.0

Table 8: Reasons given by the men for not having antenatal check up during pregnancy in Jammu and Kashmir by region and place of residence.

Reason child's mother did not have antenatal check-up	Total	Region		Residence	
		Jammu	Kashmir	Rural	Urban
	%	%	%	%	%
He did not think it necessary/did not allow	42.3%	47.8%	38.3%	39.1%	62.5%
Family did not think it necessary/did not allow	11.1%	4.4%	16.0%	10.9%	12.5%
Child's mother did not want check-up	11.3%		19.6%	13.0%	
Has had children before	5.6%	13.3%		6.5%	
Cost too much	12.8%	16.9%	9.8%	10.9%	25.0%
Too far/no transportation	9.4%	13.3%	6.5%	10.9%	
Other	7.5%	4.4%	9.8%	8.7%	
Total	100.0%	100.0%	100.0%	100.0%	100.0%

Table 9: Reasons given by the men for not having delivering in a health facility at the time when their last child was delivered in Jammu and Kashmir by region and place of residence.

Reason child's mother did not have antenatal check-up	Total	Region		Residence	
		Jammu	Kashmir	Rural	Urban
	%	%	%	%	%
Cost too much	8.7%	14.4%	3.4%	8.2%	11.8%
Facility closed	.9%	1.8%		1.0%	
Too far/no transportation	16.9%	16.6%	17.2%	19.6%	
Don't trust facility/poor quality service	4.4%	1.8%	6.9%	5.2%	
Not the first child	4.4%	9.2%		5.2%	
Mother did not think necessary	18.2%	12.8%	23.2%	15.5%	35.3%
Respondent did not think necessary	20.8%	28.5%	13.6%	17.5%	41.2%
Family did not think necessary	14.1%	11.1%	17.0%	15.5%	5.9%
Other	11.5%	3.7%	18.7%	12.4%	5.9%
Total	100.0%	100.0%	100.0%	100.0%	100.0%

Table 10: Percentage of men to whom a health provider or worker spoke about specific aspects of maternal care at any time during the pregnancy and percentage of men whose youngest living child was not delivered in a health facility were given specific home delivery related information, by residence, Jammu and Kashmir, 2005-06

	Urban	Rural	Total
Percentage to whom a health provider or worker spoke about the following aspects of maternal care:			
The importance of delivering in a health facility	51.0	33.3	37.6
The importance of proper nutrition for the mother during pregnancy	52.9	43.8	46.0
Family planning or delaying his next child	31.4	24.3	26.0
Number of men with a child age 0-35 months	48	148	196
Among men whose last child age 0-35 months was not delivered in a health facility, percentage who were told the importance of:			
Breastfeeding the baby immediately after birth		44.6	44.0
Keeping the baby warm immediately after birth		43.2	45.9
Cleanliness at the time of delivery		52.7	53.8
Using a new or unused blade to cut the cord		52.7	52.7

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