

Husband's involvement in utilization of maternal health services by their spouse in district Rohtak, Haryana

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ABSTRACT

Introduction: Husband and wife as a couple are fully responsible for their current and future. In our society, the husband is mostly responsible for making the decision regarding any expenses. In India, there is a need to reduce the maternal mortality rate, and Husband's involvement in antenatal care could be a key to success as it will enable them to support their partner in adequate preparation for birth and to utilize emergency obstetric care early if complications arise. **Aim and Objectives:** To find out about male involvement in the utilization of maternal healthcare services by their spouse and various factors affecting male involvement in the utilization of maternal healthcare services. **Methods:** This study was conducted in urban and rural field practice areas attached to the Department of Community Medicine, PGIMS, Rohtak. The study included 400 couples where 200 each were recruited from rural and urban areas. Out of 17 subcenters under CHC Chiri eight, subcenters were selected randomly by lottery method. A line list of these couples was prepared at each subcenter using ANC and birth register. Couples were enrolled from this line list till a sample size of 25 was reached at each of these eight subcenters. In this way, a total of 200 couples were enrolled from rural areas in which women delivered and availed maternal health services in the last 6 months. In urban areas, an equal number of couples were enrolled from each of these three urban health posts till the sample size of 200 was reached in an urban area. **Results:** The majority of the husbands (73%) reported that they participated in their wives' utilization of maternal health services. Twenty-seven percent did not participate in their wives' utilization of maternal health services. It also showed that 71.0% of the husbands did not know about the investigations that needed to be performed during a woman's pregnancy. Only 29% were aware of it. On analysis, it was observed that 73% of the husbands had good participation in their spouses' maternal and child health (MCH) care, while the rest had poor participation (27%). It also showed that as the education level of the participants' husbands increased, their participation in their spouses' MCH care increased, with the highest being observed among graduates (91.3%) and the lowest among those with primary schooling level education (66.7%) which were statistically significant.

Keywords: Male involvement, maternal and child health, utilization of services

Background

According to global estimates for the year 2017, there were 295000 (Uncertainty Interval: 279000–340000) maternal fatalities, which is 35% fewer than the anticipated 451000 (UI: 431000–485000) maternal deaths in the year 2000.^[1] A 15-year-old girl's projected global lifetime risk of maternal death in 2017 was 1 in 190, which is less than half of the risk in 2000,

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when it was 1 in 100.^[2] By demonstrating a significant decline in MMR from 398/100 000 live births (95% CI 378–417) in 1997–1998 to 99/100000 (90–108) in 2020, India has accomplished a great feat.^[3] In most developing countries, like India, childbirth is supposed to be a solely woman's issue. However, in line with the patriarchal nature of Indian society, most men retain the power to determine what their wives can do or not and very often control the women's access to and utilization of maternal health services.^[3] Prior research documents multiple levels of influence on maternal health service utilization, including women's sociodemographic characteristics,^[4-8] women's autonomy, and household composition^[9] as well as broader structural and policy-level factors such as cultural acceptability of institutional delivery.^[10] According to the average treatment effect on the treated (ATT) estimate and the local average treatment effect (LATE) estimate, institutional delivery increases by approximately 16 percentage points and 23 percentage points, respectively, according to the fourth round of the district-level household survey (DLHS-4).^[11] However, while most research in this area has focused on the socioeconomic and policy-level determinants of maternal health service utilization, there has been limited attention to the role of partners and family.

Because men mediate women's access to economic resources in many parts of the world, women's nutritional status, especially during pregnancy, may depend heavily on partners and male relatives.^[4] Husband's knowledge about pregnancy-related care and a positive gender attitude have been shown to enhance maternal health care utilization. Male participation in maternal and child health care services has been shown to increase antenatal care visits, markedly increasing the chances of women's delivery in institutions.^[12-14] Research into the cultural, social, and economic factors associated with male involvement in the utilization of maternal healthcare services, especially in India, is lacking. Information is also lacking on factors that affect Husband's involvement in the utilization of these services. Hence this study was undertaken to establish the Husband's involvement in utilization of maternal healthcare services by their spouse in the district Rohtak and the factors affecting it.

Aim and Objectives

To find out about Husband's involvement in the utilization of maternal healthcare services by their spouse and various factors affecting Husband's involvement in the utilization of maternal healthcare services.

Material and Methods

After obtaining ethical clearance, this descriptive cross-sectional was conducted in rural and urban field practice areas attached to the Department of Community Medicine, Pt. BD Sharma PGIMS, Rohtak. The study was conducted over a period of 6 months from the date of commencement. All couples in which women have delivered

within the last 6 months and residing in the study area were included. Study subjects in whom the husband was staying away from home or either of the spouses having psychiatric illness were excluded from the study. The sample size is calculated using Husband's involvement for utilization of MCH services as 42%^[15] for India and taking absolute error to be 5%. The sample size came out to be 374 subjects, rounded off to 400. The study includes 400 couples where 200 each were recruited from rural and urban areas.

CHC Chiri is the rural field practice area attached to the Department of Community Medicine. CHC Chiri has two PHCs, namely PHC Chiri and PHC Samargopalpur. There are 17 subcenters under CHC Chiri. Eight subcenters were selected randomly by the lottery method out of 17 subcenters under CHC Chiri. A line list of these couples was prepared at each subcenter using ANC and birth register. Couples were randomly enrolled from this line list till a sample size of 25 was reached at each of these eight subcenters. In this way, a total of 200 couples were enrolled from rural areas in which women delivered and availed maternal health services in the last 6 months. Couples were visited at their home along with ANM or ASHA workers in the area. In the urban area, couples were randomly enrolled from all three urban health posts which is the urban field practice area attached to the Department of Community Medicine. An equal number of couples were enrolled randomly from each of these three urban health posts till the sample size of 200 was reached in an urban area. The rest of the process was similar to that followed in the rural areas.

A questionnaire was designed for the study by the investigators (authors) and comprised of both close-ended and open-ended questions. The questionnaire was in three sections: Section A was designed to collect sociodemographic information; Section B sought to elicit information on the level of male involvement in maternal health care (antenatal care, delivery, and postnatal care); and Section C sought to collect information on whether they know about different aspects of pregnancy. Interviewed husbands were scored based on their responses to questions pertaining to their involvement in their spouses' maternal and child care. They were scored either 0 or 1 for each response, and those who scored 7 or less out of a total of 14 were considered to have poor participation in maternal and childcare practices.

The investigator met the couple to explain the purpose of the study with a patient information sheet and written consent was sought to seek their cooperation before the study. The help of a health worker/ASHA/Anganwadi worker at the time of the interview was taken. The purpose of the study was explained in the study subject's vernacular language in detail. The confidentiality of the information obtained was maintained. Data were collected, compiled, and entered in the MS Excel sheet. Analysis was carried out using SPSS 20 with appropriate statistical tests wherever applicable. Ethical approval was obtained from the Ethical Committee of PGIMS, Rohtak.

Table 1: Association between various sociodemographic details of the husband and the participant's husband's participation in MCH care

| | Participation of husbands (score out of 14) | | Total (%) | χ^2 | P |
|---|---|-------------------|---------------|----------|---------|
| | Good (>7) | Poor (≤ 7) | | | |
| Age of husbands (years) | | | | | |
| <30 years (%) | 153 (72.2) | 59 (27.8) | 212 (100) | 0.158 | 0.691 |
| ≥ 30 years (%) | 139 (73.9) | 49 (26.1) | 188 (100) | | |
| Religion | | | | 2.242 | 0.326 |
| Hindu (%) | 162 (74.3) | 56 (25.7) | 218 (100) | | |
| Muslim (%) | 43 (78.2) | 12 (21.8) | 55 (100) | | |
| Sikh (%) | 87 (68.5) | 40 (31.5) | 127 (100) | | |
| Level of education | | | | 23.385 | <0.001* |
| Graduate (%) | 21 (91.3) | 2 (8.7) | 23 (100) | | |
| Higher secondary (%) | 97 (87.4) | 14 (12.6) | 111 (100) | | |
| Secondary school (%) | 87 (64.9) | 47 (35.1) | 134 (100) | | |
| Middle school (%) | 59 (65.6) | 31 (34.4) | 90 (100) | | |
| Primary school (%) | 28 (66.7) | 14 (33.3) | 42 (100) | | |
| Occupation | | | | 0.096 | 0.992 |
| Business (%) | 46 (74.2) | 16 (25.8) | 62 (100) | | |
| Labourer (%) | 75 (72.1) | 29 (27.9) | 104 (100) | | |
| Self-employed (%) | 107 (73.3) | 39 (26.7) | 146 (100) | | |
| Service (%) | 64 (72.7) | 24 (27.3) | 88 (100) | | |
| SES | | | | 3.080 | 0.544 |
| Class I (%) | 24 (82.8) | 5 (17.2) | 29 (100) | | |
| Class II (%) | 62 (74.7) | 21 (25.3) | 83 (100) | | |
| Class III (%) | 111 (73.0) | 41 (27.0) | 152 (100) | | |
| Class IV (%) | 67 (67.7) | 32 (32.3) | 99 (100) | | |
| Class V (%) | 28 (75.7) | 9 (24.3) | 37 (100) | | |
| Study participant age | Poor (≤ 7) | 108 | 29.46 (5.074) | 0.665 | 0.673 |
| | Good (>7) | 292 | 29.23 (4.855) | | |
| Number of male children | | | | 0.506 | 0.777 |
| 0 (%) | 144 (74.6) | 49 (25.4) | 193 (100) | | |
| 1 (%) | 127 (71.3) | 51 (28.7) | 178 (100) | | |
| 2 (%) | 21 (72.4) | 8 (27.6) | 29 (100) | | |
| Number of female children | | | | 2.070 | 0.558 |
| 0 (%) | 90 (70.9%) | 37 (29.1) | 127 (100) | | |
| 1 (%) | 104 (75.4) | 34 (24.6) | 138 (100) | | |
| 2 (%) | 75 (75) | 25 (25) | 100 (100) | | |
| 3 (%) | 22 (64.7) | 12 (35.3) | 34 (100) | | |
| Presence of husband at the time of delivery | | | | 0.000 | 0.988 |
| Absent | 89 (73) | 33 (27) | 307 (100) | | |
| Present | 203 (73) | 75 (27) | 93 (100) | | |

Results

Out of 400 participants, the mean age of husbands was 29.3 ± 5.1 years for the rural group and 29.3 ± 4.7 years for the urban group. It was seen that more than half (54.5%) of the women interviewed as a part of the present study were Hindus. This was followed by Sikhs (31.8%) and Muslims (13.8), respectively.

It was seen that most of the husbands interviewed for the present study had completed their secondary school level of education (33.5%). This was followed by those who had completed their higher secondary level education (27.8%), those who completed their middle school-level education (22.5%), and those who completed their primary school-level

education (10.5%). The lowest proportion of participants were those who completed their graduate-level education (5.8%). Most of the husbands interviewed for the present study were primarily self-employed (36.5%) followed by laborers (26.0%), servicemen (22.0%), and businessmen (15.5%). Most of the husbands interviewed belonged to families falling category III (38.0%) of the modified B.G. Prasad scale of socioeconomic status followed by category IV, category II, category V, and category I.

Interviewed husbands were scored based on their responses to questions pertaining to their involvement in their spouses' maternal and child care. They scored either 0 or 1 for each response, and those who scored 7 or less out of a total of 14

were considered to have poor participation in maternal and childcare practices. On analysis, it was observed that 73% of the husbands had good participation in their spouses' maternal and child (MCH) care, while the rest had poor participation (27%) [Figure 1].

At the education level, it shows that as the education level of the participants' husbands increased, their participation in their spouses' MCH care increased, with the highest being observed among graduates (91.3%) and the lowest among those with primary schooling level (66.7%) education. A high statistically significant association was observed between the education level of the husbands and their participation in their spouses' MCH care (P value < 0.001) [Table 1]. All other variables turned out to be statistically insignificant with their participation in their spouses' MCH care.

Table 1 shows the association between various other details of the husband and the participant's husband's participation in MCH care.

The number of male or female children, the presence of chronic disease of the husband, and the presence of the husband at the time of delivery turned out to be statistically insignificant with the participation of the husband in the MCH care.

From Table 2 it was seen that almost half of the husbands (53.5%) did not accompany their wives during ANC visits, while the majority of the husbands (88.8%) accompanied their wives during PNC visits.

Table 3 shows that the majority of the husbands (55%) reported that they did not know about the danger signs during pregnancy or investigations (71%) to be done during pregnancy while a majority of the husbands knew about the expected date of delivery (93%) and requirement of iron and folic acid tablets (61%) during pregnancy. It also depicts nearly half of the

husbands did not know about the requirement of tetanus toxoid injection (51%) during pregnancy.

Discussion

Based on their responses, the husbands of the women interviewed were scored from 0 to 14, and those scoring more than 7 were considered to have a good overall participation in their spouses' MCH care utilization. On analysis, it was observed that 73% of the husbands had an overall good participation. This is significantly higher than the 34.8% reported by Mohammed BHI^[15] in Ethiopia, and marginally higher than the ~ 70% figures reported by Sarvar^[16] and Sinha^[17] in their studies. A concerted and increased efforts on the parts of the central and the local governments as well as the healthcare workers at every level in educating both the spouses regarding the importance of timely MCH care utilization can be credited for such a finding. However, the findings indicate that the results of these efforts, while definitely encouraging, are not perfect, as almost a third of the husbands still had poor involvement in their spouses' MCH care.

The literature is varied with respect to the different factors that are responsible for the poorer participation of men in their wives' MCH care. These factors have been found to vary across time, geography, culture, society, and population. In the present study, it was observed that the level of education of the husbands was the only significant predictor of their involvement in MCH care. Education of the male partner regarding MCH as well as their educational level in general have been repeatedly implicated in their involvement in their spouses' MCH care utilization as well as MCH care in general. A significant association between the educational levels of the husbands and their involvement in MCH care has also been reported in India by Sinha^[17] and Chattopadhyay^[18]

The findings of the present study, where it was observed that 91.3% of the graduate men had good involvement in

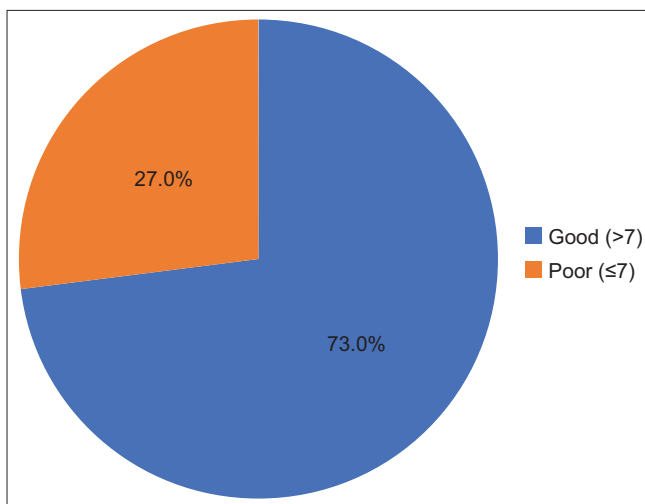


Figure 1: Distribution of interviewed husbands according to whether they participated in their wives' utilization of maternal health services

Table 2: Distribution of the spouses who were interviewed based on whether they had accompanied their wives to the ANC and PNC

| | Accompanied during ANC visits | Accompanied during PNC visits |
|-----|-------------------------------|-------------------------------|
| Yes | 186 (46.5%) | 355 (88.8%) |
| No | 214 (53.5%) | 45 (11.3%) |

Table 3: Distribution of interviewed husbands according to their awareness of pregnancy care

| | Yes | No |
|--|-------|-------|
| About danger signs during pregnancy/post-partum | 45% | 55% |
| About the expected date of delivery | 93% | 7% |
| About proper diet | 73.8% | 26.2% |
| About tetanus toxoid injection | 49% | 51% |
| About investigations to be done during pregnancy | 29% | 71% |
| About iron and folic acid | 61% | 39% |

their spouses' MCH care utilization, therefore, reiterate the postulation that with increased educational level, the perception of pregnancy as a mystery and an event exclusively pertaining to women changes, which makes men more likely to be involved in the planning of their family, ensuring the safe pregnancy of their spouses, safe delivery of their babies, and playing an important role in the postpartum care of the mother and the infant.

It was seen that more than 50% of the husband's did not accompany their spouses during ANC visits; though 88.8% were present during the PNC visits. The findings of the husbands' accompaniment to their wives' ANC visits, as observed in the present study, were far lower than studies conducted by authors such as Sarvar,^[16] and Sinha^[17] However, they are similar to that reported by Mohammed BH^[15] Findings of a sharp increase in the accompaniment of the husbands during the PNC visits could be explained by the added sense of responsibility that they feel after becoming a father, which prompt and increased want of involvement in ensuring the health of the mother and the child after the delivery.^[19]

When a detailed interview regarding individual aspects of maternal and child care service utilization was conducted among the husbands, it was observed that 93.5% of the men knew their wives' expected date of delivery for the last pregnancy, while 73.3% could tell the proper diet during pregnancy. However, 55% of them had no idea about the danger signs of pregnancy, and only 29% knew about the investigations that needed to be performed during the course of the pregnancy to assess maternal and child health. A majority of the husbands (72.5%) accompanied their wives during their delivery in the last pregnancy and knew about the importance of tetanus, IFA, and PNC visits after delivery.

Limitations

This study was limited to survey questions on male partner attendance in antenatal care, and variables measuring other forms of support were not included. Additionally, the study does not include a group of women who have not received antenatal care (and hence do not have data on male partner attendance). It is likely that women who had no contact with the health system during pregnancy often have lower levels of education and belong to the most vulnerable socio-economic groups. As a result, it was unable to extrapolate the study's overall results to this particular subpopulation. Furthermore, due to the unavailability of variables within the dataset, the study could not control for the spacing of antenatal care contacts and whether the male partner accompanied the woman for multiple antenatal care contacts.

Conclusion

In patriarchal communities like India so as to improve maternal health service utilization, involving men in the maternal health care system without worsening the already existing gender inequalities is an essential strategy. Therefore, it is advised

that policies and methods be supported that can raise men's knowledge levels and increase their involvement in maternal care through incentives and health education.

Written informed consent from participants

Obtained.

Ethical approval

Obtained (BREC/Th/20/Community Medicine/04).

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Nil.

Conflicts of interest

There are no conflicts of interest.

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