

# Men's participation in utilization of antenatal and intranatal services by women: Community based cross-sectional study

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## Abstract

**Background:** Men's supportive stance in reproductive and child health services utilization plays a crucial role towards the better future of mother baby and family. This is especially important in country like India where men play many roles as sexual partner, husband, father and gatekeeper for their families. Objective of this study is to assess men's participation in utilization of antenatal and intra natal services by women. **Materials and Methods:** A community based cross-sectional study was conducted in urban field practice area of Jawaharlal medical college, Belagavi over a period of one year. 400 husbands of women in the age group of 18-45 years having at least one living child in the age group of 12-24 months and residing in the urban field practice area for at least one year preceding the survey taken as study subjects. Pre structured questionnaires were used to collect the data. statistical analysis was done using chi square test to find out the association between men's participation and various sociodemographic variables with the help of SPSS version 18. **Results:** Majority of ( 86.2%) men accompanied their wives to Antenatal clinics at one or the other time. However, despite of coming to hospital only 68.75% knew the need of taking TT injections and 59.5% opined that pregnant women should take ferrous sulphate and folic acid tablets. 60.5% men accompanied their wives to hospital for delivery. Increased level of education occupation with young age having lesser number of kids and lower socioeconomic status showed increased accompaniment and facilitates the wives to utilize antenatal and intra natal services. **Conclusion:** Though men are aware of various aspects of antenatal and intra natal care, their participation is depending on many sociodemographic factors like their age, education status, occupation and income. So, more emphasis should be given on improving the knowledge and participation by incorporating many men centered reproductive and child health programmes. **Key words:** Men's participation, antenatal services, intranatal services.

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## INTRODUCTION

In developing countries like India Maternal Mortality is a huge public health issue. Globally Maternal Mortality Rate (MMR) fell by approximately 44% over the 25 years. The global lifetime risk of maternal mortality is approximately 1 in 180 for 2015. over 800 women are dying each day from complications in pregnancy and childbirth. South Asia with a maternal mortality ratio of 182/100000 live births accounting for 22 per cent of the global total. Almost all maternal deaths (99 per cent) occur in developing regions.<sup>1</sup> India's MMR has reduced by 77% from 556/100000 live births in 1990 to 130/100000 live births in [2]2016. Despite the fact that the

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MMR is reducing, the nation is still lagging in meeting the Millennium Development Goals 5(MDG5).<sup>3</sup> RCH in India has gained the prominence because 81% of its population falls in the age group of 0-45 years covering children, men, and women.<sup>4</sup> Reproductive health research, programmes and policies in the past have focused almost exclusively on women. Since a decade however the reproductive health field has shifted its attention to include men's participation in reproductive and child health, recognizing that men's attitude, knowledge and behavior can strongly influence women and child health. Men possess little knowledge regarding reproductive health particularly pregnancy health but have much decision-making power. So obviously the lack of men's knowledge and participation in reproductive health not only damages their own health, but also contributes to the ill health of their female partners and children. Maternal and child health are intimately connected to both men and women. Though the woman is the active participant in the maternal and child health issues, man plays the pivot role being the husband and father. Men's reproductive health and behavior implies on women's reproductive health and children wellbeing and society as well. Maternal and child health services (MCH) are essentially promotive and preventive. They provide roads for the early detection of mothers and infants at high risk of morbidity and mortality.<sup>4</sup> In 2007 on world's population day UNFPA had the theme as "men as partner in maternal health" and high lightened the importance of male's role in promotion of RCH programmes.<sup>5</sup> The concern that emerged from the ICPD conference was that neither women nor men are likely to enjoy good reproductive health, until they can discuss sexual matters and make reproductive decisions together. As a part of this broader view, reproductive health programmes started to focus their attention on the role of men as it relates to women's access to and utilization of reproductive health services.<sup>6</sup> Men's presence during antenatal visits was associated with increase in institutional delivery and higher uptake of postnatal services. More than one in seven Indian women did not receive antenatal care during their last pregnancy-

nearly half of them because their husband or family did not think it was necessary or did not allow it-according to the latest National Family Health Survey 2015-16 (NFHS-4) data, highlighting the need to sensitize men about women's rights to healthcare.<sup>2</sup> In recent years a growing area of interest is men's role in maternal and child health issues, including their role in health care decisions and their responsibilities and role as a father and husband. Hence this study aims to know the men's participation, their knowledge and behavior in reproductive health services utilization by women.

## METHODOLOGY

This was a cross sectional study conducted over a period of one year from January 2015 to December 2015 in urban field practice area of department of community medicine, Jawaharlal Nehru medical college (JNMC), Belagavi. Husbands of women in the age group of 18-45 years having at least one living child in the age group of 12-24 months and residing in the urban field practice area of Urban Health Centre, at least one year preceding the survey were selected as study subjects. Considering the prevalence of 50% with relative precision of 10% the sample size calculated was 382 and it was rounded off to 400. In the area of urban health center (UHC), the total number of children in the age group of 12-24 months were 522, as per the information collected from under-five register maintained by ANM's of UHC. Out of 522 children, 400 cases were selected by simple random sampling method by using random number table. All the husbands were interviewed by using predesigned pre structured questionnaire after obtaining written informed consent. Along with the sociodemographic characteristics, the knowledge and behavior of men regarding antenatal and intranatal services utilization by women was studied. Socioeconomic classification was based on modified B.G.Prasad's classification.<sup>7,8</sup> Data was analyzed using statistical package for social sciences (SPSS) version 18, percentages were used for comparison and Pearson's chi-square test to find out the association.

## RESULTS

A total of 400 men were interviewed, the mean age of the study subjects was 30.4±3.66. 61% of the husbands belongs to 30 years or less than 30 years. only 2% were illiterates, 28.2% were graduation and 42% completed their secondary school. 35.5% were professionals and only 5.5 % were semiskilled laborers. When comes to socioeconomic status majority (30.5%) belongs to class II and 1.5% belongs to class V according to modified B.G.Prasad's socioeconomic classification.(Table 1).

**Table 1:** sociodemographic profile of the study participants(N=400)

Characteristics	Number	Percentage
Age(years)		
<30years	245	61.2
31-40 years	145	36.2

41-50 years	10	2.5
Literacy level		
Illiterate	8	2
Primary school	27	6.8
Secondary school	168	42
PUC/Diploma	84	21
Graduation	113	28.2
Occupation		
Profession	142	35.5
Semi profession	123	30.8
Skilled laborer	66	16.5
semiskilled laborer	22	5.5
Unskilled	47	11.8
Socio economic status		
Class I	78	19.5
Class II	122	30.5
Class III	103	25.75
Class IV	91	22.75
Class V	6	1.5
Family size		
3-4 members	172	43
5-6 members	104	26
≥7 members	124	31

Obstetric information of the wives shows mean age of marriage was  $19.3 \pm 2.31$  years (mean $\pm$ SD). 242 (60.5%) wives were 20 years or more than 20 years at the time of marriage and 158 (39.5%) were 18-20 years. 336 (84%) women registered their pregnancy less than 12 weeks and 362 (90.5%) members had taken ANC regularly. 38 (9.5%) wives did not take ANC regularly. Among those who had not taken regularly ANC 79% stated that they were busy at work and remaining 21% gave the reason of not having adequate knowledge. At the time of the study 57.5% of couple had only 1 kid and 6.3% of the couple had 3 and more than 3 children. Mean duration of the couples' married life was  $5 \pm 2.2$  years (Table 2)

**Table 2: Wives obstetric information**

Characteristics	Numbers	Percentage
Age of the wife at the time of marriage		
18-20 years	158	39.5
≥20 years	242	60.5
Weeks of pregnancy registration		
<12 weeks	336	84
≥12 weeks	64	16
ANC taken regularly		
Yes	362	90.5
No	38	9.5
Reason for not taking ANC regularly		
Busy at work	30	79
Least knowledge	8	21
No. of living children the couple had at the time of study		
1 child	230	57.5
2 children	145	36.2
>3 children	25	6.3

Majority (93.5%) of men felt the need of increased food intake by pregnant ladies and 68.75% men knew that TT injection is important and to be taken during pregnancy. Among those who knew the importance of TT only 27.5% knew that 2 injections are adequate. Only 59.5% men knew the importance of taking ferrous sulphate tablet. 98% men knew the importance of taking rest during pregnancy and 96.5% men had the knowledge of nearest health facility. The study reported 86.2% of men accompanied their wives to ANC checkup. Among them 28% of men accompanied only once and 49% men accompanied for 2-3 times. 84.8% men helped their wives to carry out the domestic work and 60.5% of men accompanied their wives to hospital for delivery (Table 3)

**Table 3: Knowledge and practice of men about antenatal and intra natal care**

Variables	Numbers	Percentages
Knows the important of increased food intake during pregnancy	374	93.5
Knows about TT immunization	275	68.75
If yes how many TT injections to be taken		
1 dose	69	17.2
2 doses	110	27.5
3 doses	55	13.8
Don't know	41	10.2
Importance of ferrous sulfate and folic acid in take	238	59.5
Importance of rest for wife during pregnancy	392	98
Knowledge about the nearest health facility	386	96.5
Accompanied wife for ANC	345	86.2
If yes, accompanied for how many times		
Once	112	28
2-3 times	196	49
4-5 times	31	7.8
>6 times	6	1.5
Helped in domestic work during pregnancy	339	84.8
Accompanied wife for delivery to hospital	242	60.5

Men who were aged 30 and more (90.6%) with graduation(97.3%) and diploma(88.1%)professionals (91.5%) and semi-professionals(89.4%) belongs to class IV (90.1%), class II(87.7%) and those men who had one kid(94.3%) showed higher involvement and accompanied their wives to ANC checkup to hospital. Association of husband accompanying wife to ANC checkup with variables like age, education status, occupation and number of kids the couple had was found to be statistically significant. (Table 4)

**Table 4: Association of husband accompanied wife to ANC with many variables**

Variables	Husband accompanied wife to ANC		Chi square	P value
	Yes (%)	No (%)		
<b>Age</b>				
<30 years	222(90.6)	239.4)	52.382	<0.001
31-40 years	117(80.7)	28(19.3)		
41-50 years	1(10)	9(90)		
<b>Education</b>				
Illiterate	3(37.5)	5(62.5)	35.061	<0.001
Primary	22(81.5)	5(18.51)		
Secondary	131(78)	37(22)		
PUC/ diploma	74(88.1)	10(11.9)		
Graduation	110(97.3)	3(2.7)		
<b>Occupation</b>				
Professional	130(91.5)	12(8.5)	25.443	0.001
Semi professional	110(89.4)	13(10.5)		
Skilled	54(81.8)	12(18.2)		
Semiskilled	15(68.2)	7(31.8)		
Unskilled	31(66)	16(34)		
<b>Socioeconomic status</b>				
Class I	67(85.9)	11(14.1)	7.992	0.046
Class II	107(87.7)	15(12.3)		
Class III	79(76.7)	24(23.3)		
Class IV	82(90.1)	9(9.9)		
Class v	5(83.3)	1(16.7)		
<b>No. of children</b>				
1 child	217(94.3)	13(5.7)	55.57	<0.001
2 children	112(77.2)	33(22.8)		
>3 children	11(61.1)	14(56%)		

In the present study 64.1% of men aged 31-40 years and 60.4% of men aged 30 or less than 30, 75.2% of graduates 70.4% of those who completed primary schooling, 81.7% professionals, and 88.9% of those who had 3 or more children

accompanied their wives to hospital for delivery. Association of husband accompanying wife to hospital for delivery with various socio demographic variables like education status, occupation and the number of kids the couple had was found to be statistically significant.(Table 5)

**Table 5:** Association of husband accompanied wife to hospital for delivery with sociodemographic variables

Variables	Husband accompanied wife to hospital for delivery		Chi square	P value
	Yes (%)	No (%)		
<b>Age</b>				
<30 years	148(60.4)	97(39.6)	11.475	0.003
31-40years	93(64.1)	52(3.9)		
41-50years	1(10)	9(90)		
<b>Education status</b>				
Illiterate	0	8(100)	27.746	<0.001
Primary school	19(70.4)	8(29.6)		
Secondary school	89(53)	79(47)		
Diploma	49(58.3)	35(41.7)		
Graduation	85(75.2)	28(24.8)		
<b>Occupation</b>				
Profession	116(81.7)	26(18.3)	54.496	<0.001
Semi profession	65(52.8)	58(47.2)		
Skilled	39(59.1)	27(40.9)		
Semiskilled	9(40.9)	13(59.1)		
Unskilled	13(27.7)	34(72.3)		
<b>Socio Economic Status</b>				
Class I	48(61.5)	30(38.5)	7.411	0.060
Class II	85(69.7)	37(30.3)		
class III	57(55.3)	46(44.7)		
Class IV	50(54.9)	41(45.1)		
Class V	2(33.2)	4(66.7)		
<b>No of children</b>				
1 child	122(53)	108(47)	13.12	<0.001
2 children	104(71.7)	41(28.3)		
≥3 children	16(64)	9(36)		

## DISCUSSION

In our study 84% registered their pregnancy within 12 weeks of gestation which is most consistent with findings of NFHS 3 data but according to NFHS 4 the number has come down to 63.4%.<sup>2</sup> This could be due to the various sociodemographic factors. Mean duration of married life was  $5 \pm 2.2$  years. Men's knowledge regarding antenatal care of women was found to be noticeably good. 93.5% husbands felt the need of increased food frequency by pregnant women and 68.75% husbands knew about TT immunization during pregnancy, 27.5% husbands opined as two doses are adequate. 59.5% know the intake of Ferrous Sulfate and Folic Acid tablets by the woman during pregnancy. 98% husbands felt that rest is required during pregnancy and 96.5% husbands were aware about the nearest health facility for pregnancy and delivery care. In a study by N. Pruthi *et al* showed 84.5% men felt the need of taking inj.TT, 59.5% felt the importance of iron, folic acid tablets, increased nutritious food and adequate rest for pregnant ladies.<sup>9</sup> Swapna *et al* showed that 31% men ensured IFA tablets intake by women, 59.3%

ensured nutritious food or extra meal and 61% men ensured adequate rest for wife during pregnancy.<sup>10</sup> Men had high levels of correct knowledge on need for good nutrition and reduced workload during pregnancy, though they knew little about the details of antenatal care, iron tablets, or tetanus injections. So, the knowledge of men about ANC is limited and depends on various sociodemographic factors. Majority (86.2%) of husbands accompanied their wives to ANC checkup. 49% accompanied for 2-3 times, 28% accompanied only once. Isabel L *et al* says that 77% men accompanied to all ANC visits and 23% to some visits.<sup>11</sup> According to National Family Health Survey 4(NFHS-4) report in urban area 81.9 % men accompanied their wives to ANC checkup.<sup>2</sup> Among those who accompanied for ANC visits 90.6% of men belong to age group of 30 years and less than 30. As age increases the participation of men in ANC visits decreases and the association was found to be statistically significant which is evident from our study and supported by many similar studies.<sup>11</sup> As the education level increased the men accompanying their wives to ANC

checkup also increased and this was found to be statistically significant which was supported by the evidence of 97.3% of graduates, 88.1% of men studied up to PUC/Diploma and only 37.5% of illiterates accompanied their wives to ANC checkup. Harkiran *et al* reported men who accompanied their wife in antenatal clinics had relatively higher level of education and were more likely to have a planned pregnancy (69%).<sup>12</sup> Men educated above high school were 2.4 times more likely to accompany their wives compared to men educated only up to primary school.<sup>13</sup> Considering the profession 91.5% professionals, 89.4% of semiprofessionals accompanied their wives to ANC checkup. As the occupational status increased the number of husband's accompanying their wives to ANC also increased and it was found to be statistically significant. This could be due to the better financial status of the men. Singh A *et al* stated similar findings.<sup>16</sup> 94.3%, 77.2% and 61.1% of men who had one two and three and more than three kids respectively had accompanied their wives to ANC checkup. Men who had less than two children were more likely to assist their wives compared to men who had more than two children and this was found to be statistically significant. A study done at Ahmednagar showed the similar findings.<sup>13</sup> According to income the participation varies. 90.1% husbands of class IV showed higher involvement compared to 87.7% of class II, 85.9% of class I, accompanied wives to ANC checkup. Increased level of education occupation with young age having lesser number of kids and lower socioeconomic status showed increased accompaniment of wives to ANC visits. Sally j *et al* analysis showed that the age, education and occupation socioeconomic status and number of kids the respondents had influence on the man to accompany the woman to attend the antenatal care.<sup>14</sup> Kumar C *et al* says there is a strong negative relationship between the father's number of children ever born and a positive relationship between the men's educational level and his wealth status with his presence during antenatal check-ups.<sup>11</sup> Only 60.5% of husbands accompanied wives to hospital for delivery. A study conducted at Agra showed that 87.5% of husbands were present during delivery.<sup>15</sup> A study conducted in Salvadoron showed that 81 % men attended their wives' delivery. This could be due to the different cultural practice.<sup>16</sup> Around 64.1% men in the age group of 31-40 years accompanied their wives to hospital for delivery and the association was found to be statistically significant. As age increases participation decreases. This could be due to the various family responsibilities which is usually look after by men in a country like India where there is a male domination. A study done in Maharashtra showed 55.3% men of more than 30 years accompanied their wives to the hospital for

delivery.<sup>15</sup> In the present study, 75.2% of graduates and none of the illiterates accompanied their wives to the hospital for delivery. As literacy level of the husband increased, the husband accompanying wives to hospital for delivery increased. Barua A *et al* showed the similar findings. So, increase in educational level of men leads to increased accompaniment of wives by their husbands to the hospital for delivery.<sup>17</sup> In the present study, 81.7% professionals, accompanied their wives to hospital for delivery. As occupational status increased the husband accompanying their wives to hospital for delivery was also increased and the association was found to be statistically significant. A study done at Ahmednagar showed that 54.6% of businessmen and 55.6 % of other professionals accompany their wives to the hospital for delivery.<sup>13</sup> In the present study, 88.9% of husbands who had three children accompanied their wives to hospital for delivery. Kumar C *et al* showed the similar finding that men having more than two living children, 30% more likely to be present during delivery at hospital compared to men having two or less than two living children.<sup>13</sup>

## CONCLUSION

With the increasing necessity of men's participation in improving the reproductive health status of women, it is important to address the barriers of it. The most prominent barriers to male involvement in maternal health include low levels of knowledge, education, and job responsibilities. Therefore, we could see that education of men was the most important factor leads to the contribution of men into their wife's and family health. Participation of husbands in antenatal care significantly increases the frequency of antenatal care visits and their knowledge about nutrition and health of their wives during pregnancy.

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