

KNOWLEDGE AND PARTICIPATION OF MALE PARTNERS IN ANTENATAL CARE ATTENDING ANTENATAL CLINICS IN BIRAT MEDICAL COLLEGE TEACHING HOSPITAL

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ABSTRACT

Introduction

Male partner participation and being prepared of complications and delivery during pregnancy is extremely important for successful pregnancy outcome.

Objective

Objective of this study was to assess knowledge and participation of male partners in antenatal care attending antenatal clinics at Birat Medical College Teaching Hospital.

Methodology

A cross-sectional prospective study was done in Department of Obstetrics and Gynecology, BMCTH. Male partners accompanying primigravid pregnant lady were included. 150 male partners were included for the study. Knowledge of male partners were assessed using pre-tested questionnaire and the knowledge was scored for poor, average and good. Frequency and percentage were calculated for socio demographic variables and male partner knowledge questionnaire.

Result

Majority of male partners accompanying wife were educated (96%) and skilled (81.3%). 89.3% were between 20-35 years. Both couples involved in decision making were 48.7% and 85.3% had planned pregnancy. 89.3% had good knowledge about importance of antenatal care, pregnancy complications and delivery preparedness. Knowledge of pregnancy related complication among male partners were significantly related to level of education, age of partner, employed and skilled partner and couple with planned pregnancy. Knowledge of delivery preparedness was significantly related to male partner education, occupation and if couple are making decision in family. Knowledge score of male partners showed significant relation with level of education, involvement in skilled occupations, involvement of couple in decision making.

Conclusion

Knowledge of male partners involved in antenatal care with pregnant lady showed good knowledge of antenatal care events, pregnancy related complication and also showed positive importance of hospital delivery.

KEYWORDS

Knowledge; pregnancy; spouse participation



INTRODUCTION

Pregnancy and child birth for couples are an event of joy, beginning of new chapter in their relationship and family. On the other hand, anatomical and physiological changes during pregnancy cause variable clinical symptoms physically and mentally. Support of family members and male partner plays important part in smoothening pregnancy duration and good outcome.

Antenatal care is the clinical assessment of mother and fetus, during the period of pregnancy used for getting the best possible result for the mother and child. Family dynamics present another barrier to delivery care; many individuals in a woman's social network play a role in decisions about reproductive health care utilization, especially when acute problems arise. Close family members in the household, including mother-in-law and other female in-laws, often give opinions on how to proceed. The same pattern of behavior during pregnancy and childbirth is also found in Nepal, where older women have decision-making authority, especially the mother-in-law.¹

Participation of men in their wives' perinatal care is currently considered as an essential element of WHO's initiative for safe pregnancy.² Such participation is of special importance in developing countries, in which men are often the policy- and decision-makers in the family and at the society level.³ International studies have demonstrated that men usually respond to the participation request as "We will participate", but their poor performance is due to the lack of knowledge or very low level of knowledge about various needs of the pregnant women and their own roles and responsibilities.⁴

However, the male partner is important family member who may influence the decision to seek professional delivery care. It has been suggested that better spousal communication may improve women's maternal health care-seeking behaviors.^{1,5} Therefore, male partner attitudes and beliefs can play a key role in overcoming access barriers to maternal health care. Thus, our objective was to assess Knowledge and participation of male partners in antenatal care attending antenatal clinics at Birat Medical College Teaching Hospital.

METHODOLOGY

A cross-sectional prospective study was done in Department of Obstetrics and Gynecology, BMCTH. The study was done after approval from Institutional Review Committee (IRC) for one year duration from July. 01.2021 to June.30.2022.

The study was initiated after pilot study on 30 pregnant lady and their male partners and pre-test validation of the self-generated structured questionnaire. All primigravida irrespective of period of gestation visiting antenatal clinic (ANC) of Birat Medical College Teaching Hospital (BMCTH) with male partner were included in the study. All multigravida not with male partner or male partner with prior history of experience of pregnancy with other female partners were excluded. An informed verbal consent was taken from couple before inclusion in the study. Sample size was calculated using reference of sample size from the study done by Pruthi et al.⁶ The adjusted sample size taking 90% response rate and 0.05 as margin of error came to be 150.

Male partner sample of 150 in one year duration were taken using convenience sampling technique. Socio-demographic variables such as male partner education, occupation, ethnicity, and couples age at present pregnancy, type of family, type of marriage and decision maker in house, was the pregnancy planned or un planned were noted for couple as per performa. The male partner was then asked pregnancy and antenatal care related self-generated pretested questionnaire by the author and co-authors. The answer was coded and data were maintained in excel sheet. Knowledge of the male partner was scored 1 for right answer and 0 for wrong answer. Total score was 15 and knowledge was considered as good if score was more than 10, average if score is 5 to 10 and if less than 5 considered poor. Statistical analysis was done using (Statistical Package for the Social Sciences) SPSS version 21. Frequency and percentage were calculated for socio-demographic variables, male partner knowledge and the knowledge score. Chi-square test and Pearson's correlation was used to study the correlation among male partner knowledge of complications, knowledge of delivery preparedness, felt important to accompany and knowledge score with sociodemographic variables such as husbands age, education, occupation, decision maker in the house, type of family and planned or unplanned pregnancy.

RESULT

There were 32,247 patients visiting in outpatient department in the study duration and 4116 obstetrics delivery. 150 male partners accompanying pregnant lady fulfilling all inclusion criteria were included for study. Majority of male partners accompanying pregnant lady were educated (96%) and skilled (81.3%). 89.3% were between 20-35 years. Both couples involved in decision making were 48.7% and 85.3% had planned pregnancy. (Table 1)

Table 1: Sociodemographic variables (n=150)

Variables		Frequency (%)
Religion	Hindu	140 (93.3)
	Muslim	10 (6.7)
Education	Uneducated	6(4)
	School	62(41.3)
	Higher Secondary	43(28.7)
	Bachelor and above	39(26)
Occupation	Skilled	122(81.3)
	Unskilled	28(18.7)
Age	Less than 20	12(8)
	20-35	134(89.3)
	More than 35	4(2.7)
Decision Maker	Male	21(14)
	Both	73(48.7)
	In law	56(37.3)
Family Type	Nuclear	67(44.7)
	Joint	83(55.3)
Marriage	Arranged	93(62)
	Not arranged	57(38)
Pregnancy	Planned	128(85.3)
	Unplanned	22(14.7)



Among 150 male partners, assessment of knowledge score showed 89.3% to have good knowledge about importance of antenatal care, pregnancy complications and delivery preparedness. 73.3% accompanied their wife thinking it as important for maternal and fetal well being. 78% had knowledge about preconceptional counselling. 41.3% knew regarding complications that can happen during pregnancy and bleeding per vagina was most common known complication (20.7%). Majority thought it is important to deliver baby in hospital (90.7%).(Table 2)

Knowledge Assessment		Frequency (%)
Do you think accompanying partner important?	Yes	110(73.3)
	No	40(26.7)
Do you think ANC is valuable for pregnancy?	Yes	120(80)
	No	16(10.7)
	Don't Know	14(9.3)
Do you have knowledge about pre-conceptional counselling?	Yes	117(78)
	No	33(22)
When do you think is the best time for antenatal visit?	First trimester	83(55.3)
	Before delivery	31(20.6)
	When complicated	11(7.3)
	Don't know	25(16.7)
How many visits is required for ANC in hospital?	Less than 5	41(27.3)
	More than 5	55(36.7)
	Don't know	54(36)
Do you think injection Tetanus toxoid is required?	yes	136(90.7)
	no	10(6.7)
	Don't know	4(2.7)
Do you think iron and folic acid is required in pregnancy?	yes	131(87.3)
	no	4(2.7)
	Don't know	15(10)
Do you think ultrasonography is necessary?	yes	136(90.7)
	no	4(2.7)
	Don't know	10(6.7)
Do you think measurement of blood pressure is necessary?	yes	126(84)
	no	10(6.7)
	Don't know	14(9.3)
Do you think measuring weight necessary in pregnancy?	yes	112(74.7)
	no	16(10.7)
	Don't know	22(14.7)
Do you think ANC blood investigation necessary?	yes	128(85.3)
	no	4(2.7)
	Don't Know	18(12)
Do you have knowledge of any pregnancy complication?	Bleeding	31(20.7)
	Pain	5(3.3)
	Infection	3(2)
	Hypertension	21(14)
	Vomiting	2(1.3)
	No idea	88(58.7)
Do you know about complication during pregnancy?	yes	62(41.3)
	no	88(58.7)
Do you have knowledge about delivery preparedness?	Yes	93(62)
	No	57(38)
Where do you think is the best place to deliver?	Hospital	136(90.7)
	Home	14(9.3)
Male partner knowledge score	Good	89(59.3)
	Average	41(27.3)
	Poor	20(13.3)

Pregnancy can be complicated and knowledge of pregnancy related complication were significantly related to level of education, age of partner, employed and skilled partner and couple with planned pregnancy. Knowledge of delivery preparedness was significantly related to male partner education, occupation and decision maker in the family.

Male partners with skilled occupations showed significant relation with all the antenatal care knowledge variables. (Table 3)

Table 3: Correlation of male partner knowledge of complication, preconceptional counselling, Delivery preparedness and Felt important to accompany for ANC with sociodemographic variables.

Correlation of variable	Knowledge of complication	Preconceptional counselling	Delivery preparedness	Felt important to Accompany for ANC
Male Education	0.006	0.328	0.009	0.061
Male Age	0.048	0.361	0.259	0.322
Male Occupation	0.000	0.002	0.002	0.000 [*]
Decision maker	0.05	0.623	0.031	0.379
Family type	0.663	0.09	0.621	0.748
Pregnancy planned/unplanned	0.001	0.114	0.083	0.001 [*]

*p<0.05 (Level of significance)

Knowledge score of male partners showed significant relation with level of education, involvement in skilled occupations, involvement of couple in decision making. However, age of the male partner didn't show any significant correlation with the score. (Table. No 4)

Table 4: Correlation of male partner pregnancy knowledge of score with sociodemographic variables.

Correlation of variable	Knowledge Score ^e
Husband Education	0.01
Husband Age	0.154
Husband Occupation	0.000 [*]
Decision maker	0.02 [*]
Family type	0.462
Pregnancy planned/unplanned	0.002 [*]

DISCUSSION

Our study focuses on studying involvement of male partner during antenatal care and delivery. And also assessing the knowledge with regards to antenatal care, pregnancy complications and delivery preparedness. Majority of male partners were Hindu by religion, aged between 21-35 years of age, with skilled occupation and pregnancy was planned. Both the couple were involved in decision making for household matters. These socio demographic parameters were supported by other studies as well. Sarvar et al. showed in 100 participants majority were Hindu by religion, educated and majority of male partner also showed knowledge of delivery preparedness similar to our study.⁷

Level of education, age, place of residence, number of living children, caste, religion are some of the factors which affect



male participations at the time of ANC visit and also socially involve women into the house hold work and leads non institutional delivery. Similar to our study, Sinha et al. suggests that male participation and their knowledge about pregnancy and mother's health significantly associated with the maternal health and also found to utilize safe delivery services.⁸

Similar to our study, male partner involved in support pregnant lady socially and during ANC was found to help pregnant lady get sufficient rest, which led towards smooth pregnancy to childbirth, minimized pregnancy complications and also reduced delay in going to healthcare facility. In addition, male involvement fosters adequate complication readiness and birth preparation in the form of recognizing danger signs and making arrangement for skill birth attendant. In the Indonesian Suami SIAGA ('alert husband') campaign, men exposed to the program were 1.7 times more likely than unexposed men to take alert actions against birth complications ($p < 0.001$), thereby reducing likely hood of experiencing them.⁹⁻¹¹

Study by Bhatta showed that the men with higher age, uneducated or primary level education, and higher income, with employment and from non-indigenous ethnicities were found significant participation in ANC.¹²

Study shows that 62.9% of men arranged money for delivery, 67% of men knew at least one danger sign in pregnancy, while only 6.9% knew of three or more danger signs, 84.3% of men arranged money for transportation to hospital. Similar to our study, these knowledge about delivery preparedness was more among men with higher age, uneducated or had primary level education, had higher income, had formal employment and came with Hindu religion.¹³

Antenatal care represents a window of opportunity for information; education and communication with pregnant lady so that they will make appropriate choices during pregnancy, especially when they are in danger. However, this opportunity is often missed.^{14,15}

Though this study had small sample size, it highlighted on educated and skilled male felt important to accompany their lady and were having good knowledge of pregnancy, its complications and delivery preparedness. In view of

encouraging male and pregnant lady in health education, other study results also suggested that the pregnant women and their male partners should be given health education together, as this would result in a greater net impact on maternal health behaviors, compared to educating the women alone.¹⁶

CONCLUSION

Knowledge of male partners involved in antenatal care showed good knowledge of antenatal care events, pregnancy related complication and also showed positive importance of hospital delivery. Male partner's education, occupations, couple involvement in decision making and planned pregnancy showed significant relation with good knowledge score of antenatal care, events and complication related with pregnancy.

RECOMMENDATION

Male partner involvement in antenatal care has both psychosocial, physical and emotional support to pregnant lady. This study showed majority of male partner involved in antenatal care were educated, skilled, with both couple involving in decision making and planning their pregnancy. Thus, health promotion and health education regarding antenatal care, delivery and it's complications in community with involvement of male will definitely add positive support to pregnant lady and better pregnancy outcome.

LIMITATION OF STUDY

Since the study is conducted in single institute so the result may not represent large population. Multi centered study with incorporation of diverse population would give more statistically significant result.

CONFLICT OF INTEREST

None

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REFERENCES

1. Furuta M, Salway S: Women's position within the household as a determinant of maternal health care use in Nepal. *Int Fam Plan Perspect.* 2006, 32:17-27. DOI: 10.1363/3201706
2. UNPF. Male Involvement in Maternal Health Critical to Saving Women's Lives, Say UN Leaders. United Nations Population Fund; 2007. <https://www.unfpa.org/fr/node/6444>
3. World Health Organization. Strategy to accelerate progress towards the attainment of international development goals and targets related to reproductive health. *Reprod Health Matters.* 2005;13 (25):11-18
4. World Health Organization. Programming for male involvement in reproductive health: report of the meeting of WHO regional advisers in reproductive health. Geneva: World Health Organization; 2002.
5. Mullany BC: Spousal agreement on maternal health practices in Kathmandu, Nepal. *J Biosoc Sci.* 2010, 42:689-693. DOI: 10.1017/s0021932010000222
6. Neha Pruthi, Sumitra Bacchani, Vandana Singh. Knowledge, attitude and practice regarding antenatal care among husbands attending antenatal clinic in a tertiary care hospital Knowledge, attitude and practice regarding antenatal care among husbands attending antenatal clinic in a tertiary care hospital. *Int J Community Med Public Health.* 2016 Ju;3(7):1741-1744. DOI: <http://dx.doi.org/10.18203/2394-6040.ijcmph20162035>
7. Sarvar R, Sonavane R. Male involvement in antenatal and natal care practices of their partners – a community-based study in rural area of North Karnataka. *Public Health Rev Int J Public Health Res.* 2018;5(2):92-98. DOI: <https://doi.org/10.17511/ijphr.2018.i2.07>



8. Kumar Chiman Sinha. Male involvement and utilization of maternal health services in India. *International Journal of Scientific and Research Publications*. 2014;4(11). ISSN 2250-3153.
9. Yargawa J, Leonardi-Bee J. Male involvement and maternal health outcomes- systematic review and meta-analysis. *BMJ*. 2015. doi: 10.1136/jech-2014-204784. Epub 2015 Feb 19. Doi: <https://doi.org/10.3389/fpubh.2022.864489>
10. Bhatta DN. Involvement of males in antenatal care, birth preparedness, exclusive breast feeding and immunizations for children in Kathmandu, Nepal. *BMC Pregnancy and Childbirth*. 16 Jan;2013. doi: 10.1186/1471-2393-13-14
11. Shefner-Rogers CL, Sood S. Involving husbands in safe motherhood-effects of the SUAMI SIAGA campaign in Indonesia, In- Davis J, Luchters S, Holmes W; Men and maternal and newborn health-Benefits, harms, challenges and potential strategies for engaging men; 2012. *J Health Commun*. 2004;9;233–58.
12. Bhatta, DN. Involvement of males in antenatal care, birth preparedness, exclusive breast feeding and immunizations for children in Kathmandu, Nepal. *BMC Pregnancy Childbirth* 13, 14(2013). DOI: 10.1186/1471-2393-13-14.
13. Mutiso SM, Qureshi Z, Kinuthia J: Birth preparedness among antenatal clients. *East Afr Med J*. 2008, 85(6):275–83. <https://doi.org/10.4314/eamj.v85i6.9625>
14. Anya SE, Hydera A, Jaiteh LE: Antenatal care in the Gambia: missed opportunity for information, education and communication. *BMC Pregnancy and Childbirth* 2008, 8:9. <https://doi.org/10.1186/1471-2393-8-9>
15. Magoma M, Requejo J, Campbell OM, Cousens S, Filippi V: High ANC coverage and low skilled attendance in a rural Tanzanian district: a case for implementing a birth plan intervention. *BMC Pregnancy and Childbirth* 2010, 10:13. <https://doi.org/10.1186/1471-2393-10-13>
16. Mullany BC, Becker S, Hindin MJ: The impact of including husbands in antenatal health education services on maternal health practices in urban Nepal: results from a randomized controlled trial urban Nepal. *Health Educ Res*. 2007, 22(2):166–176. <https://doi.org/10.1093/her/cyl060>

