Original Research Article

Husband's participation in birth preparedness and complication readiness

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Abstract

Introduction: Pregnancy and childbirth continue to be viewed as solely a woman's issue. Finding a male companion at antenatal care is rare. Husbands in patriarchal societies of developing countries are often identified as decision makers in all aspects of day-to-day life. Thus Husband's participation promotes active preparation and assists in decision-making in birth preparedness and in case of complications. **Aim:** The main objective of this study was to assess the determinant factors of male involvement in birth preparedness and complication readiness. **Materials and Methods:** A cross-sectional survey was conducted among 100 married Couples from June 2018 to October 2018 in tertiary care hospital, Adichunchangiri Institute of Medical Sciences, B.G Nagara, Karnataka. Data collected Using pre-structured questionnaire, Odds Ratio and 95% confidence interval. **Results:** A total of 100 husbands participated in the study with 95% response rate. About 70% of the husbands had participated in birth preparedness and complication readiness. The study revealed that husbands were more likely to participate in birth preparedness if they had better knowledge in postnatal danger signs and a better knowledge on birth preparedness. **Conclusion:** Educated and Young aged Husbands with higher income and formal employment showed greater involvement in birth preparedness and complication readiness. Hence these factors should be emphatically considered during maternal health program development. Male awareness in postnatal danger signs and birth preparedness should be increased by local and other concerned bodies.

Key Words: Male involvement, Birth preparedness and complication readiness, Danger Signs

Introduction

Globally, more than half a million women still die annually as a result of complications of pregnancy and childbirth [1]. In 1997, the United Nations Population Fund (UNFPA) described an agenda for the International Conference on Population and Development, Cairo and Fourth World Conference on Women, Beijing, in which men would play a proactive role in the empowerment of women [2]. Men in patriarchal societies of developing countries are often identified as decision makers in all aspects of day-to-day life; pregnancy and childbirth are often regarded as women's exclusive concerns.

A male companion at antenatal care is rare and in many communities, it is unthinkable to find male companions accompanying a woman to the labour room during delivery [3,4]. Male involvement in reproductive health has been promoted as a promising new strategy for improving maternal and child health [3,4]. Strategies for involving men in maternal health services should aim at raising their awareness about emergency obstetric conditions, and engaging them in birth plans and complication readiness [5]. Most of the causes of maternal morbidity and mortality are preventable and attributed to the three delays; delay in recognizing problem and to seek care, delay to reach place of care, and delay to receive appropriate care [3,4].

Birth Preparedness and Complication Readiness strategy encourage women to be informed of danger signs of obstetric complications and emergencies, Choose a preferred birth place and attendant at birth, make advance arrangement with the attendant at birth, arrange for transport to skilled care site in case of emergency, saving or arranging alternative funds for costs of skilled and emergency care, and finding a companion to be with the woman at birth or to accompany her to emergency care [6,7]. This study was conducted to assess the determinant

Manuscript received: 10th December 2018
Reviewed: 20th December 2018
Author Corrected: 26th December 2018
Accepted for Publication: 31st December 2018

factors of male involvement male involvement in Birth preparedness and complication readiness strategy as an important support structures to help reduce delays in accessing maternal health care especially during emergencies; to reduce maternal and neonatal mortality.

Methods and Materials

Study Area and Period

Study type-cross-sectional study

Sample Size- 100 married Couples

Study period- from June 2018 to October 2018

Study Area- Tertiary care hospital, Adichunchangiri Institute of Medical Sciences, B.G Nagara, Nagamangala Taluk, Mandya Distract, Karnataka

Study Design and Source Population- A community based cross-sectional study was conducted among married couples in B.G Nagara.

Inclusion criteria

- Married male of a household head
- His willingness to participate in the study.

Exclusion criteria

- Husbands who were not present with their wives during pregnancy and birth of the child.
- Those who were critically ill.

Sample Size Determination and Sample Procedure- The sample of 100 husbands was determined using single population proportion formula with 95% level of confidence, 5% margin of error and 70% of husbands estimated to participate in birth preparedness.

Data Collection and Procedures- Data was collected using pre-structured questionnaire. The questionnaire was designed in English and was translated to Kannada version for better understanding by interviewees during the interview time.

Data Processing and Analysis- Data were coded, entered and cleaned. Data analysis was carried out using SPSS version 20 software package. Simple descriptive statistics such as frequencies, means, and standard deviations were done as appropriate and the associated factor between the different variables in relation to the outcome variable was measured by odds ratio with 95% confidence interval.

Results

Socio-demographic characteristics of the 100 married men sampled for the study, the socio-demographic characteristics of study participants are shown in Table 1.

Table-1: Socio-demographic characteristics of respondents (n=100).

Characteristic	Frequency No. (%)
Age	
20-25	6 (6)
26-30	50 (50)
31-35	26 (26)
36-40	14 (14)
41-45	4 (4)
Total	100 (100)
Educational status	
Non-formal	6 (6)
Primary	10 (10)
Secondary	38 (38)
Tertiary	28 (28)
Degree	18 (18)
Total	100 (100)
Income	
<4,999	2 (2)
5,000-9,999	16 (16)
10,000-14,999	42 (42)
15,000-20,000	32 (32)
>20,000	8 (8)
Total	100 (100)

The age of respondents ranged from 20 to 45years. Over 50% of the respondents were between 26 and 30 years. 50 (50%) respondents were farmers and self-employed in business, 32 (32%) were drivers and government or private employees. The remaining 18 (18%) had other types of work. A total of 18 (18%) respondents had Degree, 28 (28%) had a tertiary education, 38 (38%) had a secondary education, 10 (10%) had a primary education, and 6 (6%) had no formal education.

Table-2: Men's perception of high risk pregnancy and danger signs in pregnancy, B.G. Nagara, 2018.

Variable	Frequency (%) n=100	
	Yes	No
Pregnancies considered as high risk		
Pregnancy while breastfeeding	54 (54)	46 (46)
Too frequent pregnancies	56 (56)	44 (44)
Pregnancy in the young mother	58 (58)	42 (42)
Previous operative delivery	46 (46)	54 (54)
Pregnancy in the older mother	54 (54)	46 (46)
Danger signs in pregnancy		
Bleeding	56 (56)	44 (44)
Convulsions	30 (30)	70 (70)
Loss of consciousness	48 (48)	52 (52)
Paleness	58 (58)	42 (42)
Swollen legs/face	56 (56)	44 (44)
Baby stops kicking	36 (36)	64 (64)
Water breaks before labour pains	52 (52)	48 (48)
Difficulty in breathing	40 (40)	60 (60)
Dizziness/Blurred vision	56 (56)	44 (44)
Severe Headache	56 (56)	44 (44)
High Fever		

Table 2 shows that 58% of men considered pregnancy in younger age as high risk pregnancy. 56% of men considered too frequent pregnancies as high risk. 54% of men viewed pregnancy while a woman is still breastfeeding and pregnancy in elderly mothers as high risk. 46% men considered previous operative delivery as high risk pregnancies.

When asked to identify situations they would consider as danger signs in pregnancy, more than half(58%) considered paleness; (56%) considered bleeding, swollen legs/face, severe headache & blurring of vision, high fever; (52%) considered Water breaks before labour pains. 48% men considered loss of consciousness, (40%) considered difficulty in breathing. About a third considered convulsions (30%) and cessation of fetal movement as danger signs.

Table-3: Men's birth preparedness, B.G. Nagara, 2018.

What men plan for	Frequency (%) n=100
Mother/Baby's Clothing	92 (92)
Transportation	82 (82)
Savings for Delivery	78 (78)
Savings for Emergencies	58 (58)
Accompanied wives for ANC visits	74 (74)
Mother's health care	60 (60)
Identifies decision-making process in case of obstetric emergency	40 (40)
Arrange Blood Donor	40 (40)
Arrange Skilled Birth Attendant	36 (36)

Table 3 shows that most men made plans for clothing for mother/baby (92%) and Transportation (82%). 78% of men saved money for delivery out of which 58% of men also saved for emergency. 74% of men accompanied their wives for ANC visits. 60% of men planned for Mother's health care. Less than half of men arranged for donor (40%), Decision maker during emergency (40%). Less than a third made arrangement of Skilled Birth Attendant (36%).

Table- 4: Factors associated with male participation in maternity care, B.G. Nagara, 2018

Characteristics	Frequency (%)					
	Ever participated	Never participated	Total	P -Value	Crude ODDS Ratio	95% CI
Age group (years)						
≤30	48 (48)	8 (8)	56	0.0036	4.153	1.590 - 10.847
>30	26 (26)	18 (18)	44			
Total	74	26	100			
Educational status						
Non-formal	10 (10)	6 (6)	16	0.110	0.392	0.124 - 1.237
Formal	68 (68)	16 (16)	84			
Total	78	22	100			
Income						
<10,000.Rs	18 (18)	12 (12)	30	0.408	0.687	0.282 – 1.670
≥10,000.Rs	48 (48)	22 (22)	70			
Total	66	34	100			

Table 4 shows that men under the age of 30 years (48%) accompanied their wives to the hospital for maternity care when compared to men aged more than 30 years (26%). Men who had formal education (68%) were more likely to participate when compared to those with non-formal education (10%). Men with average Monthly income of more than 10,000 Rupees (48%) were significantly associated with participation in birth preparedness when compared to those men earning less than 10,000 Rupees (18%).

Reasons for low participation of husbands in maternity care- Respondents during in-depth interviewed, listed out the reasons for low participation of Husbands, which include: ignorance, poverty, restriction of men entry in the maternity health unit of hospital and labour room. Respondents also added that men don't feel welcomed in the maternity units of hospitals or clinics and especially labour wards. Even when they accompany their wives, the health workers ignore them and they will only be addressed when things go wrong, to donate blood, pay for surgery or buy drugs.

Table-5: Attitude of wives toward husband's participation in maternal care, B.G. Nagara, 2018.

Statement	Frequency (%) n=100
Husband should accompany wife during ANC	
Agree	74
Undecided	10
Disagree	16
Husband should accompany wife to hospital during delivery	
Agree	78
Undecided	10
Disagree	12
Husband should be present in labour room	
Agree	54
Undecided	10
Disagree	36
Husband should accompany wife for postnatal care	
Agree	76
Undecided	10
Disagree	14

Table 5 shows that most wives were in agreement with husbands accompanying their spouses for antenatal care (74%), delivery (78%) and postnatal care (76%). However, there were 54% of women who wanted the physical presence of husbands in the labour room while 36% of women strongly opposed it.

Discussion

The Millennium Development Goals (MDG) to the United Nations 2030 Agenda for Sustainable Development, the international community has established the Sustainable Development Goals (SDGs) and set the target for countries to reduce maternal mortality ratio to less than 70 per 100,000 live births by 2030 [10]. This community-based study assessed husband participation and factors associated with husbands participation in birth preparedness at B.G. Nagara. This study examined the factors associated with male involvement in Antenatal care and birth plans. The findings highlighted the associated factors such as age, education and income. Literature shows that the couples in which male had a higher level of education were better informed and so were likely to be involved in birth plan, and were more socially or financially empowered to make the necessary decisions [5,8,9].

Literature shows that 61% of pregnant women had adequate preparations for delivery, while only 4.8% had preparation for emergency complications [18]. Other 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 [19]. This study revealed that the men with higher education and young aged Husbands with higher income and formal employment showed greater involvement in birth preparedness and complication readiness. Men who were knowledgeable and obtained health education were more likely to accompany their spouses for ANC visit [5,8,11]. Previous findings suggested that providing information to male partners about attending antenatal care might increase their involvement, as well as greater preparedness in case of pregnancy[11-17]. WHO recommends BPCR as one of the important interventions for increasing utilization of skilled MNH services and thus averting avoidable maternal deaths [20,21]. Globally, the involvement of husbands in BPCR appears to be context specific, with low involvement overall in some regions [22,23] and high in others, [24] and selective across components in all cases.

This study highlighted reasons for low participation of husbands in maternity care: Ignorance, poverty, restriction of men entry in the maternity health unit of hospital and labour room. Respondents also added that men don't feel welcomed in the maternity units of hospitals or clinics and especially labour wards. Even when they accompany their wives, the health workers ignore them and they will only be addressed when things go wrong, to donate blood, pay for surgery or buy drugs.

Our respondents considered in descending order the following pregnancy groups as being high risk: pregnancy in younger age as high risk pregnancy, too frequent pregnancies, pregnancy while a woman is still breastfeeding and pregnancy in elderly mothers, previous operative delivery. We found that a substantial proportion of men correctly identified vaginal bleeding, paleness, headache, dizziness and blurring of vision, convulsions as obstetric emergencies. Other conditions identified were loss of consciousness, cessation of fetal movement, preterm labour, water breaks before labour pains and difficulty in breathing. These responses are higher to those mentioned by men in Northern Nigeria. It is of immense importance for husbands to correctly identify symptoms related to obstetric complications and emergencies because they constitute serious situations for both mother and child. Failure to correctly perceive these conditions as serious by the main decision-maker and financier of obstetric care may have disastrous consequences.

Husbands accompanying wives for ANC visits

This study finding shows that 74% of males accompanied their partners for ANC visits. This finding is higher when it is compared with the study done during 2015 Mekkel Town [25] in which 60.4% husbands participated in birth preparedness and 2010 Northern Nigeria [26] in which 32.1% husbands participated in birth preparedness.

Coming to the specific practices of husbands' in birth preparedness, in this study about 92% of them have prepared clean clothes for mother and baby before delivery, this finding is higher when it is compared with the study done during 2015 Mekkel Town [25] and 2010 Northern Nigeria [26] in which 80.10% of Ethiopians and 22.6% of Northern Nigerian husbands prepared clean clothes for the mother and baby. Besides this about 60% husbands identified place of delivery for their wife. This finding for identifying place of delivery is also higher compared with the study in Northern Nigeria [26] 9%.

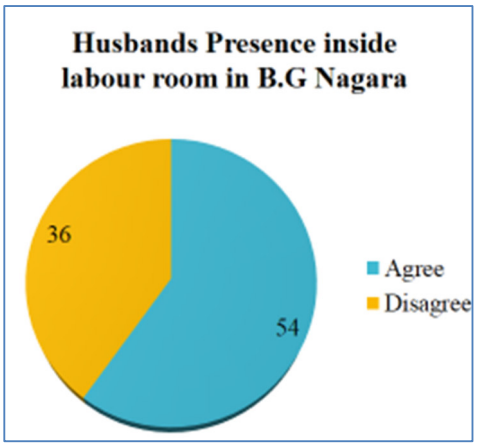
Transportation for deliver

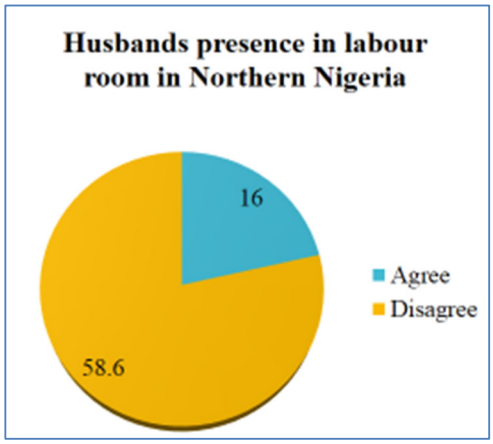
In this study 82% of them arranged for transportation, this finding is higher when it is compared with the study done during 2015 Mekkel Town[25] and 2010 Northern Nigeria[26] in which 65.4% of Ethiopians and 24.2% of Northern Nigerian husbands arranged for transportation.

Savings for delivery

In this study 78% of them saved money for delivery out of which 58% also saved money separately for emergencies, this finding is similar when it is compared with the study done during 2015 Mekkel Town [25] where in 76.3% husbands saved money for delivery and is higher when it is compared with the study done during 2010 Northern Nigeria [26]in which only 23.1% of husbands saved money for delivery.

Husbands presence in labour room





In this study around 54% of women wanted their husbands to accompany them inside the labour room to the labour cot and only 16% strongly opposed it. This finding is significantly higher when compared with the study done during 2010 Northern Nigeria [26] in which only 16% of women wanted their husbands to accompany them inside the labour room and 58.6% women strongly opposed it.

Conclusion

Educated and Young aged Husbands with higher income showed greater involvement in birth preparedness and complication readiness. Hence these factors should be emphatically considered during maternal health program development. Male awareness in postnatal danger signs and birth preparedness should be increased by local and other concerned bodies. The health office should also strengthen the health education about danger signs of pregnancy and postnatal period to increase the husbands' participation. In addition to this, counseling should be given for mothers by health care providers during antenatal, delivery and immunization period to convince their husbands about the health risks and the actual maternal health problems which in turns make husbands save money, pay in case when emergency arise, identify mode of transportation to health facility, identify blood donor ahead before emergency happen.

Antenatal care represents a window of opportunity for information; education, and communication with pregnant women so that they will make appropriate choices during pregnancy, especially when they are in danger. However, this opportunity is often missed and compounded by different associated factors. Our findings suggest that husbands' involvement is positively correlated with women's utilization of skilled services.

Addition of this study to existing knowledge: As men are the main decision makers in the patriarchal society, involvement of men in Birth preparedness and complication readiness will definitely improve the maternal and neonatal outcome by taking proper decision on time, reaching the health care center on time and making necessary arrangements prior to the date of delivery. Men should be encouraged in maternity health centers to accompany their wives during ANC visits and should be educated regarding the complications or danger signs during pregnancy; to enlighten them about complication readiness. Hence preparedness in health system, ensuring competence and motivation of workers are needed for promoting BPCR among the study population.

Authors' contributions

Dr. Mahendra. G, Dr. Afra Farheen M.V and Dr. Vijayalakshmi. S carried out the study. Dr. Afra Farheen M.V developed the theory and performed the computations. Dr. Mahendra. G verified the analytical methods. Dr. Mahendra. G encouraged Dr. Afra Farheen M.V to investigate more on reasons of husbands low participation in Maternal care and supervised the findings of this work. All authors discussed the results and contributed to the final manuscript.

Funding: Nil, **Conflict of interes**t: Nil
Permission from IRB: Yes

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How to cite this article?

Mahendra G, Afra Farheen M.V, Vijayalakshmi. S. Husband's participation in birth preparedness and complication readiness. *Obs Rev:J obstet Gynecol* 2018;4(4):95-102.doi:10.17511/joog.2018.i04.05.

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