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Male Involvement in Birth Preparedness: A Cross-sectional Study in Rural Area

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Abstract

Introduction:
Birth preparedness is a technique to encourage the prompt use of competent use of MCH care and is based on the idea that preparing for childbirth shortens the time it takes to receive care. Men are frequently the decision-makers, and can improve pregnancy outcomes by actively participating in Birth preparedness to reduce mortality and morbidity. Hence this study aims to assess the involvement of males in Birth preparedness in rural areas of Chengalpattu district.

Objective:
To determine the male involvement in Birth preparedness and its associated factors.

Methodology:
This cross-sectional study was done among male partners with children less than a year of age residing in rural areas of Chengalpattu district. A sample of 114 married men were selected through Simple random sampling method. Details were collected through pre-tested, Semi-structured questionnaire and analysed using SPSS-V.21.

Results:
Our study revealed the overall male involvement in birth preparedness is 49% and we found an association with factors like wife's occupation. Many of the participants were involved in deciding the place for delivery and few were participated in arranging blood donor.

Conclusion:
Overall male involvement is low in the rural areas. The policy makers should emphasize male participating in MCH care equally in both rural & urban areas. The awareness among men must begin early from the first pregnancy itself.

Keywords: Birth preparedness, Male involvement, Tamil Nadu

1. Introduction:

The maternal mortality rate is very high among developing countries. In 2020, there were over 287 000 deaths of women during and after pregnancy and childbirth. In 2020, about 800 women per day passed away from pregnancy- and childbirth-related avoidable causes. In 2020, maternal death was roughly every two minutes.[1] Most maternal deaths occurred in developing countries. the Maternal Mortality Ratio in India has years 97 lakhs per live birth in 2018-20 and still most could have been prevented by Birth preparedness.[2] Three delays are to blame for a significant percentage of maternal and infant deaths: 1) the delay in choosing to seek care 2) The time it takes to go to the right medical facility 3) the wait for quality care after entering a health care facility.[3] These delays can be prevented by Birth preparedness. The concept of birth preparedness which aims to encourage the timely use of expert maternal and neonatal care, particularly during childbirth, is founded on the idea that being ready for difficulties and preparing for labour both help to shorten the time it takes to receive care.[4]

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These Maternal deaths are influenced by several factors and Men's participation in birth preparedness is one of the crucial. India has historically been a patriarchal country, where male family members participate in decisions on financial and reproductive matters. Men have a crucial role in lowering the incidence of infant and maternal mortality and may significantly impact the access of their female partners to healthcare services. there is a significant disparity between maternal mortality in India's rural and urban areas. In rural areas, pregnancy problems and deliveries accounted for roughly 50% of maternal mortality among women aged 15 to 29.[5] Therefore, the purpose of this study is to evaluate the role of male partners in Birth preparedness in rural areas of the Chengalpattu district.

2. Methodology:

The study was carried out as a hospital-based Cross-sectional study and conducted among Men accompanying their children under 3 years of age visiting the Rural Health and Training Centre of Tertiary care hospital at Poonjeri, Chengalpattu district for Immunisation. The sample size of our study was calculated based on the study by G D et al[6] on "Husband's participation in birth preparedness and complication readiness" shows 70% of the men had participated in birth preparedness and complication readiness with an allowable error of 9% and adding non-response rate as 10% we got sample size as 114. Based on systemic random sampling every 4th person visiting for their child immunisation was chosen as a sample. A Pre-tested, Semi-structured questionnaire was used to collect data comprising Sociodemographic details of the participants and their involvement in Birth preparedness. Each question on birth preparedness carries a score of 1 and a score of more than 3 is considered as male partner involvement in birth preparedness.
The collected data were entered in MS Excel and analyzed using SPSS v.24. The chi-square test with odds ratio was done to look for an association between male involvement in birth preparedness and Sociodemographic variables.

3. Results:

Table.1 showed the Socio-demographic participants of our study. Most of our participants belonged to the age group between 19 – 30 years. All the participants were educated and less than half of the participants were Graduate. Many men were semi-skilled and unskilled workers. 77.2% of the participants were belonged to Hindu by religion and rest belonged to Christian and Muslim. Most of the men were from joint & three generation family and their wife's were home maker and many had one children. The major participants were from Middle class based on modified BG prasad scale[5].

Table 1: Sociodemographic Characteristics of the Participants

Characteristics	Number	Percentage
Age		
19 – 30 years	81	71
31 – 40 years	33	28.9
Education		
Schooling (Higher Secondary to below)	59	51.8
Graduate	55	48.2
Occupation		
Skilled & Professional	54	47.4
Semi-skilled & Unskilled	60	52.6
Religion		

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Hindu	88	77.2
Christian & Muslim	26	22.8
Wife Occupation		
Home maker	88	77.2
Working woman	26	22.8
No of Children		
1	64	56.1
>1	50	43.9
Type of Family		
Nuclear	51	44.7
Joint & three generation	63	55.3
Socio Economic status		
Upper class	33	28.9
Upper middle class	30	26.3
Middle class	37	32.5
Lower middle class	14	12.3

In Table.2 The majority of the participants were aware of their wife's delivery date (88.6%) and Decided on the place for the delivery (66.7%). Near half of the participants Planned their last pregnancy (40.4%) and saved their money for delivery (39.5%). Very few of them arranged blood donor for their wife's delivery (11.4%).

Table 2: Male Involvement in Birth Preparedness

Variable	Yes (percentage)	No (percentage)
Planned their last Pregnancy	46 (40.4)	68 (59.6)
Saved money for Delivery	45 (39.5)	69 (60.5)
Decided the place for Delivery	76 (66.7)	38 (33.3)
Arranged Blood donor	13 (11.4)	101 (88.6)
Aware of Wife's delivery date	101 (88.6)	13 (11.4)

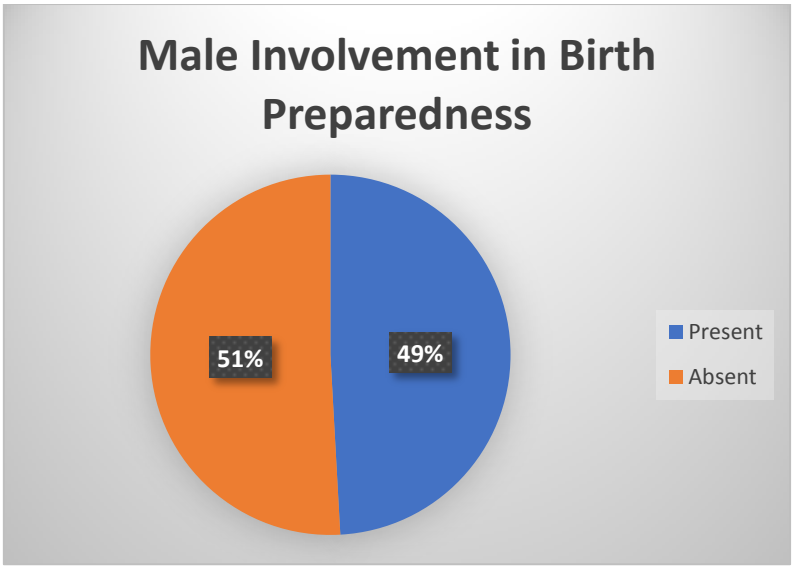

Figure. 1

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The overall male involvement in Birth preparedness is 56 (49%) and Table 3 depicts the association between Male involvement in birth preparedness and Socio-demographic characteristics. Among all the characteristics we found an association with male involvement in Birth preparedness and the wife's occupation. In our study 1.92 times (OR = 1.92 95% CI 0.78,4.69) more male involvement was present in the Hindu religion than compared with christian and muslim religion. With respect to the Wife's occupation where women were home maker husband's involvement in Birth preparedness is 3.7 times more (OR = 3.74 95% CI 1.42, 9.81) when compared with working woman. Male involvement is 1.008 times (OR = 1.008 95% CI 0.48, 2.10 more when they belonged to Joint and three-generation families than nuclear family.

Table 3: Association between Socio-demographic characteristics and Male Involvement in Birth Preparedness

Characteristics	**Birth Preparedness**		**p-value**	**Odds ratio**
	Present	**Absent**		
Age				
19 – 30 years	43	38	0.185	0.57 (0.25 – 1.30)
31 – 40 years	13	20		
Education				
Schooling (Higher Secondary to below)	25	34	0.135	1.75 (0.83-3.68)
Graduate	31	24		
Occupation				
Skilled & Professional	28	26	0.580	0.81 (0.38-1.69)
Semi-skilled & Unskilled	28	32		
Religion				
Hindu	40	48	0.149	1.92 (0.78-4.69)
Christian & Muslim	16	10		
Wife Occupation				
Home maker	37	51	*0.005**	3.74 (1.42-9.81)
Working woman	19	7		
No of Children				
1	36	28	0.085	0.51 (0.24-1.09)
>1	20	30		
Type of Family				
Nuclear	25	26	0.984	1.008 (0.48-2.10)
Joint & three generation	31	32		
Socio Economic status				
Upper & Upper	32	31	0.692	0.86 (0.41-1.80)

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middle class				
Middle & Lower middle class	24	27		

$p<0.0.5$

4. Discussion:

Our present study's overall male involvement in Birth preparedness is 49% (56). This is similar to the study conducted by Mohandas S et al[8] and Worku M et al[9] which showed 50% and 51.4% respectively. Similar studies by G D et al[6] and Sufian S et al[10] showed more men were involved in birth preparedness than our study which they found 70% and 59.6% respectively and this difference may be due to increased exposure to Knowledge to of Birth preparedness. A study from Mohandas S et al showed 64.7% had planned their last pregnancy and 65.7% planned to save money for delivery while in our study 40.4% had planned their last pregnancy and only 39.5% of the participants saved their money for delivery. This difference may be due to differences in socioeconomic status and geographical areas. A similar study by Boltena MT et al found 42.4% of male participants involved in birth preparedness which is close to our study results[11]. The author also reported that 54% had saved money for delivery, 57.2% of the men decided on the place for delivery and 16.1% of the participants identified blood donor for their wives during delivery whereas in our study 39.5% of the participants saved their money for wife's delivery, 66.7% of the participants decided the place for delivery and only few 11.4% of them had arranged blood donor. Our study results were consistent with this previous study.

5. Conclusion:

In our study, the overall men's participation in birth preparedness is found to be low and more than half of the men were not involved in Birth preparedness. The male partners need to be educated immediately and address the significance of the male partner's participation in pregnancy related care. Policymakers should emphasize male partners participating in MCH care more in rural areas. The awareness among men must begin early from the first pregnancy rather than with higher order.

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Conflict of interest: Nil

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