Original Article

Husband Involvement in Birth Preparedness and Complication Readiness and Associated Factors in Selected Hospitals of Kaski

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ABSTRACT

Background: Men in patriarchal societies are decision makers and their involvement in maternal health enable adequate preparation and decision making during obstetric complications reducing 3 delays in women's life. The objective of the study was to identify knowledge and practice of husband in birth preparedness and complication readiness.

Methods: A descriptive cross-sectional research was used to assess the knowledge and practices of husbands of postnatal women two tertiary hospitals of Kaski district. Purposive sampling was adopted to select 384 respondents. Data was collected using semi-structured interviews. Descriptive (frequency, mean, standard deviation and percent) and inferential (chi-square test and logistic regression) statistics were used for data analysis.

Results: The study found that knowledge of the respondents on Birth Preparedness and Complication Readiness was 59.1% and practice was 51.8%. Significant association was found between knowledge and practice of respondents. The factors associated with husband involvement were assessed using Andersen's behavioral model. Age (p=.001), education (p=.001), residence (p=.001), parity (p=0.001), family type (p=0.001), mass media (p=.001), number of ANC visit conducted (p=.002) and history of obstetric complication (p=.001) were found to be statistically significant with knowledge. Factors contributing to practice of husband in Birth Preparedness, Complication Readiness were age, availability of transportation and health insurance.

Conclusion: Based on these findings, the knowledge and practice of husband should be increased and more educational programs focusing on involvement in Birth Preparedness and Complication Readiness needs to be increased.

Keywords: Husband involvement, birth preparedness and complication readiness, Andersen's behavioral model

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INTRODUCTION

Nepal has one of the highest maternal mortality in Asia, 239 deaths per 100,000 live births. In Nepal about 41percent of births occur at home.[1] Many women deliver with relatives, friends, untrained traditional birth attendants,or even alone with multiple risk factors identified including the absence of skilled care at birth, delayed health-seeking and lack of access to health facilities, unilateral decision of male partner which are more prominent in rural areas.[2]

The trend of involvement of men in health care delivery centers has been increased and is reported to found higher in developed countries as compared to developing countries where pregnant women is not accompanied by her partner for antenatal care and are not expected to be in the labor room during delivery unless complications.[3,4]

Women in developing countries are under collective decision making with their partners.[5] Study conducted in Ethiopia presented that one of the factors of affecting antenatal care was husband's disapproval (15.5%) for antenatal attendance and only 21 percent of pregnant mother were accompanied by their husbands to the antenatal clinic.[6]Another study was conducted to assess the involvement of male in birth preparedness in Tulsipur Municipality of Dang district, Nepal revealed only 44.36 percent of the respondents plan for preparedness of birth and only 48 percent of them accompanied their wife for antenatal care[7]. Regarding this, husband involvement could result in good maternal and neonatal outcome thus reducing morbidity and mortality as they are the decision makers in every stage of women's life. Evidence of reduced maternal stress, increasing prenatal care, cessation of risk behaviors and participation from early stage to their future parental roles are being observed with male participation which aids in reducing the early two delays of life.[6-9]

Prevalence of patriarchal societies identified male as decision makers in all aspects of life in developing countries hence imposing women to life-threatening obstetric complications. Husband involvement in birth preparedness and complication readiness is not fully practiced in many parts of the country despite of mass awareness and campaigns. Furthermore, no study has been done in Kaski. Thus, with the support of above facts and interest of researcher the present study was undertaken to find out husband involvement in birth preparedness and complication readiness.

MATERIALS AND METHODS

A quantitative cross-sectional study was conducted to assess the husband involvement in BPCR. Study populations were husband of postnatal women at two hospitals, Pokhara Academy of Health Science (PAHS) and Gandaki Medical College (GMC) situated in Pokhara, Nepal. Total sample size was 384. Estimated delivery in per month in PAHS was 700 and GMC was 200. Thus, the sample required from PAHS was taken as 700*384/ 900=299 and GMC was 200 thus the sample required was 200*384/900=85. Non-probability purposive sampling was used.

Husband of postnatal women who were willing to participate and available at the time of data collection were included in the study. A semi-structured interview schedule from Monitoring Birth Preparedness and Complication Readiness, Tools and Indicator for Maternal and Newborn Health developed by Johns Hopkins Program for International Education in Gynecology and Obstetrics (JHPIEGO), an open access tool was used. The instrument consists of 3 parts: Part I consists of socio-demographic characteristics, Part II and Part

III consists of knowledge and practice of BPCR respectively.

The instrument was developed on the basis of objectives. Content validity of the instrument was established by consultation with subject matter experts and colleagues. Reliability of the instrument was maintained by pretesting of Nepali version of the instrument among 10 percent (38) respondents available at Valley Maternity Hospital and Paropakar Maternity and Women's Hospital, Kathmandu. Necessary modification was done in order to ascertain relevancy, stability and completeness of the instrument.

The study was carried out after obtaining ethical approval from Institutional Review Board of TU, IOM. Data was collected using structured interview schedule by researcher herself at time and place convenient for the subject at postnatal ward. Written consent was taken from the participants after giving information about the nature of the study and about the use of the data. Confidentiality was maintained by coding each questionnaire. Voluntary participation of respondents was ensured with the choice to withdraw any time without fear and clarification.

The collected data was organized, coded and entered in Statistical Package for Social Sciences (SPSS) version 16. The data was analyzed on the basis of research objectives and research questions. Both descriptive and inferential statistics were used to analyze the data. Logistic regression was used to identify the factors contributing to practice of husband involvement in BPCR. All tests were conducted at 5% level of significance.

RESULT

Out of 384 respondents, 52.6 percent of the respondents were of age 31 years and above. The overall mean and standard deviation of the age were 31.40 ±5.51. Sixty six percent of respondents followed Hindu religion and 53 percent of the respondents were from urban area. Similarly, 87 percent of the respondents had formal education and 94.5 percent of them are employed. Regarding monthly family income status 89.3 percent had income of more than Rs. 10,000 and 50.7 percent of the respondents live in joint family. Distance to health facility was more than 5 km for 56.3 percent of respondents (Table 1).

Table 2 demonstrates that majority (86.5%) of respondents has health facility nearby home and health personnel are available for 81.5 percent of respondents nearby their home. Thirty five percent of them had done health insurance in order to prevent form financial crisis during illness. In respect to parity almost half (51.6%) of the respondent's wife were of primigravida. Eighty four percent of the respondents' at least one baby was born in health facility. Seventy two percent of respondents delivered at least one baby at home and 31.2 percent of respondents had faced obstetric complications at past pregnancy. Less than half (43.4%) of respondents had heard about BPCR and health workers were major source of information for 95.8 percent of respondents to obtain information about BPCR. About half (51%) of respondents had decision making power in family. Eight four percent of respondents had done ANC visit where 42 percent of respondents had done ANC visit more than 4 times.

Table 3 depicts that 59.1 percent of respondents had adequate knowledge on birth preparedness and complication readiness. Similarly demonstrates that 51.8 percent of

respondents had adequate practice on birth preparedness and complication readiness.

Table 4 displays that there is significant association between knowledge and practice of husband involvement on birth preparedness and complication readiness (p-value= .010).

Table 5 demonstrates the logistic regression analysis where age, availability of transportation, registered health insurance are identified factors contributing practice of husband involvement in BPCR.

Table 1: Socio-Demographic Characteristics of Respondents

Characteristics	Number	Percent
Age in Completed Years		
<31 years	182	47.4
≥31 years	202	52.6
(Mean age ± S.D=31.40 ±5.51) years		
Religion		
Hinduism	254	66.0
Christianity	65	17.0
Buddhism	47	12.0
Islamic	18	5.0
Residence		
Urban	204	53.0
Rural	180	47.0
Education		
Formal education	335	87.0
Informal education	49	13.0
Occupation		
Employed	363	94.5
Unemployed	21	5.5
Monthly Family Income		
Less than Rs.10,000	41	10.7
More than Rs. 10,000	343	89.3
Type of Family		
Joint	195	50.7
Nuclear	189	49.3
Distance to Reach Health Facility		
Less than 5km	168	43.7
More than 5 km	216	56.3

Table 2: Background Information of Respondents

Variables	Number	Percent
Availability of Health Facility	332	86.5
Availability of Health Personnel	313	81.5
Registered Health Insurance	135	35.2
Parity of Wife		
Primigravida	198	51.6
Multigravidae	186	48.4
Number of Child Born at Health Facility (Multigravida=168)		
< 2		
≥2	142	84.5
	26	15.5
Number of Child Born at Home (Multigravida=18)		
< 2	13	72.0
≥2	5	28.0
Presence of Obstetric Complications at Past Pregnancy(n=186)		
	120	31.2
Heard About Birth Preparedness	167	43.4
Information from Mass Media* (n=167)		
Heath workers	160	95.8
Radio/Television	117	70.1
Peer	43	25.7
Others	14	8.4
Decision Making Power		
Husband	196	51.0
Both	82	21.4
Mother	78	20.3
Wife	28	7.3
Done ANC Visit	321	84.0
Times of ANC Visit (n=321)		
less than four times	110	34.0
four or more times	211	66.0

*** Multiple Response**

Table 3: Knowledge and Practice of Respondents on Birth Preparedness and Complication Readiness

n=384

Level of knowledge and Practice	Number	Percent
Adequate knowledge (Median Score ≥28)	227	59.1
Inadequate knowledge (Median Score <28)	157	40.9
Adequate Practice (Median score ≥21)	199	51.8
Inadequate Practice (Median Score < 21)	185	49.2

Table 4: Association between Knowledge and Practice of Husband Involvement on Birth Preparedness and Complication Readiness

Variables	Practice		χ^2	p-value
	Inadequate n (%)	Adequate n (%)		
Knowledge				
Inadequate Knowledge	88(56.1)	69(43.9)	6.595	.010*
Adequate Knowledge	97(42.7)	130(57.3)		

χ^2: Pearson Chi SquareTest *****p value significant at <.05

Table 5:Logistic Regression Analysis of Factors Contributing to Practice

Factors	Practice		Adjusted OR (95% CI)	p-value
	Inadequate n (%)	Adequate n (%)		
Age				
<31 years	69 (37.9)	113 (62.1)	1	
≥31 years	116 (57.4)	86 (42.6)	2.348 (1.371-4.019)	.002*
Availability of Health Facility				
No				
Yes	34 (65.4)	18 (34.6)	1	
	151 (45.5)	181 (54.5)	1.754 (0.701-4.392)	.230
Distance to Reach Health Facility				
Less than 5km	68 (40.5)	100 (59.5)	1	
More than 5 km	117 (54.2)	99 (45.8)	1.407 (0.817-2.423)	.218
Availability of Transportation				
No				
Yes	22 (34.4)	42 (65.6)	1	
	163 (50.9)	157 (49.1)	2.075 (0.975-4.417)	.048*
Registered Health Insurance				
No				
Yes	151 (60.6)	98 (39.4)	1	
	34 (25.2)	101 (74.8)	0.155 (0.086-0.280)	.001*
Number of ANC Visit conducted [#a]				
Less than 4 times	58 (53.2)	51 (46.8)	1	
Fur or more times	87 (41.2)	124 (58.8)	0.829 (0.467-1.473)	.523

χ^2: Pearson Chi Square Test 1: Reference Category *****p value significant <.05 CI: Confidence Interval OR: Odds Ratio

DISCUSSION

The study was conducted to assess husband involvement in birth preparedness and complication readiness. The study revealed that 59.1 percent of respondents had adequate knowledge on BPCR. The result of the study is consistent with study conducted in India and Nigeria Respectuvely.[10,11] However, the finding is comparatively lower than the study conducted in, Ethiopia.[12,] This may be due to differences in socio-economic and educational status of respondents between the studied geographical areas.

The findings of the study showed that 84 percent of respondents were aware about BPCR as advance planning and preparation for delivery. This finding is comparatively lower than study conducted in India by Kumar.[13] Nineteen percent of respondents had information about delays in pregnancy where 97 percent of the respondents agreed that delays in reaching care is one of the major delays for pregnancy which is consistent with findings of the study conducted in Bangladesh.[14] This might be same sample size and socio-demographic characteristics as Bangladesh is also a developing country

Fourty eight percent of the respondents answered that 4 ANC visit should be done which contradicts with the study[9] where almost all respondents were aware of number of times of ANC visit. Seventy four percent of respondents agreed that ignorance of male as the hindrance of husband involvement in BPCR which is demonstrated and explained in the study[5] conducted in northern Nigerian community.

Regarding the knowledge on components of BPCR, 88 percent of respondents had knowledge about preparing funds for delivery and 73 percent of respondents had knowledge on arranging transportation. These results are in line with study conducted in Uganda[9] it is comparatively higher than the study conducted in India.[10] Likewise the study demonstrated that 66 percent of respondents had knowledge to deliver their wife in health centers with skilled birth attendants. This finding is almost similar to study conducted in Nigeria.[11]

The study revealed that 51.8 percent of the respondents had adequate practice on BPCR. This finding is similar to the previous studies[7,13] whereas contradict with the study conducted in Ethiopia[12] which is comparatively lower (29%). This might be due to different socio-demographic status and policies of Nepal that have been continuously focusing on the practice of BPCR.

The study revealed that 43.7 percent of respondents had prepared at least one of the components of BPCR which is similar to the findings of study conducted by study.[16] However only 1.3 percent of respondents had prepared all the seven components of BPCR which is parallel with the study conducted in Rural Tanzania.[16] This difference was due to inadequate awareness about the components of BPCR.

Ninety nine percent of the respondents had prepared funds for emergency in the present study which is similar with the studies.[12,17] The present finding is comparatively higher than findings of previous studies. [5,15,16] Only 1.3 percent of the respondents had prepared and planned for all the components of BPCR. Lower preparation of the components of BPCR is explained by study[16] as lack of awareness on components of BPCR.

This study found that there was statistically significant association between knowledge and practice of respondents on BPCR. The present finding is similar to the study[18] where association between knowledge and practice was observed.

Factors affecting practice of husband involvement was analyzed using bivariate logistic regression where respondents of age above 31 years were 2 times (OR=2.348; 95%CI: 1.371-4.019) more likely to have adequate practice on BPCR. This finding is parallel with the study[5] however it is in contrast with the findings of study. [13] Health insurance (OR=0.155; 95%CI: 0.086-0.280) is associated with the practice of BPCR and it is similar to the findings of study[13] in which it is explained that respondents without health insurance is more likely to prepare funds than people who had done health insurance as scheme of health insurance is targeted to poor and marginalized group of population by the government. Availability of transportation to reach health facility (OR=0.155; 95% CI: 0.086-0.280) is associated with practice which is similar with the findings of study.[15]

Limitations: Non-probability sampling was used thus the results may not be generalized outside the setting.

The study was based only on verbal response of the respondents, thus the responses related to practice of BPCR may be bias.

CONCLUSION

Based on findings, this study concluded that more than half of respondents had adequate knowledge and only half of the respondents had adequate practice on BPCR. Significant association was found between knowledge and practice of husband. Furthermore, age, availability of transportation and health insurance are the factors affecting practice of husband involvement in birth preparedness and complication readiness. Thus, systems need to be put in place to ensure all husbands receive information on how to prepare for the birth of their infant including actions required when complications arise and having the funds to arrange emergency transportation to access skilled care.

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