



Research Article

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Perception of Male Partners in Understanding Obstetric Emergencies



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Abstract

Background: It is important that male members should actively participate in the maternal health domain of the community. As they cover the decision-making capacity and all the finances, they should be having awareness of obstetric danger signs. This will not only support the women but will also play a vital role in decreasing the maternal mortality rate (MMR). This study aims to assess the level of knowledge of obstetric complications among the educated class men accompanying their wives in hospital. It also includes an assessment about men's role in facilitating labor and delivery for women.

Methods: A cross sectional study was conducted where 108 recent fathers were invited through non-probability convenient sampling procedure. A structured questionnaire was used to collect socio demographic characteristics, knowledge of danger signs and arrangement for birth facilitation. Data was analyzed using bivariate and multiple logistic regression to determine factors associated with being prepared for emergency, with statistically significant level at $p < 0.05$.

Results: Among the invited men, 98% agreed to participate in the study. Nearly 90% of the husbands who participated were graduated or masters. Diabetes, hypertension are the common complications of pregnancy that were known by 50% of the men. 50.9% were familiar with Hemorrhage, which is the leading cause of mortality in our part of the world. Seizures (eclampsia fits) were known to only 50.9% of males. Knowledge of Ruptured uterus was present in only 43% of study sample. Complications least known by males were heart problems (35.2%) and jaundice (38.0%) in pregnancy. Postpartum depression was known to only 48.1% of man, which needs urgent attention and support from spouses. In terms of facilitating the companion, husbands in 78.7% cases arranged Home care, and 75.9% of men accompanied their wives to the hospital.

Conclusion: It was found that there was sub optimal perception in relation to obstetric knowledge even in educated class of the community. We need to build more innovative strategies to create awareness of potential complications related to pregnancy. Stronger counselling approaches that involve men is recommended as to utilize the presence of responsible attitude of our males, which can contributing in lowering our MMR

Introduction

A high proportion of maternal mortality is alarming in many developing nations of the world. Many of the factors contribute towards high MMR of 340 per 100 000 live births of a developing country like Pakistan [1]. Women education, poverty, health care facilities and lack of awareness are major contributing factors. Women from East Africa and similar developing nations have shown that women have inadequate knowledge of obstetric danger signs and inability to make a proper strategy [2]. A key strategy that can reduce the number of women dying from such complications is making a birth plan which constitutes at least 4 antenatal visits, when and where to deliver and making proper financial arrangements for it. In a broader aspect, it also includes

readiness to take measures in case of complications for pregnant women by their spouses and their families [3].

As men in many settings, such as South East Asia, hold the financial power in the family and influence the decision on where women should deliver and what to do in case of emergency. Women depend on their spouses for financial assistance for their reproductive health needs [4]. A study in Tanzania found out that households headed by men were associated with more home based deliveries [5]. In Pakistan data showed that high decision making power by male members was linked to low utilization of antenatal care (ANC) and delivery care services [6]. The International Conference on Population and Development in

Cairo in 1994 [7]. and the Fourth World Conference on Women, Beijing [8] pointed towards the need of involving and encouraging husbands and partners to take responsibility for their sexual and reproductive behavior advocating that they can change attitudes and practices through their position as community, religious and political leaders. However, involvement of males in reproductive and maternal health education may contribute to a reduction in preventing mortalities as reported in previous studies of under developed nations [9]. Considering this point, one may think of engaging male partners in antenatal care of women through different programs and health education surveys at an appropriate time.

Studies undertaken so far in order to assess knowledge of men in cases of emergency situations is limited. According to a study in Malawi [10], Men seek emergency care in life threatening conditions promptly eg women in active bleeding, convulsions etc. In contrast to this study from an educated society, a significant proportion of men preferred to go to traditional birth attendants and natural healers in life threatening situations [11]. Literature assesses that more effort in educating husbands and partners are needed at a community level to make them understand obstetric emergencies [12,13].

Not much studies are done in Pakistan that assessed knowledge of obstetric danger signs and birth preparedness among men. This study aimed to assess the knowledge and attitude of educated class of husbands towards obstetric emergencies by exploring their perception and behavior in the form of a questionnaire.

Materials and Methods

Study Design, Setting and Sampling

Cross sectional study was designed.108 participants were approached in clinic, urgent care services and at the time of admission at the secondary health care setup of Aga Khan University Hospital, Karachi. The hospital is located at the city center and cater middle class population of the community. The literacy rate of Karachi central district is 90% [14] and usually job class and small-scale business community resides in the area. The hospital is a busy setup where 3800 deliveries are conducted in a year. The participants were selected by non-probability convenient sampling whom after desired counselling consented and were given the questionnaires.

Data Collection

Data was collected on a structured pre tested questionnaire by the primary investigator herself. In order to maintain the validity of the questionnaire it was designed by an experienced public health professional and approved by the qualified research instructor of the department. The questionnaire was inspired by John Hopkins program for international education in Gynecology and Obstetrics (JHPIEGO) [15]. The questionnaire included questions related to socio demographic characteristics such as age, level of education

and occupation of both partners. Employment status of the husband was also asked. Furthermore, questions on knowledge of danger signs during pregnancy, Intrapartum and postpartum period were included. The participants was asked to mention any danger signs during pregnancy which included: excessive nausea and vomiting even after three months of pregnancy, High blood pressure in pregnancy, Diabetes in pregnancy, Vaginal bleeding ,heart problems and jaundice in pregnancy, seizures and blood loss in pregnancy.

In the intrapartum period danger signs included: Problems in delivery of baby, blood loss, seizures, prolonged labor, fetal distress and need of emergency cesarean sections. For the postpartum period, danger signs were excessive blood loss, fever, depression, incontinence and voiding problems, perineal tears. Knowledge of at least one obstetric danger sign in each period was coded as Yes or No. Partners were assessed by asking their knowledge about the need of emergency cesarean section, if they arranged a birth companion for delivery, looked after the children at home, accompanied wife during the last month of pregnancy, and was available at the time of emergency. They were also asked that they were invited by the attending clinician in the clinic or not during last visits of pregnancy so as to make an idea about the clinicians attitude of giving importance to male partners or not. The participants were helped and their queries were explained in relation to the questions asked.

Data Analysis

The Data was coded, entered into a database and statistical analysis was performed using SPSS version 18.Multivariate logistic regression analysis was used.

Ethical Statement

ERC department of the University (ERC no. 2018-0481-607) approved the study. The participants were informed about their right to stop the interview at any time if they wished. They were informed that their names will not be disclosed and questionnaires would be kept in a safe place to ensure the confidentiality of the information provided. Before taking part in the interview, the participant signed or thumb print the consent form.

Results

Average age of pregnant women in study sample was 27.63 (SD 4.1) years and mean age of husbands were 31.1 (SD 4.4) years. More than half of the sample (59.3%) was nulliparous, 33.3% had 1-2 deliveries and rest had more than two deliveries in the past. Most of the women were housewives (72.2%) and 84.3% of the women has received baccalaureate and masters' level education. Nearly 90% of the husbands were graduates or has received masters' degree (Table 1).

Excessive vomiting after 3 months of pregnancy, high blood pressure, diabetes were the common complications during

pregnancy that were known by at least half of the men. Known complications after child birth include difficulty in child delivery (61.1%) and excessive blood loss (50.9%). Complications least

known by the number of men were heart problems (35.2%) and jaundice (38.0) during pregnancy and perineal tears (37.0%) after delivery (Table 2).

Table 1: Baseline characteristics of study participants.

Variable	Frequency (%) Mean ± SD N=108
Age in years of pregnant women	27.63±4.1
Age in years of spouse of pregnant women	31.1±4.4
Parity:	
0	64 (59.3)
1	19 (17.6)
2	17 (15.7)
>2	8 (7.4)
Pregnant women's education:	
Less than graduate	12 (11.1)
Graduate	36 (33.4)
Masters	59 (54.6)
Others	1 (0.9)
Spouse education:	
Less than graduate	8 (7.4)
Graduate	30 (27.7)
Masters	69 (63.8)
Others	1 (0.9)

Table 2: Knowledge about complications during pregnancy and child birth.

Excessive Vomiting after 3 Months of Pregnancy	
Yes	75 68.8
No	33 30.3
High Blood Pressure during pregnancy	
Yes	55 50.5
No	53 48.6
Diabetes in pregnancy	
Yes	59 54.2
No	49 45.8
Bleeding in pregnancy	
Yes	47 43.5
No	61 56.5
Heart problems in pregnancy	
Yes	38 35.2
No	70 64.8
Jaundice in pregnancy	
Yes	41 38.0
No	67 62.0

Seizures	
Yes	44 40.7
No	64 59.3
Blood loss greater than 1 liter	
Yes	55 50.9
No	53 49.1
High grade fever	
Yes	46 42.6
No	62 57.4
Knowledge about Complications after Child Birth	
Problems in delivery of baby	
Yes	66 61.1
No	42 38.9
Rupture of uterus	
Yes	47 43.5
No	61 56.5
Excessive blood loss	
Yes	55 50.9
No	53 49.1
Perineal tears	
Yes	40 37.0
No	68 63.0
Incontinence and voiding problems	
Yes	50 46.3
No	58 53.7
Depression	
Yes	52 48.1
No	56 51.9
Fever	
Yes	49 45.4
No	59 54.6

In our sample men were actively supporting their spouse around childbirth. They supported spouses through arranging birth companion (78.7%), taking care of children (74.15) and accompanied wife to the hospital for delivery (75.9%) (Table 3).

As half of our sampled participants received health education we compared their knowledge regarding the complications of pregnancy and child birth with those who has not received it. It was found that there was no statistically significant difference between the knowledge of those who attended the session vs those who did not. It was found that less than half of the men who attended health education were aware about the important and serious complications like seizures (41.7%), excessive blood loss(51.7%) and postpartum depression (45.0%) (Table 4).

Discussion

The male population in Pakistan is usually hesitant regarding

pregnancy and labor issues, despite being from the educated part of the community. This was similar to a study done in rural Tanzania except the fact that our group of male partners was more educated [16]. Our study sample had almost half men who had previously supported their spouses for antenatal care, and had gone through the process of becoming fathers before. Despite that, they were found deficient in knowledge that can lead to life threatening problems. This finding is in contrast to Kenyan rural men who were found to have a high awareness of obstetric danger signs [17]. As an unexpected finding, there was no association between knowledge of danger signs during delivery and postpartum with being well prepared, but association was observed with knowledge during pregnancy. Previous studies on knowledge of danger signs among women in Uganda showed there was association between danger signs during pregnancy and the postpartum period with birth preparedness. However,

there was no association between knowledge of danger signs during childbirth with birth preparedness [18]. Similarly, studies in Guinea and Ethiopia among women have also shown that knowledge on obstetric complication does not translate into being well prepared [19,20]. Eclampsia is already an ignored entity and is a third most important cause of MMR in our part of

the world [21]. Less than half of the partners were aware about the potential cause of death due to seizures. As hemorrhage is the leading cause of MMR in our part of the world [22], our sample showed awareness in only half of them. Interventions are required to be done in order to make our husbands aware regarding this potential avoidable hazard [23].

Table 3: Men's support during child birth.

Variables	Frequency (%) N=108
Understanding Regarding Cesarean Section	
agree and understand	55 50.9
agreed but not clear	43 39.8
not agreed and forced	7 6.5
refuse and complain	3 2.8
Arranged A Birth Companion for Delivery	
Yes	85 78.7
No	23 21.3
Looked After Children at Home	
Yes	80 74.1
No	28 25.9
Accompanied Wife for ANC During Last Month of Pregnancy	
Yes	
No	73 67.6
	35 32.4
Doctor Invited You to The Pregnancy Care and Management	
Yes	
No	57 52.8
	51 47.2
Accompanied Wife to Hospital for Delivery	
Yes	82 75.9
No	26 24.1
Was Available at The Time of Emergency	
Yes	96 88.9
No	12 11.1

Table 4: Comparing knowledge regarding pregnancy and child birth complications between men who received health education session and those who did not.

	Yes No	Count	Had Health Education on Pregnancy and Childbirth Complications		Total
			Count	%	
Excessive blood loss	yes	Count	31	24	55
		% within Had Health Education on pregnancy and childbirth complications	51.7%	50.0%	50.9%
	no	Count	29	24	53
		% within Had Health Education on pregnancy and childbirth complications	48.3%	50.0%	49.1%

Total		Count	60	48	108
		% within Had Health Education on pregnancy and childbirth complications	100.0%	100.0%	100.0%

Yes No		Had Health Education on Pregnancy and Childbirth Complications		Total	
		Count	%		
depression	yes	Count	27	25	52
		% within Had Health Education on pregnancy and childbirth complications	45.0%	52.1%	48.1%
	no	Count	33	23	56
		% within Had Health Education on pregnancy and childbirth complications	55.0%	47.9%	51.9%
Total		Count	60	48	108
		% within Had Health Education on pregnancy and childbirth complications	100.0%	100.0%	100.0%

Yes No		Had Health Education on pregnancy and childbirth complications		Total	
		Count	%		
Seizures	yes	Count	25	19	44
		% within Had Health Education on pregnancy and childbirth complications	41.70%	39.60%	40.70%
	no	Count	35	29	64
		% within Had Health Education on pregnancy and childbirth complications	58.30%	60.40%	59.30%
Total		Count	60	48	108
		% within Had Health Education on pregnancy and childbirth complications	100.00%	100.00%	100.00%

According to RCOG, 1 in 13 women with a myocardial disease will die in pregnancy [24]. Although the incidence of other valvular diseases is low all over the world around 1% but the knowledge of unfamiliar diseases is vital as 20.5% of the MMR is due to cardiac deaths [25]. Our study population showed sub-optimal knowledge regarding cardiac diseases and were unaware regarding their existence. Ruptured uterus is a catastrophic event

and is associated with a high maternal and fetal mortality [26]. In WHO systemic review of uterine rupture the incidence of rupture in general population is 5.3/10,000 birth [27]. Proper health education is recommended strategy to avoid this preventable morbidity [28] which was present in 43% of our study sample. Not much study are found in literature to create awareness regarding this high mortality among husbands [29,30].

Postpartum depression needs immediate attention and support of partners. This condition may have serious consequences on relational (e.g., poor collaborate well-being and relationship difficulties), parenting (e.g., disturbed mother-child interactions) and infant outcomes (e.g., impairments in cognitive and psychosocial development) [31]. Despite the increasing prevalence rate of 19.2 % [32] males of our sample population showed suboptimal awareness. Similar studies are found in literature where awareness is not existent regarding this ignored aspect of motherhood [33,34].

Antenatal classes seem to improve couple's knowledge and competence. This may provide a defense against the tendency to over medicalize pregnancy and childbirth [29]. Our facility is providing Antenatal classes so half of our sampled population received them. Their knowledge came less sufficient and was comparable to a study published in the journal of perinatal education where fathers are less familiar with family related services [30].

Our sample population despite being the educated class showed less compliance towards understanding the need of emergency cesarean section. However, our center provides relevant counselling and strict reasoning before taking the patient to theatre but major contributing factors towards this were the inevitable fear related to major surgery, financial constraints and lack of trust on the attending doctor created by the colleagues, peers and friends based on their own personal experiences. This was contrary to a study conducted in Japan where males remained calm and understood when the decision was made despite having feelings of anxiety and powerlessness.

In our sample, men were actively supporting their spouses around childbirth. More than three forth of the sample was available at the time of emergency for their wives. This was favorable as study from Malawi has shown that males if present around delivery can play a very important part if they are encouraged to attend services, so together with their spouses help in reducing maternal mortality. This is also supported by the fact that if man has previous experience of a health facility they are encouraged to attend antenatal care services and can be treated as partners so together with their spouses they obtain information and can help in reducing maternal mortality. Studies has also supported that women if accompanied by husband had better coping with the painful process of labor which may contribute in reducing MMR.

Conclusion

It was found that suboptimal knowledge and perception exist in relation to obstetric emergencies even in educated class of men. We need to build more innovative strategies to create awareness

of potential complications related to pregnancy. Stronger counselling approach during antenatal care services that involve men together with partners is recommended. If we utilize the responsible attitude in our educated class of men judiciously, we may contribute in reducing MMR of our region.

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