

# Womens' Perceptions regarding Obstetric Complications and Care in a Poor Fishing Community in Karachi

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## Abstract

**Objective:** To assess the knowledge of women about obstetric complications and care.

**Methods:** The study was conducted in a remote coastal community in Karachi in 1999, where the Department of Community Health Sciences of Aga Khan University is operating its primary health care project since 1996. The information was collected using a structured questionnaire, interviewing a representative sample of 329 married-women of reproductive age, selected systematically from the community.

**Results:** The mean age of the respondents was 29 years. On average they were married for 11 years and had four living children. Almost half of them had no antenatal care in their last pregnancy and 75% delivered at home. The findings indicate a poor knowledge of common and serious pregnancy related complications based on their perception related to danger signs. Five percent of the women perceived absent/decreased fetal movement as a danger sign of pregnancy. Other reported danger signs included premature uterine contraction by 3%, premature rupture of membranes by 3%, convulsions by 13%, obstructed labor by 23% and bleeding by 39%. Moreover, the women's perception regarding obstetric care suggests that unsafe practices prevail: 86% of women thought that a case of ante-partum hemorrhage should be examined internally and 50% thought that no precaution is required to sterilize the instrument for cuffing the cord.

**Conclusion:** There is a clear need to create awareness regarding obstetric complications through a targeted community based health educational intervention aiming to promote early recognition of the obstetric emergency at the household level and also to create a demand of safe obstetric practices (JPMA 52:148;2002).

## Introduction

Global attention to maternal health and safe motherhood has grown significantly in the past decade. Reproductive health problems account for more than a third of the total burden of disease of women aged 14-44, compared with only 12% for men. The WHO estimates that half a million women die annually from pregnancy-related causes and that 99% of these deaths occur in developing countries<sup>1</sup>. In Pakistan, the recently reported maternal mortality ratio (MMR) is 340/100,000 live births as compared to 13/100,000 for developed countries<sup>2</sup>. The Maternal Mortality Survey in three provinces of Pakistan conducted by The Aga Khan University had indicated a range of MMR from as low as 281 in Karachi to 673 in Khuzdar, Balochistan<sup>3</sup>. This gap in pregnancy related deaths between developing and developed countries signify the disparity in human development index. The huge toll of morbidity resulting from neglected or inadequately managed obstetric complications is far greater than mortality, often leading to grave consequences like formation of various fistulae, reproductive tract infection and infertility<sup>4</sup>.

An overwhelming majority of maternal mortality and morbidity are avoidable through timely access to

basic maternity care supported by adequate emergency obstetric care; for which early recognition of the problem at the family level is crucial. There is a cluster of socio-cultural, economic, technical and administrative barriers preventing or delaying timely access to appropriate health care, leading to her death<sup>5</sup>. In this context, three level of delays in seeking emergency obstetric care are identified: delay in decision making at the family level; the delay in reaching an appropriate obstetric care facility and the delay in receiving appropriate care at the facility<sup>6</sup>. The dearth of information in Pakistan highlights the delayed referral as a key risk factor for maternal deaths in urban Karachi. Often, the severity of the women's condition is unrecognized by the family members that leads to insufficient care and delays in referral to an appropriate health facility<sup>7,8</sup>. Furthermore, it is often customary for a woman in a developing country to obtain permission from her husband or some other male relative to go to a hospital<sup>8</sup>. Delay in acquiring permission may even lead to her death. The lack of emergency transport is undoubtedly the major constraint to accessibility, mostly in the rural areas<sup>9</sup>. However, the existing research evidence indicates that family and community play crucial role in this regard and can significantly reduce the burden of morbidity and mortality by early recognition of the emergency, taking prompt action and timely referral to appropriate care. Unless vigorous, scientifically informed action is taken, more women may die from causes related to pregnancy, childbirth and unsafe abortion. The present study sought to assess women's knowledge regarding obstetric complications and care and the feasibility of transferring a woman to obstetric emergency hospital. This is an attempt to assess the potential role of these factors in delaying obstetric emergency referral. The study does not relate to the institutional delay in providing services or the quality of these services.

## **Subjects and Methods**

### **Study setting**

This was a cross sectional survey conducted in 1999 in Rehri Goth, which is one of the field sites where the Department of Community Health Sciences (CHS) of the Aga Khan University (AKU) is implementing health and developmental activities since 1996, through its Urban Health Project (UHP). Rehri Goth is one of the oldest squatter settlements of Karachi, near the coast. This is a remote area, in terms of access to secondary and tertiary health care. The total population within the catchment area is 12,000, predominantly Sindhi speaking. The major occupation of the residents is fishing. It was selected as the site for this study for having poor maternal health indicators, as reported in the UHP baseline health and demographic survey conducted in 1996. There were 6 maternal deaths reported during 1997 and 1998. Considering a crude birth rate of 40 per thousand, this figure is much higher than the officially reported maternal mortality ratio of 340 per hundred thousand live births. Furthermore, the community itself had identified obstetric emergency and its management as a major health problem and they wanted to learn about the existing situation in their community.

### **Study subjects and Data collection**

The information was collected using a pretested semi-structured questionnaire from a representative sample of 329 currently married women of reproductive age. Assuming to find at least one such woman in each of the household, a proportionate sample of household was selected through systematic sampling procedure, from each of the sixteen sectors of Rehri Goth, so as to make it representative of all ethnic and socio-economic groups. Once the household was identified, the subject who met the selection criteria within each household was selected for interview. If there were two or more women in the household who met the criteria, one woman was selected randomly.

As the women can report symptoms and not the medical condition per se, knowledge regarding obstetric complication is assessed by asking their perception about danger signs! symptoms during antenatal, natal and post natal periods separately. The questions were pre-coded and un-prompted. Following necessary checks and editing,

completed questionnaires were entered in Epi Info for data management and analysis.

## Results

### Baseline characteristics of the Study Population

Interviews were completed for a representative sample of 329 women. The mean age was 29 years, most were married for 11 years and had four living children on average. They were mostly housewives, 75% had no formal education and reported a median household income of Rs. 3000. In addition to these background characteristics only 4% women reported their husbands to be unemployed whereas majority of the men were engaged in the fishing (61%) and labor force (21%). On an average, 9 persons resided in one house. Twenty percent of the women reported to be pregnant, at the time of interview.

### Perceptions and Practices regarding Antenatal Care

\*34 women did not have a pregnancy until the time of reporting.

Utilisation of antenatal care in the last pregnancy is presented in Table 2.

**Table 1. Utilization of ANC during last pregnancy.**

	% Reported (n = 295*)
Utilization of ANC	52
ANC care provider (n = 152)	
TBA	34
LHV	7
Mid Wife	21
Nurse	19
Doctor	19
Tetanus toxoid during pregnancy	50
Iron supplementation during pregnancy	50

\*34 women did not have a pregnancy until the time of reporting .

**Table 2. Place of delivery and birth attendant in the last delivery.**

	% Reported (n = 285*)
<b>Place of last delivery:</b>	
Home	75
Health Center	1
Govt. hospital	6
Private hospital	7
Private Clinic	11
<b>Birth attendant:</b>	
Neighbor /relative	8
TBA	60
Mid wife/LHV/ Nurse	23
Doctor	9

Of those who reported receiving antenatal care during their most recent pregnancy, the most common care provider was a traditional birth attendant (34%). Regarding vaccination against tetanus, 50% reported receiving it in any of the pregnancy. Of those who did not report receiving it, 57% were not aware of its need while 23% did not receive it due to fear of its side effects.

Women's perceptions regarding clinically important danger signs during ante-natal period were bleeding (39%), premature rupture of membrane (3%), absent or decreased fetal movement (5%), premature uterine contraction (3%) and convulsions (7%). When inquired about the management of women with antepartum hemorrhage, 86% considered an internal examination by the care provider should be carried out. In case of antepartum hemorrhage 66% and 20% respectively, considered that women should

\* 44 women did not reach the place of delivery until the time of birth.

be taken to a hospital or to a health center while 9% considered that care should be provided at home.

#### **Perceptions and Practices regarding Natal Care**

During their last delivery, 75% delivered at home and were mostly assisted by TBAs (Table 3).

**Table 3. Percentage distribution of knowledge regarding obstetric complications.**

Complications	% Reported (n= 329)
<b>Antenatal</b>	
Spotting/ bleeding	39
Leaking membrane	3
Decreased/absent fetal movement	5
Premature uterine contraction	3
Convulsions	13
<b>Natal</b>	
Excessive bleeding	35
Cervix not dilating	5
Presenting part not descending	3
Labor >18 hours (primigravida)	30
Labor > 12 hours (multigravida)	20
<b>Postpartum</b>	
Excessive bleeding	24
Retained placental piece	3
Severe abdominal pain	64
Fever	47
Engorgement of breast	4

The five clinically important danger signs during labor as reported by the women were excessive bleeding (35%), obstructed labor (as indicated by decrease in frequency/intensity of labor contractions 30%, presenting part not descending 3% and lack of cervical dilatation 5%), decreased fetal movement (8%), meconium stained liquor (1%) and convulsion (13%). Regarding safe duration of labor for spontaneous delivery, about 30% of the women considered examining a woman internally, 40% considered that care provider should wear gloves and 34% considered that the care provider should wash hands (Table 5).

**Table 4. Women's perceptions regarding selected obstetric care indicators.**

<b>Obstetric care Indicators</b>	<b>% Reported (n=329)</b>
<b>Internal examination in case of ante partum hemorrhage was considered appropriate</b>	<b>86</b>
<b>Precaution while examining a woman internally:</b>	
<b>Washing of hands with soap</b>	
Reported	34
Not reported	66
<b>Wearing of gloves</b>	
Reported	40
Not reported	60
<b>Instrument for cutting the cord</b>	
Blade	72
Knife	2
Scissors	25
Don't know	3
<b>How should the instrument for cutting cord be prepared?</b>	
Boiled	25
Soaked in dettol	24
No preparation required	16
Don't know	35

**Table 5. Feasibility of Obstetric Care Utilization.**

	% Reported (n=329)
<b>Type of transport used to transfer a woman to the emergency hospital</b>	
Pick-up	75
Ambulance	13
Don't know	10
Private car	2
<b>Key decision maker to take the woman to the hospital</b>	
Husband	59
Father - in law	17
Self	12
Mother in law	6
Others	5
<b>Can you decide on your own to visit a hospital for your health care</b>	
Yes	65
No	35
<b>Average time required to reach the nearest obstetric emergency hospital = 60 min</b>	
<b>Average cost incurred in transportation = Rs. 400</b>	

When inquired about the management of a woman with ruptured membranes for more than 2 days, the responses were referral to hospital by 65%, referral to Dai by 14%, management at home by 12%, referral to health center by 9% and hastening of the labor by intravenous injection/drip by 7% of the

women.

When inquired about their opinion for hospital delivery, 18% said that they would not like to deliver in a hospital, even if advised by their care providers. High cost of hospital delivery (41%) was the most cited reason for not preferring hospital delivery followed by rude attitude of hospital staff (9%), family disapproval (5%), lack of privacy (4%) and distance (2%).

Blade (72%), scissors (25%) and knife (2.4%) were considered to be appropriate instruments to cut the baby's cord. Preparation of such instruments for cord cutting was considered necessary by boiling by 26% of women and by soaking in disinfectant by 25% of the respondents while 17% considered no such preparation is required. To hasten the cord drying, 81% felt to apply oil, 25% cicatrin powder, 24% talcum powder and 17% surma/kajal.

### **Perceptions and Practices regarding Postnatal Care**

Majority of respondents (47%) considered that the newborn should be breast fed immediately after birth while 32% were of the opinion that newborn should be breast fed within 24 hours after delivery and 17% responded that baby should be breast fed 24 hours after delivery. Regarding the knowledge about effectiveness of colostrum for the baby, 59% were aware of its benefits and were of the opinion that it should be given to the baby.

The three common danger signs during postpartum period as perceived by respondents were severe abdominal pain (64%), fever (47%) and excessive bleeding postpartum (24%). Regarding management of the women who bleed excessively after delivery, 61% suggested referral to hospital, 20% management at home and 16% referral to health center/clinic. Similar pattern of responses was obtained for management of women with postpartum fever (hospital 53%, home 27% and health center 10%).

### **Feasibility of transport to Hospital in Obstetric Emergency**

On an average, 50% of the respondents thought that it generally takes 60 minutes to reach to the nearest emergency hospital. At times of obstetric emergency, 75% are transferred to a hospital by pickup/datsun and 13% on feet. On an average, it costs 400 rupees to reach a hospital. The majority (38%) reported referral to Jinnah Hospital Karachi, in times of emergency. Fifty nine percent reported that they require permission from husband and 17% from father-in-law to be taken to the hospital, while 12% said that they could take self-decision, 65% could decide to visit the hospital/health center, on their own, in case, if there was nobody at home.

## **Discussion**

The study indicates poor knowledge of obstetric complications and appropriate care among women of childbearing age in Rehri Goth, based on their perceptions about related danger signs. The findings relate to the first level of delay - delay that occurs at the household level. It includes factors such as low level of awareness about the danger signs of pregnancy and labor, and the cultural tradition of seeking permission from a male member (or to be accompanied by a male member) before care could be sought, prevails in this community. These factors could delay access to emergency obstetric care to such an extent as to jeopardize the life of pregnant women as reported in other studies. Delayed decision making and access to health care contributed largely to the deaths of 150 pregnant or recently delivered women who were brought dead to most of these women resided within a distance of 5-8 km from this hospital. Results from the Safe Motherhood Project of the Department of Community Health Sciences of the Aga Khan University, reports a low level of awareness about obstetric complications among men and women residing in the catchment population of JPMC. This interrelationship of lack of perception of severity of condition by the family, delaying the access to appropriate care is well demonstrated in some other studies<sup>8</sup>. Hence, there is a clear need to create such awareness among women and other family members to foster early recognition of the overt complication hence breaking

the chain of delay at the very first level.

The findings further highlight that lack of awareness about obstetric danger signs is compounded by unsafe practices. Most of the women are consulting local TBAs for pregnancy and childbirth. The TBAs are the source of information and inspiration to the community women. Despite training unsafe practices persists among the TBAs, however a final such comment cannot be made about it given the scope of the study.. This interdependent nature of knowledge and practice should guide intervention programs. Moreover, a demand of right practices could be raised by creating awareness among beneficiaries about complications arising due to unsafe practices.

### **Acknowledgements**

We acknowledge Drs. Rozina Noorali, Asma Siddiqi and Nazish Siddiqi for their contribution in the conceptualization and execution of the study. We further acknowledge the conceptual and technical input provided by Drs. Fariyal F. Fikree and Asma Fozia Qureshi. We thank The Aga Khan Foundation (AKF), for financially supporting the study through its Urban Health Project (UHP) in selected squatter settlements in Karachi.

### **References**

- 1.Murray T. Huge worldwide toll of maternal deaths largely underreported. *Med. Post*, March 05, 1996.
- 2.UNICEF; 1998, Statistical tables, State of the world's children, Oxford University Press, 1998;pp.1 20-21.
- 3.Fikree F. A community-based nested case-control study of maternal mortality. *Int. J. Gynaec. Obstet.*, 1994. 47; 247-55.
- 4.IIasan Ti, .Baqai R, Jafarey SN, et al, Maternal morbidity in the department of obstetrics and gynaecology; *J. Pak. Med. Assoc.*, 1991 ;4 1:223-25.
- 5.Network. Feb. 1994. Access to care saves lives.Thaddeus S. Maine D. Too far to walk: maternal mortality in context. *Soc. Sci. Med.*, 1994;38:10911110.
- 7.Jafarey SN, Korejo R. Mothers brought dead: an enquiry into causes on delay. *Soc. Sei. Med.*, 1993; 36: 37 1-72.
- 8.Fawcus S. A Community - based investigation of avoidable factors for maternal mortality in Zimbabwe. *Stud. Fain. Planning*, 1996; 6: 3 19-27.
- 9.Fawcus S. A Community-based investigation of maternal mortality from obstetric hacorrhage in rural Zimbabwe. *Trop. Doct.*, 1997; 27: 159-63.