Original Article

Pregnancy complications and health seeking behavior of women in a selected rural area of Bangladesh

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Abstract

Objectives : This study was carried out to explore the various types of complication during pregnancy, during delivery and after delivery and also the care seeking behavior for those complications.

Methods : This descriptive study was carried out over a period of May to August 2012. Data were collected among 112 respondents who had delivered child within last 24 months and were selected purposively.

Results : Majority (82.1%) of the respondents belongs to the age group of 20-30 years and with a mean (±SD) of 25.05 (± 4.33) years. Out of 112 respondents 86.6% husbands were the main decision maker of family. Sixty three percent respondents had received antenatal checkup from different health facilities and highest in Govt. hospital (47.8%). About 30% mother faced complication during their pregnancy period. Commonest complications during pregnancy period were excessive vomiting, severe headache and blurring of vision (66.7%). Out of the complicated mother 70% sought care in time. A total 13.4% mothers faced complications like obstructed labour (33.3%) , Prolonged labour (26.7%), Eclampsia (26.7%), Abnormal position (13.3%) during delivery. After delivery 12.5% of total respondents developed complications like high fever with foul smelling discharge (85.7%). Among the respondents who were not received antenatal care developed more complications during pregnancy and delivery period ($P<0.05$). In this study educational status and monthly income of a family is statistically significant in health seeking behavior for pregnancy complications ($P<0.05$). So care seeking behavior is closely related with pregnancy complication.

Conclusion : In countries, many mothers experience serious health problems during pregnancy, delivery and the postnatal period that require professional care, but they often remain unaware of the serious nature of their illness. Timely and properly seeking treatment could help to reduce maternal mortality and morbidity.

Key words : Complication, Health seeking behavior, Antenatal care.

Introduction

Pregnancy is a normal, healthy state that most women desire at some point in their lives. Yet while pregnancy and childbirth should be an occasion for rejoicing, life-threatening complications may occur, which if inappropriately managed, could lead to maternal death or disability. Pregnancy-related complications are a leading cause of death of the women of reproductive ages (15–49) in developing countries[1]. Every year over half a million women die during pregnancy and following childbirth 174,000 of these in the South-East Asia (SEA) Region of WHO[2]. This alarming disparity represents one of the greatest indicators of the gap between rich and poor in our world today[3].

Ante-natal care (ANC) services indirectly saves the lives of mothers and babies by promoting and establishing good health before childbirth and the early post-natal period.

It often presents the first contact opportunities for a pregnant woman to connect with health services, thus offering an entry point for integrated care, promoting healthy home practices, influencing care-seeking behavior and linking women with pregnancy complications to a referral system; thus impacting positively on maternal and fetal health[4]. Currently, 71% of women worldwide utilizes ANC services; and in industrialized countries 95%, South Asia 54% and Sub-Saharan Africa 64%. Proper utilization of maternal health services and child healthcare improves survival

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and quality of life for mothers and children, and reduces maternal mortality[5-11].

Complications of pregnancy and childbirth cause more deaths and disability than any other reproductive health problems. In a recent national survey on maternal health in Bangladesh, the large number of women reported complications during pregnancy and childbirth, but few reported that they sought care from medically trained providers in health facilities, even if they perceived the complication to be life-threatening[12]. In Bangladesh, four out of five women experience at least one illness during the index pregnancy and puerperium[13]. At least one morbidity was suffered by 57% of women during pregnancy,[14] these morbidities included bleeding, fits/convulsion, pre-eclampsia, fever, excessive vomiting, urinary problem, varicose veins, hepatitis, rheumatic heart diseases, malaria and tuberculosis.

Most of the pregnancy-related diseases and 90% of maternal deaths could be prevented by proper medical care at different stages of child bearing age[15,16]. According to the Bangladesh Maternal Health Services and Maternal Mortality Survey (National Institute of Population Research and Training 2001), only 48% of mothers receive antenatal care during pregnancy. Despite the government's commitment to provide health facilities on people's doorsteps through innovative approaches in Bangladesh, the utilization of health services during the antenatal, pregnancy and postnatal periods is still far below any acceptable standard[17,18]. DGHS health bulletin, 2009 published about ANC that at least one ante natal care is now 51.7%[19]. The general pattern of healthcare-seeking for female diseases reveals that more than two-thirds of rural women in Bangladesh do not receive any antenatal care during pregnancy. Study was reported that the respondents perceived fits/convulsions and hypertension as serious ante partum morbidities. Three-quarters of those suffering from these conditions had perceived them as serious and sought care[14].

The number of deliveries in health facilities constituted of 15 % in Bangladesh[20]. So, for Bangladesh one of the major challenges for the public health sector is to identify the factors associated with under-utilization of the available health services, and to find ways to reach those groups who need maternal health services most. Many empirical studies of preventive and curative services have found that the use of health services is related to the availability, quality and cost of the services, as well as social structure, health beliefs and the personal characteristics of the users[21-24].

Methodology :

This was a population based cross sectional descriptive study conducted from May to August 2012 in Dasmina upazilla at Patuakhali to determine the complications of pregnancy and health seeking behavior of pregnant rural women in Bangladesh.

Total 112 women who delivered within last 24 months were included in the study population. Convenient sampling technique was adopted to select the sample. Data were collected by face to face interview using a semi-structured, pre-tested questionnaire which had three parts consisting of socio-demographic characteristics, pregnancy related and care seeking behavior related variables.

Results and observations:

Table 1: Socio demographic characteristics of the respondents

Socioeconomic characteristics of the respondents	Frequency	Percent (%)
Age <20 years	05	4.5
20-30 years	92	82.1
>30 years	15	13.4
Mean=25.05yrs, SD (+_) 4.33		
Education Illiterate	24	21.4
Primary	82	73.2
Secondary	06	5.7
Occupation (Husband)		
Day laborer	43	38.4
Farmer	17	15.2
Service holder	21	18.8
Business	20	17.8
Others 11	9.8	
Monthly family income		
Taka <5000	52	46.4
Taka 5000-10000	52	46.4
Taka >10000	08	7.2
Mean=5500,SD=(±)3063.15 TK		
Decision makers regarding health seeking affairs		
Husband	97	86.6
Father/Mother in law	12	10.7
Others 03	2.7	

Table 2: Distribution of respondents regarding their antenatal care

71(63.4%) respondent received ante natal care from different health facilities. Lack of money and prohibition from family members were the prevalent reason those who did went for seeking ANC.

	Frequency	Percentage
ANC(n=112)		
Done	71	63.4
Not done	41	36.6
Number of ANC(n=71)		
< 4 times	17	23.9
4 times	31	43.7
> 4 times	23	32.4
Place of ANC(n=71)		
FWC	19	26.8
Govt. hospital	34	47.8
Private hospital	12	16.9
Satellite clinic	06	8.5
Reason for not seeking ANC		
No money	26	63.4
Prohibition from family member	15	36.6

Table 3: Distribution of the respondents by type of complications

During Pregnancy(n= 33)			During Delivery(n=15)			After Delivery(n=14)		
Excessive vomiting	17	51.5%	Obstructed labour	05	3 3.3%	Puerperial sepsis	12	5.7%
Swelling of leg/face	0	12.1%	Prolonged labour	04	26.7%	PPH	02	14.28%
Anaemia	05	15.1%	Eclampsia	04	26.7%			
Burning micturation	04	12.1%	Abnormal position	02	13.3%			
Convulsion	03	09%						

Table 4: Distribution of treatment seeking behaviors among the respondents Out of 33 respondent who faced complication during their pregnancy 23 (70%) sought treatment and 10 (30%) didn't take any treatment. Among 15 respondents who had faced complications during delivery period all sought treatment.

	During pregnancy		During delivery		After delivery	
	Frequency	Percentage	Frequency	Percentage	Frequency	Percentage
Sought treatment	n=33	%	n=15	%	n=14	%
Yes	23	69.7	15	100.0	14	100.0
No	10	30.3	00	0.0	00	0.0
Place of treatment (n=23)						
Govt. Hospital	12	52.2	10	66.7	03	21.4
Private Clinic	11	47.8	03	20.0	05	35.7
At home	-	-	02	13.3	02	14.3
Others(Satellite clinic, Pharmacy)	-	-	-	-	04	28.6
Care provider (n=23)						
Doctor	19	82.6	12	80.0	08	57.1
Nurse/Paramedics	04	17.4	01	6.7	04	28.6
TBA/FWV	-	-	02	13.3	02	14.3

Table 5: Relationship of complications of pregnancy with ANC

Complication during pregnancy was significantly more among respondents, who didn't attend ANC (P<.001). Complication during delivery was also more among those didn't attend ANC (P<.05). However, Post delivery complication didn't show any relation with ANC.

	ANTENATAL CARE		
	Yes (n=71)	No (n=41)	Chi sq and P value
Complications during pregnancy period			
Yes	13 (18.3 %)	20 (48.8 %)	$X^2 = 11.6$
No	58 (81.7 %)	21 (51.2 %)	P = 0.001*
Complications during delivery period			
Yes	06 (8.5 %)	09 (22.0 %)	$X^2 = 4.01$
No	65 (91.5 %)	32 (78.0 %)	P = 0.043*
Complications after delivery			
Yes	07 (9.9 %)	07 (17.1 %)	$X^2 = 1.2$
No	64 (90.1 %)	34 (82.9 %)	P = 0.27

Table 6: Relationship of health seeking behavior for pregnancy complications with educational status.

Association between educational status and treatment seeking behavior (P<0.05) and place of treatment were significant (P<0.01).

	Educational Status				Chi sq P value
	Illiterate	Primary	Secondary	HSC& above	
Sought treatment for pregnancy complication					
Yes	02 (25.0%)	05 (71.4%)	09 (81.8%)	07 (100%)	$X^2 = 11.4$ P = 0.01
No	06 (75.0%)	02 (28.6%)	02 (18.2%)	00 (0.0%)	
Place of treatment for pregnancy complication					
Govt. hospital	02 (100%)	04 (80.0%)	06 (66.7%)	00 (0.0%)	$X^2 = 11.8$ P = 0.008
Private clinic	00 (0.0%)	01 (2.0%)	03 (33.3%)	07 (100%)	

Table: 7 Relationship of Health seeking behaviour of complications during pregnancy with economic status.

It was seen that treatment seeking behavior during pregnancy has got no association at all with monthly family income (P>.05). But the association between place of treatment and monthly income was found significant (P<.05).

	Monthly family income			
	<5000 Tk	5000–10000 Tk	>10000 Tk	Chi sq & P Value
Seeking treatment				
Yes	06 (18.2 %)	14 (42.4 %)	03 (9.1 %)	$X^2 = 3.55$
No	06 (18.2 %)	03 (9.1 %)	01 (3.0 %)	P = 0.170
Place of treatment				
Govt. hospital	06 (26.1 %)	06 (26.1 %)	00 (0.0 %)	$X^2 = 9.26$
Private clinic	00 (0.0 %)	08 (34.8 %)	03 (13.0 %)	P = 0.010

Discussion :

Maternal health services have a potentially critical role to play in the improvement of reproductive health. In developing countries, where the prevalence of pregnancy-related morbidities is very high, maternal health services provide unique opportunities to detect and treat these diseases[9]. In the present study, an attempt has been made to describe the different complications of pregnancy and care seeking behavior in a rural setting. The study findings of age group, the educational status, occupation, monthly family income were almost similar with the findings conducted by Bangladesh demographic health survey, 1999-2000, the current occupational status of Bangladeshi population[3,25].

In the study most of the respondents had received antenatal checkup at least 4 times from health facilities like FWC, govt. hospital, satellite clinic, private hospital. The respondents, did not seek ANC were due to financial problem or prohibition from husband or other family member. DGHS health bulletin, 2009 published about ANC that at least one antenatal care visit is now 51.7%.[19] In Bangladesh, another study[26] reveals 48% women received ANC during their pregnancy period and BDHS survey found 40.3% women sought any type of antenatal care during their pregnancy[25]. In this study ANC receiving rate was relatively higher due to availability of health facilities in the study place because there is a community clinic, satellite clinic, and family welfare center and also upazilla health complex nearby.

During pregnancy, majority respondents suffered from excessive vomiting, anaemia, burning micturation and swelling of leg or face and convulsion. In the study, two thirds of the respondents who faced complication during their pregnancy sought treatment and treated in Govt. hospital or private clinic. In most of the cases treatment was given by the doctor to 19 (82.6%) respondents and was given by nurse or paramedic to 04 (17.4%) respondents. In BDHS survey[25] they found four complications during the pregnancy period. The prevalence of prolonged labour was the highest, followed by excessive bleeding, high fever/discharge and convulsions. The pattern of seeking treatment for prolonged labour, excessive bleeding and high fever/discharge were similar; roughly one-third of the women went to a health professional, between one-fifth and one-quarter to a TBA or other provider, while almost half of the subjects did not seek any help. The pattern was different for convulsions, with almost half going to a health professional, and over one-quarter either seeking out a TBA or other providers, or seeking no help. Several studies also suggested that prenatal care may protect mothers from complications due to pregnancy. In a study conducted in the Philippines, it was found that mothers with prenatal care are less likely to experience hemorrhage. Prenatal care also protects mothers from pre-eclampsia which is the most common cause of maternal mortality. Prenatal care, timely diagnosis and proper management prevent the complications of pre-eclampsia[27].

Regarding complications during last delivery among the mothers 05(33.3%) had obstructed labour, 04 (26.7%) had prolonged labour, eclampsia, and 02 (13.3%) had abnormal position of foetus. Among 15 respondents who had faced complications during their delivery period all sought treatment. Among them 10 (66.7%) went to Govt. hospital and 03 (20%) went to private clinic and 02 (13.3%) brought provider at home. Treatment was provided by the doctor to 12 (80%) respondents and by nurse/paramedic to 02 (13.3%) respondents and by TBA/FWV to 1(6.7%) respondents. During seeking treatment 53.3% did not face any problem. In another study in Bangladesh[28] the most common pattern of care seeking was bringing medicine and/or treatment to the home (67.7%).Village doctors (7.3%) and traditional birth attendants (5.3%) were most common, with few families bringing a medically trained provider to the home (3.2%).Thirty per cent of women sought care outside the home in a health facility or in a provider's office/home. Fourteen mothers experienced post delivery complications, among them 12 (85.7%) suffered from high fever with foul smelling discharge, 02(14.28%) suffered from post partum hemorrhage. After delivery, 03(21.4%) respondents went to Govt. hospital, 05(35.7%) went to private clinic, 02 (14.3%) brought provider at home and rest 04 (28.6%) got treatment from Satellite clinic or pharmacy. Treatment provided by the doctor to 08 (57.1%) respondent, by nurse/paramedic to 04 (28.6%) respondent, by TBA/FWV to 02 (14.3%) respondent.

Among the respondents who were not received antenatal care developed more complications during pregnancy period and delivery period which is statistically significant ($P<0.05$). Study in Uttar Pradesh was also found similar findings[29].

It has been well established that age plays an important role in the utilization of medical services[19]. Educational status and monthly income of a family has great impact on care seeking behavior. In this study education and monthly income of a family is statistically significant in health seeking behavior for pregnancy complications ($P<0.05$). These findings were similar in the study of Bangladesh, Haiti and Nigeria[19,30].

Conclusion :

Involvement of the community by providing assistance to the mothers in time of need of emergency care and seeking antenatal, natal and post natal care has been found to be useful in reducing maternal mortality and morbidity.

All the respondents who developed complications during and after delivery sought health care. The present study may be a useful guideline for future large scale community based study on pregnancy complication and health seeking behavior to achieve Millennium Development Goal 5.

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