



CARE SEEKING FOR DANGER SIGNS DURING POST-PARTUM PERIOD

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ABSTRACT

The aim of the study was find out the patterns to care seeking behavior for danger signs during post-partum period at Chittagong Medical College Hospital (CMCH), Jamison Maternity Hospital and Mammon Maternity Hospital Chittagong Bangladesh. The cross-sectional study was purposively selected 184 Child bearing mothers age between 15-49 years from 1st January to 31st December, 2018. Data were collected face to face by using semi structured questionnaire. Collected data were analyzed by using descriptive statistics. The mean age of the respondents was 24.23 ± 4.96 years. According to the study findings, 60.9% of the respondents developed high fever followed by above half (58.2%) of the respondents developed PPH and 32.6% of the respondents developed foul smelling lochia. Here, {97 (69.3%)} of the respondents got much effective treatment during post-partum period. Those did receive postpartum danger signs were asked about the reasons of not taking the care seek. More than 60% told that they did have any accompanying persons to go to care-providers, 52.5% considered the available care as inadequate, 40% had geographic or communication barriers, 23.1% families were reluctant, 20.1% delayed in deciding to have care and another 20.1% were unaware about postnatal care.

KEYWORDS: Postpartum period, Postnatal care, Danger signs, Puerperal sepsis, Postpartum hemorrhage.

INTRODUCTION

The postnatal period is the first six weeks after birth. The postnatal period is a neglected period. Health care seeking Behavior (HCSB) is to visit a health facility for the individual's health condition and disease prevention, and this personal decision includes all available health care options such as visiting a public or private health facility, and also modern or traditional health facility.^[1] Maternal mortality has severe consequences for raising a family, especially for children who have been neglected, and for children under the age of five, the risk of death increases by up to 50%. These women died during most of their working years, and their deaths had an impact on society and the economy in their countries in general^[2,3] Globally, one of the health problems is maternal related death and illness World Health Organization evidence showed that 830 women worldwide and 303,000 women die every year from pregnancy related causes, of which approximately 99% (302,000) in developing regions.

Most maternal deaths are avoidable, as the health-care solutions to prevent or manage complications are well known. All women need access to high standard of care in pregnancy, and during and after childbirth. Women's

health and newborn health are closely integrated. It is particularly important that all births are attended by skilled health professionals, as timely management and treatment can make the difference between life and death for the mother as well as for the baby. Beside of this, because of these women stricken during their most productive years, their deaths have a profound impact on the society and on the economies of their nations at large. Most of maternal deaths in under developing countries including Ethiopia was due to adequate health care system and family planning, and pregnant women have minimal access to skilled labor and emergency care.^[4] As many studies indicate that about 50% of maternal deaths are due to post-partum hemorrhage.^[5] The danger signs are not the actual complications, but symptoms that are easily identified by non-clinical personnel. The commonest/ key danger signs during labor and child birth include severe vaginal bleeding, prolonged labor (greater than 12 h), convulsion, and retained placenta. Major danger signs during the postpartum period include severe vaginal bleeding, foul smelling vaginal discharge, and fever.^[6]

Delay in seeking care is one of the key factors leading to maternal death, which can be associated with lack of knowledge about obstetric danger signs.^[4] Severe vaginal bleeding, swollen hands/face and blurred vision are the key danger signs during pregnancy. The key danger signs during labor and childbirth include: severe vaginal bleeding, prolonged labor (>12 h), convulsions and retained placenta. Additionally, severe vaginal bleeding, foul-smelling vaginal discharge and high fever are the key danger signs during the postpartum period.^[5]

The United Nations' (UN) Sustainable Development Goals (SDGs) has set a new transformative agenda for maternal health to reduce the global maternal mortality ratio (MMR) to less than 70 per 100 000 live births by 2030 (SDG 3.1).^[7] Therefore, this research was allowed to find out the patterns to care seeking behavior for danger signs during post-partum period for the care seeking of mother regarding reproductive health care services in tertiary level hospital in Bangladesh.

MATERIALS AND METHODS

This study was a cross sectional study at Chittagong Medical College Hospital (CMCH), Jamison Maternity Hospital and Mammon Maternity Hospital Chittagong from 1st January to 31st December, 2018. Total 184 Child bearing mothers age between 15-49 years had study sample. Purposive type of non-probability

sampling technique was followed. Data were collected by face to face interview using semi-structured questionnaire on socio-demographic details, reproductive information, antenatal profile data, delivery information data, postnatal data, and postpartum danger signs care seeking behavior information. To complete interview average 30 minutes were required. The data entry was started immediately after completion of data collection. Then data processing and analysis were done by using appropriate method of Statistical Package for Social Sciences (SPSS) Version 20.

Following approval was given by the Ethical and Research Committee of Chittagong Medical College Hospital (CMCH), Jamison Maternity Hospital and Mammon Maternity Hospital Chittagong.

RESULT

A cross-sectional study was conducted in three different hospitals at Chittagong district. In this study 184 respondents randomly selected from maternal department at their hospital to determine the status and factor related to care seeking during post-partum period. Collected data were cleaned, edited and analyzed with the help of Excel spreadsheet and Statistical package for the Social Sciences (SPSS) version 20 was used to perform for statistical analysis.

Table 1: Socio-demographic characteristics of the respondents (n=184).

Age in years	Percentage (%)
15-20years	32.1%
21-25years	35.3%
26-30years	23.4%
31-35years	8.7%
36-40years	0.5%
Educational qualifications of the respondents	
Illiterate	4.3%
Primary	11.4%
Secondary level	56.0%)
Higher secondary	15.2%
Graduate	7.6%
Post graduate	2.2%
Education Qualifications of the respondents' husband	
Illiterate	6.5%
Primary	8.7%
secondary level	42.9%
Higher secondary	21.2%
Graduate	12.0%
Post graduate	8.7%
Occupation of the respondents	
Housewife	92.9%
Garments worker	2.7%
Service holder	2.2%
Respondent's husband occupation	
Businessman	33.7%)
Service holder	23.4%
Day laborer	7.1%
Garments worker	4.9%

Farmer and home manager	4.3%
Others	19.0%
Distance from house to hospital in km	
1-10km	45.7%
11-20km	4.9%
21-30km	24.5%
31-40km	3.3%
41-50km	7.6%
51>km	14%
Monthly family Income (Taka)	
Respondent's Income	
≤ 10000	98.4%
11000 – 20000	1.1%
> 20000	0.5%
Family income	
≤ 10000	19.6%
11000 – 20000	26.1%
21000 – 30000	19.0%
31000 – 40000	5.4%
> 40000	29.9%
Types of family of the respondents	
Nuclear family	52.2%
Joint family	47.8%
Total	100%

Table 1 showed the socio-demographic characteristics of the respondents. Here, one third (32.1%) of the respondents was 15-20 years old followed by above one third (35.3%) of the respondents were 21-25 years old. As regards 23.4% of the respondents were fall in 31-35 years age group and rest of total (9.2%) were fall in 31-40 age groups. The mean age of the respondents was 24.2 years (Range 15-40). Mean age = (24.23 ± 4.96) years; range = (15 – 40) years. Above half (56.0%) of the respondents were secondary level educated followed by 15.2% were Higher secondary, 11.4% were Primary, 7.6% were Graduate level educated. As regards 4.3% were can write, Illiterate and post graduate level educated were in same range (2.2%). About 42.9% of the respondents' husband was secondary education level followed by 21.2% were higher secondary level, 12.0% were Graduate, whereas primary and post graduate education level was same range (8.7%). As regards rest of total (6.5%) respondents husband were can write, can read and Illiterate respectively. Majority (92.9%) of the respondents were housewife followed by 2.7% and 2.2%

of the respondents were Garments worker and service holder respectively. Here, (33.7%) of the respondents were Businessman followed by Service holder and others were 23.4% and 19.0% respectively. As regards 7.1% was day laborer, 4.9% were garments worker, and further farmer and home manager were same range (4.3%). Less than half (45.7%) of the respondents had 1-10 km distance from house to hospital followed by 24.5% of the respondents had 21-30 km distance from house to hospital. As regards 14.1% of the respondents had 51> km distance from house to hospital, rest of total (15.8%) of the respondents had 11-20 km, 31-40 km, 41-50 km respectively. Majority (98.4%) of the respondents' monthly income was Taka 10000 or below. In terms of monthly family income, 30% had income greater than Taka 40000, 26.1% between Taka 10000 to 20000, 19% between Taka 20000-30000 and 19.6% Taka 10000 or below. Above half (52.2%) of the respondents families were nuclear followed by less than half (47.8%) of the respondents were joint family.

Table 2: Distribution of the respondents according to their reproductive health status (n = 184).

Abortion	Frequency (f)	Percentage (%)
Abortion occurred		
Yes	37	20.1
No	147	79.9
Number of abortion (n = 37)		
Once	34	91.9
Twice	03	8.1
MR		
MR done		
Yes	24	13.0
No	160	87.0

Number of MR (n = 24)		
Once	20	83.3
Twice	04	16.7
Past obstetric history		
Still birth		
Yes	35	19.0
No	149	81.0
Number of still birth (n = 35)		
Once	32	91.4
Twice	03	8.6
Number of pregnancies (gravid)		
≤ 2	123	66.9
3 – 5	58	31.5
> 6	03	1.6
Number of living children (n = 184)		
≤ 2	157	85.3
3 – 5	25	13.6
> 6	02	1.1
Total	184	100%

Table 2 shows that over 20% of the respondents had history of past abortion. Of them 91.9% have had abortion at least once and the rest (8.1%) twice, 24(13%) had history of MR; of them 83.3% have had MR at least once and the rest (16.7%) two times. Of the 184 respondents, 35(19%) had history of still-birth with

91.4% having one still birth and the rest 8.6% two still-births. Two-thirds (66.8%) of the respondents were pregnant for once or twice, 31.5% between 3-5 times. Majority (85.3%) had 2 or < 2 children and 13.6% had 3 – 5 children.

Table 3: Distribution of the respondents according to receiving care during Antenatal & Intra-natal period (n = 184).

ANC related variable	Frequency (f)	Percentage (%)
Receive ANC (n = 184)		
Yes	173	94.0
No	11	6.0
Number of ANC (n = 173)		
≤ 5 times	88	47.8
6 – 10 times	83	45.1
> 10 times	13	7.1
Place of ANC		
Government Hospital	50	28.9
Private hospital	78	45.1
Community Clinic	02	1.2
NGO Clinic	32	18.5
Satellite clinic(Others)	11	6.3
Service providers		
Doctor	137	79.2
Trained nurses	6	3.5
Paramedics	30	17.3
Antenatal complications		
Complications		
Yes	56	30.4
No	128	69.6
Type of complications (n = 58)		
Blurring of vision	13	22.4
Lower abdominal pain	33	56.9
APH	04	6.9
Oedema	05	8.6
Others	03	5.2
Treatment		

Yes	44	23.9
No	140	76.1
Treatment received from (n = 44)		
Doctor	43	97.7
Trained nurse	01	2.3
Profile about Intra-natal Care		
Where was the delivery conducted		
Government Hospital	137	74.5
Private hospital	45	24.5
NGO Clinic(Home)	2	1
Type of delivery		
Normal delivery	133	72.3
LUCS	51	27.7
Who conducted delivery		
Physician	180	97.8
Trained nurse(Paramedics &SBA)	4	2.2
Complications profile		
Delivery complications(n=184)		
Yes	100	54.3
No	84	45.7
Type of delivery complications (n=100)		
Obstructed labor	80	80.0
Retained placenta	13	13.0
Convulsion	4	4.0
Abnormal lie	3	3.0
Received treatment for complications (n=100)		
Public hospital	77	77.0
Private hospital	20	20.0
NGO Clinic(Others)	3	3.0

Table 3 shows that, most (94%) of the respondents received ANC during pregnancy. About 48% received ANC 5 or < 5 times, 45% 6 – 10 times and the rest (7.1%) > 10 times. Over 45% received the care from private hospital, 28.9% from public facilities and 18.5% from NGO clinics. In about 80% cases, doctors were the service providers followed by paramedics (17.3%) and very few (3.5%) were trained nurse, 70% of the respondents developed complications during pregnancy. The most vital complications were lower abdominal pain (56.9%) and blurring of vision (22.4%). A few developed APH (6.9%) and oedema (8.6%). Majority (97.7%) of

the respondents received treatment for complications from physicians. Nearly three-quarters (74.5%) of the respondents were delivered at public hospital and 25.5% at private hospital. Over 72.3% had normal delivery and 27.7% cesarean delivery. Majority (97.8%) of deliveries was conducted by physicians. Over half (54.3%) encountered complications during delivery. Of those who faced complications, obstructed labor was prime complication (80%). More than three-quarters (77%) received treatment for complications from public hospitals.

Table 4: Distribution of the respondents by their postnatal care services and its importance (n = 184).

Postnatal Care (PNC)	Frequency (f)	Percentage (%)
Knowledge of importance of PNC		
Yes	81	44.0
No	103	56.0
Number of PNC		
≤ 5 times	111	60.3
> 5 times	73	39.7
Who provided PNC		
Doctor	118	64.2
Trained Nurses	66	35.8
PNC received from(n=120)		
Upazilla Health Complex	10	8.3
Sador Hospital	78	65.0
Private Hospital(Community Clinic)	32	26.7

Treatment of danger signs		
Yes	142	77.2
No	42	22.8
Received health services from hospital		
Upazilla health complex	6	4.2
Sadar hospital	100	69.4
Community Clinic	2	1.4
Satellite clinic	8	5.6
Home	23	15.9
Private hospital/Clinic	5	3.5
Whom gave treatment		
Doctor	133	90.5
Trained nurse	3	2
Pharmacist	8	5.5
Others(Traditional healer & Kabiraj)	3	2
When go to hospital for danger signs		
Immediately after seeing symptoms	34	24.3
Seeing increase in severity of symptoms	94	67.1
At the last moment	12	8.6
Whom referred to the hospital		
Doctor	81	75.0
Trained nurse	4	3.7
Pharmacist	4	3.7
Others(FWV, Mid-wife & Kabiraj)	19	17.6
Took to the hospital		
Self	2	1.5
Husband	88	64.7
Parents-in-law	32	23.5
Others	14	10.3
Got effective treatment		
Very much	27	19.3
Much	97	69.3
Not much	12	8.6
Very little	4	2.8

Table 4 shows, nearly 45% of the respondents were aware about the importance of postnatal care and about 40% received PNC more than 5 times. About two-thirds (64.2%) received PNC from physicians and the rest from trained nurses. Two-thirds received PNC from sadar hospital and 26.7% from private hospital or clinic and the rest from Upazila Health Complexes and others. Above three quarters (77.2%) of the respondents seek treatment after deliveries, two third (69.4%) of the respondents received health services from Sadar hospital followed by total 30.6% of the respondents received health services from upazilla health complex ,home,

community clinic, satellite clinic and private hospital. About (90.5%) of the respondents informed that Doctors are the main treatment giver, two third (67.1%) of the respondents go to hospital to seeing increase in severity of symptoms of danger signs and (75.0%) of the respondents informed that doctor are the main referrer to the hospital. Among them {88 (64.7%)} and {32 (23.5%)} of the respondents too to the hospital by husband and parents-in-law respectively. From them {97 (69.3%)} of the respondents got much effective treatment followed by 19.3% of the respondents got very much effective treatment.

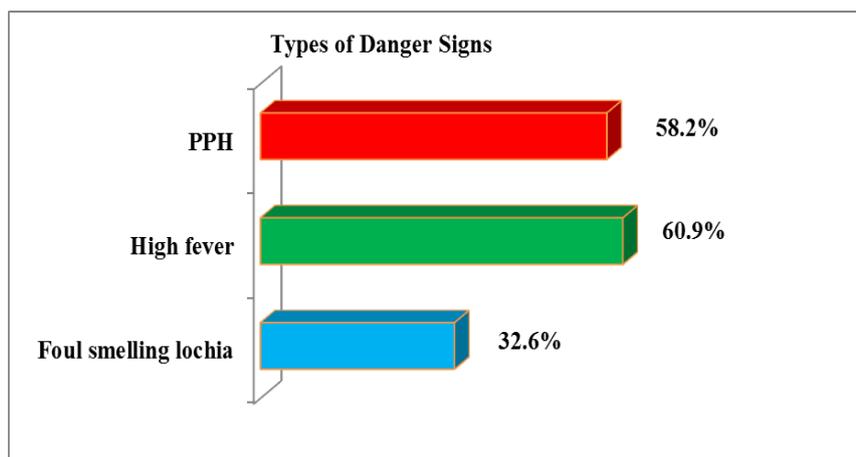


Figure 1: Distribution of the respondents by their types of danger signs (n=184).

Figure 1 shows, two third (60.9%) of the respondents developed high fever followed by above half (58.2%) of the respondents developed PPH. whereas, 32.6% of the respondents developed foul smelling lochia. Further ten

patients (5.4%) developed one danger sign 121(65.8%) patients developed 2 danger signs and 9(4.9%) developed 3 danger signs.

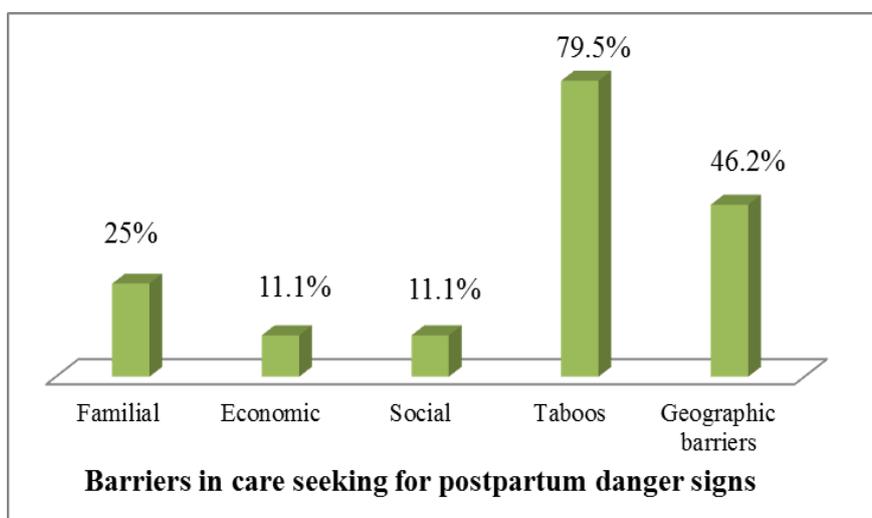


Figure 2: Distribution of the respondents by facing barriers to care seeks during postpartum period (n=184).

Figure 2 shows about 80% respondents who did not receive care, have had taboos that a mother should not go out of home for some days after delivery, 46.2% complained of geographical barrier, 25% familial barrier, 11% economic and another 11% social barrier.

DISCUSSION

This cross sectional study was conducted from January to December 2015 with the aim to care seeking for danger signs during post-partum period among 184 mothers. These communities based cross sectional study identified factors that influence about seek care for danger signs during post-partum period.

Obstetric danger sign knowledge is the first essential step in order to access and get appropriate and timely obstetric care. In this study above half (58.2%) of the study subjects mentioned PPH as danger signs which is higher than the findings at Pakistan.^[8] The postpartum

health care is not being properly utilized despite the global acceptance of its significance. The proportion of mothers who sought health care during postpartum period was higher (24%) in this study which included only urban settlements compared to National Ministry of Health report (19 %) including both rural and urban settlements. This proportion is lower compared to other developing countries such as India (40%), Philippines (58%), and Indonesia (72%), where national female literacy rate and GDP is also high.^[9]

Major supporting activities did by respondents were making transportation facility available, choosing place of delivery during period. Most (74.5%) of the respondents had visited health facility while 97.3% had contact physician during such conditions. Government hospital was main place of delivery followed by private hospital i.e 23.4%. Level of monthly income which is

less than 10000/= taka per month. Joint family was dominant over nuclear.

Key danger signs during post-partum period are PPH, High fever and foul smelling lochia. In this study a proportion of women in post-partum period who mentioned high fever (60.9%) were higher than the Ethiopian community based cross-sectional study finding (26.6%).^[10]

The findings of this study has shown above half (54.3%) of women who had recognized signs for complications during delivery had attended health facility for care and management. This is explained further by the reasons women gave that they have been told to go to hospital if they recognize danger sign. Furthermore, less than half (45.1%) of the respondents were living at a distance of one but less than 10 kilometres, hence can access the services. In this study two third (64.2%) were knowledgeable about danger signs during post-partum period and above two third (66%) were sought treatment.

This study finding is higher than Ethiopian study.^[11] Less than half (46.5%) were took services from sadar hospital and 61.9% service provider were doctors. In this study 43.7% go to hospital after developed danger signs and above one third (37.7%) referrer were doctors. The quality of life during post-partum period is a responsibility of the husband and the immediate family members. In this study 40.9% husbands were took to hospital for treatment and 45.1% found effective treatment.

CONCLUSIONS

According to the study findings, this indicates that many mothers are more likely to delay in deciding to seek care. Three-quarters of the respondent barrier for care seeking due to taboos and one third of the respondent were not seeking care for geographical barrier. More than two third told that they did have any accompanying persons to go to health facility and over half of the respondent considered the available care as inadequate. This study revealed that pregnant mothers suffer from many problem which demands awareness, motivation, education and appropriate health care facilities to improve their life.

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