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Original Article

Healthcare Providers' Views on the Management of Emergency Obstetric Care (EmOC) Centres for Forcibly Displaced Myanmar Nationals (FDMN) Women in Bangladesh

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Abstract

Background: A well managed and organized emergency obstetric care (EmOC) centre is very important to ensure that the most vulnerable groups, e.g., women and newborns, receive the best possible care in humanitarian crisis situation.

Objective: This study aims to determine the healthcare providers' views on the management of the Emergency Obstetric Care (EmOC) centers for the Forcibly Displaced Myanmar Nationals (FDMN) women currently living in Bangladesh.

Methods: This cross-sectional, descriptive study was conducted between January and December of 2019. A convenient sampling technique was adopted. A total of 104 healthcare providers working in the refugee camp areas of Forcibly Displaced Myanmar Nationals (FDMN) participated in this study at Kutupalong and Balukhali of Ukhiya upazila under Cox's Bazar district, Bangladesh. A pre-tested, semi-structured questionnaire was used in face-to-face interview.

Results: Out of 104 respondents, most of them (62.5%) were in 21-30 years age group and 36.54% were 31-40 years age group. About 56% respondents were male and 44.23% were female. Among healthcare providers, 31.73% were doctors, 19.23% were nurse, 35.58% were paramedics and 13.46% were skilled birth attendants (SBAs) or midwives. About 88% were deployed in the field hospital facilities and the rest (11.54%) were in camp based primary health centres. ANC services were provided by all of them (100%). A satisfactory level of 'signal functions' of basic EmOC and comprehensive EmOC were done by them. All the centres had separate examination room and dedicated delivery room and they maintained privacy during physical examination of their clients (100%). However, 11.5% had blood bank support, 52.9% got laboratory support and dedicated OT facility for EmOC was reported by 72.1%. All claimed the presence of emergency response team (ERT) in due time. Regarding quality of the services, from receiving the patients to arranging necessary treatment, cumulatively more than 85% decision making and treatment were done within 30 minutes. All the respondents (100%) claimed about availability of wheel chairs and stretchers, reception and information services, medical record keeping, emergency oxygen supply, 24/7 electricity and adequate water supply, autoclave for sterilization, ambulance or other transport facilities to carry patients. High satisfaction on workplace environment and job responsibility was reported by 17.3%, while 75.0% had moderate satisfaction and 7.7% had low satisfaction.

Conclusion: Our data suggests a moderate level of satisfaction among most of the healthcare providers on management of EmOC centres for the FDMN women amid several challenges and also highlights the areas of improvement to facilitate better healthcare for them.

Keywords: Forcibly Displaced Myanmar Nationals, Rohingya Refugees, Emergency Obstetric Care, Healthcare Providers, Humanitarian Crisis

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Introduction:

During humanitarian emergencies, women and newborns face severe disparities and heightened vulnerabilities, increasing their risk of illness and death. Humanitarian crises, usually caused by conflict, climate-related disasters, or forced displacement, often disrupt health systems, limit access to essential services, and increase the likelihood of preventable deaths. In 2023, 58% of global maternal deaths, 50% of newborn deaths, and 51% of stillbirths worldwide occurred in the 29 countries with a UN humanitarian response plan or regional response plan[1]. To combat such devastation, provision of emergency obstetric care (EmOC) is crucial in and around refugee camps. A well managed EmOC facility is even more important than ever before to ensure that the most vulnerable groups, e.g., women and newborns, receive the best possible care with the rising number and complexity of humanitarian crises across the globe[1,2].

Evidence showed that during any humanitarian crises, whether driven by conflict, climate change, natural disasters or public health emergencies, sexual and reproductive health needs are often neglected that sometimes lead to devastating consequences, particularly for pregnant women as they risk life-threatening complications[2,3]. Similar situation was experienced by the Government of Bangladesh (GoB), UN agencies and other humanitarian aid partners when Rohingya communities in the Rakhine state by Myanmar fled their country to the neighbouring country, Bangladesh, under indiscriminate and violent attacks by Myanmar's army[4]. Under the circumstances, emergency obstetric care (EmOC) centres were reinforced in the system to enhance antenatal care and support, manage complications related to pregnancy, reduce maternal mortality and improve overall humanitarian health scenario in and around the refugee camp areas[5]. The World Health Organization (WHO) recommended at least five EmOC centres per 500,000 population including one comprehensive EmOC (CEmOC) and four basic EmOC (BemOC), which must ensure their functional capability, availability, accessibility, referral system and address as well as mitigate challenges through monitoring and evaluation[6]. There are eleven EmOC centres in Ukhiya and Teknaf Upazila under Cox's Bazar district, Bangladesh, surrounding all refugee camps resided by the Forcibly Displaced Myanmar Nationals (FDMN)[7].

In our country, there is limited research on the experiences of frontline healthcare providers working in refugee settings especially on their lived experience of working with FDMN population in recent years. Hence, we proposed this study to determine the healthcare providers' views on the management of the Emergency Obstetric Care (EmOC) centers for the Forcibly Displaced Myanmar Nationals (FDMN) women in Cox's Bazar district of Bangladesh.

Methods:

A total of 104 healthcare providers working in the refugee camp areas of Forcibly Displaced Myanmar Nationals (FDMN) participated in this study at Kutupalong and Balukhali of Ukhiya upazila under Cox's Bazar district, Bangladesh, between January and December of 2019. A convenient sampling technique was adopted. Participants were selected based on the following criteria:

Inclusion criteria:

1. Healthcare providers working in that refugee settings and related to emergency obstetric care (EmOC) centres for at least 3 months; and
2. Voluntarily participated with written informed consent.

Exclusion criteria:

1. Working in that refugee healthcare settings for less than three months;
2. Those who provided other services that are not related to EmOC; and
3. Those who are emotionally challenged and unwilling to participate in the study.

Data was collected through face-to-face interview of the participants using a pre-tested, semi-structured questionnaire. However, before starting data collection process, pretesting of the questionnaire was done on 10 healthcare providers at Nayapara camp of Teknaf Upazila under Cox's Bazar district, after matching the selection criteria to finalize the procedure and to evaluate the effectiveness of the research instrument. During pretesting participants were asked whether any specific word or sentence was not understandable or unacceptable or offensive to them. Participants were also asked about language difficulties or any alternatives fit better to their own language, as some of them were from diverse indigenous or Rohingya population. Modifications were made accordingly to finalize the research instrument. Two interpreters were appointed to assist collecting data

from the local community and the FDMN due to disparity in language. Interpreters were selected based on their voluntary participation.

Immediately after the completion of data collection, collected data were checked and verified. Data cleaning, coding and recording were done. Only fully completed questionnaire was entered into the computer for final analysis. Data analysis was carried using Statistical Package for the Social Sciences (SPSS) version 25.0 for Windows. Analysis was done in line with the objectives. For descriptive statistics, data was presented as frequency and percentage – for demographic variables and perceived utility and performance of the EmOc centres. Results were presented in various tables in descriptive manner.

Results:

Out of 104 respondents, most of them (62.5%) were in 21-30 years age group and 36.54% were 31-40 years age group. 55.77% respondents were male and 44.23% were female. Among healthcare providers, 31.73% were doctors, 19.23% were nurse, 35.58% were paramedics and 13.46% were skilled birth attendants (SBAs) or midwives. 88.46% were deployed in the field hospital facilities and the rest (11.54%) were in camp based primary health centres (Table-I). ANC services were provided by all of them (100%). As 'signal functions' of basic EmOC, all the respondents had experience of administration of parenteral antibiotics, uterotonic drugs (e.g., oxytocin), anticonvulsants and resuscitation of the newborn (100%). Manual removal of placenta was done by 98.1% of them, while removal of retained product of conception was done by 85.6%. 97.1% performed assisted vaginal delivery. Comprehensive EmOC services like blood transfusion, surgery (Caeserean section operation) were done by 72.1% and 31.7% respectively, while management of preecalmsia or eclampsia, haemorrhage (APH/PPH), and sepsis/fever were done by 69.2%, 79.8% and 84.6% respectively (Table-II) All the respondents claimed that the centres were opened for 24/7. All services were free of cost for FDMN. All the centres had separate examination room and dedicated delivery room and they maintained privacy during physical examination of their clients. 11.5% had blood bank support, 52.9% got laboratory support and dedicated OT facility for EmOC was reported by 72.1%. However, all claimed the presence of emergency response team (ERT) in due time in those facilities (Table-III). Regarding quality of the services, from receiving the patients to arranging necessary treatment, 58.7% of the healthcare providers responded immediately, while 26.9% took less than 30 minutes and 14.4% needed 30–60 minutes. Cumulatively, more than 85% decision making and treatment were done within 30 minutes. All the respondents (100%) claimed about availability of wheel chairs and stretchers, reception and information services, medical record keeping, emergency oxygen supply, 24/7 electricity and adequate water supply, autoclave for sterilization, ambulance or other transport facilities to carry patients. High satisfaction on workplace environment and job responsibility was reported by 17.3%, while 75.0% had moderate satisfaction and 7.7% had low satisfaction (Table-IV).

Table-I: Demographic characteristics of the participants (n=104)

Variables	Frequency	Percentage
Age group in years		
21 - 30	65	62.50
31 - 40	38	36.54
41 - 50	1	0.01
> 50	-	-
Gender		
Male	58	55.77
Female	46	44.23

Occupation		
Doctor	33	31.73
Nurse	20	19.23
Paramedic	37	35.58
SBAs/midwives	14	13.46
Types of healthcare facilities		
Field hospital	92	88.46
Camp based facility	12	11.54

Table-II: Provision of ANC, 'signal functions' and other EmOC services (n=104)

Variables related to Service/signal functions	Provisioned (P)	Not Provisioned (Np)	Frequency (P/Np)	Percentage (P/Np)
ANC	104	00	104/0	100.0/0
Parenteral antibiotics*	104	00	104/0	100.0/0
Parenteral uterotonic drugs * (e. g., oxytocin)	104	00	104/0	100.0/0
Parenteral anticonvulsants*	104	00	104/0	100.0/0
Manual removal of placenta*	102	02	102/02	98.1/1.9
Removal of retained product*	89	15	89/15	85.6/14.4
Assisted vaginal delivery*	101	03	101/3	97.1/2.9
Perform blood transfusion	75	29	75/29	72.1/29.9
Perform surgery (e. g., Caesarean section)	33	71	33/71	31.7/68.3
Managing intrautrine death (IUD	39	65	39/65	37.5/62.5
Managing pre-eclampsia /eclampsia	72	32	72/32	69.2/30.8
Managing haemorrhage (APH/PPH)	83	21	83/21	79.8/20.2
Managing sepsis/fever	88	16	88/16	84.6/15.4
Resuscitation of the newborn*	104	0	104/0	100/0

*= signal functions as Basic EmOC

Table-III: Respondents' opinion on provision of EmOC services (n=104)

Provision of EmOC services	Frequency	Percentage
Availability of the services for 24/7	104	100.0
No cost EmOC services	104	100.0
Provision of privacy in examining and treating patient	104	100.0
Separate room for examination	104	100.0
Dedicated labour or delivery room	104	100.0
Blood bank services	12	11.5
Laboratory services	55	52.9
Dedicated OT facility	75	72.1
Presence of emergency response (ERT) on time	7	100.0

Table-IV: Respondents' opinion on quality of EmOC services (n=104)

Variables	Frequency	Percentage
Response time after receiving the patient		
Immediate	61	58.7
< 30 minutes	28	26.9
30 – 60 minutes	15	14.4
Availability of wheel chairs and stretchers	104	100.0
Reception and information services	104	100.0
Medical record keeping services	104	100.0
Emergency oxygen supply	104	100.0
24/7 electricity supply	104	100.0
Adequate water supply	104	100.0
Availability of equipment sterilization (autoclave)	104	100.0
Provision of transport facility while referring a patient	104	100.0
Availability of ambulance	104	100.0
Satisfaction on workplace environment and job responsibility		
High	18	17.3
Moderate	78	75.0
Low	8	7.7

Discussion:

This study was conducted and interpreted in the context of displaced, impoverished populations who have fled from their own country and whose normal social life has been interrupted. The situation was complex and unstable rather than a normal setting. Hence all data findings were discussed in context with the situation of the Forcibly Displaced Myanmar National (FDMN). Healthcare providers in those areas came up to evaluate their own status and management of EmOC settings to help us find out scopes of improvement, which is really praise-worthy. Young age-group was prevalent among them; 62.5% were aged between 21 and 30 years. Males were predominant (55.77%) comparing to its female (44.23%) counterpart. It is to be noted that most of the FDMN women were from Muslim community and conservative in nature. Increased number of female healthcare provider could help increase the accessibility of the services, as privacy and comfort of the female patients often depends on that religious and culture issue[8].

According to service provider's opinion, 27.88% were deployed for basic EmOC services and 72.12%. for comprehensive EmOC. They claimed that all services were available 24/7 and cost-free. Since ANC is a basic component of maternal and reproductive health, it showed full availability and standard practice of the centers; however, the service utilization was not up to the standard9 (as per WHO standard, 90% of pregnant women should receive at least four ANC visit during pregnancy)10. However, free antenatal care is widely available similar to other camps led by UN agencies across the globe led by midwives or nurse-midwives at different primary care facilities[11].

Availability of 'signal functions' at those centers varied from centers to centers and according to type of the centers. Respondents of all centers of both type (BEmOC and CEmOC) provided parenteral antibiotics, parenteral uterotonic drugs (e.g., oxytocin), parenteral anticonvulsants, resuscitation of the newborn invariably. However, in case of different medical or surgical intervention, the results were variable. A satisfactory level of 'signal functions' of basic EmOC and comprehensive EmOC were done by them. In case comprehensive EmOC, like blood transfusion, surgery (Caeserean section operation) were done by 72.1% and 31.7% respectively. Nonetheless, availability of all 'signal functions' means the center is providing EmOC in proper ways at good level[12].

Emergency preparedness refers to response time needed by the service providers to respond to an emergency; in this study, 58.7% service providers responded immediately after receiving an emergency obstetric patient, while 26.9% needed less than 30 minutes to initiate treatment. Cumulatively about 85% response occurred within 30 minutes amid some facilities demand more providers, logistics, and supporting skills. Besides, supply services like emergency oxygen, 24/7 electricity supply, adequate water supply, sterilized equipment supply were available100 percent. These findings signify good management practice of supply system of those centers. However, data derived from other refugee camp areas in Syria, Jordan, Turkey and African countries revealed that there is always a shortage in supply system in such humanitarian settings due to a huge gap in demand vs. supply[13]. Our study showed that lack of blood bank and laboratory support, and dedicated OT facility were reported by 88.5%, 47.1% and 27.9% of the respondents. As part of providing comprehensive EmOC, blood transfusion, laboratory services and a full-fledged OT are often needed for saving lives; lacking such facilities may hamper proper services to the clients and compromise the quality of service[14,15]. Barriers to EmOC service provision include poor availability of EmOC services in terms of difficult geographical access and inadequate physical infrastructure. Besides, lack of functioning operation theatre, electricity and water supply as well as waste disposal methods are crucial. Facilities may also lack equipment, essential drugs and sufficient numbers of professional staff for providing EmOC[15,16].

Our study was a modest effort to assess healthcare providers' own views towards the utilization and quality of EmOC for the FDMN women in Bangladesh. Assessment of EmOC facilities and their service providers based on performance standards guidelines help us address the gaps in the service and quality of care as well as implement changes that could lead to quality improvement of EmOC[12,15].

This study has a few limitations. Due to the resource and time constraints, our catchment area was limited to only few camps under Kutupalong and Balukhali of Ukhiya upazila under Cox's Bazar district. Therefore, variations of opinion might be observed among other healthcare providers working in the other camps of Cox's Bazar district. Moreover, there is chance of bias as providers often try to impose level of extra satisfaction and justify the quality of their services offered to the clients. Therefore, further studies are warranted with larger samples and involving more camp areas to get more representative results.

Conclusion:

Our data suggests a moderate level of satisfaction among most of the healthcare providers on management of EmOC centres for the FDMN women amid several challenges faced by them. It also highlights the areas of improvement to facilitate better healthcare for them. Continuous assessment of the situation, planning, implementation, and further evaluation must be in place in EmOC facilities in our current resource scarce settings for proper management to change the lives of the forcibly displaced Myanmar nationals (FDMN) in Bangladesh.

Author's Statements:

Ethical Clearance:

This study was approved by the Institutional Review Board of National Institute of Preventive & Social Medicine (NIPSOM), Dhaka, Bangladesh (NIPSOM/IRB/2019/111).

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Conflict of Interest:

No conflict of interest.

Authors' Contribution:

1. Concept and design of the study: SS Tamal, F Khanam;
2. Formulation of the questionnaire: SS Tamal, ASM Nurunnabi, F Khanam;
3. Selection of participants, data collection, scrutiny and compilation: SS Tamal, IA Oishee, T Shahrin, N Jahan;
4. Data analysis: SS Tamal, ASM Nurunnabi: Manuscript preparation,
5. Editing and final submission: SS Tamal, ASM Nurunnabi, IA Oishee, T Shahrin, N Jahan, F Khanam.

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