

Utilization of Emergency Obstetric Care Centres by the Forcibly Displaced Myanmar Nationals (FDMN) Women in Cox's Bazar, Bangladesh

Tamal SS¹, Nurunnabi ASM², Oishee IA³, Shahrin T⁴, Jahan N⁵, Khanam F⁶

ABSTRACT

A cross-sectional, descriptive study was conducted between January and December of 2019, to see the utilization of the Emergency Obstetric Care (EmOC) Centers by the Forcibly Displaced Myanmar Nationals (FDMN) women. Convenient sampling technique was adopted. A total of 114 Forcibly Displaced Myanmar Nationals (FDMN) women participated in this study hailing from different FDMN refugee camps situated at Kutupalong and Balukhali of Ukhiya upazila under Cox's Bazar district, Bangladesh. A pre-tested, semi-structured questionnaire was used in this study. Data was collected through face-to-face interview of the participants and from clinical record reviews. Out of 114 respondents, most of them (34.2%) belonged to the 21-25 years age-group. About two-thirds of the respondents (63.2%) were aged below 25 years. All of respondents were married and belonged to the Muslim community. 64% of them did not complete a single year in any educational institution, while 36% studied in primary schools varying from 1 to 4 years. Regarding antenatal checkup (ANC), 87(76.3%) respondents had at ANC visit, while 27(23.7%) had no ANC visit during pregnancy. Of them, 37(32.5%) had three and 22(19.2%) four or more ANC visits. Among obstetric complications, most of them (46.5%) had prolonged or obstructed labour, while 15.8% had eclampsia/preeclampsia. Other complications were: haemorrhage (12.3%); sepsis/fever (8.8%); retained product or placenta (6.1%), spontaneous abortion (6.1%) and intrauterine death (IUD) (4.4%). At EmOC centre, conservative medical treatment was provided to 47(41.2%), while surgical treatment (Caesarean section) was performed on 21(18.4%) women. Blood transfusion was given to 11(9.6%) women. Manual removal of placenta was done on 8(7%) and removal of retained product of conception on 7(6.1%). 20(17.5%) women received assisted vaginal deliveries. Continuous assessment of the situation, planning, implementation, and further evaluation must be practiced in EmOC facilities to provide better healthcare for the Forcibly Displaced Myanmar Nationals (FDMN) women in Bangladesh.

Keywords: Forcibly displaced Myanmar nationals, Rohingya refugees, emergency obstetric care, health service utilization, humanitarian crisis

Mugda Med Coll J. 2025; 8(1): 50-54

DOI: <https://doi.org/10.3329/mumcj.v8i1.82881>

1. Dr. Syed Shafiq Tamal, Medical Officer, Human Resource Management Department, Directorate General of Health Services (DGHS), Dhaka-1212, Bangladesh. Email: shafiq8@gmail.com (Corresponding author)
2. Dr. Abu Sadat Mohammad Nurunnabi, Graduate Student, Dalla Lana School of Public Health, University of Toronto, ON, Canada.
3. Dr. Irtifa Aziz Oishee, Deputy Manager, Save the Children, Bangladesh Country Office, Gulshan-2, Dhaka-1212, Bangladesh.
4. Dr. Tunazzina Shahrin, Deputy Manager, Save the Children, Bangladesh Country Office, Gulshan-2, Dhaka-1212, Bangladesh.
5. Dr. Nusrat Jahan, Research Fellow, International Centre for Diarrhoeal Disease Research, Bangladesh (ICDDR,B), Dhaka-1212, Bangladesh.
6. Dr. Fahmida Khanam, Associate Professor and Head, Department of Microbiology and Mycology, National Institute of Preventive & Social Medicine (NIPSOM), Dhaka-1212, Bangladesh.

INTRODUCTION

Women and children are generally the worst affected population in need of humanitarian assistance or aid during any humanitarian crisis, conflict or war¹. Particularly, pregnant women are at risk of life-threatening complications without access to reproductive health services². Significant progress in healthcare has been achieved in the recent decades in reducing under five and maternal mortality rate, reducing the burden of communicable diseases, and increasing life expectancy; however, globally under five mortality rate remained 42 deaths per 1000 live births and near about 303,000 women die during child birth and due to pregnancy related complications leading to 216 deaths per 100,000 live births. Therefore, SDG 3 aspires to ensure health and well-being for all at all ages by improving maternal and child health³. Obstetric complications related to maternal deaths are haemorrhage, sepsis, complications of abortion, hypertensive disorders of pregnancy, ruptured uterus and ectopic pregnancy⁴. During humanitarian crisis, conflict and war situation, the incidence of pregnancy-related complications tend to be high as proper medical care is scarce let alone emergency obstetric care. However, many of the maternal and child deaths are avoidable if women with pregnancy-related complications have timely access to emergency obstetric care⁵.

In Bangladesh, among all Forcibly Displaced Myanmar Nationals (FDMN), who are often termed as Rohingya refugees, women and girls are 52% of the mentioned population with 304,398 women and girls of reproductive age⁶ making it more difficult for the Government of Bangladesh, NGOs, humanitarian actors and different healthcare providers to meet their sexual and reproductive health (SRH) services demand. During humanitarian conflicts and other emergencies, need for sexual and reproductive health services are often overlooked and pregnant women risk life-threatening complications^{1,7}. Therefore, apart from ensuring limited curative care, emergency obstetric care (EmOC) needs to be reinforced in the system to enhance antenatal support, manage complications related to pregnancy, reduce maternal mortality and improve overall humanitarian health scenario in affected areas⁸. There are 11 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)⁹. The present study aims to see the utilization of the Emergency Obstetric Care (EmOC) Centers by the forcibly displaced Myanmar nationals (FDMN).

METHODS

A total of 114 forcibly displaced Myanmar nationals (FDMN) women participated in this cross-sectional, descriptive study hailing from different FDMN refugee camps situated 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. FDMN females who had faced complicated pregnancy and received EmOC service in the last year;
2. Voluntarily participated with written informed consent

Exclusion criteria:

1. Unwilling to participate in the study;
2. Females who received other services not related to EmOC; and
3. Mentally incapable person to participate in the study.

A pre-tested, semi-structured questionnaire was used in this study. Data was collected through face-to-face interview of the participants and from clinical record reviews. Before starting data collection process, pretesting of the questionnaire was done on 10 FDMN women 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. 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 socio-demographic variables and utilization of the services of EmOc centre. Results were presented in various tables in descriptive manner.

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

RESULTS

The mean age of participants was . Out of 114 respondents, most of them (34.2%) belonged to the 21-25 years age-group. About two-thirds of the respondents (63.2%) were aged below 25 years. All of respondents were married and belonged to the Muslim community. 64% of them did not complete a single year in any educational institution, while 36% studied in primary schools varying from 1 to 4 years (Table-I). 87(76.3%) respondents had at least one ANC visit, while 27(23.7%) had no ANC visit during their pregnancies. Among those who received ANC services, 37(32.5%) had three ANC visits, while 22(19.2%) four or more ANC visits. Among obstetric complications, most of them (46.5%) had prolonged or obstructed labour, while 15.8% had eclampsia/preeclampsia. Other complications were: haemorrhage (12.3%); sepsis/fever (8.8%); retained product or placenta (6.1%), spontaneous abortion (6.1%) and intrauterine death (IUD) (4.4%) (Table-II). At EmOC centre, conservative medical treatment was provided to 47(41.2%), while surgical treatment (Caesarean section) was performed on 21(18.4%) women. Blood transfusion was given to 11(9.6%) women. Manual removal of placenta was done on 8(7%) and removal of retained product of conception on 7(6.1%). 20(17.5%) women received assisted vaginal deliveries (Table-III).

Table-I: Sociodemographic characteristics of the study participants (n=114)

Variables	Frequency	Percentage
Age group in years		
15-20	33	28.9
21-25	39	34.2
26-30	27	23.7
31-35	12	10.5
36-40	3	2.6
Marital status		
Married	114	100
Unmarried	-	-
Religion		
Muslim	114	100
Others	-	-
Education		
No education	73	64
Below primary level	41	36

Table-II: Utilization of the EmOC Centre by the study participants (n=114)

Variables	Frequency	Percentage
ANC visit		
Yes	87	76.3
No	27	23.7
Number of ANC visit		
Only one visit	8	7.0
Two visits	20	17.5
Three visits	37	32.5
Four visits	11	9.6
More than four visits	11	9.6
Obstetric emergencies		
Eclampsia/preeclampsia	18	15.8
Prolonged or obstructed labour	53	46.5
Haemorrhage	14	12.3
Spontaneous abortion	7	6.1
Retained product or placenta	7	6.1
Sepsis/fever	10	8.8
Intrauterine death (IUD)	5	4.4

Table-III: *Emergency obstetric care (EmOC) received by the participants (n=114)*

Mode of management	Frequency	Percentage
Conservative medical treatment	47	41.2
Surgical treatment (e.g., LUCS)	21	18.4
Blood transfusion	11	9.6
Manual removal of the placenta	8	7.0
Retained products removal	7	6.1
Assisted vaginal delivery	20	17.5

DISCUSSION

In the present study, we found that FDMN women living in the refugee camps in Bangladesh utilized the EmOC centres situated within their localities. Among the respondents, in total 76.3% received ANC facilities, while 23.7% did not have any ANC visits during pregnancy. Though the World Health Organization (WHO) recommends at least four ANC visit during pregnancy period, only 19.2% respondents followed the schedule. In earlier study done in the same population showed that among the enrolled FDMN pregnant women (n=370), only 53.5% had at least 1 ANC during their recent past pregnancy and 3.5% received four or more ANC¹⁰. The difference between two results may be due to difference in the time frame of the study and consecutive improvement of healthcare facilities and communication system in recent years. Another study showed that in similar situation in Syria, 67% refugee mothers had no or a single ANC visit¹¹. Another study done in the refugee camps in Jordan showed that among the women who gave birth (n=299), 71% had at least one ANC visit during pregnancy¹².

In our study, most of the respondents underwent some forms of pregnancy related complications; among them, 46.5% had history of prolonged or obstructed labour. This may prevail in such humanitarian crisis scenario due to ongoing trauma, stress, early age of pregnancy, under nutrition, less experience about health care facilities, fear about the new place, fear about the outcomes or fear about the management. Other complications reported were: spontaneous abortion-in 6.1%; IUD/still birth in 4.4%, eclampsia/preeclampsia in 15.8%; hemorrhage in 12.3%; postpartum sepsis/fever in 8.8%; and retained product or placenta in 6.1% respondents. Another

similar study showed (n=568) the similar prevalence of eclampsia/preeclampsia (15.1%) and higher prevalence of sepsis/fever and haemorrhage (29.9% and 20.4% respectively)¹⁰. Meanwhile, a study done in African region showed almost similar prevalence of prolonged or obstructed labour and haemorrhage ((39% and 10% respectively), but a lower prevalence of sepsis (4%) among the study participants hailing from refugee camps of Uganda¹³.

Together with the Government of Bangladesh (GoB), more than one hundred national non-governmental organizations (NGOs), international NGOs, United Nations (UN) agencies, and several donor agencies have been providing both preventive and clinical care, including health promotion, for the FDMNs since the start of the influx. Maternal, Newborn, and Child Health (MNCH) services are the primary focus of the interventions¹⁴. However, several challenges have been observed in recent years and mitigated accordingly. Still we have a long way to go to ensure better access to healthcare for the FDMN population in general.

Our 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 in utilization of EmOC may prevail among FDMN women living in the other camps of Cox's Bazar district. Therefore, further studies are warranted with larger samples and involving more camp areas to get more representative results.

Therefore, further studies are warranted with larger samples and involving more camp areas to get more representative results.

CONCLUSION

Living in humanitarian settings usually overrules the basic human rights and dignity of refugee people scattered across the globe. Same is true for the Rohingya people, i.e., Forcibly Displaced Myanmar Nationals (FDMN). Government of Bangladesh (GoB), several UN agencies and humanitarian aid and healthcare actors play a great role to create more access to healthcare. To restore refugee people's health, healthcare providers and policy makers should have sound knowledge on the current situation and challenges. This descriptive study was aimed to facilitate them through disseminating research data and knowledge sharing. However, continuous

assessment of the situation, planning, implementation, and further evaluation must be practiced in EmOC facilities to provide better healthcare for the Forcibly Displaced Myanmar Nationals (FDMN) women in Bangladesh.

REFERENCES

1. Kohrt BA, Mistry AS, Anand N, Beecroft B, Nuwayhid I. Health research in humanitarian crises: An urgent global imperative. *BMJ Glob Health*. 2019;4(6):e001870.
2. Chan EY, Chiu CP, Chan GK. Medical and health risks associated with communicable diseases of Rohingya refugees in Bangladesh 2017. *Int J Infect Dis*. 2018;68:39-43.
3. Ministry of Planning, Government of the People's Republic of Bangladesh. Bangladesh Sustainable Development Goals: Bangladesh Progress Report 2020. Dhaka: General Economics Division, Bangladesh Planning Commission; 2020.
4. Kongnyuy EJ, Hofman JJ, van den Broek N. Ensuring effective essential obstetric care in resource poor settings. *BJOG*. 2009;116(Suppl 1): 41-7.
5. Joarder T, Sutradhar I, Hasan MI, Bulbul MM. A record review on the health status of Rohingya refugees in Bangladesh. *Cureus*. 2020;12(8):e9753.
6. Parmar PK, Jin RO, Walsh M, Scott J. Mortality in Rohingya refugee camps in Bangladesh: Historical, social, and political context. *Sex Reprod Health Matters*. 2019;27(2):1610275.
7. Uddin AM, Hussain MF, Adnan AB, Hasan R, Helal A, Amin US, et al. Common health problems of 'Forcibly Displaced Myanmar Nationals' (FDMNs) of Bangladesh. *J Medicine*. 2022;23(1):13-9.
8. Dopfer C, Vakilzadeh A, Happle C, Kleinert E, Müller F, Ernst D, et al. Pregnancy related health care needs in refugees – A current three center experience in Europe. *Int J Environ Res Public Health*. 2018;15(9):1934.
9. United Nations Population Fund (UNFPA). Humanitarian Action 2018 Overview. (January 29, 2018). Retrieved from: <https://www.unfpa.org/publications/humanitarian-action-2018-overview> (Accessed December 16, 2021).
10. Chowdhury MAK, Billah SM, Karim F, Khan ANS, Islam S, Arifeen SE. Report on demographic profiling and needs assessment of maternal and child health (MCH) care for the Rohingya refugee population in Cox's Bazar, Bangladesh. Dhaka: ICDDR,B; 2018.
11. Alnuaimi K, Kassab M, Ali R, Mohammad K, Shattnawi K. Pregnancy outcomes among Syrian refugee and Jordanian women: A comparative study. *Int Nurs Rev*. 2017;64(4):584-92.
12. Bouchghoul H, Hornez E, Duval-Arnould X, Philippe HJ, Nizard J. Humanitarian obstetric care for refugees of the Syrian war. The first 6 months of experience of Gynécologie Sans Frontières in Zaatari refugee camp (Jordan). *Acta Obstet Gynecol Scand*. 2015;94(7):755-9.
13. Pearson L, Shoo R. Availability and use of emergency obstetric services: Kenya, Rwanda, Southern Sudan, and Uganda. *Int J Gynaecol Obstet*. 2005;88(2):208-15.
14. United Nations Children's Fund (UNICEF). UNICEF Humanitarian Situation Report (Rohingya Influx). Bangladesh: Humanitarian Situation Report No. 45 (Rohingya Influx), 27 November to 10 December 2018. Dhaka: UNICEF; 2018.