FACTORS AFFECTING UTILIZATION OF POSTNATAL SERVICES IN A SELECTED DISTRICT OF SOMALIA

Fardowso Abdirizak Mohamud¹, Nur Jahan Begum^{1, 2}, Fouzia Akter³ and *Salamat Khandker¹

Abstract: Postnatal services refer to measures undertaken after birth to ensure good health of the mother and child. The objective of this study was to assess factors affecting utilization of postnatal services among mothers attending Banadir Hospital in Hodan district, Somalia. The study employed Quantitative methods of inquiry using a descriptive cross-sectional survey design. The study involved 150 mothers who responded to a questionnaire that was used to find out the factors affecting utilization of postnatal services. Questions were asked on demographic information of mothers; knowledge of mothers' about postnatal services, mothers' socio-economic status and factors affecting utilization of the postnatal services. The data were coded and analyzed using Statistical Package for Social Sciences (SPSS). Key findings of the study were that most women lacked awareness about postnatal services and those who knew about these services only few knew about immunization and family planning services. The majority of the mothers did not know about other services, such as physiotherapy, counseling and physical examination. Lack of money for transport or service costs, un-friendly attitude of health workers, long waiting time for service provider and lack of awareness were the causes of non-availing the services from public institutes.

Keywords: Postnatal Services, maternal and child health, hospital, health, Somalia

Introduction

Somalia has been engulfed in conflict for more than 20 years. Consequently basic facilities — such as referral hospitals, maternal and child health (MCH) facilities and services are damaged or totally destroyed. Only 6.0% of all births are attended by a skilled health worker in South Central Somalia. UNICEF estimates maternal mortality at 1,400 per 100,000 live births, which puts Somali women as one of the most high-risk groups' worldwide^{1,2}.

According to the World Health Organization (WHO), the average Somali woman gives birth at home with the help of a traditional birth attendant, or family and friends². Culturally Somali mothers go to the hospital only for deliver in severe medical difficulty. The World Health Organization guidelines on postnatal care recommend postnatal visits within six to 12 hours after birth, three to six days, six weeks, and at six months (6-6-6-6 model). Somali society placed a high value on having large

¹ Department of Public Health, Faculty of Allied Health Sciences, Daffodil International University, Dhaka-1207 Bangladesh,

² Department of Obstetrics and Gynecology, Cumilla Medical College and Hospital, Cumilla-3500 Bangladesh,

³Department of Nutrition and Food Engineering, Faculty of Allied Health Sciences, Daffodil International University, Dhaka-1207 Bangladesh.

^{*}Corresponding author: Dr. Salamat Khandker, Associate Professor, Department of Public Health, Faculty of Allied Health Sciences, Daffodil International University, Dhaka-1207 Bangladesh, Email: drsalamat@daffodilvarsity.edu.bd

families. On average women in Somalia give birth to 7.3 children during their lifetime. Contraception is discouraged in Somali tradition. Women often are ostracized in the community for using birth control, and many do not practice child spacing with the exception of the Quran-blessed breast-feeding of infants for two years. As a result, many Somali women give birth annually which is detrimental to their health, and the health of their infants³. This study was conducted to assess health service utilization by pregnant mothers for anti-natal care.

Materials and methods

This was a descriptive cross-sectional survey design to determine the factors in relation to utilization of postnatal services in a selected hospital in Somalia. The study population was pregnant mothers attending maternal clinic at Banadir hospital in Hodan district of Somalia.

A set of predesigned close ended questionnaire was used for collection of information on factors in relation to utilization of postnatal services. The questionnaire was written in English and translated in Somali and retranslated into English for validation. The questionnaire was field tested before those were used for data collection. The researcher collected data by face to face interview. Written consent was collected from respondents and confidentiality was maintained. Data were analyzed by using Statistical Package for Social Scientists (SPSS) by selecting descriptive variables and the findings were presented in form of tables, and graphs.

The researcher carried out a Focus Group Discussion (FGD) among 12 mothers who did not attend postnatal care services to identify the reason of not availing PNC services of the hospital. The Principal Investigator (PI) took note during FGD and whole the session was also recorded. The findings were analyzed and presented in descriptive form of study report. This study was approved by Ethics Review Committee of the Faculty of Allied Health Sciences, Daffodil International University, Bangladesh.

Results

Table 1 shows that most of the respondents' age was 15-25 years 51.3%, followed by the age group 26-35 years (34.7%). Above 46% of the respondents were married (46.7%), 42.0% were divorced and 11.3% were widowed. Most of the mothers were housewives (25.3%) followed by students (20.7%) and rest were involved in other occupations like civil servant, health staff, business and NGO workers.

Above half of the mothers (54.0%) come to Banadir hospital from Urban areas, 43.3% from Rural areas and 2.7% were from slum areas. Most of the participants (73.5%) come from far away i.e. 6Km and above to receive health services. Remaining 26.7% were within 5Km circumference of the hospital. Most of the respondents had education up to secondary school and Bachelor/Master degree (22.0%, 33.3%), followed by no-formal education. Master and Elementary were 14.7%. & 10.7% respectively and 5.3% respondents could sign only. Slightly below 30.0% of the participants were unemployed, about 22.7% were health staff that means they had the knowledge about it. Fifty percent of them were self-employee and business men. Forty percent (40.0%) of the participants give birth from 3-4 times. (Table 1).

Table 1: Distribution of Respondents by Socio-demographic Characteristics (n=150)

Variables	Frequency	Percentage (%)
Age		
15-25	77	51.3
26-35	52	34.7
36 -45	15	10.0
46 & above	6	4.0
Marital status		
Married	70	46.7
Divorced	63	42.0
Widow	17	11.3
Occupation		
Housewife	38	25.3
Civil servant	26	17.3
NGO	16	10.7
Business	18	12.0
Student	31	20.7
Health staff	21	14.0
Residence type		
Urban	81	54.0
Rural	65	43.3
Slum	4	2.7
Distances between hospital and re	sidences	
1-5Km	40	26.7
6-10Km	43	28.7
11Km+	67	44.7
Education level		
Can sign only	8	5.3
No formal education	22	14.7
Elementary	16	10.7
Primary intermediate	15	10.0
Secondary school	33	22.0
Vocational	6	4.0
Bachelor/Masters	50	33.3
Number of Pregnancy		
1-2	46	30.7
3-4	60	40.0
5+	44	29.3

Awareness of Postnatal Service

Above thirty six percent (36.6%) of the respondents received postnatal services information from nurses and midwifes, followed by doctors 25.3%. Other sources of information were family members, media, friends, and school. Ninety two percent (92.0%) of the respondents attended postnatal services and common cause of attending PNC services were immunization 27.5%, confirmation of physical fitness 23.2%, according to advice of service provider 14.5%, for treatment of sickness 22.5% and fro family planning services 12.3%.

Responding to the query regarding type of services they attended, 28.0% reported that they went for counselling. While 25.3%, 21.3%, 13.3% and 11.3% reported for immunization of the baby, physical examination, breast feeding education, and family planning services respectively. Only 0.7% respondents received physiotherapy. Eight percent mothers reported that they did not go to hospital for PNC services; as they went to hospital for delivery therefore those mothers received physical examination after delivery. Table -2 further shows that although 36.7% respondents are not aware about postnatal services but 92.0% of the respondents attended postnatal services at the hospital.

Table 2: Distribution of Respondents by Awareness of Postnatal Service

Variables	Frequency	Percentage (%)	
Source of information on postnatal service			
Doctor	43	28.7	
Midwife and nurses	55	36.7	
Family member	22	14.7	
Media	7	4.7	
Friend	5	3.3	
School	18	12.0	
Visited hospital for postnatal services			
Yes	138	92.0	
No	12	8.0	
Reason of going for PNC			
Sickness	31	22.5	
Immunization of baby	38	27.5	
Advice of service provider	20	14.5	
Family planning services	17	12.3	
Physical fitness	32	23.2	
Type of PNC service attended in hospital			
Physical examination	32	21.3	
Immunization of baby	38	25.3	
Counselling	42	28.0	
Family planning services	17	11.3	
Breastfeeding education	20	13.3	
Physiotherapy	1	0.7	
Mother's awareness about postnatal services			
Yes	95	63.3	
No	55	36.7	
Total	150	100.0	

The Utilization of Postnatal Services

Only 80.7% of the respondents had checked up at a hospital when they were pregnant and 19.3% went to hospital for delivery only. Eighty six percent stated that they did not pay for the postnatal service that they were provided in the hospital. Above nineteen percent (19.3%) respondents delivered at hospital but did not check-up when they were pregnant. Among these respondents 44.8% reported that cultural factor prevented them from attending hospital services during pregnancy (Table 3).

Table 3: Distribution of respondents according to utilization of postnatal services

Variables	Frequ	uency	Perce	ntage
Utilization of Postnatal Services	Yes	No	Yes	No
Did you have check-ups when you were pregnant?	121	29	80.7	19.3
Did you have to pay any fee for the services?	21	129	14.0	86.0
Are there problems that prevented you from				
receiving services?	29	121	19.3	80.7
What prevented you from attending?	13	16	44.8	55.2

FGD Findings

Among the respondents 12 mothers stated that they did not go for PNC. During Focus Group discussion these 12 respondents stated that the common reasons for not attending PNC services in the hospital are: they were not aware about postnatal services, waiting time is too long, they preferred to attend other family members, hospital service is expensive, cultural belief, do not stay in the area, think that PNC services was not necessary and no money for transport. They further informed that the health personnel do not treat well. In this regard one of mothers opined "they shouted at me, they do not treat me well, examined roughly and did not come when called".

It was found that 42.7% delivered through caesarean section, 35.5% were normal vaginal delivery and 22.0% were assisted vaginal delivery. Responding to our query regarding quality of services 58.6% told that service quality was between good and very good and remaining 41.4% stated that it was between bad and very bad.

Table 4: Distribution of respondents according to methods of delivery and rating of hospital services (n=150)

Variables	Frequency	Percentage (%)
Method of delivery		
Normal vaginal delivery	53	35.3
Caesarean section	64	42.7
Assisted vaginal delivery	33	22.0
ating of hospital services		
Very Bad	42	28.0
Bad	20	13.3
Good	47	31.3
Very Good	41	27.3

Discussion

All the respondents of this study delivered in hospital and were attended by doctors, nurses or by skilled birth attendants. Study report found that mothers who delivered in a health facility and whose delivery was attended by a skilled attendant were more likely to report attending at least one postnatal care visit⁵. Above 80.0% respondents of this study availed antenatal care services; this may have influenced on utilization of postnatal care (PNC) services. As a result utilization of PNC was 92.0%. Fifty four percent (54.0%) mothers came to Banadir hospital from urban areas and above 59.0% mothers educational level was above secondary or higher level. Vishnu K. stated that mothers who were educated, whose partners were educated and who were from rich families and from urban areas were more likely to report attending immediate postnatal care⁵. Higher utilization of post natal services from hospital might be influenced by higher education rate of respondents of this study. Maternal education increases women's perceived seriousness about maternal morbidities and enhances women's knowledge about the availability of healthcare services. Maternal education may also act as a foster for representing a woman's higher socio-economic status. It was reported that mother's educational status, lower parity, marital status and educational attainment of husband have influence on utilization of postnatal services by mothers⁶. Sixty three percent respondents of this study were aware about importance of post natal care. Study reports revealed that 60.9% mothers were not aware about post natal services while only 16.9% mothers attended post-natal care services within 42 days of PNC⁶⁻⁷. In this study all deliveries were done in hospital and 100% mothers received at least one PNC visit after delivery and 92.0% respondents reported to attend more than one PNC. Study report concluded that marital status, maternal knowledge, and place of delivery were predictors of postnatal care service utilization in Debre Birhan town⁸. In this study above 47.0% mothers were married.

This study reveals that above 74.0% mothers came from 5 Km+ away from hospital. Previous studies reported that distance from hospitals was one of the barriers of utilization of postnatal services⁹⁻¹⁰. In our study majority of respondents came from far away for delivery. The reason might be that the mothers went to hospital for delivery purpose. Therefore they availed postnatal care services to avoid any complication. In addition mothers reported that they went to hospital for other reason e.g. treatment of other disease, immunization of baby, family planning services, to check physical fitness, according to advice of doctors, etc. On the other hand mother those did not go for PNC stated that lack of awareness, living far away from hospital, high expensive of PNC in hospital were the causes of not going to hospital for PNC. *Annete N.* stated that lack of awareness about postnatal services and lack of somebody to take care of the children at home were the main barriers of utilization of postnatal services⁹⁻¹⁰.

Yinager GW. et al stated that 20.2% mothers utilized postnatal care service and concluded that educational status, women's autonomy, number of pregnancy, place of delivery and knowledge of postpartum obstetric danger sign were the factors making a difference in utilizing post natal care service¹¹. This study reveals that above 74.0% respondents were either self-employed or worked in government or non-governmental sector. It is anticipated that occupation represents family income and better social status and has a positive effect on the utilization of modern healthcare services. Similarly employed women have better financial status, ability to use quality health services and gain empowerment to take part in the decision making process about healthcare in the family. Above 59.0% respondents of this study had either completed secondary level of education or had above secondary level of education. Maternal health care increases linearly with education and educated of mothers with at least secondary schooling are four times more likely to use postnatal care than women

with no education. 11 Studies showed direct association between postnatal care utilization and maternal employment, awareness to postpartum danger signs, frequency of ANC and attending birth at health institution. 12

Twelve mothers of this study reported that they did not go for PNC. In FGD they reported that lack of awareness on postnatal services, long waiting time in hospital, culturally prefer to attend by other family members, higher cost of hospital service, do not stay in the area, etc. were main reason behind it. The respondents further informed that the health personnel do not treat well and shouted, examined roughly and did not come when called. Previous study findings revealed that maternal factors associated with lack of postnatal care included low household wealth index, low education levels, lack of knowledge of pregnancy-related complications or where distance from health services was a problem 13-14.

Study suggested context-specific evidence which might be taken into consideration when rethinking policies to increase PNC utilization¹². A significant number of mothers of this study were not aware about post natal services but they received postnatal services from hospital. This indicates positive impression of health sector reforms policy of the Somali government to bring the health services at door step of the community. Other studies on community based survey reveals that introducing community based postnatal care increases in post natal care coverage¹⁵⁻¹⁶.

Conclusion

The mothers who utilized postnatal services preferred private to government health facility. The factors those influence utilization of postnatal services in Banadir hospital include: awareness of postnatal services; long distance from the health facilities; employment; education; quality of services; cultural beliefs; waiting time; lack of somebody to look after the children at home; and decision-making powers by the women.

Acknowledgement

We would like to express our deep gratitude to Dr. ABM Alauddin Chowdhury, the Supervisor, for conceding the study, for his invaluable advices and support throughout the study.

References:

- World Health Organization (WHO). Republic of Somalia country profile 2006. Available at https://www.who.int/countries/som/en/ [Access on 6 March, 2019)
- Carla A, Tessa W. World Health Organization (WHO). Maternal Mortality in 2000: Estimates developed by WHO, UNICEF and UN FPA, 2000. Available at: https://apps.who.int/iris/bitstream/handle/10665/68382/a81531.pdf;jsessionid=2F63F528E02E90647935ACFA2AA5C 0C0?sequence=1 [Access on 10 January, 2019)
- 3. Thomson Reuters Foundation poll 'Giving Birth in Somalia: A Matter of Life and Death' The Story of Asha and Her Baby Boy, Somalia is the 5th most dangerous country according to Thomson Reuters Foundation poll, 16th June 2011. https://www.trocaire.org/news/giving-birth-somalia-matter-life-and-death (Accessed on June 2019)
- 4. Nancy S. "Cultural Traditions and the Reproductive Health of Somali Refugees and Immigrants" University of San Francisco Master's Theses 2012. Available at: https://repository.usfca.edu/thes/29 [Access 28th June 2019].
- 5. Khana V, Adhikari M, Karkee R, Gavidia T. Factors associated with the utilisation of postnatal care services among the mothers of Nepal: analysis of Nepal Demographic and Health Survey 2011. BMC Women's Health 2014 14:19
- 6. Idris UT, Haruna DD, Mohammed B, Bala MA, Aliyu SK. Factors responsible for under-utilization of postnatal care services in Maiduguri, north-eastern Nigeria. Sahel Medical Journal; 2015:8:3: 109-115

- 7. Daniel A, Diana M, Mark K. Determinants of Postnatal Care Use in Kenya. African Population Studies; 2014:28:3: 1447-1459
- 8. Angore, B.N., Tufa, E.G. & Bisetegen, F.S. J Health Popul Nutr (2018) 37: 10. Available at: https://doi.org/10.1186/s41043-018-0140-6
- 9. Nankwanga A, Phillips J. Factors Influencing Utilization of Postnatal Services in Kampala Uganda. JCHS; 2008:3:1.
- 10. Annet, N. Factors influencing utilization of postnatal services in Mulgan and Mengo hospital Kampala, Uganda 2004. [http://www.uwc.ac.za/ the Mother and Newborn: A Practical Guide. library/theses/main_frame.htm]. (Unpublished M.Sc. thesis), University of the Western cape, Cape Town, South Africa.
- 11. Yinager GW, Desta AH. Factors Affecting Utilization of Postnatal Care Service in Amhara Region, Jabitena District, Ethiopia. Science Journal of Public Health. 2014:2:3:169-176. doi: 10.11648/j.sjph.20140203.15
- 12. Abebo TA, Tesfaye DJ. Postnatal care utilization and associated factors among women of reproductive age Group in Halaba Kulito Town, Southern Ethiopia. Arch Public Health. 2018; 8:76:9. https://doi.org/10.1186/s13690-018-0256-6
- 13. Hordofa MA, Almaw SS, Berhanu MG, Lemiso HB. Postnatal Care Service Utilization and Associated Factors Among, Women in Dembecha District, Northwest Ethiopia, Science Journal of Public Health: 2015: 3(5): 686-692.
- 14. Titaley CR, Dibley MJ, Roberts CL. Factors associated with non-utilization of postnatal care services Indonesia, J Epidemiol Community Health: 2009; 63(10):827-31.
- Sines E, Syed U, Wall S, Worley H. Postnatal Care: A Critical Opportunity to Save Mothers and Newborns. Save the children & Population Reference Bureau, 2007. Available at: https://cdn2.sph.harvard.edu/wpcontent/uploads/sites/32/2017/02/snl_pncbrieffinal.pdf (Last access 28.06.2019).
- 16. World Health Organization (WHO). Postpartum Care of the Mother and Newborn: A Practical Guide; WHO: Geneva, 1998. Available at: https://www.who.int/maternal_child_adolescent/documents/who_rht_msm_983/en/