TMJ
Original research **Published by** OJS
Doi: 10.4314/tmj.v31i4.410.g257

OPEN ACCESS JOURNAL

"Postnatal Care Utilization is Meant Only for Our Children": Perceptions and Experience of Women in Nachingwea District Council, Tanzania

Samwel A. Laizer[1], Gladys R. Mahiti[2]*, Tumaini Nyamhanga[2]

[1]Health Deaprtment, Kinondoni Municipal Council, Dar es Salaam, Tanzania
[2]Department of Development Studies, School of Public Health and Social Sciences, Muhimbili University of Health and Allied Sciences, Dar es Salaam, Tanzania

***Corresponding author:**
Dr. Gladys Reuben Mahiti
Muhimbili University of Health and Allied Sciences
P.O. Box 65001
Dar es Salaam, Tanzania
Email: gmahiti2011@gmail.com

TMJ
Original research
Published by OJS
Doi: 10.4314/tmj.v31i4.410.g257
OPEN ACCESS JOURNAL

Abstract

Background
Postnatal care (PNC) is essential for ensuring the optimal health of women and their newborns. In Africa, most mothers and newborn do not visit healthcare facilities following childbirth despite the fact that majority of maternal and neonatal deaths occur during this period. Regardless the the existence of several programs for improving maternal and child health, the utilization of PNC yet remains low. The objective of this study was to assess the experiences and perceptions of women on postnatal care services utilization.

Methodology
A qualitative study design was used. The study was conducted in Nachingwea district. Women who delivered children within one year before the study and reside in Nachingwea district were recruited from Nachingwea district hospital and Naipanga dispensary. The selection was based on their age, education and parity. IDIs and FGDs were used. Qualitative content analysis was used for analysis.

Results
Sixty-six (66) women who brought their babies to PNC services for immunization and growth monitoring participated in the study. Sixteen (16) IDIs and seven FGDs were conducted. Upon analysis of data, three main categories that explain the experiences and perceptions of women on postnatal care services utilization were generated. These categories are women's experiences on postnatal care services utilization; perceived benefits of postnatal care services utilization, and, perceived barriers towards PNC services utilization. Women had negative experience and perceptions regarding PNC services utilization and they did not understand the advantages of PNC services to them, except for their children.

Conclusion
Women's negative perceptions on PNC services utilization were revealed. Women did not understand the benefits of PNC services to them, except for their children. Barriers such as health systems, socio economic and cultural factors also affected PNC utilization. The government should improve PNC services through health education, promotion interventions aiming at PNC utilization. Improvements should address the availability and accessibility of services and importance of PNC services for both mother and her newborn in reducing maternal and newborn morbidity and mortality during postnatal period.

Key words: *Experiences, Perceptions, Postnatal Care, Nachingwea District, newborn.*

Published by OJS
Doi: 10.4314/tmj.v31i4.410.g257
OPEN ACCESS JOURNAL

Introduction

Postnatal care (PNC) refers to the healthcare services provided to a woman and her child for six weeks consecutively following childbirth (1–4). It includes a set of activities such as observation, treatment, and advice given in order to prevent and treat complications that may occur to the mother or her baby (3). Majority of maternal and newborn mortality cases occur during this time, especially in the first 24 hours and within the first week after delivery. Other complications are hemorrhage, sepsis and infections, poorly spaced pregnancy, poor access to family planning and emotional and psychological problems that might cause depression, yet, this is the most neglected time for the provision of good quality services for mothers and their newborns (4,5). Worldwide, about 303,000 maternal deaths occur annually, with the largest proportion (201,000 deaths) happening in sub Saharan Africa (6).
The World Health Organization (WHO) recommends at least four postnatal care visits: within 24 hours after birth, on day three (48-72hours), within 7-14 days after birth and after six weeks. However, individual countries are encouraged to implement this plan according to their own needs and capabilities (4,7). Through its Ministry of Health, Community Development, Gender, Elderly and Children (MoHCDGEC), Tanzania recommends at least four visits during the postnatal period. They are at 24 hours, within seven days, and at 28 days and 42 days (3,8).

In Africa, a large number of women deliver at home, and PNC may be unavailable (5,9). This situation poses great challenges for planning and implementing PNC services (4). It indicates that PNC programs are among the weakest of all the reproductive and child health programs in most countries (10).

According to the Millennium Development Goal 5, the world had intended to reduce maternal mortality rate (MMR) by 75% between 1990 and 2015. However, global MMR had decreased by only 43.8% between those years (6). Immediate action is needed to meet the Sustainable Development Goals (SDGs) 2030 target of having less than 70 deaths per 100,000 live births, and ultimately eliminate preventable causes of maternal mortality (6,11). Evidence from previous studies shows that improved PNC intervention helps reduce the incidents of maternal morbidity and mortality (12).
Globally, various countries have adopted policies and programs to encourage the utilization of maternal and newborn healthcare services (MNHC). One of the strategies is to increase

universal access to MNHC (13,14). However, to-date, PNC utilization remains low (13,15,16). In Tanzania, for instance, there exist several national policies and programs for improving maternal and child healthcare services (17). However, MMR has increased from 456 deaths per 100,000 live births to 556 deaths per 100,000 live births, while Neonatal Mortality Rate (NMR) decreased from 40 deaths per 1,000 live births in 1999 to 25 death per 1,000 live births in 2015 (16,18).

Lack of awareness on the importance of PNC services, complications following childbirth such as hemorrhage, sepsis and infections, poorly spaced pregnancy, poor access to family planning and emotional and psychological problems that might cause depression may affect PNC use, distance to healthcare facilities, transport problems, the costs of accessing healthcare services, health seeking behavior, education, poor quality of the available healthcare services, and poor attitude of healthcare service providers toward their patients (12,13,18–21) affects PNC utilization. Health system factors such as insufficient workforce, poor infrastructure, health information system, supply chain logistics and managerial capacity also affect women's access to PNC services (22).

Factors that determine PNC services utilization vary according to different social, economic, and cultural reasons within a society. In Tanzania PNC services are underutilized by 35% as compared to other stages of the continuum of care and particularly in Nachingwea district where underutilization is 49%. Therefore, assessing and understanding women's experiences and perceptions of PNC in different areas remains of paramount significance.

Methodology

Study area

The study was conducted in Nachingwea district, in Lindi region, Tanzania. Two facilities were involved namely Nachingwea district hospital and Naipanga dispensary.

Study design

This study employed an exploratory qualitative study design and employed where in-depth interviews and focus group discussion data collection techniques were used for data collection (23).

Study participants

Women who delivered children within one year before the study and who resided in Nachingwea District Council were recruited. The period of one year deemed appropriate to minimize recall bias.

Sampling technique

Purposive sampling was used to select participants (23). The selection was based on their age, education and parity for maximum variation.

Sample size

Sixteen in-depth interviews (IDIs) and 7 Focus Group Discussion (FGD) sessions were conducted. Data collection was stopped after reaching saturation – a point at which no more new issues were emerging and data begun to repeat (23).

Data collection methods and tools

IDIs and FGD guides were prepared in English and translated into Kiswahili which is widely spoken in Tanzania. The guides contained open-ended questions that emerged from the study objectives and research questions, as well as other information gained from literature on experiences and perceptions on PNC utilization. Participants were recruited when visiting healthcare facilities for their newborn children's immunization and growth monitoring. Informed consent was obtained from all participants before each conversation. Each conversation lasted between 30 and 60 minutes.

Data processing and analysis

Content analysis was used in analyzing the findings (23). The digitally recorded IDIs and FGDs were transcribed verbatim. Firstly, the IDIs and FGDs were read several times to obtain sense of a whole, and to identify meaning units. Meaning short sections of the transcripts that were meaningful and related to our research question. Secondly, the identified meaning units were condensed into short summarized versions namely condensed meaning units. Thirdly, from condensed meaning units, codes were elaborated. Fourthly, codes were grouped together. and through going back and fourth between the texts and developed codes sub-categories were formed. Finally, through constant comparison between sub-categories and rest of material categories were formed. Coding was done in Kiswahili then translated into English to develop sub-categories and categories (**Table 1**).

Published by OJS
Doi: 10.4314/tmj.v31i4.410.g257
OPEN ACCESS JOURNAL

Table 1. Example of Coding Process

Meaning Unit	Condensed meaning unit	Code	sub-category	Category
"Some of the women (not me), were afraid to come to the clinic after giving birth at home because they would be required to pay fines…" (FGD No. 06, Naipanga Dispensary).	Women were afraid to come to the clinic Women giving birth at home Long waiting time imped attendance to PNC Women required to pay fine	Women being afraid to come to the clinic, paying fines and long waiting time imped PNC utilization	Health systems barriers to PNC utilization	Perceived barriers on utilization of PNC

Data trustworthiness

Trustworthiness refers to issues of credibility, transferability, conformability and dependability (24). Credibility is the ability of the qualitative research to reveal what the researcher intends to study. Firstly, author spent some time in the field and had familiarity in the field. In that regard, participants were identified purposively and the researchers explained the study in detail before each conversation. Also, the researchers established good rapport with the participants to increase their confidence and willingness to participate. In each session, notes were taken and sound recording was done for effective record keeping. In ensuring conformability, all the rules, regulations and methods of collecting qualitative data were observed. An attempt was also made to obtain feedback from participants so as to lessen misinterpretation of their self-behaviors and views (24). Dependability has been ensured by use of open-ended questions, by describing the selection criteria. Data collection and analysis process are supplemented with quotes and emergent design. Transferability is how applicable the findings are in other contexts and was ensured by describing the study context.

Results

This section covers results from this study. It presents social demographic characteristics and categories that explain the experiences and perceptions of women on postnatal care services utilization. The main categories include: women's experiences on PNC services utilization; perceived benefits of PNC services utilization, and, perceived barriers towards PNC services utilization.

Social demographic characteristic of the participants

Characteristics of participants are summarized in Table 2. The participants ranged between 15 and 45 years and majority of them had attained primary education (65.2%), with more than one parity (75.8%) and were mostly engaged in farming activities (56%).

Table 2: Socio-demographic Characteristics of In-Depth Interviews (IDI) and Focus Group Discussion (FGD) Participants

Background Characteristics	IDI (n=16)	FGD 7 (n=50)
Age of the mother		
15-19	3	2
20-24	2	19
25-29	5	12
30-34	3	6
35-39	2	9
>39	1	2
Birth order/Parity		
1	4	12
2-3	7	26
4-5	3	9
6+	2	3
Level of Education		
Never gone to school	1	4
Primary school level	9	34
Secondary school level	3	9
College level	3	3
Occupation of participants		

Housewives	1	6
Farmer	9	28
Employed in formal sector	3	4
Self-employed	3	12
Residence		
Urban	9	37
Rural	8	13
Antenatal care visits		
None		
1-3	5	19
4+	11	31

Source: Field data, 2018

Experiences of women on PNC services utilization

Women narrated their experiences of PNC services utilization. In this study, mothers' experiences on how healthcare service providers (HCPs) treated them and their children, and how that situation encouraged or discouraged them from utilizing PNC services. However, other women expressed how healthcare staff disrespected and insulted them as indicated by participants in different interviews.

"*Nowadays, this service is good compared to the previous years, because nurses take a good care of us and our children... …and generally, communication is good."* (IDI No. 09, Nachingwea District Hospital).

"But sometimes the healthcare workers, especially midwives, treat people very badly. …they begin to insult and shout at you in front of other women. This may discourage you not to return to the clinic, especially for first time mothers." (IDI No. 10, Naipanga Dispensary).

Other participants reported how the poor quality of PNC services discouraged them from seeking the services. In this study, some participants reported inadequacy of PNC services due to lack of other services within the postnatal care package. In one in-depth interview, a participant mentioned that:

"The quality of the services was average because they skip some of the components... Other services are beyond their capability." (IDI No. 07, Nachingwea District Hospital).

Women who previously utilized PNC services tend to return during subsequent deliveries. This could be due to the positive experience with the services they received previously. This was reported in interview as shown below:

"…I used to come here and all my children are doing fine." (IDI No. 08, Nachingwea District Hospital).

Perceived benefits of PNC services utilization

Participants for this study rated PNC services as beneficial to children because they protect their children against preventable diseases. That is why they brought their children to the clinic. But the women themselves reported seeking PNC services during complications. In addition, women reported that weight monitoring helps them to understand if the child is growing in the right way. Women reported that PNC services is meant only for their children, whereby newborns get weighed and vaccinated against preventable diseases as mentioned by the following participants;

"This service is good for our children because nurses weigh and vaccinate them against diseases." (IDI No. 08, Nachingwea District Hospital).

Another woman in an interview reported that:

"They vaccinated my child against diseases and measured his weight. But for me, I got nothing." (IDI No. 14, Nachingwea District Hospital).

"It is important because our children get immunizations against diseases and the doctors may discover if the children have any health problem." (FGD No. 06, Naipanga Dispensary). Other participants reported that they only make use of PNC services when they experience complications: In one focus group discussion, it was reported that:

"If I have a problem, I will come as it happened in my second pregnancy when I lost a lot of blood and I started to lose control (fainting)" (FGD No. 01, Nachingwea District Hospital).

Most participants reported to have received health education covering various components such as nutrition, hygiene, breastfeeding, and contraception. Some women explained that PNC services are beneficial because they acquired new knowledge, which helps them to care for themselves and their children. Participants also commended the services as beneficial because they were taught about danger signs for mothers and their children including dizziness, severe headache, excessive bleeding or foul smelling discharge. For children, the danger signs are failure to breastfeed, yellowish color on skin and eyes, and convulsions as indicated below;

"*I gained knowledge on family planning, the importance of breastfeeding and hygiene for me and my child."* (FGD No. 02, Nachingwea District Hospital).

"While we wait for services, one of the nurses educates us in groups on danger signs for us and our babies." (FGD No. 02, Nachingwea District Hospital).

Perceived barriers on utilizing PNC services

Women expressed the barriers that they perceived as discouraging them from utilizing PNC services. These include factors such as socio-economic reasons, cultural beliefs and practices and health systems barriers on PNC utilization and literacy on postnatal care services.

Socio-economic and cultural barriers to PNC utilization

Although women positively value PNC services, they reported barriers hindering their utilization. The major barriers included conflict with the husband/partner, lack of transport money, long travel distance to the healthcare facility, misconceptions, and cultural practices, as explained in the below excerpts:

"Sometimes, husbands may stop you from attending postnatal clinic… he may beat you up or sometimes you may end up being chased away." (FGD No. 04, Nachingwea District Hospital).

"Not having bus fare and long waiting periods on the road is a huge impediment toward our attending PNC clinic appointments." (FGD No. 07, Nachingwea District Hospital).

Published by OJS
Doi: 10.4314/tmj.v31i4.410.g257

"Yes, some of them use something like "hirizi" and they believe that it is prevention. (IDI No. 07, Naipanga Dispensary)

Health systems barriers to PNC utilization

Participants mentioned external factors that demotivate them from utilizing PNC services. Such factors include the lack of vaccines and medicines, abusive behavior from health care staff, inadequate healthcare staff, long waiting time, and illegitimate fines and penalties:

"Availability of vaccines and medicines is a big problem here." (FGD No. 06, Naipanga Dispensary).

"If you fail to put your card correctly, instead of guiding you, a nurse would insult you in front of other women as if you're a small child." (FGD No. 02, Nachingwea District Hospital).

"*…but here the number of staff is small…"* (IDI No. 03, Nachingwea District Hospital).

"Some of the women (not me), were afraid to come to the clinic after giving birth at home because they would be required to pay fines…" (FGD No. 06, Naipanga Dispensary).

Low literacy on PNC services

Participants in this study demonstrated lack of knowledge and awareness on PNC services and their importance to them. They are unaware of the kind of services and the time they should receive them. This is attributable to the lack of knowledge on the components and contents of postnatal care services.

"They told me to attend clinic, but I don't know the importance of it, and that if I and my child, we are supposed to get any care post-delivery." (IDI No. 14, Naipanga Dispensary).

"I know nothing and I have never heard about postnatal care services." (IDI No. 03, Nachingwea District Hospital).

Discussion

The women expressed negative experiences regarding their utilization of the services. However, some women hold the view that the benefits of services are meant for their children such as weight measuring, physical or medical examination, and vaccination. Perceived barriers to PNC, socio economic and cultural barriers to PNC services, health systems barriers to PNC services and low literacy on PNC were also observed.

Studies on the use of antenatal and PNC services in Tanzania and Indonesia reported that participants viewed PNC services as good and beneficial to their children because they help in protecting them from preventable diseases (31). Lack of information about the significance of PNC services was revealed. Women's reluctance to utilize PNC services was observed. Some participants reported utilizing PNC services only during complications, similar to findings from studies conducted in Tanzania, Malawi and Ethiopia (18, 33, 36). The knowledge gaps on the importance of PNC services may result in increased risk levels of maternal and child mortality and morbidity.

During clinic visits, women receive education on nutrition, breastfeeding, hygiene, and family planning and participants confirmed benefitting from the lessons. Similar findings were observed in Malawi where women reported the significance of child nursing education they received during PNC sessions (26). Participants in this study appreciated that they were taught about danger signs for mothers and their children. This helps to seek healthcare services at nearby healthcare facilities in times of need and may cultivate a positive health seeking behavior for PNC services.

Despite increased understanding of the benefits of PNC services, several factors hinder women's uptake of the services: socioeconomic, cultural, health systems, illiteracy, and negligence. This information aligns with the results from the Tanzania Demographic and Health Survey and Malaria Indicator Survey (TDHS-MIS) (16). Long travel distance and lack of bus fare were reported to hinder women's utilization of PNC services (18, 21). Some cultural practices were noted, for example, a tradition preventing women and newborns from exiting the house before the child's umbilical cord drops off has been observed in Indonesia and Ethiopia (13,27). Such cultures expose women and children to infection and other risks, sometimes encouraging them to resort to alternative medicine (15). This implies that community engagement to formal health care services is still a challenge.

This study has also observed that insufficient staff results in long waiting time and poor quality of PNC services. Similar findings were made in Indonesia and Tanzania where it was observed that the heavy workloads on Health Service Providers (HCPs), poor quality of care and insufficient communication hindered PNC services use (3, 6). This suggests that there is still poor quality of care despite increasing number of health facilities in Tanzania. Health

workforce availability is still a challenge in improving maternal health services. In addition, poor communication between women and HCPs, and the caregivers' disrespect towards clients were noted. The findings are in line with those previously reported in a study conducted in Tanzania by Mahiti et al 2015 (19). The findings imply that health systems might be the barrier for recommended practices on PNC services utilization.

Some of the women were not aware of the kind of services they should receive, a finding which is similar to what was reported in the studies conducted in Indonesia and Ethiopia (13,28,29). This implies that emphasis on women utilization of PNC services is still poor as compared to other stages of continuum of care (pregnancy and delivery) at the formal setting and might be due to poor experience during delivery as it is still low in Tanzania.

Conclusion

Women's negative experiences on PNC utilization were revealed. Women did not understand the benefits of PNC services to them but felt that they were only beneficial for their children. Barriers such as health system, socio-economic, cultural beliefs and practices, and literacy on PNC were revealed.

Recommendation

The government should launch education campaign and promotion interventions to raise awareness on PNC services and emphasis on the importance of PNC utilization. Improvements should also address availability and accessibility of services.

Study limitation

Some of the study participants were likely to get afraid to provide true information due to the fear of being mistreated by the healthcare service providers in the facilities they attended.

Ethical considerations

The MUHAS Senate Research and Ethics Committee approved the study protocol and gave ethical clearance number DA.287/298/01A. Permissions to conduct the study were also obtained from the offices of the Regional Administrative Secretary, District Executive Director and the respective heads of the selected healthcare facilities. All the participants gave their informed consent.

Published by OJS
Doi: 10.4314/tmj.v31i4.410.g257

OPEN ACCESS JOURNAL

Conflict of interest

All authors declare that they have no conflict of interests.

Authors contributions

SAL conceived the study, participated on its design, collected the data and analyzed the data and prepared the first draft. GRM participated in the conception and design of the study and involved in providing critical review of the manuscript. TN provided contributions throught the preparation of the manuscript. All authors read and approved the final manuscript.

Acknowledgments

Our special appreciations go to the Centers for Diseases Control and Prevention (CDC), for sponsoring this study**.** Our heartfelt appreciation is directed to Prof. Deodatus Kakoko, from School of Public Health and Social Sciences at Muhimbili University of Health and Allied Sciences for his contributions and constructive ideas and participants of this study.

List of Abbreviations

ANC	Antenatal Care
DC	District Council
HCPs	Healthcare Providers
IDI	In-depth Interview
FGDs	Focus Group Discussions
MMR	Maternal Mortality Ratio
MoHCDGEC	Ministry of Health, Community Development, Gender, Elderly and Children
MNHC	Maternal Newborn Healthcare
PNC	Postnatal Care
SDG	Sustainable Development Goals
WHO	World Health Organization

References

1. World Health Organization (WHO). **Postpartum care of the mother and newborn: a practical guide.** 1998.
2. Berhan Y, Davey B, Fesseha N, Gessese M KA. **Postnatal Care Module_ 1** [Internet]. Available from: http://www.open.edu/openlearncreate
3. Ministry of Health and Social Welfare - Reproductive and Child Health Section. **Learning Resource Package for Basic Emergency Obstetric and Newborn Care** (BEmONC) [Internet]. first edit. Ministry of Health and Social Welfare - Reproductive and Child Health Section, editor. Ministry of Health and Social Welfare - Reproductive and Child Health Section; 2010. 204 p. Available from: Ministry of Health and Social Welfare - Reproductive and Child Health Section
4. World Health Organization (WHO). **2013 WHO recomendations postnatal care of the mother and newborn.** World Health Organization (WHO)., editor. WHO Headquarters in Geneva: WHO; 2013. 62 p.
5. Warren CE. **Exploring the quality and effect of comprehensive postnatal care models in East and Southern Africa.** Ghent University; 2014.
6. Alkema L, Chou D, Hogan D, Zhang S, Moller AB, Gemmill A, et al. **Global, regional, and national levels and trends in maternal mortality between 1990 and 2015, with scenario-based projections to 2030: A systematic analysis by the un Maternal Mortality Estimation Inter-Agency Group**. Lancet. 2016;
7. World Health Organization, Who WHO. **World Health Statistics 2012.** World Health Statistics 2012. 2012.
8. Section M of H and SW-R and CH. **National Postpartum Care Guidelines.** first. Welfare M of H and S, editor. 2011. 43 p.
9. Kaba M, Bulto T, Tafesse Z, Lingerih W AI. **Sociocultural determinants of home delivery in Ethiopia: a qualitative study**. Int J Womens Health. 2016;8(2015):Pages 93—102.
10. World Health Organization. **World Health Statistics 2013**. World Health Organization. 2013.
11. United Nations. **Sustainable Development GOALS - 17 Goals to transform our world.** Sustainable development goals - United Nations. 2016.
12. Sanam Qasemzahi. **What are the factors effecting utilisation of antenatal and postnatal care services according to mothers and health care workers in the**

Pwani region, Tanzania? Ann Glob Heal. 2016;3:83.

13. Probandari A, Arcita A, Kothijah K, Pamungkasari EP. **Barriers to utilization of postnatal care at village level in Klaten district, central Java Province, Indonesia.** BMC Health Serv Res [Internet]. 2017;17(1):541. Available from: http://bmchealthservres.biomedcentral.com/articles/10.1186/s12913-017-2490-y
14. The United Republic of Tanzania MoHSW. **National Health Policy**. Minist Heal. 2003;
15. Rwabufigiri BN, Mukamurigo J, Thomson DR, Hedt-Gautier BL, Semasaka JPS. **Factors associated with postnatal care utilisation in Rwanda: A secondary analysis of 2010 Demographic and Health Survey data.** BMC Pregnancy Childbirth. 2016;16(1).
16. TDHS. **Tanzania Demographic and Health Survey and Malaria Indicator Survey** (DHS-MIS) 2015-2016. Vol. June, NBS, MoHCDGEC, ICF International. 2016.
17. URT. United Republic of Tanzania Ministry of Health and Social Welfare **The National Road Map Strategic Plan To Accelerate Reduction of Maternal , Newborn and Child Deaths in Tanzania.** 2015;(4):14–89.
18. Tanzania Bureau of Statistics. **Tanzania Demographic and Health Survey 2010**. Natl Bur Stat Dar es Salaam, Tanzania ICF Macro Calverton, Maryland, USA. 2010;
19. Mahiti GR, Mkoka DA, Kiwara AD, Mbekenga CK, Hurtig AK, Goicolea I. **Women's perceptions of antenatal, delivery, and postpartum services in rural Tanzania.** Glob Health Action. 2015;
20. Somefun OD, Ibisomi L. **Determinants of postnatal care non-utilization among women in Nigeria.** BMC Res Notes. 2016;9(1).
21. Sialubanje C, Massar K, Hamer DH, Ruiter RAC. **Understanding the psychosocial and environmental factors and barriers affecting utilization of maternal healthcare services in Kalomo, Zambia: A qualitative study**. Health Educ Res. 2014;
22. Lozano R, Wang H, Foreman KJ, Rajaratnam JK, Naghavi M, Marcus JR, et al. **Progress towards Millennium Development Goals 4 and 5 on maternal and child mortality: An updated systematic analysis.** Lancet. 2011;
23. Graneheim UH1 LB. **Qualitative content analysis in nursing research: concepts, procedures and measures to achieve trustworthiness**. Nurse Educ. 2004;24(2)(feb 2004):102–12.
24. Lincoln YS, Guba EG. **Establishing Trustworthiness**. In: Naturalistic Inquiry. 1985.
25. Mrisho M, Obrist B, Schellenberg JA, Haws RA, Mushi AK, Mshinda H, et al. **The use of antenatal and postnatal care: Perspectives and experiences of women and health**

care providers in rural southern Tanzania. BMC Pregnancy Childbirth. 2009;

26. Zamawe CF, Masache GC, Dube AN. **The role of the parents' perception of the postpartum period and knowledge of maternal mortality in uptake of postnatal care: A qualitative exploration in Malawi.** Int J Womens Health. 2015;
27. Zeleke A. **An Assessment of Factors Affecting the Utilization of Maternal Health Care Service Delivery: the Perspective of Rural Women in the Case of Duna Woreda, Hadiya Zone** [Internet]. Addis Ababa University; 2015. Available from: http://localhost:80/xmlui/handle/123456789/6839
28. World Health Organization (WHO)-Department of Making Pregnancy Safer. **WHO technical consultation on postpartum and postnatal care.** WHO Press, World Health Organization, 20 Avenue Appia, 1211 Geneva 27, Switzerland; 2010. 65 p.
29. Kanté AM, Chung CE, Larsen AM, Exavery A, Tani K, Phillips JF. **Factors associated with compliance with the recommended frequency of postnatal care services in three rural districts of Tanzania.** BMC Pregnancy Childbirth. 2015;