



## Perceived Barriers Associated with Maternal Health Care Service Delivery in Malawi: Health Personnel Perspectives

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**ABSTRACT** This study's aim was to understand perceived barriers associated with maternal health care service delivery in Malawi from the health personnel perspective. Using a qualitative approach, data was collected from 12 health facilities from across the country using semi-structured interview technique. The study found that barriers such as delayed health care financing, shortage of health personnel, poor record keeping of patients, irregular ambulatory services and unavailability of medical resources do affect maternal health care service delivery in Malawi. As such government of Malawi in collaboration with health care partners should make deliberate effort to ensure that supply side barriers that are affecting quality of maternal health care delivered are proactively addressed at district and national level if maternal health outcome is to improve.

### INTRODUCTION

Around the world, about 300 000 women die to causes related to childbirth and pregnancy complications. Out of this estimate, ninety-nine percent (289 000) of these deaths occur in sub-Saharan Africa and Asia (World Bank 2016). This implies that in sub-Saharan Africa and Asia, maternal mortality remains a public health challenge causing losses of lives in the process meant to give birth to life.

As indicated in earlier studies below, some of these deaths are attributed to direct primary preventable causes such as haemorrhage, unsafe abortion, obstructed or prolonged labour, and eclampsia in addition to other secondary causes such as Malaria, anaemia, diabetes and high blood pressure aggravated by women's pregnancy situation (Hogan 2010; AbouZahr 2003).

In southern sub-Saharan Africa, Malawi is among the countries that, in 2015, experienced highest burden of maternal mortality equivalence of 510 deaths per 100 000 live birth compared to neighbouring countries namely Zambia which registered a 280 deaths of women per 100 000 live births, Tanzania 410 deaths per 100 000 live births and Mozambique which noted 480 deaths per 100 000 live births (WHO 2015).

Over the past years, studies indicated that availability of effective and robust maternal health care service facilities furnished with skilled health care personnel, aimed at supporting wom-

en during childbirth and early period of postpartum/postnatal livelihood, can prevent at least 75 percent of maternal mortality experienced in most developing countries including Malawi (Koblinsky et al. 1999; Harvey et al. 2004; Leigh 2008; Alemayehu et al. 2010). Nevertheless, Malawi Demographic and Health Survey, in 2010 point out that maternal health care service utilization among women declined. For instance, the report further pointed out that 94.1 percent of these women received antenatal care services from skilled health providers, 71.4 percent were assisted by skilled birth attendant and on about 49 percent of these women received first postnatal check-up from the skilled health providers (NSO and ICF Macro 2011). A report by Hazemba et al. (2008) and of Sakala et al. (2011) postulated that variations affecting women use of maternal health care services was attributed to variations in socioeconomic, demographic and cultural factors. On the same note, recent study by Aregay et al. (2014) alluded to the same argument. On the same note to ensure effective delivery of health care services the government of Malawi become a signatory of 2002 Abuja health investment declaration in which the country pledged in increase health care investment to about fifteen percent of the annual national budget on health in a quest to improve not only quality of health care services delivery but also maternal health outcome (WHO 2002).

However, despite previous scholars concentrated at pointing out the numerous demand side

factors/barriers associated with women's utilization of maternal health care services, little has been discussed on the effect of supply-side factors on influence on delivery of maternal health-care services in most developing countries including Malawi. Therefore, it is important to understand such factors from the health care workers' perspective in order to ascertain such supply-side factors that prevent wholesome utilization of maternal health care services among women during pregnancy, childbirth and an early postpartum care period in Malawi. As such, the study anticipates exploring perceived barriers associated with delivery of maternal health care service utilization in Malawi from the health workers perspectives.

## METHODOLOGY

### Study Area

The study was conducted in 12 health facilities from Malawi's three regions, namely, northern region, central region and southern region. From each region, two districts were purposefully selected. At each district, there was a district hospital which was designed to act as a referral to support the services of the health centres within the district. These districts include Mzimba and Nkhatabay in the northern region; Lilongwe and Ntcheu in the central region and Chiradzulu and Zomba in the southern region. At each hospital, the health officer was asked to name the health centre that had the highest mode of referral cases and that health centre was included in the study. This was the case in order to understand the quality of existent maternal health care services barriers from the perspective of responsible manager between the health centre and the hospital in each district.

### Qualitative Data Collection

In each health facility, a semi-structured interview was conducted in which a manager or an overseer of the maternal health care services (in this case, the hospital matrons, district nursing officers and the clinic officer) was the targeted prime informant.

### Procedure of Data Collection

Data was collected from the prime informant at health facility. As such, these operational personnel were asked to explain their experiences

with regards to delivery of maternal health care services at the health facilities. The prime informants had to reveal the challenges exist in as far as resources availability is concerned and their perceptions in general on the quality of delivered maternal health care services. The responses from the discussions were recorded and transcribed verbatim in Microsoft word. Thereafter, key phrases were coded and categorised based on the themes.

## RESULTS AND DISCUSSION

The structured interviews were performed, across 12 prime informants responsible for operational management at the health care facilities in 3 regions of Malawi. Five themes were identified to be associated with barriers affecting perfect management of maternal health care facilities in the country. These themes are: i) personnel barriers; ii) medical equipment barriers; iii) inadequate information systems; iv) financial barriers; and vi) socio-cultural barriers.

### Personnel Barriers

The study explored the health care personnel barriers related to maternal health care service delivery in 3 regions of country. On this aspect, the issue of maternal health care experiencing shortage of human resource personnel, responsible for managing activities pertaining to maternal health was common among the selected health facilities in the country. This is what one respondent reported.

*"In this health facility, we have shortages of human resources to meet the daily demand of the facility's operations."*

This factor was also highlighted by Muula et al. (2006) who attributed the increased shortage of the health care workers to factors such as brain drain of health care workers to other paying jobs. In another study, it was observed that the situation translates into imbalances in as far as the required mix of health care providers is expected to meet all emergent maternal health care needs at the time they seek maternal health care (Muula 2005). On the same aspect, the health workers' having busy schedules in a bid to meet the demand of all women requiring maternal health care services and this causes operational burnout (Muula 2005; Koblinsky 2006). The prob-

lem of human resources is a common phenomenon; thus one interviewee had this to say:

*"I am the only clinic officer supporting both Out Patient Dispensary (OPD) and those women who have been admitted because of their maternal health care needs. This makes me work extensively and without off days because I am ever on call. You know, sometimes I get burn out due to too much work as this health facility has a wider catchment area that it is servicing."*

It is a common knowledge that such health care operational experiences have been associated with not only increased level of operational barriers on the supply side of the maternal health delivery but also compromises the quality of care rendered to patients at the time they come for the maternal health care service utilization (Franco et al. 2004; Gouws et al. 2004; Radyowijati 2003). Moreover, recommended ratio of a skilled health worker to a patient not only assist in continuous development of health workers skills but also motivates use of health care facilities among women for any maternal health care needs.

The study further revealed that lack of comprehensive health workers mix to support specific maternal health care needs due to scant availability of such specialists within the health facilities in general. An interview in the present study highlighted the gravity of the problem by the following statement.

*"At this health facility, we do not have a gynaecologist to handle specific gynaecological challenges. We rely on general medical practitioners to advise and assist when the needs arise."*

Upon further questioning on the technicalities of handling the challenge of health worker shortages, the manager added.

*"In a number of occasions when we experience great needs of gynaecologists, we often-times call our District Health Officer who is trained in gynaecology but serve in his present capacity as the manager of the entire health facility responsible for administrative duties."*

Prata and colleagues (2010) observed that this is a common phenomenon in most developing countries where changing roles of the health care workers to serve in other portfolios not directly related to their speciality in the health facility, compromises the quality of health care outcome, more importantly, among women.

### Medical Equipment Barriers

The study revealed that the selected health facilities have common challenges associated with medical equipment availability to support effective delivery on-demand. For instance, the study indicated that such medical equipment and resources include the scanning devices, oxygen concentrators and adequate beds to accommodate women at the time of intrapartum and postpartum care before discharged from the health facility. The following were the comments that the manager responsible for maternal health care had to say.

*"We do not have a scanning machine to assist us in detecting the position of the foetus and condition of the pregnancy. In view of such challenges, doctors just use physical examination regarding obstetric tests on the woman and other related tests, which in some instances do help."*

However, in one instance, the manager pointed out that some women are told to go for private providers for scanning services in which the patient herself meets the cost of scanning. This disadvantages women who are not economically capable to meet such indirect hidden costs associated with public health care service facilities. A study in Tanzania argued that such indirect out of pocket payment for free delivery services affected utilization of services among women in rural part of the country (Kruk and Freeman 2008). This factor is one which influences women choice of traditional – based maternal health care service seeking behaviour over the facility-based option. One other problem that the study identified is that the health care facilities experience persistent shortage of drugs accompanied by erratic drugs supplies in order to support on demand maternal pharmaceutical needs. Additionally, the facilities also experience delayed in medical and supplies order processing from the central medical stores so as to timely replenish the supplies. This subsequent delays result in medicine becoming expired before they are distributed to targeted consumers. With this problem at hand, the health personnel resort to prescribe medication to patients so that they can source them through private pharmaceutical outlets. Thus, an interview intimated that

*"The facility does not have the medical resources to support our operations. In some instance, we just write a prescription to the pa-*

tients to buy for themselves in private pharmaceutical companies..... As we speak, a month has gone after we ordered medicine from the Central Medical Trust, but so far, we have not had any feedback yet patient drug/medical demand is on the increasing each day, typical of public health care facilities”, fumed one of the health care managers.

Despite the country's made an earlier 2002 Abuja declaration pledge which advocated for an extensive investment of up to fifteen percent of the annual national budget on health care services medical resource challenges still exists (WHO 2002).

On the same note, one important indirect resource that significantly paralyzes effective delivery of maternal health care services is the fuel scarcity within the health system to support transport services that include ambulance services.

*“Whenever we call the transport officer requesting for an ambulance to enable this facility to access referral services at the district hospital, they always claim that they do not have fuel for an ambulance to service our requests. This is a big challenge and last year we experienced a maternal death at this health facility due to such an excuse. After a maternal death audit enquiry, it appeared in the report that effective transport system servicing district hospital and health facilities become an outstanding challenge.”*

In their earlier study, Sepehri et al. (2008) pointed out that in order to have an effective patient service delivery; the health system should be provided with a robust, available and functioning transport network to support all forms of operation within the health care environment. In Uganda, Kyomuhendo (2003) argued that unavailability of ambulatory services has been associated with operational challenges for maternal health care services. As such, it is of paramount importance to revisit the current transport management practices if women are to receive their requisite maternal health care either at health centre or hospital level without experiencing any mobility challenges.

### Information Management Challenge

Information management have been associated effective delivery of health care services as it provides the information both to service pro-

viders to communicate effectively with the patient in order to deliver quality of care. For instance, information system have been used to support a patient innovative support services such as telemedicine, web-based patient assistance systems and electronic patient registry systems with the capacity of ensuring an effective delivery of health care services (Meyers et al. 2011; Bates et al. 2010; Reed et al. 2012). Further to the argument, the information management allows the patients to contact the doctor at any time and vice versa and provide a platform in which information related any treatment is put across to the intended recipients instantly. For instance, previous scholars underscore the significance of information management in the form of facilitating communication as paramount towards effective delivery of maternal health care. In Nepal Republic, Simkanda et al. (2006) observed that women use of telephones to communicate between the health care providers increased maternal health care uptake. In another study, Paulus et al. (2008) highlighted that innovative technologies such as health information system do provide an advantage of not only integrate patients records but also assist in facilitating an after-discharge maternal health care services.

The present study revealed that, the health system has had no information system in place capable of tracing the patients and support an after-discharge maternal health care service. Yet, the country's health system postpartum utilization rate much lower compared to pre-natal and intra-natal care counterparts. One interviewee claims that:

*“There is no vibrant register to keep track of women after they are discharged after childbirth. At the moment, the Ministry of Health has just offered a register that will assist in tracking maternal health care recipients in a postpartum period in order to minimise maternal deaths.”*

### Financial Barriers

The study found that delay in health care financing from the treasury has had a consequence of causing challenges which lead to underperformance of health facilities in the country's health facilities. Such health system under performance does affect quality of health care more importantly high intensive maternal health care. One health care provider has this to say:

*“Finances to run our daily operations are not available in time. Such scenario has resulted in some outsourced companies that provide us with resources and commodities to run the health facilities deny in servicing us as agreed and this creates a lot of operational pressure on our side. These delays in getting subventions affect payment of LOCAM which is allowance health workers get any overtime work. This aggravates health workers shortage due to their unwillingness to participate in LOCAM program.”*

To improve quality of maternal health care services, Campbell et al. (2007) suggested that adequate health care investment has the capacity of improving not only availability of medical resources, equipment and supplies but also motivate health worker personnel which in turn improves quality of care delivery. Therefore, the state through the ministry of health could make a remarkable progress if and only if issues of health care financing were followed religiously as of 2002 Abuja declaration despite the countries experiencing socio-economic challenges effecting budgetary support across other public services in Malawi (WHO 2002; RBM 2015).

### CONCLUSION

The study highlights major barriers associated with maternal health care service delivery in Malawi from the health care perspectives. The study found that financial challenge, health personnel shortage, poor record keeping of patient data more importantly at postpartum care service level, irregular ambulatory services, unavailability of a comprehensive medical equipment and supplies logistic system do cripple effective delivery of maternal health care services in selected district of Malawi. Following discussion from this study, health care financing is a perceive determinant of quality of maternal health care across health facilities at district level in Malawi. Therefore, there is a dire need to prioritise sectoral funding by the government targeting social services such as healthcare to ensure smooth health facility operations. Similarly, there is need to perform constants replenishment and conduct short-spaced audit of the health facilities equipment, supplies and medical resources across the country to ensure that they are available for maternal health care service need. In short, it can be concluded that

health workers at the health facility level are more willing to support delivery of services against all odds but there is need for government and other collaborative health care partners make deliberate call to ensure health sector is persistently financed and ensure that basic health services operational resources are convenient if quality of maternal health care service at either district or national level is to improve maternal health outcome. Therefore, the study recommends the introduction of pro-community-based maternal health care service delivery support if quality of maternal health care services is to be improved.

### REFERENCES

- AbouZahr C 2003. Global burden of maternal death and disability. *British Medical Bulletin*, 67: 1-11.
- Alemayehu S 2010. Institutional delivery service utilization and associated factors among others who gave birth in the last 12 months in Sekela District, North West of Ethiopia: A community - based cross sectional study. *BMC Pregnancy and Childbirth*, 12(1): 74.
- Aregay A, Alemayehu M, Assefa H, Wondeweson W 2014. Factors associated with maternal health care services in Enderta District, Tigray, Northern Ethiopia: A cross-sectional study. *American Journal of Nursing Science*, 3: 117-125.
- Bates DW, Bitton A 2010. The future of health information technology in the patient-centred medical home. *Health Affairs*, 29: 614-621.
- Campbell NC, Murray E, Darbyshire J, Emery J 2007. Designing and evaluating complex interventions to improve health care. *British Medical Journal*, 334: 455-459.
- Do M 2009. Utilization of skilled birth attendants in public and private sectors in Vietnam. *Journal of Biosocial Science*, 41(3): 289-308.
- Franco LM, Diop FP, Burgert CR, Kelley AG, Makinen M, Simpura CHT 2008. Effects of mutual health organizations on use of priority health-care services in urban and rural Mali: A case-control study. *Bulletin of the World Health Organization*, 86(11): 830-838.
- Gouws E, Bryce J, Pariyo G, Schellenberg JA, Amaral J, Habicht JP 2005. Measuring the quality of child health care at first-level facilities. *Social Science and Medicine*, 61(3): 613-625.
- Harvey SA, Ayabacab P, Bucaguc M, Djibrinad S, Edsona WN, Gbangbadee S 2004. Skilled birth attendant competence: An initial assessment in four countries, and implications for safe motherhood movement. *Int Journal of Gynaecology and Obstetrics*, 87: 203-210.
- Hazemba AN, Siziya S 2008. Choice of place for childbirth prevalence and correlates of utilization of health facilities in Chongwe district. *Zambia Med J Zambia*, 35: 53-57.
- Hogan MC, Foreman KJ, Naghavi M, Ahn SY., Wang M, Makela SM, Murray CJ 2010. Maternal mortality-

- ty for 181 countries, 1980–2008: A systematic analysis of progress towards millennium development goal 5. *The Lancet*, 375: 1609–1623.
- Koblinsky M, Matthews Z, Hussein J, Mavalankar D, Mridha MK, Anwar I 2006. Maternal Survival Series Steering Group 2006. Going to scale with professional skilled care. *The Lancet*, 368(9544): 1377–1386.
- Koblinsky MA, Heichelheim J 1999. Organizing delivery care: What works for safe motherhood? *Bull World Health Organ*, 77: 399–404.
- Kruk ME, Freedman LP 2008. Assessing health system performance in developing countries: A review of the literature. *Health Policy*, 85(3): 263–276.
- Kyomuhendo GB 2003. Low use of rural maternity services in Uganda: Impact of women's status, traditional beliefs and limited resources. *Reproductive Health Matters*, 11: 16–26.
- Leigh B, Mwale G, Lazaro D, Lunguzi J 2008. Emergency obstetric care: How do we stand in Malawi? *International Journal of Gynaecology & Obstetrics*, 101: 107–111.
- Meyers D, Quinn M, Clancy CM 2011. Health information technology: Turning the patient-centred medical home from concept to reality. *American Journal of Med Qual*, 26: 154–156.
- Muula AS 2005. Is there any solution to the “brain drain” of health professionals and knowledge from Africa. *Croatia Medical Journal*, 46(1): 21–29.
- Muula AS, Panulo B, Maseko FC 2006. The financial losses from the migration of nurses from Malawi. *BMC Nursing*, 5(1): 9.
- National Statistics Office 2011. *Malawi Demographic and Health Survey*. Zomba, Malawi: National Statistics Office.
- Paulus RA, Davis K, Steele GD 2008. Continuous innovation in health care: Implications of the Geisinger experience. *Health Affairs*, 27: 1235–1245.
- Prata N, Passano P, Sreenivas A, Gerdt CE 2010. Maternal mortality in developing countries: Challenges in scaling-up priority interventions. *Women's Health*, 6(2): 311–327.
- Radyowijati A, Haak H 2003. Improving antibiotic use in low-income countries: An overview of evidence on determinants. *Social Science and Medicine*, 57: 733–744.
- Reserve Bank of Malawi 2015. *Malawi Monthly Economic Review, October 2015*. Lilongwe, Malawi: Reserve Bank.
- Sakala B, Kazembe A 2011. Factors influencing the utilisation of postnatal care at one week and six weeks among mothers at Zomba central hospital in Malawi. *Evidence Based Midwifery-Royal College of Midwives Library*, 9(4): 131.
- Sepehri A, Sharma S, Simpson W, Moshiri S 2008. How important are individual, household and commune characteristics in explaining utilization of maternal health services in Vietnam? *Social Science & Medicine*, 67(6): 1009–1017.
- Simkhada B, Teijlingen ERV, Porter M, Simkhada P 2008. Factors affecting the utilization of antenatal care in developing countries: Systematic review of the literature. *Journal of Advanced Nursing*, 61(3): 244–260.
- World Health Organisation (WHO) 2015. *Trends in Maternal Mortality: 1990 to 2015. Estimates by WHO, UNICEF, UNFPA*. Geneva, Switzerland: The World Bank.
- World Health Organization (WHO) 2002. *Abuja Declaration Ten Years On*. Geneva: World Health Organization.

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