

Service providers' perception of the quality of emergency obstetric care provided and factors identified which affect the provision of quality care

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Abstract

Aim

The aim of the study was to investigate health workers' perception of the quality of, and factors which impact provision of quality emergency obstetric care.

Methods

This exploratory, descriptive qualitative study was conducted at Mwanza district hospital in Malawi. Qualitative data was obtained through 14 individual in-depth interviews with the health workers involved in the management of women who experienced major obstetric complications.

Results

The health workers' overall perception of the quality of emergency obstetric care provided was poor. The poor quality of care was identified as related to client related factors and facility/staff factors. Client factors which emerged as contributing to poor quality care were; the client delay in seeking care: reliance on TBAs, reliance on traditional medications, and lack of awareness regarding signs of an obstetric emergency. Facility/staff themes which emerged as contributing to the poor care were; inadequate resources, inadequate staffing, poor teamwork, and inadequate knowledge/supervision.

Conclusion

The findings of this study reveal that health care workers rate the quality of emergency obstetric care they provide as poor. They were able to identify structure and process factors which contribute to this overall poor quality emergency obstetric care provided. These were attributed to health care system problems and client problems. Only through addressing the contributing factors will true improvement of management of obstetric emergencies occur.

Introduction

Malawi has one of the highest rates of maternal mortality of the Eastern, Central and Southern African Regions¹. The Malawi government, together with its development partners (e.g. World Health Organization (WHO), Department For International Development Of The United Kingdom (DFID), United Nations Children's Fund, (UNICEF) and United Nations Development Programme (UNDP), identified the high maternal mortality rate as a serious concern and the reduction of MMR as one of its priorities. Current statistics indicate the trends of maternal deaths are decreasing in Malawi from 910/100,000 live births in 1990 to 510/100,000 live births in 2008¹. This may be partially attributed to the development of standards for the management of obstetric complications as an initiative that was implemented in response to the high MMR. These standards were established in an attempt to maximize the quality of care provided during obstetric emergencies. Standards are explicit statements that stipulate the desired and/or achievable level of performance against which actual performance is compared². They have been developed to facilitate monitoring and evaluation of the quality of care. The WHO, UNFPA and UNICEF have recommended that all pregnant women have access to good quality Emergency Obstetric Care (EMOC)³. The provision of quality obstetric

care is being used as a key measure of progress towards the fifth MDG of improving maternal health and reduction of maternal deaths to 155/100,000 by 2015⁴.

Quality of care is difficult to define and is an abstract concept. Donabedian has defined high quality care as "that kind of care which is expected to maximize an inclusive measure of patient welfare, after one has taken account the balance of expected gains and losses that attend the process of care in all its parts". He identified three components of quality care: structure, process, and outcome. According to Donabedian, inferences about quality are said to be impossible unless there is a predetermined relationship among the three components, so that structure influences process and process influences outcome⁵.

A two phase cross sectional descriptive prospective study, guided by the Donabedian framework was conducted (2010)⁶, examining quality of care in relation to the level of compliance with national standards in the management of obstetric emergencies. Phase I involved a quantitative observational study of the management, in comparison with the national standards, of 42 women (5.3%) who experienced emergency obstetric complications. Results from phase I of the study revealed inconsistent and poor compliance to the standards (0% to 100%). Phase II of the study was a qualitative exploratory study of health professionals, involved in the management of the 42 obstetric emergencies, and their perception of the quality of care which was provided.

Perception is defined as a psychological process of regarding, understanding, and interpreting an event⁷. What is perceived guides how people behave in a particular situation. There are multiple factors that influence perception. The needs, the desires, and the personality of a person are vital in influencing perception. It depends upon the personality of a person with respect to how they interpret the situation. Additionally, it is contented that past experience and knowledge impact what is perceived. Service provider's perception of care given is generally not addressed in quality of care research and therefore is a frequently ignored perspective of the overall care provided. This study was guided by the quality of care framework introduced by Donabedian.

Purpose

The purpose of this qualitative study was to determine the health care workers' perception of the quality of care provided during the management of emergency obstetric complications and to identify factors which influence the care provided.

Objective

1. To explore health workers' perception of the quality of emergency obstetric care provided.
2. To explore factors health workers identify as impacting the quality of emergency obstetric care provided

Research Questions

1. What are the perceptions of health workers regarding emergency obstetric care provided?
2. What do health workers identify as factors which influence the quality of care provided during emergency obstetric

care?

Materials and Methods

Setting

The study was conducted at Mwanza district hospital. Mwanza district is located in the Southern Region of the Republic of Malawi; it is bordered by the districts of Neno to the North-East, Chikwawa to the South, and the Peoples' Republic of Mozambique to the North-West. The Malawi nationwide assessment on the availability, utilization, and quality of obstetric care revealed that the case fatality rate for Mwanza district was the highest (13%) among all districts in the country⁸. The district is approximately 100 kilometres North of Blantyre City, and about 320 kilometres South of Lilongwe. The total land area of the district is 826 square kilometres⁹.

Mwanza district serves as a referral hospital for 12 health centres and dispensaries within its catchment area. The district hospital receives referrals from health facilities in Chikhwawa district. It also receives patients from border villages and health centres in Mozambique. Compared to national figures, using vital health indicators as indicated in Table 1, the overall health situation in Mwanza is lower than the average for the country. The district has a total population of 78,271. Maternal mortality ratio (MMR) is at 984/100,000 live births, Infant mortality is 80/1000 live births, under five mortality 80/1000 live births. The hospital conducts around 3,500 deliveries per year⁹.

Research Methodology

This was a qualitative descriptive study utilizing in-depth interviews with health workers.

Sample Selection

A convenience sample of 14 of the 20 health workers who were directly involved in the management of the 42 obstetric emergencies included in Phase I of the study. All 20 health workers were approached and asked about willingness to participate and the sample reflects the 14 participants who agreed. The Emergency complications for which they provided care included 12 women with eclampsia/pre-eclampsia (29%), 11 cases of postpartum haemorrhage (11%), 8 cases of obstructed labour (8%), 6 cases of ruptured uterus (6%) and 5 women with puerperal sepsis (5%). Nine patients died secondary to obstetric emergencies (21%).

The participant's ages ranged from 27 to 73 years with the mean age of 30 years. The years of service in the health profession ranged from 1 to 42 years with an average of 15 years. The sample was composed of 9 females and 5 males. There were five clinical officers, one physician, one nurse technician, four enrolled nurse midwives and three registered midwives.

Inclusion Criteria

- Licensed health workers who were involved in the provision of care to the 42 patients who experienced obstetric emergencies during the study period.

Full time health workers and those who were on 24 hour call.

Exclusion Criteria

- Health workers who worked in departments other than the maternity unit
- Health workers working in the maternity ward but on

leave

- Health workers who did not provide consent.

Data Collection

An in-depth, audio recorded, interview was conducted with each participant. All interviews were conducted within 24 to 48 hours of the management of the emergency obstetric complication. Data collection was conducted between August and September, 2007. Health workers were approached and an interview was requested by the researcher. The interviews were conducted using an interview guide, which focused on the health providers' analysis of the quality of care provided, and consisted of semi-structured open-ended questions. Interviews were conducted in a quiet matron's office on the labour and delivery ward and privacy was ensured to enable interviewees to feel free to express themselves. The interviews were conducted when the health workers were either off duty or on duty but felt they were free to participate. The average length of each interview was 1 hour. Three interviews were not audio recorded as requested by the interviewees. For those not audio recorded, notes were taken with the interviewee's permission. The focus of the interview was to elicit information on how participants perceived the quality of care rendered to women with emergency obstetric complications and to identify factors affecting provision of quality emergency care.

Specific questions were included which allowed participants to explain the process, structural and outcome analyses.

Data Analysis

All interviews were tape recorded and transcribed verbatim. The transcriptions were analyzed utilizing content analysis¹⁰. The researcher immersed herself totally in the data until saturation occurred. The content was then analyzed to identify prominent themes and patterns which emerged from the capturing of the commonalities of the narratives. The narrative qualitative information and the observations were organized and integrated according to emerging themes and subthemes.

Trustworthiness

Trustworthiness of the results was assured using criteria outlined by Polit (2006)¹¹, which include: Credibility, confirmability, dependability, and transferability. Credibility of the results was assured by the comprehensiveness of the sample size and the total immersion of the researcher in the situation while the care was being provided. Additionally participants were encouraged to continue to describe their feelings and perceptions until both the researcher and the participant felt there was understanding. Dependability of the results is enhanced by the presence of the researcher for 90 days of data collection and the recruitment of health care providers throughout the study period. The issue of confirmability was addressed by having outside qualitative researchers independently code the data and identify emerging themes. The transferability of the results is somewhat limited because of data collection being limited to one study site.

Ethical Considerations

The research study was approved by The College of Medicine Research and Ethics Committee (COMREC) at the University of Malawi and University of Oslo, Norway. Written permission was obtained from the chief matron of the health facility. A signed informed consent was obtained

from all participants. Measures to protect the confidentiality of the participants were instituted throughout the project. No personal identification of data was recorded during data collection, analysis, and after the completion of the project. Data, transcripts of the interviews, and data analysis remains stored in a locked filing cabinet in the researcher's office. All tape recordings were erased after transcription of the interview data was completed.

Results

Participants were asked to respond to the following question to determine their perception of the quality of care provided. "In your own opinion, can you explain how you perceive the quality of care which is given to patients with obstetric complications at this hospital?" Additionally they were asked "What problems do providers face in providing emergency care?"

Thematic Analysis

Data analysis of the responses revealed that health workers perceived the overall quality of emergency obstetric care provided as poor. Participants identified multiple factors that impacted the provision of quality emergency obstetric care. The two major themes which emerged were client factors and facility/staff factors. Within the major theme of client factors contributing to poor quality care, the following subthemes emerged: client delay in seeking care, reliance on TBAs, reliance on traditional medications, and lack of awareness regarding signs of an obstetric emergency. Within the major theme of facility/staff factors contributing to poor quality care, the subthemes that emerged were: inadequate resources, inadequate teamwork, inadequate staff, and inadequate information.

Poor Quality of Care Related to Client Factors

Factors that affect the client's decision to seek care are frequently cited as barriers or constraints to the provision of quality emergency obstetric care. Health workers identified the factors which they perceived delayed the clients' arrival for emergency obstetric care to be related to lack of information about danger signs, as well as the client's cultural practices and beliefs.

Delay in Arrival for Management of Emergency Obstetric Conditions

Health workers reported that women arrive too late at the hospital for effective management of their emergency conditions. These delays were felt to significantly affect the quality of care provided and contributed to the provision of poor quality of care. The delay in arrival was felt to limit the impact which the emergency interventions can have on the ultimate outcome of the emergency.

"Most of these women come in bad condition because they come from very far, some may stay 2 days before they arrive here at the hospital. Some health centres within the district are very far from the district hospital and the roads are also poor. When patients arrive in poor condition, no matter how good the care may be, sometimes we fail to save a life because the condition has already deteriorated".

Reliance on TBA care

Other client factors which were identified as delaying the client's arrival for care were related to the clients' cultural and traditional beliefs. Participants identified the utilization of TBAs and use of traditional medications as significant

factors. Health workers identified women's preference of and reliance on TBAs' care as one of the reasons why women come to hospital in poor condition. The women were frequently noted to have been cared for by TBAs for many hours before transfer to the emergency facility. This was perceived as preventing provision of quality care as the women frequently arrive in very poor condition. This delay in arrival prevents early identification and intervention of the obstetric emergency. Health workers reported incidents in which patients were retained by the TBAs even after complications developed.

One health worker expressed the following:

Most of these patients come from TBAs where they stay for two or more days....One patient was referred from a TBA while convulsing. She came to our hospital on the third day at around 10 pm. She underwent caesarean section and stayed for 2 hours then died.

Reliance on Traditional Medicine

Health workers stated that women have their own traditional ways of managing various obstetric complications before they seek medical care. This practice was perceived to delay management of emergencies and frequently contribute to a poor outcome. Drug preparations may be prepared by patients themselves in their homes or may be given by a TBA. Additionally, health workers noted that some clients self administer drugs while they are within the hospital. The health care providers reported that women believe in the practice of consuming local herbs, which contain oxytocin derivatives that stimulate strong uterine contractions often leading to uterine rupture and severe internal bleeding.

The use of traditional medication was perceived to complicate the care and management as patients may not inform the staff that they have used the medication. Additionally, they may not know the name or the ingredients of the compound taken.

The following quote exemplifies the practice:

Due to cultural beliefs, some women who experience severe bleeding are first given traditional medications to arrest the bleeding before they actually come to hospital. As such, they come in a very bad state. These patients do really come in bad condition; furthermore, patients with eclampsia usually come while unconscious after trying traditional medicine at home. They come to us after they have failed and they fear losing life.

Lack of Awareness of Signs of Obstetric Emergencies

Health workers identified a lack of awareness, on the patient's part, with respect to identification of complications they may be experiencing. Specifically, health care workers stated that patients do not perceive complications such as convulsions and bleeding as dangerous. The symptoms are seen as part of the normal delivery process. Health workers reported that patients do not perceive complications such as convulsions and bleeding as dangerous and therefore they delay their arrival and consultation. Because of this failure to identify potential complications, the transfer to the health facility is delayed.

Below is a direct quote from one health worker:

"Other women do not like to go for hospital deliveries because they feel they can attempt home delivery, when they have failed to make it at home that's when they decide to go to the health facility. It is such type of people who come in poor condition since they have been pushing at home. All this happens because the women are not aware of the danger signs

of pregnancy, a convulsion may not be taken as a serious condition and severe bleeding as normal for a newly delivered mother”.

Poor Quality of Care Related to Facility/Staff Factors

The second overriding theme which emerged was provision of poor quality emergency care related to facility/staff factors. Subthemes which emerged include: inadequate resources, inadequate teamwork, inadequate staff, and inadequate information.

Inadequate Resources

Participants cited inadequate supplies to appropriately handle the obstetric emergencies as a major factor contributing to the provision of poor quality care. This included lack of necessary medical supplies, and specifically a lack of blood. Staff acknowledged that a lack of blood contributed to poor quality of care. The problem was attributed to the current system of getting blood from MBTS (Malawi Blood Transfusion Service) which is not able to meet the current demand of blood transfusion in district hospitals. Two patients, in this study, were reported to have lost their lives because the staff could not access blood.

More than half of the health workers expressed concern over lack of adequate blood in the blood bank. This lack of blood was identified as a major factor contributing to provision of poor emergency obstetric care.

Some of the concerns raised by the health workers:

.....I would give an example when a woman needs blood transfusion, there are times when the laboratory has completely no pint of blood and yet the patient is in dire need of blood. For such patients to receive blood, you need somebody to donate. When we have urgent cases, we cannot operate on them because they really need blood. For some patients, it really becomes a dilemma as some are in a very critical condition.

Inadequate Transportation for Health Care Staff and Teamwork

Inadequate transportation of hospital staff was identified as a factor contributing to poor management of obstetric emergencies. Health workers reported a lack of transport for staff on call during odd hours as grossly contributing to delays in provision of critical care.

Below is a direct quote as expressed by one of the health workers:

Most of the staff on call i.e. clinicians, laboratory technicians, pharmacy technicians and all other theatre staff are called from home when there is an emergency case during odd hours. To get everybody available in good time can be a problem and this causes delays for patients to receive care in good time. Usually, the problem is that we have one vehicle on call and when it has gone out, we have none on standby and this causes delays for emergency care management.

Inadequate transportation of staff was also directly related to the unwillingness of drivers to respond to midwives' request for an ambulance. They were noted to go on private errands without informing the midwife in charge of the maternity ward and thereby limiting access to transport when needed.

Another big problem is drivers; the ambulance is sometimes abused by drivers on duty. The driver may go away with the ambulance on private trip without the knowledge of the one in charge of maternity. It is only when you want the vehicle when you discover that the driver has gone out.

This lack of team work in the maternity unit has been

demonstrated by the unavailability of clinicians. This could signify a lack of team work, which is mandatory in quality management of emergency obstetric complications. This contributes to delays in emergency care as they have to be called to review emergency cases. Most of the midwives interviewed raised concern related to this issue. Since emergencies cannot be predicted, it is important to have coverage for 24 hours. The physical presence of clinicians who are able to perform all the EmOC functions is vital. It is an important cadre which must be motivated to be available in the maternity ward to ensure availability of EmOC at all times.

Below are concerns voiced by one health care worker:

The most common problem which we experience in the maternity ward is when we receive a woman with an emergency obstetric complication. We call any clinician to review the patient because it is an emergency but he would tell us that he is not responsible for the maternity ward. When a clinician refuses to review a patient, it becomes difficult especially when the one responsible for the maternity ward has gone away. Sometimes you may find the one responsible for the maternity ward but may still tell you that he is busy with something else.

Inadequate Staff

Health workers identified a shortage of staff as contributing to provision of poor quality of care.

Inadequate midwives.

The shortage of midwives was identified by health workers as affecting efficiency and quality of emergency obstetric care. This shortage leads to work overload on the few midwives available and this further reduces morale and ability to provide quality and timely obstetric care.

One participant discusses the negative effects of shortage of staff:

Other problems which we experience are shortages of staff, for example, you may be alone working in the labour ward as a midwife. When an emergency case arrives, it requires the attention of a midwife while at the same time there are women who want to deliver and need to be attend to as well, This becomes a difficult situation especially when one is alone.

The Ministry of health introduced the locum system in order to address the problem of a shortage of midwives. However, the health workers describe this as ineffective because the locum midwives are the ones who rotate and work their normal shifts plus the locum shifts. As a result, they do not have time to rest; they get tired and therefore cannot provide quality care.

The comments of one health worker regarding the locum system:

“We have severe shortage of staff, at least clinicians are better off, but the problem is severe on the midwives side. They are too few such that the number does not tally with the workload at the hospital. We should thank government for introducing the locum system; however, the solution is not very helpful as the midwives who work on locum are the same ones on normal duty and this leads to provision of poor quality of care because they get exhausted”.

Inadequate availability of anaesthetists.

Inadequate anaesthesia personnel, 24 hours a day, for the provision of emergency care was identified as a factor contributing to provision of poor quality of care during the

management of obstetric emergencies. Health workers cited the severe shortage of anaesthetists as compromising the effectiveness and quality of care given to patients.

The following quote describes the situation:

“One big problem we have at this hospital is that we have one anaesthetist. It’s very difficult for one person to be on duty for 24 hours thereby working for the whole year without off duties. It also becomes a problem when they have their personal problems. Sometimes he gets sick or else he has pressing needs and has to get out of the station. Yet he is the only person on duty around the clock. Sometimes, there is nobody to administer anaesthesia in theatre. This problem occurs though we do have the orthopaedic clinician who helps in the administration of anaesthesia”.

Inadequate number of clinical officers.

The shortage of clinical officers was identified as contributing to poor quality of emergency obstetric care. Participants expressed concern over unavailability of clinical officers in the maternity unit as contributing to delays in the provision of timely and quality care. Clinical officers perform many of the comprehensive Emergency Obstetric Care primary functions. Participants also noted that it is often difficult to contact a clinician who is not assigned to the maternity unit when an emergency occurs.

Some respondents supported the suggestion of having clinicians stationed in the maternity unit. This is what one midwife said:

“A patient may arrive and find a midwife who is always available in the labour ward, but the problem is to find a colleague (a clinician) to assist you in decision making. These people usually wait to be called when there is an emergency. We do have a clinician specific for maternity ward but when the ward is quiet he is assigned other duties. I wish they stayed in the maternity unit for easy reach when an emergency occurs”.

Inadequate theatre staff.

The lack of adequate theatre personnel during an emergency situation was also identified as a factor contributing to provision of poor quality care during obstetric emergencies. The health workers noted that most patients with emergency obstetric complications do not get all necessary care, in a timely manner, because the theatre team and laboratory technician on call remain at home during off hours. Additionally, most of them have their houses outside the hospital premises. This results in a delay in implementing surgery and necessary emergency procedures.

The following exemplifies some of the health workers’ concerns regarding delay in delivery of emergency care:

“The problem is that we stay away from the hospital and all the theatre staff stay outside the hospital premises as such patients wait for care. If a woman is bleeding, she keeps on losing blood while theatre staff is being collected. Sometimes the ambulance on duty may have gone out to the health centres to pick patients and this may be a problem”.

Inadequate Information and Supervision

Health workers expressed concern over a lack of in-service trainings and refresher courses in obstetric care in general and emergency management in particular. Participants mentioned that they attended training in obstetric life saving skills (LSS) many years earlier. Most reported relying on the knowledge they received in school and consequently fear they might have forgotten some of the important information. They noted that a lot of important and new management issues in obstetrics are emerging which they need to be well

versed in. This critically affects the quality of care rendered to the women which often results in loss of life.

The health workers’ dissatisfaction due to lack of trainings and refresher courses are expressed in the following quote:

“Since I qualified, I have attended obstetrics LSS training and post abortion care. These are the trainings which I can remember but I know there are a lot of trainings which are taking place. It is long time ago when I got LSS training. I cannot remember what we were taught; I need a refresher course. Generally, the knowledge I have is the one which I gained from school. The other thing is that I like reading and I know most of the things through reading, that’s how I upgrade my knowledge.”

The health workers expressed concern over the lack of supervision. They noted a serious lack of clinical supervision during the six to twelve months prior to the study. The participants reported a lack of trainings, refresher courses, and supervision for the health workers. They said that merely having management guidelines is not enough as they do not have time to refer to them in times of emergency. Both the midwives and clinical officers reported the lack of supervision.

The following quote depicts the situation regarding supervision:

“I feel there is no supervision at this hospital because when we are working in the labour ward, we work alone and we manage the wards ourselves. It is only when we experience a problem that we seek assistance from the sister on call but we cannot say that there is somebody who supervises us. When we are knocking off, we just give each other handover to fellow midwives but I feel we are not supervised”.

Discussion

The results of this study will be discussed consistent with the components of the Donabedian Quality of Care framework which include structure, process, and outcome.

Structure

The element of structure includes organizational factors which influenced the care provided during management of obstetric emergencies. Client structural factors identified which impact quality of care provided included reliance on TBAs and herbal medicine, plus the lack of awareness of signs of obstetric emergencies. Structural facility/staff factors identified included inadequate staffing, and inadequate information, and inadequate resources.

Reliance on TBAs and Reliance on Traditional Medicine

Culture has been found to influence the client’s decision on when to seek care and what type of care (whether traditional or modern) is sought. These decisions depend on the perceived cause of the illness by patients and their families. Often, women intentionally delay acknowledging the medical paradigm regarding problems because of indigenous beliefs regarding pregnancy and birth. In many districts in the Southern Region of Malawi beliefs exist that obstructed labour is associated with infidelity of the woman. Because of this belief, women may remain in prolonged labour at home and are often forced into ‘confession’ of infidelity before further care is sought. The delay in the decision to seek care may be on the part of the woman herself or her family. Cham, in his study found that some reasons for the delay to seek obstetric care were: underestimation of the severity of the complication, cultural belief or previous unfavorable experience with the health system¹².

Internationally, TBAs have been known to delay or even deliberately discourage women with complications from going to hospital¹³. In Malawi, stories compiled for radio broadcasts on “why women are dying” relate a story of how a young woman was prevented by her TBA from accessing a facility when labour was clearly obstructed¹⁴. Knowledge is limited about the compounds that are prescribed by traditional TBAs. Without this knowledge, the health care team is limited in the management of complications related to the compounds. Use of traditional medications, before arriving at the health facility, may reduce safety and effectiveness of maternal health care that is provided during emergencies. The health care authorities need to develop a mechanism to deter use of these medications. Additionally, health care workers need information regarding the identification and management of women who have ingested the traditional medications before arrival for care. This information is needed for all health care providers involved in caring for women perinatally, both at the community health centre and the hospital level.

Lack of Awareness of Signs of Obstetric Emergencies

Failure to recognise danger signs may be a function of low literacy and low overall knowledge levels. In response to the above problem, the Malawi Safe Motherhood Project developed posters depicting danger signs and made them accessible to people and communities with low literacy levels. The project also utilized radio messages to reach out to people in their communities. Thus far, these strategies do not appear to have had a substantial impact in the communities. However, continued intensive education on pregnancy danger signs within communities is needed. It has been reported that the higher the level of education that someone has, the more likely they are to recognise danger signs. This may be related to the person's level of knowledge comprehension which is said to be higher for those with higher education.

Inadequate Staffing

Malawi MOH reports indicate the service provider shortage is particularly acute for midwives and doctors¹⁵. Critical shortages were noted in the number of midwives available during the study period. On day to day staffing patterns, usually there were one to two midwives on duty. The recommended number of midwives for this facility is 4 per shift. Inventories of the number of physicians, nurses, midwives, and clinical officers revealed inadequate health personnel on duty.

The shortage of midwives was identified by health workers as affecting efficiency and quality of emergency obstetric care. This shortage leads to work overload on the few midwives available which further reduces morale and ability to provide quality and timely obstetric care.

Inadequate Resources and Transport

Health workers mentioned issues of unavailability of transport which delayed patients from reaching appropriate care. This usually occurred when the nearest facility is a peripheral facility which is not equipped to treat emergency complications (i.e. health centre, TBA). In a related study, Cham found that among 32 cases autopsied, 27 had delayed to reach the appropriate obstetric facility due to lack of transport and prolonged transportation¹².

Two patients died with obstetric complications because there was no transport for a senior clinician to perform a

hysterectomy and a laboratory technician to cross match blood. These are avoidable delays as the hospital has a good fleet of functional vehicles.

Process

Process in this study refers to factors that influenced the actual transaction of providing emergency obstetric care. Specific factors identified by the participants which affected the process of providing quality obstetric care included delays in arrival by women, delays in transport of health workers, lack of team work among health professionals, and lack of continuing education and supervision.

Delay in Transport

The process of delivery of quality emergency care was affected by the delays in transport of health professionals. When emergency obstetric complications occur, there is need for timely transfer to EmONC facilities. Some delays were attributed to the lack of availability of drivers, the time and distance factor in transporting health workers, and the lack of timely availability of lab, anaesthesia, and surgery staff members. Transportation problems have been documented in the current Malawi 2010 EmONC Needs Assessment Final Report. At national level only 44 % of surveyed facilities reported availability of a functioning motor vehicle ambulance, 23 % reported a functioning motor vehicle and 14% reported availability of a functioning motor cycle ambulance¹⁶. Transport is an element at the centre of a referral system and when used effectively and expediently can save the lives of women and their babies during pregnancy, childbirth and the postpartum period.

Inadequate Teamwork

This lack of team work in the maternity unit has been demonstrated by the unavailability of clinicians and by the unwillingness of personnel to respond to requests for assistance from other service providers. This contributes to delays in emergency care. Midwives interviewed raised concern related to this issue. Since emergencies cannot be predicted, it is important to have coverage for 24 hours every day. The physical presence of clinicians who are able to perform all the EmOC functions is vital. The reliance on contacting them via their cell phones has proved to contribute to the delay in initiation of care. Similar problems have been reported where physicians who are well trained to handle obstetric cases are rarely available resulting in reliance on less skilled nurses to attend to labour, diagnose, and manage complications as they arose^{17,18,19}.

Even when women have overcome the delays outlined above and reach the health facility, they are still unable to access a high quality of care because of factors related to the process of delivery of emergency care. Thus, merely reaching the health facility is not sufficient. Even where a Comprehensive EmOC facility is reached, women die needlessly at the hospital itself for a variety of reasons.

Inadequate Supervision/Continuing Education

The health workers expressed concern over the lack of supervision. They noted a serious lack of clinical supervision during the six to twelve months prior to the study. Both the midwives and clinical officers reported the lack of supervision. They reported no formal policy guidelines to guide the technical supervision of Clinical Officers and Doctors practice and also to update/improve their

performance¹⁶.

The midwives stated they had a somewhat limited skills and knowledge base. Some midwives reported not feeling competent in dealing with complications like manual removal of placenta, management of obstructed labour, management of eclampsia, and postpartum hemorrhage^{20, 21}. This lack of proficiency critically affects the quality of care that is rendered to the women and may result in loss of life.

Health workers expressed concern over a lack of in-service trainings and refresher courses in obstetric care in general and emergency management in particular. The participants reported a lack of trainings, refresher courses, and supervision for the health workers. They said that merely having management guidelines is not enough as they do not have time to refer to them in times of emergency. This could partially explain the limited knowledge and practice in the management of emergency obstetric complications. Similar findings have been reported before²².

Participants mentioned that they attended training in obstetric life saving skills (LSS) many years earlier. Most reported relying on the knowledge they received in school and consequently fear they might have forgotten some of the important information. They noted that a lot of important and new management issues in obstetrics are emerging which they need to be well versed in. The majority of enrolled midwives have a somewhat limited skills and knowledge base. Some midwives do not feel competent in dealing with complications like manual removal of placenta, management of obstructed labour, management of eclampsia, and PPH^{20,21,23}. This critically affects the quality of care rendered to the women which often results in loss of life.

Ongoing obstetrical in-service trainings and refresher courses followed by adequate supervision plays an important role in the improvement of the quality of services. It is through this that individual's scientific knowledge, and consequently institutional capacity is strengthened and updated

Outcome

The outcome component will be discussed in relation to the actual health outcomes of the women who received the emergency obstetric management and the overall perception that the service providers had with respect to the care provided.

Poor Health outcome and Poor Adherence to Guidelines

Results of phase I of this study (Chodzaza, 2010) document an overwhelming lack of adherence to Emergency management guidelines⁶. There also was noted to be a very high mortality rate of 21% among women who received the emergency obstetric care. This has major implications for health care providers and for women who are recipients of the care. The overall quality is far below the standards set by the guidelines and this contributes to the poor maternal death statistics in Malawi.

Perception of Delivery of Poor Quality of Care

The results of this study indicate that service provider's perception of delivery of quality of care by the providers was that it was poor. Not only was substandard care provided but the service providers were away of the less than optimal quality of care they were providing. When one is aware that they are doing substandard work it frequently spirals into further and further disintegration of quality. This is

worrisome and an area that is rarely included in studied evaluating quality of care. It could be argued that the service provide is the expert at evaluating overall quality of care. The service provider's observations and evaluations have potential for providing invaluable information to everyone involved in the design and implementation of care guidelines and standards.

Limitations of the study

Informants may have given responses which they felt would please the researcher rather than a true reflection of the real life situation. Interviewees may have been unwilling or uncomfortable to share all information resulting in incomplete information. The researcher attempted to address these constraints by clearly explaining the objectives of the study and the interviewees were assured of anonymity.

The small number of study participant's limits generalizability of the results. Additionally, the medical background of interviewer may have influenced data interpretation and biased thematic analysis answers towards a more positive attitude of care. Participants were aware that the researcher is a nurse midwife and that may have influenced the information given.

Conclusion

Even when women overcome the obstacles that impact their access to emergency obstetric services they are not assured to receive quality care. Service providers are acutely aware that the quality of emergency care provided is poor. Service providers identify multiple factors which contribute to the provision of substandard care. Studies have investigated motivating factors which impact health workers performance. The common factors which emerged from interviews with the health workers as contributing to the overall poor quality of care were related to client and facility/provider factors. All were identified as affecting the structure, process, and outcome of emergency obstetric care.

The results of this study highlight problems identified by health care workers involved in management of women with obstetric complications and how it impacts quality of care. In order to reduce the overall maternal mortality ratio in Malawi, the issues identified by the health care workers will need to be addressed. Educational programs to address client's lack of identification of warning signs indicating need to seek emergency treatment are needed. Additionally, the overall inadequacy of staff, resources and information by health care workers will need further exploration and improvement to impact positively the care provided to women experiencing obstetric emergencies.

Merely reaching the health facility is not sufficient. The performance of the health care system depends ultimately on knowledge, skills, supervision, and motivation of the people responsible for providing care. Service providers recognize the poor quality of care provided and the associated factors. This presents a mandate for service providers, and governing bodies to address these issues and implement changes which will ultimately impact the overall maternal mortality rates in Malawi.

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