

## **Factors Affecting the Provision of Referral Services at the Primary Level of Health Care in Zomba District in Malawi**

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### **Abstract**

*The study was conducted to investigate the factors that affect management of the referral system at the primary level of health care in Zomba district in Malawi. To accomplish this purpose the study sought to identify the criteria that guided primary health care providers in making referral decisions; assessed the effectiveness of the role of community leaders in the management of referral process at primary care level, and investigated the challenges affecting the implementation of referral system at the primary health care level in Zomba district. The study took a qualitative approach and used face-to-face interviews to collect data from purposively selected nurses, clinicians, health surveillance assistants, ambulance drivers, transport officers, community and health committee leaders from six conveniently sampled primary health facilities. The findings revealed that primary care facilities faced a number of challenges such as lack of referral transport, poor communication, lack of referral guidelines, shortage of skilled personnel, lack of diagnostic equipment and drugs which led to the self-referral and the bypassing of primary care facilities in Zomba district. The study recommended that the government should enhance the availability of needed resources such as skilled personnel, diagnostic equipment, drugs, referral ambulances and communication technology in order to facilitate the referral of patients. The Ministry of Health should provide referral guidelines to all health care providers at all levels as well as consider constructing a district hospital to provide secondary level health care services. The district health office needs to maintain all the ambulances and provide fuel consistently in order to improve the quality of primary health care referral services.*

**Keywords:** Primary health care, referral system, patient outcome, referral process.

### **Introduction**

According to Abodurin et al. (2010), referral include all the activities done by a health provider in response to its incapability to offer therapeutic and diagnostic care as it relates to the patients' needs. During referral process, the referring provider seeks assistance of a better or differently resourced facility at the same level or higher to help or take the responsibility of the case management (Dunmade et al., 2010 with an aim of promoting continuity of care (Omaha et al. (1998). An effective referral system makes certain that there is a close relationship between all levels of care in a health system and helps to make sure that people receive the best possible care not far from their homes (Abodurin et al., 2010). According to Afsar & Younus (2004), the aim of a referral service is to make sure that all patients are cared for at a proper level of care as well as get the quality management that is worthwhile. In addition, a well-functioning health care referral system ensures that specialist care is accessed by those in need as well as making use of primary health care levels (WHO, Undated).

### **The health care system in malawi**

The Malawi health care system is made up of three levels of care, namely: primary, secondary and tertiary level of care which are linked by a well-established referral system and are mainly based on the type of care offered as well as the type of resources used at each level.

## **Primary level of health care**

The primary level of health care is made up of health centers, clinics, dispensaries and village clinics. Health centers serve a population of not less than 10 000 people with urban centers serving close to 237 000 people (Masanjala & Kajumi, 2013). Primary health care facilities are expected to be in connection with community-based services, but most of the times there is division between facility-based curative and community-based preventive activities. Nurses, medical assistants and sometimes clinical officers provide health care services in Health centers. It is through the health surveillance assistants (HSAs), community health workers (CHWs) and traditional healers that primary care centers link with the community (Masanjala & Kajumi, 2013; Government of Malawi, 2017b).

## **Secondary and tertiary levels of health care**

Health surveillance assistants provide health promotion and preventive health care through door-to-door visitations and outreach clinics in the communities, while the medical assistants, clinical officers and nurses provide curative services as well as a little bit of health promotion and preventive services (Masanjala & Kajumi, 2013). Apart from HSAs, there are also community health workers (CHWs) who work with the local community leaders and health advisory committees as volunteers. The other duty for the HSAs is to diagnose and treat minor childhood illnesses in areas which are difficult to reach. To accomplish their duties at community level, HSAs work in collaboration with CHWs and village leaders (Masanjala & Kajumi, 2013; Government of Malawi, 2017b).

District hospitals and CHAM hospitals make up the secondary level of care which receives referrals from health centres and community/rural hospitals. At the highest level of care are the tertiary health care facilities which provide specialised care to the districts that are found in the hospital's region. However, due to weak or non-functional gate keeping system 70% of the care offered in referral hospitals needs primary and secondary level care services (Government of Malawi, 2017a). Each district health system is mandated to provide health services and management of referral cases. According to the Malawi health policy, the strengthening of the referral system is the most critical way of improving efficiency in the health system (Government of Malawi, 2017a).

To ensure a successful referral system, there must be a good geographical access to the referral health care facility, well trained staff to offer quality care, availability of essential drug supplies and equipment as well as services which are affordable. Besides, care seekers are required to comply with the rules of the referral procedures. Majority of the health care systems require care seekers to first contact the primary level and then be referred to a higher level so that the costs are reduced (Mwabu, 2006). However, often times, care seekers do bypass primary care facilities and go straight to referral hospitals for conditions that could be managed at primary level (Abodunrin et al. 2010) thereby by overburdening the referral facilities. According to Akande (2004), offering primary care services at a tertiary facility increases the cost by six times.

The performance of Primary health care level determines the success or failure of the health system as whole. For example, Malawi's success in achieving the maternal and child health goals was largely contributed by the government's commitment to towards primary and community health care services (Government of Malawi, 2017b). Malawi has a well-designed primary health care though practically the system has difficulties in providing the quality health care services.

According to Kamau et al. (2017), access to the highest standard of health is one of the fundamental human rights which can be enhanced by the presence of a properly functioning referral system that encourages the continuity of care across different levels of care. However, most of the low-income countries have health referral systems which are weak, ineffective as well as inefficient. The weakness of the referral system across different levels of care has an effect on the general outcome of the health system which in turn is responsible for the health outcome.

Having realised that prognosis is the most important issue, the Ministry of Health (MoH) in Malawi established standards of referral system which recommends referrals to be done at the earliest stage of medical problem when the outcome might be expected to be good.

### **Statement of the problem**

In trying to respond to the health needs of Malawians, the Government has been attempting to improve and strengthen primary health care so as to improve accessibility, quality of care and the outcome. Despite the government's effort to improve health care access and patient outcome through primary health care, patients keep on bypassing the primary health care (PHC) and refer themselves to the highest level of care thereby contributing to low usage of PHC and over usage of the referral facilities as evidenced by the referral facility's provision of higher percentage (70%) of primary care services (Government of Malawi, 2017a).

### **Aim of the study**

Since 70% of the services offered in Malawi's referral facilities are primary care services (Government of Malawi, 2017a) the aim of the study was to investigate the factors that affect management of the referral system at the primary level of health care in Zomba district in Malawi.

### **Objectives of the study**

The study was carried out to achieve the following objectives:

1. To identify the criteria that guide primary health care providers in making referral decisions.
2. To assess the effectiveness of the role of community leaders in the management of referral process at primary care level.
3. To assess the challenges affecting the implementation of referral system at the primary health care level in Zomba district.

### **Literature review**

Almost all the health care systems require the care seekers to first contact the primary level of care and then are referred if necessary, to the next level of care. Following this designed procedure helps to reduce the costs for the care seekers (Mwabu, 2006). However, in most areas, care seekers often go to the referral facility without passing through primary level thereby overburdening the referral facility (Kamau et al. 2017) and increasing the costs for both the system and the care seeker. Most of the health referral systems in low resourced countries face a number of challenges which lead to congestion of referral facilities, delay or not accessing referral services at all. The challenge includes: communication, transportation, self-referral to referral facility, lack or not making use of a well-established standardized referral letter that could help in sending the medical information from the referring facility to the receiving facility and vice versa.

Previous studies have reported various challenges and outcomes on the implementation of referral system for quality care services.

### **Self-referral to higher level of care**

A study conducted by Font (2002) in Tanzania revealed that only 3% of the sick children seen at a referral hospital were referred (235 out of 7,989 children). Similarly, a study done in Ghana reported that one OPD care seeker in every 34 OPD care seekers (3%) seen at a referral facility were referred (Cervantes et al. 2003). The study also reported that only 11% of the children admitted in the referral facility were referred. Again, a study conducted in Harare, Zimbabwe showed that most of the Malaria patients admitted at the highest level of care could be managed at both primary and secondary levels of care but the patients did not make use of primary care as their first level of contact (Sanders et al., 1998). In addition, Hongoro et al. (1998) reported lack of knowledge on the functional difference between hospital and clinic which led to incorrect entry point into the health care delivery system thereby creating

unnecessary congestion of the referral centres. In Tanzania, Simba et al. (2008) reported that 72.5% of patients seen at Muhimbili National hospital were self-referral and 70% of those requiring admission could be assisted at level one of care. The study noted that the inadequacy of the local district hospital and unavailability of a secondary level facility in the district where the tertiary level facility is, led to the patients' self-referral. Again, in Zimbabwe, Sanders et al. (1998) reported that 60% of the patients admitted at National hospital could be well assisted at the lower level of care. In Iran, Eskandari et al. (2013) and Abodunrin et al. (2010) reported self-referral as one of the problems that led to poor quality of referral care and lack of knowledge about the referral was the reason given by study participants. However, Afolaranmi et al. (2018); reported high level of knowledge of referral system and its functionality.

### **Delay and noncompliance with referral process**

According to Peterson et al. (2004) in Uganda, only half of the referred patients were able to access the referral services on same day of referral and there was no death among the 28% of the referred children whose guardians complied with the referral procedure as compared to 5% of deaths that were reported among the children whose guardians did not comply with the referral. Again, a study done in Eritrea reported that only 38% of the referrals were able to proceed to the next level of care (Salgado et al. 2002). In Uganda only 28% of the referred children were able to access the referral care and transportation and cost of medical care were reported as barriers to accessing referral service (Peterson et al. 2004).

### **Provider capacity and use of guidelines**

A study conducted in Burkina Faso by Ilboudo et al. (2012) reported that only 14.4% of severe malaria cases were correctly diagnosed and 60.6% of these were referred according to the given guidelines. These results indicated that most of the health care providers at health centres were not utilising the guide lines when making referral decisions. Similarly, Kamau et al. (2017) reported the need for training on the use of referral guidelines. Kamau et al. (2017); Asuke et al. (2016) also reported lack of standard referral documents to be used for referrals as given by 52.4% of the study participants. Lack of standard referral documents led to problems in providing proper referral documentation. In their studies, Madinah, (2016); Afari et al. (2014) pointed out that lack of well-trained personnel, diagnostic equipment as well as the breakdown of the entire referral system act as barriers for the people in Uganda to seek for medical care in lower level facilities. Lack of guidelines in most of the health care settings pose a challenge in provision of quality referral services (Kang'ethe, 2015). In Malawi, a study conducted by Chikowe et al. (2018) reported absence of guidelines for management of diabetes in all health centres.

### **Communication**

Lack of communication can affect the quality of referral care (Kalter et al. 2003; Jat et al. 2004). Communicating before the transfer of patient can lead to the provision of quality care as the receiving facility might have enough time to prepare for the coming patient (Mock et al. 2004). The provision of referral and feedback letters is not oftenly done in developing countries Malawi inclusive (Siddiqi et al. 2001). It is necessary to provide feedback as this might help the referring facilities to know what was right or wrong in their management (Omaha et al. 1998). A study done in Cambodia reported insufficient communication between the referring facility and the receiving facility. There was also impaired communication before patient transfer which could affect the quality of care as the receiving facility might have not prepared. According to Lungu & Ratsman, (2008), the improvement of the radio communication system reduced the delay in referral of obstetric emergencies from health centre to hospital by almost one hour (4hrs 35min to 3hrs 7min). In their study Wanjau et al. (2012) observed most of the study respondents (84%) indicated communication as a factor that enhances provision of quality health care services that can satisfy the clients in public health facilities. Similarly, Wanjau et al. (2012) found communication as a factor that influence the provision of quality health care. Nakahara et al.

(2010); Eskandari et al. (2013); Afari et al. (2014); Asuke et al. (2016) found that poor communication between the facilities as well as the provider and patient affected the functionality of the referral system in Cambodia.

### **Transportation**

Lack of transport is a common barrier to effective referrals (Razzak & Kellermann, 2002; Kang’ethe, 2015). Longer distances to health care facility prolong time for patient to receive the care and delay urgent referrals in poor resourced countries (Peterson et al. 2004) like Malawi. The presence of prompt vehicles can help to respond to emergency cases and referral cases at all levels of care. Previous literature has shown that transport issues contribute to the delay in seeking and receiving health care services and has been noted as one of contributing factors to prevent deaths among women with obstetric problems (Farm, 1992; Maine, 1997; Afari et al. 2014). Studies have also indicated that residing away from the referral hospital affects the accessibility of referral services (Kloos, 2000). A study done in Mangochi district, showed that motorcycle ambulances are more efficient and effective in reducing referral delays by 2 to 4.5 hours. In addition, purchasing motorcycle ambulances was 19 times cheaper than buying a car ambulance with an annual operating cost of 24 times less than for a car ambulance. In Kenya a study conducted by Kamau et al. (2017) indicated that most of the health care facilities had no transport for the patients on referral as reported by 67.2% of the participants. Eskandari et al. (2013); Madinah, (2016) also reported distance and transport problems as the setbacks from receiving quality referral care. In Cambodia, a study conducted by Nakahara et al. (2010) revealed that transportation was a problem and people were asked to buy their own fuel for ambulances or use taxi to transfer patients which was too expensive for the care seekers.

### **Research methodology**

#### **Research design and sampling technique**

The study used a qualitative approach and face-to-face interviews were used to collect data from purposively sampled nurses, clinicians, health surveillance assistants (HSAs), transport officers, ambulance drivers and community leaders made up of village heads and village health committee leaders. The participants were selected from six conveniently sampled health centres (Naisi, Ulumba, Sadzi, Machinjiri, Chamba, and Mambo) and Zomba district health office. The participants were purposively sampled because of the roles they play in the referral process. Nurses and clinicians were charged with the responsibility of making referral decisions, managing and escorting referred patients from health centres to the referral facility. HSAs were responsible for referring patients from the community to the health centres as well as following up patients at community level. The community leaders were responsible for encouraging the community to seek medical attention as well as ensuring the availability of the means of transferring patients from the community to the nearest health facility. As indicated in table 1 a total of 34 participants were interviewed.

**Table 1.** Categories and numbers of respondents

| <b>Category of Respondents</b> | <b>Number of Respondents</b> |
|--------------------------------|------------------------------|
| Nurses                         | 8                            |
| Clinicians                     | 8                            |
| HSAs                           | 8                            |
| Community Leader               | 6                            |
| Transport Officers             | 2                            |
| Ambulance drivers              | 2                            |
| Total                          | 34                           |

## **Data collection instruments and procedure**

Three interview guides were used to collect data from different categories of the respondents. One guide was used with health care providers (nurses and clinicians) to identify the criteria that guide them to make referral decisions as well as challenges faced during the referral process. The other interview guide was used with community leaders and HSAs to assess the effectiveness of their roles in referral process and ways used to transfer patients to health facilities as well as challenges faced during referral process. The third interview guide was used with drivers and transport officers and to identify their roles in the referral of patients from one facility level to the other, problems encountered and suggestions for improvement. All the interview guides consisted of open-ended questions to allow respondents to freely express their ideas and opinions. Face to face interviews were used to get in depth information through probing and to give the researcher a chance to clarify questions where necessary so as to obtain relevant information. During the interview sessions, the interviewer wrote down the responses to the questions. The average interview time was 60 minutes.

## **Data analysis**

The collected data were qualitatively analyzed. Analysis began as soon as data collection commenced and it continued after collection of data. This was important because the memories of the interviews were still fresh. During data analysis, data for each question were put together and themes were identified and then arranged into categories.

## **Ethical consideration**

Permission to visit the facilities was sought from the District Health Office. All Officers-In charge of the sampled facilities were then consulted through phones to arrange dates for data collection besides informing them of the purpose of the study and people needed to be interviewed.

During data collection, all respondents gave informed consent before their participation in the study. For respondents to provide reliable information, they were assured of confidentiality and anonymity. Any information collected about individual respondents was treated without attaching or mentioning their names or names of their health facilities. The researcher also ensured that the interview environment made respondents feel comfortable, secure and at ease to speak openly about their view points and experiences.

## **Study findings and discussion**

The study investigated the factors that affect the provision of referral health care services at primary health care level in Zomba district, Malawi. The study revealed that the following factors were observed at the primary health care level during referral process in Zomba district:

### **Criteria that guide health care providers in making referral decisions**

The study has revealed that most of the health care providers at primary health care level were not aware of the referral guides. At one of the health facilities the clinician reported that

*‘As a facility we do refer patients especially when one requires other tests or medication which we don’t have, however the decision to refer or not to refer depends on the clinician’s judgement as well as the clinical presentation of the patient.*

Another clinician from one of the health centers also said,

*‘It is easy to refer maternal and child cases because of the availability of guidelines while the other medical conditions are not easy because we use our own judgement which might be unacceptable to the receiving facility’.*

It is evident from the findings that the primary health care centers need to be provided with referral guidelines. Chikowe et al. (2018) also reported absence of guidelines for diabetes in all health centers in Malawi.

Similar findings were reported in a study conducted in Kenya by Kamau et al. (2017) reported that 53.0% of health care workers were not conversant with the referral guidelines and required training on this. Similarly, a study conducted by Ilboudo et al. (2012) in Burkina Faso reported inappropriate patient referral which was due to failure to use referral guidelines. A study done by Asuke et al. (2016) in Nigeria reported inavailability of standard referral documentation as a factor that affected the quality of referral care. In addition, a study aimed at finding challenges that the referral system poses to care giving in Botswana reported lack of referral guidelines in health care settings compromise the quality of referral services (Kang'ethe, 2015).

### **Effectiveness of the role of community leaders in the management of referral process**

The study has found that community leaders such as HSAs, village heads and village health committee members had a big role to play in referral of patients from community to health centers thereby enhancing equity and universal accessibility of quality of health care services. In this study it was found that community leaders were supposed to make arrangements for patients to be transferred from community to health centres as well as following them up when they are back and to ensure that those referred for further management have really accessed the care. However, it was revealed that, issues of transport made the community leaders work to be ineffective as it was found that, out of the six sampled facilities, only two facilities (33%) had bicycle ambulances used to transfer patients from the community to the health center. Majority of the communities use stretchers, bicycles and wheelbarrows which delay referral process and led to complications.

At one of the health centers, the community leader (HSA) said,

*Most of the patients use bicycles and wheelbarrows and this makes them to arrive late hours. Where patients are taken to the health centre using a wheelbarrow, the patients would prefer to travel at night to avoid embarrassment hence making the condition worse'.*

Another community leader at one of the health centres said,

*'Sometimes we are forced to wait with the patient at the health centre until the patient is taken to the central hospital because when the ambulance delays some of the referred patients chose not to go for the referral service. Sometimes patients do die at the health centre or home while waiting for the transport. In a few cases, those who can afford to hire a car are able to reach the central hospital same day of referral'.*

These results were consistent with what Peterson et al. (2004) in Uganda, reported that, only half of the referred patients were able to access the referral services on same day of referral and 28% of the referred children were able to access the referral care Similarly in Eritrea Salgado et al. (2000) reported that only 38% of the referrals were able to proceed to the next level of care.

### **Challenges affecting the implementation of referral system at the primary health care level in Zomba district.**

#### **Lack of transport facilities**

The study showed that lack of transport facilities (ambulances) was a factor that negatively affected the implementation of quality health care referral services in Zomba district. As a result, most of referred patients ended up dying or having complications which were difficult and more expensive to manage.

At the district health office, the transport officer reported as follows:

*'We have few ambulances which are functioning and these cannot serve the district accordingly so our priority is maternal cases. We also have shortage of fuel which is worsening the referral transport issues to the extent that not all the functioning ambulances are on the road so you can see how difficult it is to serve the whole district with less than five working ambulances.*

These findings confirm the results of a study conducted by Chikowe et al. (2018) reported unavailability of ambulances as the main barrier to referral services in Malawi. Similar findings were reported by Kamau et al. (2017) in their study of the challenges facing implementation of referral system for quality health care services in Kiambu county in Kenya. The study reported that there was no transport

for referrals as indicated by 67.2% of the study respondents. In Uganda and Ghana, Madina (2010) and Afari et al. (2014) respectively also reported lack of functioning ambulance system for patient referral where people were using non-ambulance vehicles. Afari et al. (2014) also reported that health care workers had challenges in trying to stabilize and monitor referred patients who are transferred by pickup trucks and taxis. Again, Peterson et al. (2004) reported that only 28% of the referred children were able to access the referral care and transportation was reported as a barrier to accessing referral service among the sick children in Uganda.

### **Poor road network**

The study also identified bad roads as one of the factors that worsened the problem of transport for patient referrals thereby leading to unnecessary complications and deaths.

At one of the facilities the community leader stated that

*'our roads are bad and most of them cross rivers which have no bridges hence impassable during rainy season.'*

At the district health office, one of the drivers said,

*'The delay to take patients from health centres to the central hospital worsens during rainy season because most of the health centres are far from tarmac road with no bridges across the rivers so we have to wait for the floods to subside. Due to the prolonged delay we sometimes find that the patient has passed away and the community always put blame on us.'*

Similar findings were also reported by Afari et al. (2014) in their study of provider perspectives of quality improvement in emergency obstetric referrals in Ghana. The study noted that the available ambulances could not reach most of the areas because the roads were not tarred and the vehicles were designed for use on tarred roads only.

### **Lack of public secondary level of care facility**

Lack of a district hospital which can offer secondary level of care was also pin pointed as a factor that affected the quality of the referral system in Zomba and it was identified as one of the factors that led to the congestion at the referral facility where specialized care is supposed to be offered.

One of the nurses at one health facility pointed out that

*'it is not easy for the patients that require special care to get it as the specialists are always overburdened with cases that could be managed at a district hospital which we don't have.'*

To emphasize the need for a public secondary level care facility a clinician at another facility reported that,

*'most of the referrals we make (severe malaria, severe anaemia and pneumonias) do not require specialist attention but rather care from a district hospital which we don't have.'*

Similarly, a study conducted in Tanzania also reported lack of secondary level facility as a factor that led to congestion of the referral facility as well as reduce the quality of care given at the referral facility (Simba et al., 2008)

### **Shortage of skilled health care providers, equipment and drugs**

The other factors which affected the provision of quality referral care at the primary health care level and led to self-referral and bypassing of primary health care facilities was the shortage of skilled health care workers, equipment and drugs.

At one of the health facilities, the community leader reported that,

*'shortage of staff is really a problem; patients have to wait for a long time and some conditions do worsen whilst on the waiting queue.'*

One of the clinicians at one of the facilities reported that

*'It is difficult for me to manage cases like diabetes and hypertension because I have not yet gone for training so I have to refer each and every case I suspect to be hypertensive and diabetic. Besides, our*

*blood pressure checking machine is not functioning and we have no glucometer to check patient's blood sugar'.*

One of the nurses at one of the facilities said,

*'Here we often run short of drugs and most of the times our referred patients are not given the pre-referral treatment not even panadol. We also feel sorry when we send patients to the central hospital just to get anti-malarial drug.*

Similarly, studies conducted by Madinah, (2016) in Uganda and Afari et al. (2014) in Ghana, also reported shortage of well-trained personnel and diagnostic equipment as barriers for seeking care from the primary level facilities hence congestion of the referral centres.

### **Communication challenges**

The study also found that communication was a factor that negatively affected the smooth provision of referral health care services in Zomba. It was also noted that only one facility (17%) had a functioning wireless radio message. Cell phones were used but not always due to lack of airtime since only 1,500 Malawi kwacha (US\$2) was given to cater for a month. Poor communication contributes to the delay of patient transfer as the ambulance tended to come late.

Concerning the communication problems one of the nurses at one of the facilities had this to say,

*'we are told to call the switchboard operator at the referral facility who is supposed to call us back but most of the times we are not called back. We use a handset provided by Airtel and the district health office provides us with airtime which is not enough for the whole month and sometimes we use our own phones'.*

At the district health office, the transport officer said,

*'Communication is really a problem because most of the health centres have no wireless radio messages so using cell phone is a challenge due to financial constraints. This also makes our drivers to arrive late.*

The study also noted that there was a problem of not getting feedback from the receiving facility which could lead to repetition of mistakes by the referring facilities. However, the researcher did not manage to hear from the receiving facility the reasons for their failure to send feedback to the referring facilities. Similarly, Nakahara et al. (2010); Eskandari et al. (2013); Afari et al. (2014); and Asuke et al. (2016) found that there was poor or no communication between the referring facility and the receiving facility both before and after patient transfer. Kalter et al. (2003) and Jat et al. (2004) also noted that quality of referral can be negatively affected by lack of communication. However, Siddiqi et al. (2001) noticed that it was common to see no referral and feedback letters in low resourced countries like Malawi. Again Omaha et al. (1998) commended the provision of feedback as a means of learning on how to manage different referral cases. In Cambodia, Nakahara et al. (2010) also noted the problem of communication between the referring facility and the receiving facility. According to Lungu & Ratsman (2008), the improvement of communication can help to improve the quality of referral care by reducing time taken for the referred patient to reach the referral facility. The results of this study are also in agreement with what Wanjau et al. (2012). reported that good communication during referral process can help to improve the quality of referral health care services.

### **Delay and noncompliance with referral process**

In Malawi the district health offices are responsible for transferring patients from the referring facilities to the receiving referral facility. The study revealed that, delay of patients in reaching the facility as well as failure to comply with the referral procedures was another factor that affected the provision of primary referral health care services in Zomba district.

At one of the facilities, a nurse disclosed that,

*'It takes not less than four hours for the ambulance to come for the medical case and sometimes patients spend a night or two waiting for the ambulance. Some patients do refuse to go to the central*

*hospital but later we see them coming back in a worse condition which we cannot manage and this also affects the outcome of such cases.*

These findings also confirm the results of a study conducted by Peterson et al. (2004), on pediatric referral in Uganda. The study reported that only 50% of the referred patients received the referral services and no death occurred among those who followed the referral process. Salgado et al. (2002) also reported that, in Eritrea, less than half of the referrals were able to receive the referral services.

## **Conclusion**

The results of this study are indicating that, not all the patients who are referred from primary health care facilities in Zomba are able to access the referral services either due to factors that affect referral system. From the findings of this study it was concluded that the referral system in Zomba district is not adequately resourced to provide of quality primary referral health care services. This was reflected on the factors identified from the research interviews. It was concluded that patients' delay and failure to access the prompt and timely referral services was largely contributed by the system's lack of transport, communication problems, bad road networks, lack of referral standard guidelines and shortage of well-trained personnel. It was also noted that the services at the referral facility were of low quality due to high numbers of self-referrals which was attributed to drug stock out, and lack of diagnostic equipment as well as the providers' skills at the primary level of health care.

## **Recommendations**

In view of the findings, the study recommends that the Government of Malawi needs to improve on road infrastructure, availability of ambulances as well as communication technology in order to enhance the transfer of patients. The Ministry of Health should also develop the policies and referral guidelines which should be made available to all health care providers at all levels of care. The District health office should also be in a position to maintain ambulances, wireless radio messages and provide enough fuel on a regular base in order to improve primary health care referral services. To reduce congestion of primary health care seekers at the central hospital (tertiary level), the government should consider constructing a district hospital to provide secondary level health care services.

## **Further steps**

The study investigated challenges faced by primary health care providers in the provision of primary referral health care services. To fully understand the underlying factors behind the patients' self-referral and bypassing of primary health care facilities, future studies need to go beyond primary health care providers' experiences and investigate the patients' and referral facility's factors.

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