

Obstetric referrals: the practice by community health workers

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Abstract

Background: Maternal mortality is a major health challenge in Nigeria. Improper/late referral of obstetric patients is a major contributor to these deaths. This cross-sectional study documents the practice of referral of obstetric patients and the challenges faced by community health extension workers attending a Community Health Officers Training programme in a teaching hospital in Nigeria

Methods: Pretested self-administered questionnaires were administered to students undergoing the Community Health Officers training programme at the Jos University Teaching Hospital. Focused group discussions were also conducted.

Results: Majority of the respondents (93.8%) referred patients to other healthcare facilities and the reasons proffered for referring patients include complications (54.7%), for proper care (34.4%) and based on guidelines/protocol (6.3%). Majority of respondents 89.1%, 84.4% and 78.1% referred patients with eclampsia, abnormal lies and presentation and antepartum haemorrhage respectively while about half of the

respondents referred primigravidae, grandmultigravidae and women with multiple gestation. Half of the respondents had encountered challenges while referring patients to other health facilities. The challenges highlighted during the group discussions in referring patients include absence of feedback from referred hospitals, insults from health workers at the referred centres, patients refusing to go to other hospitals due to lack of funds and complaints of poor treatment/care by health workers in those hospitals.

Conclusion: The practice of referrals of obstetric patients by community health workers is poor. Health workers should be trained on proper patient referral with the use of clearly written guidelines/protocols.

Keywords: Community health workers, Obstetrics, Practice, Referrals

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Introduction

Maternal deaths are major issues of public health concern in developing countries including Nigeria. Concerted efforts have been made to curb this tragedy for which the Millennium Development Goal 5 was introduced in a bid to reduce maternal deaths by 75% by 2015.^{1,2} Several factors have been found to contribute to maternal deaths aside from the obstetric conditions. Social, cultural and economic factors have been found to strongly impact maternal deaths. These result in the 3-delay model which influence the timely arrival of women to appropriate care in obstetric emergencies.³ The "three delays" are (I) delays in the recognition of the problem and the decision to seek care in the household, (II) delays in reaching the appropriate facility, and (III) delays in the care received once the woman reaches the facility.

The reasons for phase II delays include difficult

geographical terrain, cost of transport, lack of phones and vehicles, suboptimal distribution and location of health facilities, and poor decision making of health professionals as to when to refer patients to a higher level of care.^{3,4} Healthcare providers need to recognize their limits and appropriately refer patients when necessary. Proper and timely referral of obstetric patients would go a long way to reduce phase II delays i.e. those experienced after the decision to seek care is made, and before obtaining adequate care. Ujah et al⁵ studying maternal deaths in Jos, Nigeria reported that 79% of maternal deaths occurred within 24 hours of admission which suggests that many of these patients presented late. Late/delayed referral is a strong contributor to women presenting late in hospital for proper care.

A large proportion of Nigerians including pregnant women live in rural areas where healthcare is mostly sought from primary health centres which are manned mainly by community health workers.⁶ We therefore, sought to assess the practice of referral of obstetric patients and the challenges faced by community health extension workers attending a Community Health Officers Training programme in a teaching hospital in Nigeria.

Materials and Methods

This cross-sectional study utilized both quantitative and qualitative methods of data collection. The study was

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conducted using pretested self-administered questionnaires distributed to two sets of first year students undergoing the Community Health Officers training programme at the Jos University Teaching Hospital in May and October, 2014. These students were all Community Health Extension Workers. There were 64 students in total.

The questionnaire consisted of both open- and close-ended questions assessing age, sex, number of years in school, duration and place of practice. It also included questions on whether they referred pregnant patients, what type of pregnant patients were referred, if they referred patients with specific outlined conditions antenatally, where these patients were referred to and challenges they had with referral of such patients. The 64 subjects participated in two group discussions conducted in their respective classrooms. The participants were asked what challenges they encountered in patient referral and how the challenges could be surmounted. Field notes were taken by the researchers and these were transcribed.

Ethical consideration

The Human Research and Ethics Committee of the Jos University Teaching Hospital approved the study. Informed consent was obtained from the subjects. All personal identifiers were removed from the data and confidentiality maintained.

Data Analysis

Data analysis was performed using EPI info 2005 version 3.3.2 statistical software. Continuous variables were presented as means \pm SD while discrete variables as proportions. Open ended questions and group discussions were transcribed and analyzed thematically.

Results

Demographics of respondents

There were 64 CHO students and 40 (62.5%) were female as shown in Table 1. They were drawn from nine states of northern Nigeria where majority were employed in government facilities. This and other demographics are shown in Table 1.

Practice of obstetric referrals

Majority of the respondents (93.8%) referred patients to other healthcare facilities which are mostly the nearest General Hospital (75%). The reasons proffered for referring patients include complications (54.7%), for proper care (34.4%) and based on guidelines/protocol (6.3%) (Table 1).

The indications for referring patients are shown in Table 2. Majority of respondents 89.1%, 84.4% and 78.1% referred patients with eclampsia, abnormal lies and presentation and antepartum haemorrhage respectively while about half of the respondents referred primigravidae, grandmultigravidae and women with multiple gestation.

Table 1. Characteristics and referral practices of community health officer trainees at the Jos University Teaching Hospital

Variable	Value
Female, n (%)	40 (52.5)
Mean age	39 \pm 7 years
Mean number of years spent as health workers	14 \pm 6 years
Place of employment, n (%)	
Government facility	50 (78.1)
Faith based facility	7 (10.9)
Private facility	7 (10.9)
Provide antenatal care, n (%)	53 (82.8)
Provide delivery services, n (%)	49 (76.6)
Refer pregnant women, n (%)	60 (93.8)
Reasons for referrals, n (%)*	
Complications	35 (54.7)
For proper care	22 (34.4)
Based on guidelines/protocol	4 (6.3)
Challenges with referrals, n (%)	32 (50)
Types of challenges with referrals, n (%)*	
Lack of feedback	19(29.7)
Lack of transportation	15(23.4)
Patients' refusal to go	6(9.4)
Insufficient funds	6(9.4)
Inaccessibility	5(7.8)
Sites of referral, n (%)	
Nearest General Hospital	48(75)
Teaching Hospital	6(9.4)
Nearest Private clinic	1(1.6)
Patients' choice	1(1.6)

*Multiple answers

Table 2: Indications for referral of obstetric patients antenatally

Condition	Proportion (value)	(%)
Teenage pregnancy	38	60.3
Primigravidae	23	55.9
Grandmultigravidae	34	54.0
Hypertensive disorders	57	89.1
Eclampsia	57	89.1
Diabetes mellitus	54	84.4
Sickle cell anaemia	52	82.5
History of postpartum Haemorrhage	51	79.7
Prolonged pregnancy	54	84.4
Multiple pregnancy	34	53.1
Antepartum Haemorrhage	50	78.1
Previous caesarean section	57	89.1
Abnormal lies and presentations	54	84.4

Challenges to patient referral

Half of the respondents had encountered challenges while referring patients to other health facilities. The challenges highlighted during the group discussions in referring patients include absence of feedback from referred hospitals and patients refusing to go to other hospitals due to lack of funds and complaints of poor treatment/care by health workers in those hospitals. The other challenge was insults from health workers in referred centres which include statements like “you are incompetent”, “Why did you wait until the patient's condition was bad before referring?”

Discussion

Maternal deaths could be drastically reduced if functional referral systems were in place to allow pregnant women to reach appropriate health services when complications occur⁷. This cross-sectional study demonstrates referral practice among primary health care providers attending training at a teaching hospital. The study revealed that majority of the respondents referred patients to higher levels of care. Alarmingly, some respondents did not refer obstetric patients with high risk of developing life threatening conditions while some did not refer obstetric patients with outright complications.

This poor referral practice of community health workers, who are usually the major work force at the primary health care level, may be a major contributor to maternal deaths in Nigeria. Maternal mortality studies in Nigeria have shown that about 80% of women die within 24 hours of presentation in the hospital which implies that many of these women were referred late and some of the reasons for this included lack of transportation and inability of the health-care staff to detect obstetric emergencies early enough^{5,8}. A study from Pakistan revealed that a poorly functioning referral system may be partly to blame for lack of expected improvements in health status of the populace despite elaborate primary health care activities⁹.

Of the respondents 89.1% referred patients for proper care and complications while only 6.3% referred patients based on written guidelines/ protocol. The inference of this is that CHOs manage patients beyond their capabilities and when referring would refer patients late and in 'extremis' resulting in severe maternal morbidities and death. A systematic review by Murray and Pearson¹⁰ revealed that the use of protocols improved referral systems and obstetric outcomes.

Though majority of respondents referred, 10.1% and 21.9% did not refer patients with antepartum eclampsia and antepartum haemorrhage respectively. These conditions have been found to be major direct contributors to maternal deaths^{5, 11-13}. Patients with conditions like teenage pregnancy, primigravidity, grand multiparity, sickle cell anaemia, diabetes mellitus, previous caesarean section, multiple pregnancy,

abnormal lies and presentation and prolonged pregnancy which all have potential for severe complication with disastrous outcomes were not referred by at least 10% of the respondents. This is a dangerous practice and may be due to the fact that the CHOs are not aware of or do not use guidelines/ protocols for referral. It could also be that these health workers are not properly supervised and monitored to curb the dangerous practice of managing patients with conditions beyond their capabilities and training to do so.

Some of the challenges the respondents had with the referral of obstetric patients include lack of feedback from the referred health facility, inaccessibility and lack of transportation to the referred hospital, patients' refusal to be referred and insults from health workers in the referred health facilities. Siddiqi et al⁹ from Pakistan reported issues of feedback and patients decision to bypass referral systems as challenges faced by health workers in referring patients. Maternal mortality studies in Nigeria have implicated inaccessibility of health facilities and transportation problems as contributory factors to late presentation of pregnant women in hospitals with resultant mortalities^{5,8}.

The limitations of the study include the fact that we found no similar study in our environment with which to compare our findings. The study was a questionnaire based study, hence is subject to recall bias. Additionally, the relatively small number of respondents limits generalizability. However, this study provides a background for further studies to explore issues concerning referral of obstetric patients amongst health workers.

In conclusion, the practice of referrals of obstetric patients by community health workers is poor. We therefore, recommend that CHOs should be trained on proper patient referral with the use of clearly written guidelines/protocols. The proper use of ambulances and feedback mechanism should be integrated into the healthcare system and health workers trained and encouraged to be polite to patients and fellow healthcare workers.

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