Profile and Outcome of Primary Health Workers' Referrals in a Cosmopolitan State in Nigeria

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Abstract

Background: Referral system is any process in which healthcare providers at lower levels of the health system seek the assistance of providers who are better equipped or specially trained to guide them in managing or to take over responsibility for a particular episode of a clinical condition in a patient. **Objective:** To evaluate the profile and outcome of referrals from primary healthcare levels. **Materials and Methods:** This was a descriptive cross-sectional study undertaken with the aid of a structured questionnaire administered to all referred pregnant mothers and parents of children at three General Hospitals and one tertiary hospital. **Results:** Nearly all the participants were informed about the reason for their referral. Four-fifths of the participants were not accompanied by a health worker, whereas 90% were not expected on arrival. About 80% of the participants went to the referred hospital on the same day. The most common mode for transporting referred patients was public bus followed private vehicle. **Conclusion:** Although there are good practices with regard to referred patients being informed about the reason for their referral, work is still pending to ensure that the referral systems are effectively functioning in the referring of patients from primary health facilities.

Keywords: Emergency, primary health care, referral, system

INTRODUCTION

There are three levels of health care in the Nigerian Health Systems – primary, secondary, and tertiary health care levels.^[1,2] Health problems that cannot be managed within the primary health facilities are then referred to secondary level which in turn refers to tertiary facilities. These various levels interact through a referral system.^[1,2] The backbone of the healthcare system is the primary health care (PHC) services.^[3] They are supposed to be the first point of contact to the healthcare system when a citizen is ill. The PHC facilities include health stations or posts, and other healthcare facilities such as private health practitioners, community-based health organizations, and primary healthcare clinics.

A referral is a process by which a health worker at one level of the health system seeks the assistance of a better or differently resourced facility at the same or higher level to assist in, or to take over the management of the client's case.^[4] Patient referral service constitutes an integral part of any well functioning health system. The goal of a referral service is to ensure that the patient is cared for at the appropriate level of health facility

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and receives cost effectiveness and quality management.^[5] In addition, a referral also serves to provide linkages among primary, secondary, and tertiary care.

There are different approaches to referral management. One extreme is the existence of a referral management center that acts as a conduit for all referrals and conducts clinical triage that may redirect or reject referrals.^[6] The Health Maintenance Organizations are the prominent formal structure serving this function in Nigeria. The other extreme is for the healthcare provider to decide which patient needs referral either through their self-judgment or through clinical guidelines given to them to influence their referral behavior. This is the most popular approach to referral management in resource-poor countries such as Nigeria.

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The evaluation of profile and outcome of PHC referrals to maternal and children services is an important performance analysis for strategic healthcare managers. The study assessed the profile and outcome of referrals from primary healthcare levels with the aim of consolidating an informed action plan toward making it more effective.

MATERIALS AND METHODS

This study was a descriptive cross-sectional one conducted with the aid of a structured questionnaire administered by the researcher. The questionnaires were pretested at a health facility outside the study location and covered key thematic areas relevant to the patient's experience of the referral system.

A multistage sampling method was used to select study participants. Three Local Government Areas (LGAs) and four Local Council Development Areas (LCDAs) were selected by simple balloting from a list of 57 LGAs and LCDAs in Lagos State. All the secondary and tertiary health facilities located within these selected LGAs and LCDAs were further selected. Consequently, the three General Hospitals (Ifako-Ijaiye, Agege, and Gbagada) and the only tertiary hospital (Lagos State University, Teaching Hospital) located within these selected LGAs and LCDAs were chosen. The study population consists all referred pregnant mothers and all parents of referred children at the selected secondary and tertiary health facilities during the study period who are referred from primary health facilities.

All individuals gave voluntary consent for the interview based on the protocol and informed consent procedures approved by the Lagos State Ministry of Health. It was also authorized by the Head of the Department of Paediatrics and Obstetrics of the three General Hospitals (Ifako-Ijaiye, Agege, and Gbagada) and one tertiary hospital (Lagos State University, Teaching Hospital).

Data were entered on an Excel spread sheet, cleaned by a statistician, and subsequently transferred into SPSS version 16.0 (SPSS Inc., Chicago, IL, USA) for data analysis. The data were analyzed using frequency distribution and percentage. Social classification was done using the scheme proposed by Oyedeji,^[7] in which patients are grouped into five classes (I–V) based on the occupation and educational attainments of both parents.

RESULTS

Characteristics of participants

Table 1 shows the characteristics of participants. A total of 112 participants, 66 (58.93%) and 46 (41.07%) referred from government-owned and private for-profit PHC facilities, respectively. Thirty-three percent of the participants belong to the upper socioeconomic strata, whereas 47.3 and 19.7% belong to the middle and lower socioeconomic strata, respectively. Majority of the referred patients were children (53.6%). Overall,

Table 1: Characteristics of study patients

	Frequency (%)
Type of referring health facility	
Government	66 (58.9)
Private for-profit	46 (41.1)
Socioeconomic class of referred patients	
Upper	37 (33.0)
Middle	53 (47.3)
Lower	22 (19.7)
Age category of referred patients	
Children	60 (53.6)
Pregnant mothers	52 (46.4)

the age of the referred patients ranged from 3 to 576 months, with a mean of 191.46 (\pm 174.12) months and a median of 138.0 months. The age of the pediatric patients ranged from 3 to 168 months, whereas that for pregnant mothers ranged from 240 to 576 months. The mean age of the children patients was 36.21 (\pm 39.87) months, whereas that of the pregnant patients was 364.62 (\pm 70.98) months.

Referral pattern

Table 2 summaries the referral pattern observed at the study sites. Almost all the participants were informed about the reason for their referral. More than four-fifths of the participants were not accompanied by a health worker to the referral site. Ninety percent of the participants were not expected by the referred hospital at the time of arrival. More than 80% of the participants went to the referred hospital on the same day that they were referred. About three-fifths of the participants were given a copy of referral note. The most common mode for transporting participants was public bus followed by private vehicle. Only about one-eighths of the participants were transported by hospital ambulance. Nearly two-thirds of the participants transported to referral site by hospital ambulance were from government-owned PHC facilities.

Reasons why patients could not arrive at the referral site the same day of referral

The reasons why the remaining 14 participants could not arrive at the referral site on the same day of referral are as shown in Figure 1. Late in taking referral decision followed by patient's condition not being perceived as urgent were the common reasons why referrals were not on the same day.

Reasons why a copy of referral letter was not given to patients

Further analysis of the 47 participants who were not given referral letters showed the reasons why they were not being given a copy of referral letter as shown in Figure 2. Almost half of them did not know. However, among the respondents who gave reasons, the most common reasons identified was that they thought it was meant to be confidential between referring and referral health workers (26.8%), whereas the next common reason identified was that they thought referral is by words of mouth (12.2.%).

Table 2: Referral pattern

	Type of	health facility	Total (n=112) (%)
	Government ($n = 66$) (%)	Private for profit ($n = 46$) (%)	
Informed about the reason for referral			
Yes	63 (95.5)	39 (84.8)	102 (91.1)
No	3 (4.5)	7 (15.2)	10 (8.9)
Accompanied by health worker			
Yes	8 (12.1)	5 (10.9)	13 (11.6)
No	58 (87.9)	41(89.1)	99 (88.4)
Expected by referred hospital			
Yes	6 (9.1)	5 (10.9)	11 (9.8)
No	60 (90.9)	41 (89.1)	101 (90.2)
Time of arrival at the referral site			
Same day	56 (84.8)	42 (91.3)	98 (87.5)
Less than 2 days	5 (7.6)	4 (8.7)	9 (8.0)
Between 2 and 7days	2 (3.0)	0 (0.0)	2 (1.8)
After 1 week	3 (4.5)	0 (0.0)	3 (2.7)
Given copy of referral slip/letter			
Yes	43 (65.2)	22 (47.8)	65 (58.0)
No	23 (34.8)	24 (52.2)	47 (42.0)
Mode of transportation to the referral site			
Motorcycle	1 (1.5)	3 (6.5)	4 (3.6)
Hospital ambulance	10 (15.2)	3 (6.5)	13 (11.6)
Private vehicle	14 (21.2)	19 (41.3)	33 (29.5)
Public bus	26 (39.4)	11 (23.9)	37 (33.0)
Public taxi	13 (19.7)	9 (19.6)	22 (19.6)
Walk	2 (3.0)	1 (2.2)	3 (2.7)





Medical conditions for which participants were referred

The medical conditions for which participants were referred were as shown in Figure 3. Gynecological and obstetric emergencies constituted the most common medical condition for the referrals. The second most common medical condition was because of neonatal complications. The challenges encountered by the participants in transition between healthcare providers included: transportation problems, lack of bed space, lack of funds, long waiting times, and difficulty in locating the hospital.

Suggestions given by the participants to improve the referral system included: provision of ambulance (25.88%), provision of more equipments and drugs at the hospitals (16.47%), employment of more health workers (24.71%), reduction



Figure 2: Reasons why a copy of referral letter was not given to patients. NB: Others includes: No paper to write referral, referred by a TBA: Traditional Birth Attendants, delivery in a church and doctor rushed patient down himself

in waiting times (5.88%), provision of communication network between hospitals (5.88%), provision of more bed spaces (10.59%), monitoring of the traditional birth attendants (1.18%), provision of blood transfusion facilities at all hospitals (1.18%), quick decision-making on referral (1.18%), and that a health worker should accompany referred patients (4.71%).

DISCUSSION

Being a system, examination of a referral requires consideration of all its parts. The components of a referral system include initiating and receiving facility with the



Figure 3: Reasons for referral. NB: Others includes: self-referral, expert management, lack of required equipments to deliver the appropriate care necessary and non-availability of inpatients service

patients in between them. The present study assessed the profile and outcome of referrals from primary healthcare levels with the aim of consolidating an informed action plan toward making it more effective. This study sought to understand referral from referred patients' perspectives to inform decision makers on ways to reform the referral system in Nigeria.

As parts of the framework of referral system, both caretakers and referring healthcare workers must have a shared understanding of the purpose and expectations of the referral. The current study findings revealed that this is a common practice among both government-owned and private for-profit health facilities. The usefulness of the caretaker briefing prior to movement to referral health facility helps to remove personal factors that may prevent referral such as poor prior experience with the system.^[8]

Referral standards in an efficient and effective referral systems facilitate the referred patients being accompanied by a trained health worker.^[9] The current study revealed that these standards were not observed among the referrals from primary health facilities either government or privately owned. The reasons for this observed low standard may either be due to an inadequate number of healthcare workers being on duty at the time of referrals or because the caretakers are not having emergency medical conditions.

The result from the present study showed that majority of the patients were not been expected by the referred hospitals. This finding is similar irrespective of the health facilities from which the patients have been referred. One of the components of efficient and effective referral systems is that health workers should call ahead to alert the receiving facility of the arrival of the referred patients.^[9] Communication between healthcare workers is mandatory for the referral system to be robust and to provide best practice.^[10] This may be as a result of the fact that majority of the facilities had no publicized means of communications – either land line or mobile. This would hinder interfacility communication.

In comparison with private for-profit health facilities, the practice of referred patients being given a copy of referral slip/letter was well established among the government-owned health facilities. The explanation may be due to unavailability of referral slip/letter at the private for-profit health facilities following cost cutting measures so that profits can be maximized. Another reason may be the lack of knowledge about the importance of referral slip/letter by the referring health workers. Further studies are needed to determine the factors which prevent private for-profit health facilities from giving a copy of referral slip/letter to referred patients.

The data from the present study demonstrated that movement of mothers and that of children with severe illness is challenging with prevailing nonavailability of ambulances to support referral. It may not be feasible for every PHC to own an ambulance, and thus, the regionalization of ambulance services currently practiced should be made more effective ensuring that all comprehensive PHCs have dedicated ambulances which would feed other smaller health centers. Transportation challenges in Lagos State has seen the introduction of tricycles known as Keke Napep or Marwa. Tackling the same problem in regard to the transportation of referred patients may require innovative approaches with the use of these tricycles, specially designated and driven by trained and certified drivers to serve certain far-to-reach areas.^[11] Their usefulness would be for the not so critically ill patients who do not require life-support and are able to sit.

This study demonstrated that majority of the referred patients reported at the referred health facilities on the same day. Patients' reporting to referral hospitals may be influenced by a wide variety of factors such as patients' perception of the severity of their illness, cultural beliefs, physical accessibility, and affordability. Further evaluations of the reasons why some did not report on the same day of being referred showed that the delay was because their medical conditions were not an emergency.

The most common reasons for referrals in the present study were gynecological and obstetric emergencies. It may be due to the fact that most primary health centers and private for profit health facilities cannot provide basic gynecological and obstetric emergencies. The finding is consistent with that of Simba *et al.*^[12] in Dar es Salaam, Tanzania.

Nearly all participants recommended that ambulance provision, provision of more equipments and drugs, employment of more health workers, provision of communication network between hospitals, provision of blood transfusion facilities at all hospitals, quick referral decision-making, and a health worker should accompany referred patients as measures to improve the referral system. This observations is consistent with that of other authors.^[8,13]

Results point toward specific areas where the referral system lacks capacity, but these problems are not uniform. As such, discrete short-term reforms may alleviate some of the burdens on the system. Other reforms will be costlier in terms of time and resources necessary for change.

LIMITATIONS

There is no current baseline information to compare any of the findings, so many of the conclusions have been considered in isolation. Although there may have been similar internal audits conducted in other jurisdictions, the author has not been able to access any of the reports.

Due to lack of resources, it was not feasible to interview members of communities who were not already clients within the system. So participants were those who had managed to reach a facility. Reporting bias is a potential problem; respondents may have perceived the potential of receiving something if they gave "acceptable" responses.

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Conflict of interest

There are no conflict of interest.

REFERENCES

- Health Reform Foundation of Nigeria. History of the Nigerian health sector. Nigeria Health Review; Abuja: 2006. HERFON; 2006. p. 1-13.
- FMOH. Revised National Health Policy. Federal Ministry of Health; Abuja: 2004. p. 5-17.
- Müller VT, Gomes Mda M. Questionnairestudyof primary care physicians' referral patterns and perceptions of patients with epilepsy in a Brazilian city, 2005. Rev Panam Salud Publica 2007;22:67-74.

- Dunmade AD, Afolabi OA, Eletta AP. Challenges of Otolaryngologic Referral in a Nigerian Tertiary Hospital: An Audit. East and Central African J Surg 2010;15:87-92.
- Afsar HA, Younus M. Patient referral at the grass-roots level in Pakistan. Nat Sci; 2:2004.
- Imison C, Naylor C. Referral Management: Lessons for Success. London: King's Fund; 2010. Available from: www.kingsfund.org.uk/publications/ referral_management.html. [Last accessed on 2016 Dec 05].
- Oyedeji GA. Socio-economic and cultural background of hospitalized children in Ilesha. Niger J Paediatr 1985;12:111-7.
- Macintyre KCE, Littrell M, Hotchkiss DDR, Mndzebele S, Nkambule R, Gumbi S *et al.* Barriers to referrals in Swaziland: Perceptions from providers and clients of a system under stress. World Medical and Health Policy 2011;3:1-29
- Awoonor-Williams JK, Bailey PE, Yeji F, Adongo AE, Baffoe P, Williams A, *et al.* Conducting an audit to improve the facilitation of emergency maternal and newborn referral in northern Ghana. Glob Public Health 2015;10:1118-33.
- O'Malley AS, Reschovsky JD. Referral and consultation communication between primary care and specialist physicians. Arch Intern Med 2011;171:56-65.
- Hofman JJ, Dzimadzi C, Lungu K, Ratsma EY, Hussein J. Motorcycle ambulances for referral of obstetric emergencies in rural Malawi: Do they reduce delay and what do they cost? Int J Gynaecol Obstet 2008;102:191-7.
- Simba DO, Mbembati NAA, Museru LM, Lema LEK. Referral pattern of patients received at the national referral hospital: Challenges in low income countries. East Afr J Public Health 2008;5:6-9.
- Tayler-Smith K, Zachariah R, Manzi M, Van den Boogaard W, Nyandwi G, Reid T, *et al.* An ambulance referral network improves access to emergency obstetric and neonatal care in a district of rural Burundi with high maternal mortality. Trop Med Int Health 2013;18:993-1001.