# Challenges of Otolaryngologic Referral in a Nigerian Tertiary Hospital.

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Background: The referral system offers one strategy for making the best use of hospitals and tertiary healthcare services. The aim of this study was to analyze the referral system of patients to the otorhinolaryngologist and to examine the use of in-house referral system in the teaching hospital set up.

Methods: This was a retrospective review of all patients referred to the ENT Department between January 2000 and December 2007. Data retrieved from all referral notes included the review of referral letter, demographic, referral status, clinical presentations and examination findings. These data were entered into the SPSS computer software version 11.0 and analysed Results: A total of 1402 cases were analyzed. The patients' ages ranged from 3weeks to 90yrs, with 70.4% of cases being below 40yrs of age while 25.9% were between 40-64yrs and 3.7% were above 65yrs. The Male to female sex ratio was 1:1. The majority (70.4%) of the patients had at least primary school education. The rest (29.6%) had no formal education. Slight over half (51.5%) of the patients were unemployed. The rest were either civil servants or self employed. Out of the 1402 patients that were referred to the hospital, in-house referral accounted for 74.1%, 7.2% of came from private health facility and 4.3% were self referrals. Out of the 1038 in-house referrals, 42.8% were from GOPD, 5.0% from Staff clinic, 13.3% from surgery, 4.7% from medicine, 3.5% from Obstetrics and Gynaecology, 10% from paediatrics and 10.4% from ophthalmology and 10.3% from ENT staffs such as residents, ENT Nurse Practitioner and ENT supporting staffs such as speech therapist and audiologist.

Conclusion: The challenges of referral to the otolaryngologists are enormous thus the need to organize continuous medical education for the family physician, to make patients have confidence in the primary care physician, early referral of patients and to allow the otorhinolaryngologist to focus on the cutting edge issues of the specialty

## Introduction

In any health care delivery system an appropriate structure is essential to promote comprehensive scope, continuity, integration of components and operational efficiency. Patient must be able to easily access healthcare workers and or health center in their own community. In the first contact with a health care practitioner particularly if that contact is with the GP's 90% of patient's need can be met. If the initial problem cannot be managed the decision will be made to refer the patient to a specialist or hospital outpatient department (OPD)<sup>1</sup>. Referral is a process by which a health worker transfers the responsibility of care temporarily or permanently to another health professional or social worker or to the community2. The referral system offers one strategy for making the best use of hospitals and tertiary healthcare services, but all patients should be seen first by a primary healthcare physician who decides whether a referral is necessary or not. In other words, access to hospital care should be through primary healthcare centers, except for emergency cases where patients may access the hospital directly via the hospital's emergency department. Thus whoever can be treated adequately at primary health centre level will be treated there, and the referral system will ensure that all others are referred to the district hospital in a timely fashion 4.8. Some patients present directly to the hospital, through emergencies and self-referrals, while a physician, nurse or other health care workers refer other patients

The national health system provides for three tiers of health care; primary, secondary and tertiary. The three should enjoy patronage from clients and a good referral system is the main link between them<sup>12</sup>.

In Nigeria many secondary and tertiary health facilities are crowded with people with simple ailments that can be managed at primary health centers, while health workers in many of later are idle<sup>13</sup>. Otolaryngology is a specialized medical practice that cares for ear, nose and throat, head and neck diseases.

A moderate percentage of Nigerians with ear, nose and throat diseases are not likely to enjoy the services of an otolaryngologist. This is because there are few of such specialists in Nigeria and they are located in cities and mainly in tertiary health facilities. The aim of the study is to audit the referral of patient to ear, nose and throat practice and to examine the use of in-house referral system in the teaching hospital set up.

### **Patients and Methods**

It was a retrospective review of all patient referred to the ear, nose and throat department between January 2000 and December 2007. Patients who have incomplete records were excluded from the study. The instruments used for the study were patients case notes and semi-structured questionnaire where information was documented, case notes without referral forms were excluded. Data retrieved from all referrals included the review of referral letter, demographic data (the age, sex), referral status (time of referral, name of referring facility, if within or outside the teaching hospital, does the patient have a referral note or not), (clinical presentations, examination findings, diagnoses) in ENT compared to outside diagnoses and outcome in terms of referral from the institutional case note.. These data were entered into the SPSS computer software version 11.0 and analysed descriptively.

#### **Results**

A total of 1456 patients were referred from to the ear, nose and throat specialty during the study period out of which 1402 case notes were analyzable. The 54 case notes not analyzed have either incomplete record with critical items missing, some containing only referral and no other documentation and some with referral and no demographic data but just diagnosis or not found. Age ranges from 3weeks to 90yrs, about 70.4% are below 40yrs of age while almost 40% were in between 15-40yrs while 25.9% were between 40-64yrs and 3.7% among the elderly (Table 1). The Male to female ratio was 1:1

The patients were predominantly Yoruba (74.2%). Only 12.8% were Ibos, 2% Hausa/Fulani while the rest (11%) were from other ethnic groups. Among these patients 49.8% were married and 50.2% not married. About two-thirds (70.4%) of the new patients had at least primary school education. The rest 29.6% had no formal education. However those with no formal education included children below school age and some adults. Among the 973 patients above 15 years age, 194 (20%) had no formal education, 323 (33.2%) had primary education, 275 (28.2%) had secondary education and 181 (18.6%) had post-secondary education. As much as 51.5% of the patients were unemployed (children, students, housewives and some young adults). The rest 48.5% were either civil servants or self employed.

Table 1. Age of Patients

Age	Frequency (%)
1day-28days	0 (0.00)
>28days-1year	52 (3.7)
>1year-15years	377 (26.9)
>15years-40years	558 (39.8)
>40years-65years	363 (25.9)
>65years	52 (3.7)
Total	1402 (100)

Table 2. Health Facility

Health facility type	Frequency (%)
Private clinic/hospital	158 (11.2)
РНС	66 (4.7)
General hospital	80 (5.7)
Teaching hospital	1308 (74.1)
Home	38 (2.7)
Non	22 (1.6)
Total	1402 (100)

Table 3. In-house Referrals

Dept within UITH	Frequency (%)
GOPD	444 (42.8)
Staff clinic	53 (5.0)
Surgery	139 (13.3)
Adult medicine	49 (4.7)
Obstetric/Gynecology	36 (3.5)
ENT	105 (10.1)
Paediatrics	104 (10.0)
Ophthalmology	108 (10.4)
Total	1038 (100)

Table 4. Duration Before Referral

Duration Before Referral	Frequency (%)
<24hrs	222 (15.8)
1-5days	189 (13.5)
>5days-2weeks	210 (15.0)
>2weeks	429 (30.6)
Not stated	352 (25.1)
Total	1402 (100)

Out of all the new cases 87.3% of them were resident in Ilorin and the rest 12.9% came from outside Ilorin. Among those that reside outside Ilorin town, 74.8% of them came from within Kwara State and the rest 13.4% were from other states in Nigeria in the range of 200-300Km West-East and 150-200Km north-south of Kwara state. Only 1038 (74.1%) of the patients with referrals, excluding those that were referred from UITH, only 21.6% of these were referred to the UITH, Ilorin from other health facilities and about 4.3% from health workers at home (Table 2.). The remaining 364 (25.9%) patients reported directly to the hospital without any referral. Among the 1038 patients referred, 47.8% (497) of them had referral note from GOPD/Staff clinic, 52.2% (541) from other departments; in the hospital and about 10.1% (105) are referred by ENT staffs (table 2.0).

Out of the 1402 patients that were referred to the hospital, in-house referral accounted for 74.1% (1038), 7.2% (158) from private health facility and 4.3% (60) are self referred (Table 3.). Most of the patients were referred after an average of 2 weeks of consultation in both outside and in-referrals with about 15.8% of the patient being referred within 24hrs (Table 4.)

# **Discussion**

A two-way referral system is advocated from the lowest level of health care to the highest (Village health worker to health post, to primary health care, to comprehensive health centre and to state General Hospital), except in emergency when patients can be referred to any of the facilities for

immediate treatment <sup>5</sup>. This is hardly the case in many of the developing countries, especially with the specialized areas like the otolaryngology where these specialists are sparsely distributed. Previous study done to assess the referral system in Nigeria revealed 7.1% going through the proper referral system <sup>14</sup>. However this study has shown a high proportion (88.3%) of these patients referred to otorhinolaryngology makes the outpatient departments of the Teaching Hospital their first contact with the National Health System. This is irrespective of the types of otolaryngologic problems. This supports the observation that awareness about the otolaryngologic practice is still coming up among both the health practitioner and the populace as those with simple ailment such as wax, foreign body in the orifices which should be treated at the primary or secondary health center still come to the tertiary .

Many (approximately 40%) of the patient seen were young adults aged between 15 and 40 years while the least was among the extreme of ages these may be associated with their inability to present self. Although we expected the children and elderly to be more likely to be referred by colleagues, it was not the case in this study.

In this study the patients' educational status had no influence on whether they were referred or not. Both the educated and uneducated bypass the lower levels of health care to obtain health care at the otolaryngology department irrespective of their ailments this is supported by the number of patients referred by staffs in ENT department in table 4.0 below. Some reasons for this include; the fact that people have little confidence in the care they would receive at the level of primary and secondary care- due to the obvious lack of an ENT specialist at this level, also the lack of well-designed referral system with defined procedures, management support and appropriate forms may be contributory.

The practices of bypassing the lower levels of health care and provision of primary care distorts a hospital function. It is believed many of the apparent shortcomings of hospitals are linked to congested outpatient departments as about a third of the patient (30.6%) spend minimum of 2weeks before referral with about 15.8% referred within 24hrs of presentation. Majority of the patient referred were in-house referral which constituted about three-quarter (74.1%) of the referrals most of these are due to lack of basic medical equipments required in the quick evaluation of patients and making the right diagnosis also there is need to improve the training of the family physician who first had contact with the patients, this is because some of the basis for referral are for simple ailments like wax impaction which a family physician by virtue of rotation through otolaryngology posting should be able to handle. What is desirable of a primary care physician is to be proficient in the management of simple cases of aural foreign bodies removal, wax impaction<sup>15, 16, 17, 18</sup>. If a paediatrician – not many either at primary centers could be so innovative to adapt a paper clip to function like a jobson Horne's probe with some degree of success<sup>16, 19</sup> thus he will do a lot with appropriate instrument, this will save the care giver the problems, cost and stress of seeking the services of a not always available otolaryngologists 15-17, 19 and this will also allow the otolaryngologists to focus on cutting edge issues of the specialty<sup>18</sup>. Some countries train ENT clinical officers who are competent at performing simple ENT procedures and diagnosing ENT diseases for referral to Specialists - this would solve some of the problems and reduce the numbers jumping the referral chain. Some also work in separate clinics at referral hospitals to decongest the Specialists' queues. However when indicated there should be no hesitation to seek the services of the otolaryngologists who are very limited in number<sup>16</sup>

Some of the referral are influenced by nurses, attendants, relatives or other hospital staffs so in this situation a short note with no clinical information were given to patients or patients just come without a referral note was observed in 25.9% of the patients. This can make it difficult to accurately determine what had been done for the patient before the referral and it is surprising to see that about 52.9% of the referral given to patient does not state what treatment has been offered to the patient. This was also observed in table 3.0 where about 10.1% of the in-house referral is from ENT clinic.

This practice is likely to be found mostly among patients that were not referred by doctors<sup>14</sup>.

Late referral is also found to be common among the patients referred however this influences the outcome of treatment of their disease management such as in case of a patient with cervical lymphadenopathy who was repeatedly placed on antibiotics with no improvement had his tumor progressed from a early stage to a late stage. It is important to address this situation, believed to be similar in most Nigerian teaching hospitals. It may affect the running of the National Health Insurance Scheme (NHIS). It is good to ensure that hospitals concentrate on their roles as referral centers and not made to perform functions of health centres. To realise this, people must be made to have confidence in these health centres by providing the necessary trained manpower, drugs and facilities to carry out some of this baseline treatment.

# Conclusion

- The challenges of referral to the otolaryngologists are enormous thus the need to make the populace have confidence in the family physician who are the first point of call on getting to a tertiary center in the treatment of simple ailments.
- The need to organize continue medical education for the family physician in the treatment of simple ORL disease condition, the need for early referral of a patient the family physician have doubting diagnosis

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