

Patients Barrier to Ear, Nose and Throat Surgical Care in Nigeria

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Abstract

There is high prevalence of ear, nose and throat surgical conditions in our community. Ekiti state government funded facility is available and yet the rate of utilization is low. Therefore, there is need to study the barriers to and surgical uptake. The aim of the study is to identify barriers to both minor and major surgical uptake in Ekiti State, South-Western Nigeria. It is a prospective study of all patients who had attended our Ear, Nose and Throat clinics and scheduled for either minor or major surgery. The study was done between January and December 2016. The patients who consented to be included in the study were enrolled and interviewed. Relevant additional information from their case notes were coded and recorded in the software SPSS version 16. The data was collated and then analyzed. Seven hundred and two (702) consented respondents were enrolled into the study, this comprises of 368 females and 334 males. Majority of the respondents (61.6%) resided in Ado Ekiti while minority of our respondents 2.4% resided outside Ekiti state. Majority of our cases, 87.5% were booked for minor procedure. Only 44.9% of our study population was gainfully employed and 42.7% of the respondents were self-sponsored for the surgical cares. Only minority 13.2% of our studied population did not encounter any form of barrier and 19.2% were able to overcome their encountered barrier. Hospital based barrier, hospital staff based barrier and patient based barrier were found to be 53.8%, 43.6% and 33.8% respectively in the studied population.

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Hospital-based barriers were noticed to be 42.3% high cost of surgical services, 28.9% hospital accessibility, 37.5% long waiting hour to access surgeon, lack of accommodation for escort, and 41.2% cumbersome tests in our study. Patients-based barriers were responsible for 48.1% fear of surgery, 52.3% fear of anaesthesia for the surgery, 57.8% complications from surgery and 44.9% dislike age of surgery in our studied group. Hospital-worker based barriers occurred in 36.2% bad attitude of hospital workers, and 9.8% frequently strike by the health workers among our respondent. In conclusions, the barriers to ear, nose and throat surgical care in this study are preventable. There is an urgent need to ensure affordable and sustainable otorhinolaryngological surgical care, in our community.

Keywords: Barriers; Surgical; ear; nose; throat care; Otorhinolaryngology.

1. Introduction

Global improvements in health care services over the last few decades has resulted in increasing lifespan[1]. Surgical diseases constitute about 16% of the global disease burden[1]. Surgery for upper airway obstruction has been associated with excellent relief like other life threatening otorhinolaryngological disorders. In Nigeria, there are over 200 Otorhinolaryngologists are over spread across the country, although they are not evenly distributed; the mega cities and state capitals have greater proportion while they are few in the rural communities. In contrast, the rural communities have high prevalence of surgical conditions which are amenable to essential otolaryngological surgical care and is not able to access required surgical care [2-4]. The major examples of these conditions include ear, nose and throat impacted foreign body, adenotonsillar hypertrophy, nasal polyps, otitis media, earwax impaction and so on.

Despite all these procedures, different barriers to surgical uptake have been documented worldwide, especially in our environment. In a surgical survey in Nepal 31% of the studied population had one or more barrier to access to surgery. Therefore, there is a need to investigate factors which tend to reduce access to affordable and accessible otorhinolaryngological surgeries in our practices. Community utilization of health care services is influenced by a range of psychological, cultural, socioeconomic and other factors[1]. Otorhinolaryngological surgical care services are no exception. Barriers to any surgical uptake are multifactorial and are divided into 3 main groups [5-9].

Hospital-based barriers such as lack of modern equipment, high cost of services, accessibility of hospital, long waiting hour to access surgeon, lack of accommodation for accompanying person during surgery, cumbersome surgical tests, and cancellation of operations[9]. In addition, patient-based barriers which include: socioeconomic factor, fear of surgery, fear of the outcome of surgery, dislike of hospital protocols[9].

Finally, hospital-worker based barriers includes: bad attitude of hospital workers, lack of confidence in surgical team, and fear of health workers[1].

The objective of this study is to document the barriers to Ear, Nose and Throat surgical uptake in Ekiti State University Teaching Hospital, Ado Ekiti and strategies to improve the care of the E. N. T patients in Nigeria

2. Materials and Methods

This is a prospective hospital-based study of all patients scheduled for surgery in the Department of E.N.T of Ekiti state university teaching hospital Ado Ekiti. Ethical clearance was obtained from the Ethical Committee of our institution. This study was carried out between January and December 2016.

Furthermore, the research scope was explained to patients and confidentiality was assured. Informed consent was obtained from the patients/guardian/parents. Consented patients were then enrolled into the study. The data were obtained using interviewer assisted questionnaires. Further information was obtained from the patient's case file.

The involved patients were those being worked up for both minor and major surgery in Ear, Nose and Throat department of Ekiti State University Teaching Hospital, Ado Ekiti, Nigeria over the study period.

The research data obtained includes patient bio data, diagnosis, type of surgery required, any specific barrier encountered whilst accessing or attempting to access surgery such as hospital, patient and health workers based barrier. The data obtained were collated and analyzed using SPSS version 16.

3. Results

Seven hundred and two (702) consented respondents were enrolled into the study. There were 368 females and 334 males and female: male ratio 1:1.

Table 1 shows that patients between 11 and 20 years (195) and those above 61 years (160) constitute the majority.

Among the participants, 256 (36.5%) resided in Ado Ekiti, 429 (61.1%) live outside Ado Ekiti and within Ekiti state, while 17 (2.4%) were outside Ekiti state as shown in Fig 1.

The employment status revealed that 315 (44.9%) were employed, 134 (19.1%) retiree/elderly, 171 (24.4%) were students/apprentice, 82 (11.6%) were applicants as displayed in Table 2.

Table 1: Age distribution Of Studied Group

Age group	Number	Percentage (%)
1 - 10	29	4.2
11-20	195	27.8
21-30	88	12.5
31-40	90	12.8
41-50	62	8.8
51-60	77	11.0
>=61	161	22.9
T o t a l	702	100

Table 3 illustrated pattern of sponsorship for the surgical care. Our data analysis revealed 300 (42.7%) were self-sponsored, 103 (14.7%) sponsored by children/relative, 240 (34.2%) by parents, and 59 (8.4%) were sponsored by community.

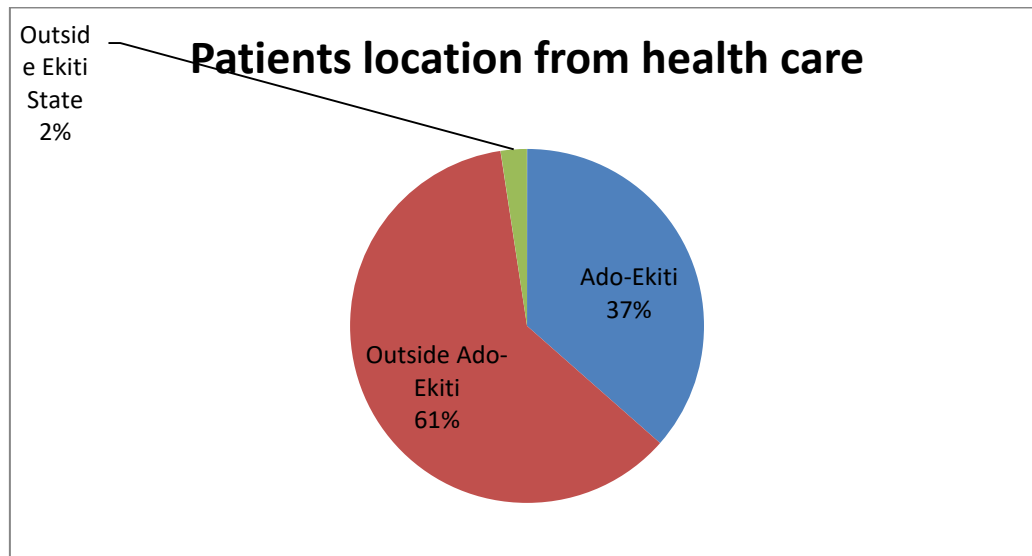


Figure 1: Patients location from health care

Table 2: Employment status of the respondents

Employment	Number	Percentage (%)
Employed	315	44.9
Retiree/Elderly	134	19.1
Students/Apprentices	171	24.4
Applicants	82	11.6
	702	100

Major surgeries were scheduled for 88 (12.5%) while minor surgeries were scheduled for 614 (87.5%). Our study further revealed 418 (59.5%) patients accepted require surgery, 192 (27.4%) patients differed surgery and 92 (13.1%) patients wanted alternative to the required surgery as shown in fig 2.

There was no barrier experienced in 93 (13.2%), however 378 (53.8%) indicated encountering one or more form of hospital based barrier, 237 (33.8%) encountered patients based barrier, while 306 (43.6%) encountered barriers from hospital staff. However, 135 (19.2%) were able to overcome their barriers and had surgery.

In this study, types of barriers encountered by the studied population were further analyzed as follows: High cost of surgical service 297 (42.3%), long waiting hours to access surgeon 263 (37.5%), accessibility to the hospital 203 (28.9%), lack of accommodation for escorts 146 (20.8%), cumbersome surgical tests 289 (41.2%),

fear of anaesthesia for surgery 367 (52.3%), fear of surgery 338 (48.1%), complications from surgery 406 (57.8%), dislike age of surgery 315 (44.9%), frequent strikes by health workers 69 (9.8%), and bad attitude of health workers 254 (36.2%) as illustrated in Fig 3.

4. Discussion

The prevalence of Ear, Nose and Throat diseases are high and the extent of use of otorhinolaryngological services is limited.

Ear, nose and throat surgical care cover all age group from neonate to geriatric as demonstrated in other findings[10-13]. This study further revealed highest prevalence of otorhinolaryngological disorders and therapy at extreme ages of life. Female are commoner respondent than male counterpart. The difference between male and female within the respondents further highlights the importance of systematic identification of barrier. This also address barriers to otorhinolaryngological care at our center to improve the uptake of essential surgical care[14,15]. Even with these differences, there was gender similarity among surgical barriers in this work.

Geographical location barriers were the distance traveled by patients to reach surgical services. One of the major challenges facing health care providers in ear, nose and throat surgical care is the inequity in the provision and utilization of the surgical care. This has resulted in mal-distribution of the infrastructure necessary for the provision of surgical care. This was considered a major barrier, for many of our studied respondents[16]. There is need for more regional facilities to deliver surgical care. There is need for more surgical centers in rural areas and posting of trained community healthcare workers to perform common simple otorhinolaryngological surgeries as this will significantly reduce the burden of surgical conditions.

The economic power of the community to pay for the cost of ear, nose and throat surgery is one of the major surgical barriers. The cost of hospital surgical services was either direct cost incurred by the patient for the registration, surgery, admission, drugs, investigations, transportation etc or indirect cost involves the time spent during the surgical care, disturbance of daily economic activities of both the patient and the escort [17-19]. Over 50% of our study population was applicants, students, apprentice, elderly or retiree. However, it is well recognized that universal coverage in itself will only guarantee access to and uptake of care when Otorhinolaryngological surgical care services are available and affordable. Ear, nose and throat care utilization vary across the surveyed population groups based on economic status. Our findings further revealed less than 50% of participants were self-sponsored and the rest were sponsored by relative or non-relative. Therefore, analysis of the reasons for poor uptake, and the enumeration of the measures necessary to be taken to enhance the utilization of services, are of critical importance if increased coverage is to be equated with enhanced utilization.

It is also important to note that inadequate access to surgical services has resulted in increased morbidity and mortality from a spectrum of surgical emergency availability worldwide. The alternatives to Ear, Nose and Throat surgical care service were chemist cal shops, spiritual churches, muslims clergy and indigenous herbal medicine [20]. Their availability is not surprising because of the numerical strength in our district but there are

also other negative barriers against uptake of services. Patients usually spent their money at the primary alternative center and present in hospital empty handed when alternative care failed. Further reasons for the ear, nose and throat surgical care inaccessibility include their poor perception of the hospital and the hospital staff. High proportion 59.5% of the respondents accepted surgery as the option to treat their ailment. This value may be due to inclusion of both major and minor surgical procedure in this work. Significant percentage 13.1% of studied population preferred alternative otorhinolaryngological surgery. This may due to information about surgical care from fellow patient, neighbor, or family member. This information varied with few patients perceiving ear, nose and throat surgery as a cause of mortality and disability after surgery [21]. The fear of bleeding, blood transfusion, pain, surgical and anaesthetic complications during or after surgery and death are major factor for preferring alternative to surgery even if it is free surgery[22].

Table 3: Types of sponsorship for the surgical care

Sponsorship	Number	Percentage (%)
Self-sponsored	300	42.7
Children/Relative	103	14.7
Parents	240	34.2
Non Relative	59	8.4
	702	100

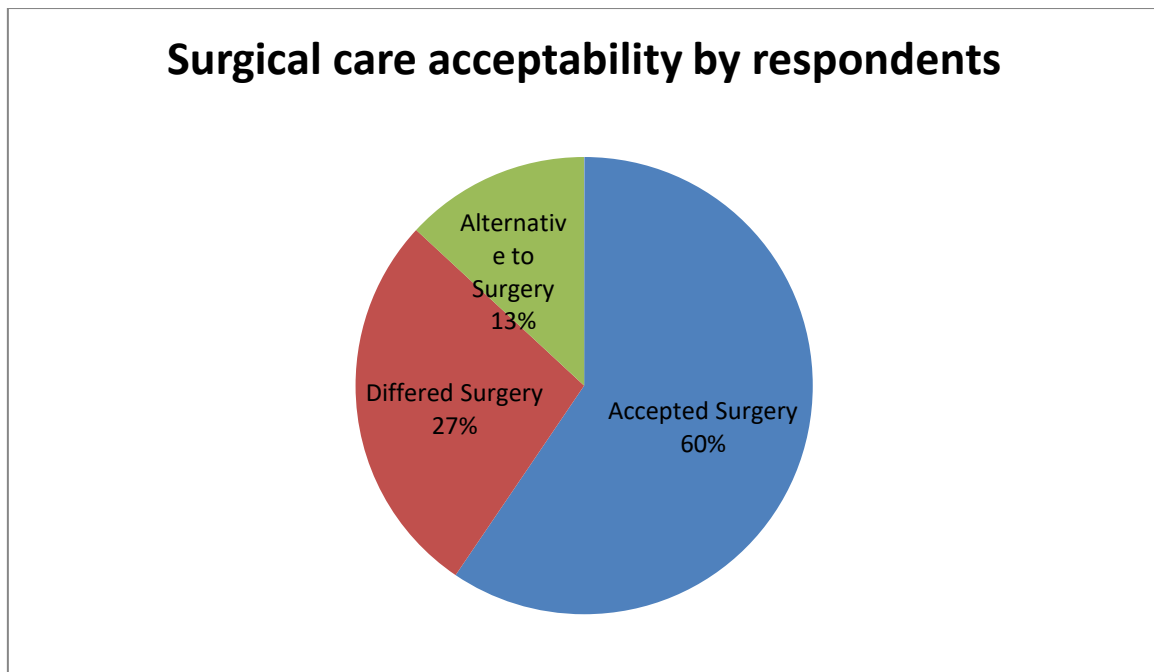


Figure 2: Surgical care acceptability by respondents

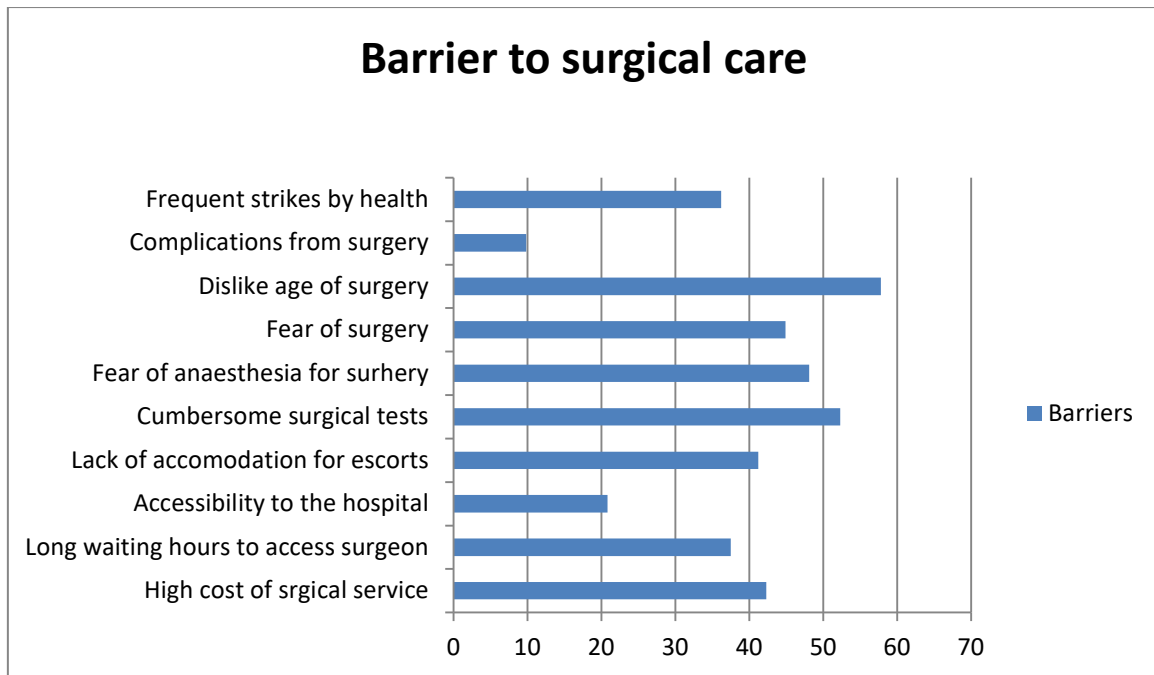


Figure 3: Barrier to surgical care

Majority (86.8%) encountered one or more barrier before consultation and only 13.2% of our population did not experience any form of barrier in the course of their surgical care while 19.2% overcome their exposed surgical barrier. Most of our respondents complained about cumbersome multistage process that was involved before Otorhinolaryngologist review. This includes multistage payments for registration, consultation, procedure, investigation, accommodation etc. However previous study has identified major barriers to surgery to include the need for patient education to decrease communication gap. Hospital road map and directive may also be of big help.

5. Conclusion

Otorhinolaryngological surgical conditions are very common in our community. There is urgent and continuous need for surgical barriers study to prevent avoidable surgical morbidity and mortality. Otorhinolaryngological surgical services should be made available, accessible and affordable even in the remote area of the state.

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