

# REASONS FOR CANCELLATION OF ENT, HEAD AND NECK SURGERIES IN A NIGERIAN TEACHING HOSPITAL

Paul Oserhemhen Adobamen, Charles Imarengiaye

Department of ENT, Head & Neck Surgery, and Deptt. of Anaesthesiology, University of Benin Teaching Hospital, Benin, Nigeria

## ABSTRACT

**Background:** A high rate of cancellation of surgeries has been observed in our hospital. This study therefore decided to determine the factors responsible for cancellations of ear, nose, throat, head and neck (ENTH&N) surgeries and recommend ways of preventing their occurrence.

**Material & Methods:** This prospective study was carried out at the University of Benin Teaching Hospital, Benin City, between January, 2009 and December, 2010. All patients that were booked for ENTH&N surgeries, but whose surgeries were not performed were enrolled into the study. The age, sex, diagnosis, intended surgery and reasons for cancellation were documented. The reasons and circumstances of cancellation were further scrutinised to determine the avoidable and non-avoidable reasons.

**Results:** In total, 113 patients; 70 male and 43 female patients, had their surgeries cancelled during the study period. The cancellation rate was 37.79%. There was a preponderance of young age individuals (0-10 years) with cancelled surgeries. Patients' factors accounted for 61.1%, hospital factors 19.5%, surgeon/anaesthetist factors 17.7% and public factors 1.8% of cancellations.

**Conclusion:** Preventable factors are mainly responsible for cancellation of surgeries. Proper pre-operative evaluation and preparation of patients, appropriate supervision of trainees and improved communication between care providers and patients would ameliorate the rate of cancellation of scheduled surgical procedures.

**Key Words:** Ear, Nose, Throat, Head and Neck Surgery, Nigerian hospital.

**This article may be cited as:** Adobamen PO, Imarengiaye C. Reasons for cancellation of ENT, head and neck surgeries in a Nigerian Teaching Hospital. *Gomal J Med Sci* 2012; 10: 190-3.

---

## INTRODUCTION

Cancellation of surgeries refers to the practice whereby scheduled surgical procedures are not done on the intended day of surgery for various reasons.<sup>1</sup> Various reasons have been given for cancellation of surgeries in different places. The common reasons include acute medical conditions, infrastructural problems, absence of surgeons, lack of operating room time, failure of the patient to turn up and no post-operative bed.<sup>2-7</sup>

A high rate of cancellation of surgeries is indicative of inadequate utilization of the operating room resources. Furthermore, the cancellation of

surgeries prolongs the waiting list, depreciates the resources of fee-paying patients, wastes manpower resources and impacts negatively on the overall health care delivery. It is imperative therefore to determine the reasons for cancellations. This will assist health policy managers in formulating preventive strategies at eliminating or ameliorating cancellation of surgical procedures.

This study sought to determine the factors associated with cancellation of scheduled ENT, Head & Neck Surgical procedures in our institution and to recommend ways of preventing their occurrence.

## MATERIAL AND METHODS

This prospective study was carried out at the University of Benin Teaching Hospital (UBTH), Benin City, between January, 2009 and December, 2010. All emergency and elective operating theatre bookings for ENT, Head & Neck surgeries were studied. All patients that were booked for surgeries were given appointment for hospital admission at least 2

---

### Corresponding Author:

Dr. P.R.O.C. Adobamen  
Department of ENT, Head & Neck Surgery  
University of Benin Teaching Hospital  
P.O. Box 674, 1Benin City, Edo State, Nigeria  
e-mail: brotherpaulchima@yahoo.com

days before their intended surgeries. They were then put on the operation list that was circulated to the wards and theatre at 2.00 p.m. the day before surgery. The patients whose surgeries were cancelled on the operation day were enrolled for the study. For any cancelled case, the age, sex, diagnosis, intended surgery and the reason for cancellation as obtained from the case notes by one of the authors (POA) were noted in an approved format.

Approval for this study was granted by the Institutional Research and Ethics Committee. The data are presented as counts and frequencies.

## RESULTS

A total of 299 ENT, Head & Neck surgeries were scheduled in the operating theatres of the hospital. There were 113 cancellations (37.79%). The age of patients ranged from 1.5 year to 77 years, with a mean age of 32.83 years. There were 70 males and 43 females, giving a male to female ratio of 1.6:1. Table 1 shows the age distribution of patients.

Abnormal results of investigations and uncontrolled intercurrent medical diseases were the leading reasons for patient related cancellation of surgeries. Poor logistics like non-availability of appropriate instruments and lack of operating room time were the main reasons for cancellation on the part of the administration of the hospital. Inadequate pre-operative preparation of the patients like insufficient investigations, absence of review by the anaesthetist and failure of other services to review patients were reasons for cancellation on the part of the attending physicians/surgeons. (Table 2)

**Table 1: Age distribution of patients with cancelled surgeries**

Age Group	Frequency	Percentage
0—10	33	29.2
11—20	12	10.6
21—30	18	15.9
31—40	7	6.2
41—50	6	5.3
51—60	10	8.9
61—70	16	14.2
71—80	11	9.7
Total	113	100

**Table 2: Reasons for cancellation of ENT, Head & Neck surgeries**

	Reasons	Frequency	Percentage
<b>Patients Factors</b>	Uncontrolled medical diseases	13	32
	Abnormal investigations	32	28.3
	Self cancellation/ Unavailable patient	9	8.2
	Upper Respiratory Tract Infection	5	4.4
	No funds	2	1.8
	Miscellaneous	8	7.1
<b>Hospital factors</b>	Lack of appropriate instruments	7	6.2
	No operating room time	6	5.3
	Strike by health workers	4	3.5
	List not distributed	3	2.6
	Unplanned public holiday	2	1.8
	Others	2	.18
<b>Surgical factors</b>	No preoperative review by anaesthetist	7	6.2
	Inadequate investigation by surgeon	5	4.4
	Unavailable consultation from other services	3	2.6
	Anaesthetist not available	3	2.6
	Surgeons' cancellation	2	2.18
		113	100

Table 3 shows the sub-specialty of ENT, Head & Neck surgery with cancellations. Procedures on the throat were more likely to be cancelled compared to other procedures. Some patients had more than one scheduled surgical procedure for a single surgery, giving rise to 130 cancelled surgical procedures.

**Table 3: Subspecialty distribution of the cancellations**

Subspecialty	Frequency	Percentage
Ear	19	14.6
Nose	16	12.3
Throat	77	59.2
HeadNeck	126	9.24.6
Total	130	100

## DISCUSSION

This study shows that a sizeable proportion of scheduled cases are cancelled and all age groups are involved in the cancellations. However, less than 10 years age group is the most represented in cancellation of surgical procedures in otorhinolaryngological unit.

Our findings are similar to reports from hospitals in the United Kingdom.<sup>7,8</sup> Characteristically, this age group are in school. It may be speculated that difficulty in obtaining permission from the school and other important curricular engagement during the academic session could be a reason for absence from hospital and consequent cancellation of surgery. The rate of cancellation is rather high when compared to other centres. The published evidence in the literature are however different from economies with varying health policies and financing. The myriad of factors associated with cancellation of surgery in this centre are characteristic of developing nations. Issues of failure to pay bills are rather rare in insured healthcare. Similarly, abnormal investigations could have been corrected before scheduling in centres with preoperative anaesthetic clinic. When these factors are corrected, the reasons for cancellation of surgery may be similar to other global centres. There was also a slight male preponderance in this study, which is similar to Hampal & Flood's study,<sup>8</sup> but contrasts with the study at Guy and St. Thomas NHS trust.<sup>7</sup> Hampal & Flood's study attributed the higher male cancellations to lack of desire by males to take time off work during a relative economic depression, which is similar to what we are presently experiencing in Nigeria.

In this study a cancellation rate of 37.79% was recorded. This is quite high and represents poor planning strategies and sub-optimal utilization of facilities in a country with very poor health indices.<sup>9</sup> This is quite high when compared to other studies; Garg et al<sup>5</sup> with a cancellation rate of 30.3%, Jimenez et al<sup>2</sup> 4% and Schofield et al<sup>6</sup> 11.9%. It is also extremely high when compared to the cancellation rates of studies in ENT, Head & Neck surgery; Singh

et al<sup>7</sup> 19.9%, Hampal & Flood<sup>8</sup> 16.93%, Thompson<sup>10</sup> 30.1% and Dingle et al<sup>7</sup> 9.5%.

The reasons for cancellations are detailed in Table 2. The patients' factors are due to poor pre-operative preparation of patients. If the patients were adequately investigated before been booked for surgery, the patients with deranged parameters would not have been booked and other fit patients would have had the opportunity of having their surgeries performed. Operations cancelled by patients and unavailability of patients (8%), represent poor communication and information protocol. Lack of appropriate instrument for surgery (6.2%), is one of the bane of specialist ENT, Head & Neck surgical practise in developing countries. Although these instruments were available, they were either broken down completely or developed faults that made the surgeon unable to make use of them. There is also the problem of poor maintenance culture; where faults with medical instruments are not rectified early enough even in a hospital with several instrument engineers and technicians. Lack of theatre time (5.3%), obviously results from either the surgeon booking more patients that could be operated on the day of operation or a problem develops with one of the cases leading to prolongation of the operating time and the resultant cancellation of other booked cases for that day. Doctors' and anaesthetists' factors (17.7%) are a reflection of poor pre-operative planning and ineffective supervision of resident doctors.

The main reasons for cancellations in previous studies were; Garg et al<sup>5</sup> (lack of operating room time, 59.7%), Schofield<sup>6</sup> (no theatre time, 18.7% and no post-operative bed, 18.1%). These are factors which are not easily preventable within limits of available resources. In this study the main reasons for cancellation were abnormal patients' parameters, (which could have been detected and corrected before booking the patient for surgery), no appropriate instrument, patient not properly investigated by surgeon, not reviewed by anaesthetist/ unavailability of anaesthetist in the theatre; which are easily preventable factors. Although these easily preventable factors were also encountered in Singh et al<sup>7</sup> (patient failed to arrive 29.2% and unfit for surgery 20.1%), Jimenez et al<sup>2</sup> (preventable factors accounting for 51.7% of cancellations), it is indicative of poor professional strategies deployed at achieving optimal utilization of limited health facilities. The high number of cancelled throat surgeries is reflective of the high number of throat surgeries in our practice.

It is advocated that if good communication skills in terms of phoning patients at least twice be-

fore admission for surgery,<sup>2</sup> proper pre-operative work-up and certifying the patient fit before being booked for surgery, good judgement of the required operating time for each case to avoid booking too many patients daily, appropriate maintenance of surgical instruments, maintaining of discipline and effective supervision of resident doctors by consultant anaesthetists and surgeons to ensure that they do their job, the high incidence of highly preventable reasons for cancellation as seen in this study would have been avoided. With this audit, it is hoped that all concerned will make amendments for more efficient use of the limited health facilities at our disposal.

### CONCLUSION

The factors responsible for cancellation of ENT and Head & Neck surgeries in our hospital are mainly preventable. Enforcement of high level of discipline and supervision of trainees, improved communication with the patients, proper pre-operative evaluation and preparation of patients would ameliorate the rate of cancellation for ENT and Head & Neck procedures.

### REFERENCES

1. Lemos P, Regalado AM. Patient outcomes and clinical indicators for ambulatory surgery. In: Lemos P, Jarrett P, Philip B. (eds). Day Surgery Development and Practice. International Association for ambulatory surgery. 2006, pp. 257-80.
2. Jimenez A, Artigas C, Elia M, Casamayor C, Gracia J A, Martinez M .Cancellations in ambulatory day surgery: Ten years observational study. J Amb Surg 2006; 12: 119-23.
3. Bode CO, Adeyemi SD. Reasons For Day Surgery Cancellation In Paediatric Surgical Practice At The Lagos University Teaching Hospital. Nig. J Surg 2006; 3: 41-4.

4. Ojo EO, Ihezue CH. An audit of Day Case Cancellations in a Tertiary Hospital Based Day Case Unit. East and Central African J Surg 2008; 13: 150-3.
5. Garg R, Bhalotra AR, Bhadoria P, Gupta N, Anand R. Reasons for cancellation of cases on the day of surgery-a Prospective Study. India J Anaesth 2009; 53: 35-9.
6. Schofield WN, Rubin GL, Piza M, Lai YY, Sindhusake D, Fearnside MR, et al. Cancellation of operations on the day of intended surgery at a major Australian referral hospital. MJA 2005; 182; 12: 612-5.
7. Singh G.C, Agha R, Roberts D.R. Cancellation in day case ENT Surgery. J Amb Surg 2005; 12; 57-60.
8. Hampal S, Flood LM. Why patients fail to attend for ENT operations: a one year prospective audit. Clin Otolaryngol 1991; 17: 218-22.
9. Shehu U. The millennium development goal, women's health and HIV/AIDS. Nig, Postgrad. Med J 2008; 15 (Suppl 1): 2-6.
10. Thompson PJ. Reducing failure rates for in-patient oral surgery. The use of a pre-admission clinic. Br Dent J 1991; 170: 59-60.
11. Dingle AF, Bingham B, Krishnan R, Gibb JG, Thompson CJ, Flood LM. Pre-admission assessment clinics: an answer to non-attendance for ENT operations. Clin Otolaryngol 1993; 18: 415-8.

**CONFLICT OF INTEREST**  
Authors declare no conflict of interest.  
**GRANT SUPPORT AND FINANCIAL DISCLOSURE**  
None declared.