RESIDENCY TRAINING IN OTORHINOLARYNGOLOGY HEAD-AND-NECK SURGERY IN NIGERIA [#,]

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ABSTRACT
Introduction: *The residency program in Otorhinolaryngology (ORL) is a supervised program for doctors wishing to become ORL specialists. The duration is 66months. This presentation traces the history and describes the current residency training program in ORL in Nigeria, discusses the challenges it faces and suggest ways forward.*
Methodology*: This study was conducted over a 4-month period (May-September 2023), during which the curricula in ORL of the West African College of Surgeons and that of the National Postgraduate Medical College of Nigeria were studied, physical and telephone interviews were conducted with the most senior ORL surgeons/Trainers in Nigeria. ORL accreditation visitation reports of West African College of Surgeons on twenty institutions visited over a 5-year period (June 2018-May 2023) were reviewed.*
Results*: An average of 14 ORL specialists graduated yearly in the years between 2018 and 2023 in contrast to 1 to 3 specialist per year prior to the year 2000. The curriculum of ORL has not undergone momentous change since commencement of the program nearly 40 years ago. There were 244 ORL training slots allotted to twenty institutions over a 5-year period, 60% of institutions were yet to fill these allotted slots. The clinical rotations practically do not adhere to spelt out structure. There is adequate patient workload to sustain training in all training institutions. Three quarters of the institutions do not have fully functional Temporal bone dissection or Endoscopic Sinus Surgery (ESS) dissection facilities. No institution has facilities for advanced vestibular tests. Only 30% of institutions showed evidence of operative surgery in all core areas of Otorhinolaryngology.*
Conclusion and recommendation*: The training in Otorhinolaryngology has grown steadily, but faster progress is required to provide the population with a reasonable number of ORL specialists.*
The available training slots in ORL are insufficient, yet even these few slots are not fully utilized and more needs to be done to ensure the enrolment of more trainees on the ORL training.
Periodic curriculum review to keep up with best practices is recommended.
Investment in training centers should be a priority with some centers specifically upgraded and designated centers of excellence. Invitation of international Faculties to participate in local training should become a policy as part of these investments.

Keywords: Otorhinolaryngologist. Specialist, Residency Training

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INTRODUCTION

The prevalence of peculiar medical/surgical diseases in the Ear, Nose, Throat, Head & Neck regions of the human body that are best managed by a specialist necessitated the emergence of Otorhinolaryngology (ORL/ENT) as a specialty. A non-ORL specialist is unlikely to comprehensively manage these peculiar disorders. For instance, while disabling hearing impairment has been found to be the most common disability globally, the World Health organization (WHO) reported that even among health-care providers, there is often a shortage of knowledge about prevention, early identification and management of hearing loss and ear diseases, hampering their ability to provide care required[1], [2].
The Otorhinolaryngologist (ORL Surgeon/ ENT Surgeon) engages in medical and surgical care of diseases affecting the Ear, Nose, Throat, and Head & Neck regions. Apart from rendering medical and surgical care, the Otolaryngologist, in a training facility, is also involved in teaching, training, research and collaborating with other health care professionals in multidisciplinary management of diseases.
After completion of the mandatory National Youth Service Corp, a fully registered medical practitioner, an aspiring otolaryngologist will spend 6 to 7 years of residency in ORL to obtain the Fellowship in Otorhinolaryngology. He or She may spend another 2-4years to qualify as a super-specialist in any of the fields of Otology, Rhinology, Laryngologist/Head and Neck surgery, or Pediatric Otorhinolaryngology. A qualified Otolaryngologist may additionally opt to train as a clinical Audiologist or Speech Pathologist or may pursue a career in research bringing results of research to actual day-day clinical practice.
There are two certifying bodies for Otorhinolaryngology training presently in the sub-region, namely the West African College of Surgeons, and the National Postgraduate Medical College of Nigeria and currently have twenty-three training Centers spread across Nigeria.
The training of the Otolaryngologist in Nigeria is guided by the missions of the two Postgraduate Colleges: "The mission of the College is to PLAN, IMPLEMENT, MONITOR and EVALUATE postgraduate programs required to produce medical and dental SPECIALISTS of the highest quality, competence, and dedication, who will provide TEACHING and optimal HEALTHCARE for the people. Lifelong learning will be maintained by continuing professional development programs of the College"[3].as well as "To promote postgraduate medical Education through accreditation, training and certification in Surgery and related disciplines in collaboration with organizations with similar objectives. To contribute to surgical human resource development *in order to meet the health needs of West Africa"*[4].
Training in ORL at National Postgraduate Medical College of Nigeria started in 1983 under the Faculty of Otorhinolaryngology, while that of West African College of Surgeons started a year later, under the Faculty of Ophthalmology and ORL. The Foundation Fellows/Trainers were common to both Colleges, and as a result, the training curriculum was essentially the same for both Colleges and had remained the same until recently. Pioneer trainers in Nigeria

include FD Martinson (Ibadan), BC Okafor (Enugu), PA Okeowo (Lagos), GTA Ijaduola (Lagos, Ibadan), Ogan (Ibadan, Ilorin), Obiako (Enugu), Olu Ibekwe (Enugu).

In 1984, the first set of ORL specialist were produced by the Colleges, these two had prior training abroad and only completed their training in Nigeria, however it was not until 1990 before the first set of ORL specialist that had gone through the entire residency program of the Colleges were produced.

Since commencement of Otorhinolaryngology training, and up to 1999, there were only 3 Centers in Nigeria for ORL training, namely Lagos University Teaching Hospital (LUTH), University College Hospital (UCH), Ibadan and University of Nigeria Teaching Hospital (UNTH), Enugu. During this period, 1 to 3 ORL Specialist were produced yearly. Subsequently other Centers began to get accreditation for training and by 2023, the number of training centers had increased to twenty-three spreads across Nigeria and in the last 8 years graduating a yearly average of 14 ORL specialists.

In Nigeria with a population of nearly 200 million, there are less than 400 ORL specialist (senior residents and Consultants), about ten audiologists and three speech pathologists in practice, with a near total absence of ORL Surgical services at the community level[5]. Though this may appear to be an improvement from the findings 14years ago by Fagan and Jacobs, this ORL Surgeon-Population ratio is still very unsatisfactory [6]. These dismal figures underscore the need to bring to the front burner the training in Otorhinolaryngology.

METHODOLOGY:

This study was conducted over a 4-month period (May-September 2023), during which the curricula in ORL of the West African College of Surgeons and that of the National Postgraduate Medical College of Nigeria were studied, physical and telephone interviews were conducted with the most senior ORL surgeons/Trainers in Nigeria. Because Joint accreditation visits were common between the two Colleges, the official accreditation reports of twenty institutions visited over a 5-year period (June 2018-May 2023) by the West African College of Surgeons were studied.

RESULTS

Curriculum:

Both Postgraduate Colleges have individual written curriculum that spells out what skills, performances, attitudes, and competences the trainee must acquire through various forms of knowledge acquisition. In large part, the curricula are similar in both Colleges. These include, but are not limited to, Cognitive skills, Social Attitude Skills, Psychomotor, Research, Teaching, Management, Continuing Medical/Professional Education skills. Additionally, in 2018, **rural posting** at the junior residency level was introduced by the West African College of Surgeons. In 2010 and 2019, some changes were introduced in the accreditation requirements of both Colleges. A major change was introduced in 2022 by the National Postgraduate Medical College, where senior residents were expected to undergo rotations in sub-specialty of their choice. Aside from these changes, no major curriculum review has occurred.

Training slots

Training slots were created in the accredited training institutions following a principle of two junior residents and one senior resident for each certified trainer. To qualify as a trainer, a Fellow must be at least 5 years post-fellowship. Other factors such as out-patient and in-patient workload, availability of out-patient facilities and theatre operation workload were also determinants to addition or subtraction of the number of training slots allotted. The allocation of training slots is further subject to review on each accreditation visit. From the accreditation visitation reports studied, a total of 164 junior residency slots and eighty senior residency slots were approved for the twenty institutions studied. Of the approved available training slots-Six (30%) institutions had training slots filled appropriately, 2 (10%) institutions had exceeded the approved number of residents allowed, and 12 (60%) institutions had training slots not occupied.

Rotation in ORL training:

The aspiring Otolaryngologist attempts and pass the primary examination after the one-year National Youth service (NYSC), then enrolls and commence the junior residency rotations of 36 months which include ORL (18months), General Surgery (6months), Accident and Emergency (A and E) department (3 months), Plastic and/or Maxillofacial Surgery (3 months), then spends 2 months each in Neurosurgery, Ophthalmology, and cardiothoracic Surgery. In the West African College, some months in ORL posting are used for Anesthesia posting (1 month), and rural posting (3 months).

The senior residency rotation commences after passing the Part I/ Membership examination and consist of 30 months spent across the sub-specialties of Otology, Rhinology, Laryngology-Head and Neck, Audiology, Pediatric Otolaryngology and General Otolaryngology. On completion of these rotations, the trainee becomes eligible to sit for the Part II final Fellowship examination. While West African College maintains currently, a 30-month general ORL posting across all sub-specialties for all trainees, the National Postgraduate Medical College of Nigeria expects trainees to choose and remain in one of the sub-specialties for the senior residency rotation. On completion of the rotations, the trainee becomes eligible to sit for the Part II final Fellowship Examination. While in training, the trainee is expected to be under supervision of trainers in a mentor-mentee relationship.

Faculty and College Courses:

Both Colleges and the Faculties mount optional and compulsory courses periodically for the various levels of training. Such Courses include Update Courses, Temporal Bone Dissection Course, Functional Endoscopic Sinus Surgery Course, Head and Neck Dissection Course, Basic Surgical Skill Course, Research Methodology, Manuscript Writing, Health Management Course. The basic sciences update course is the least attended of the courses. Attendance of all mandatory courses is a prerequisite for sitting various levels of the examination.

Assessment:

Trainees undergo three levels of assessment during the journey to become specialists.

Trainees must first pass the primary examination before commencing ORL rotations.

The first primary examination was conducted by the National Postgraduate Medical College in 1985, and six months later, West African College of Surgeons conducted a similar examination. Previously, the Primary examination consisted of essay type and multiple-choice questions covering the basic sciences followed by a viva/ practical examination. The viva/practical examination was dropped subsequently and by 2021, the primary in ORL was entirely Computer-Based Testing (CBT). The examination assesses the candidate's ability to interpret, analyze, and evaluate information in the basic sciences as applied to Otolaryngology. In WACS, the average pass rate of six random primary examinations between 2017 and 2021 was 31.2%. The average pass rate became 64% when CBT with abolition of penalties for wrong answers was adopted.

On passing the primary examination, the trainee becomes eligible to proceed to 36 months rotations leading up to the Part I/Membership Examination.

A trainee qualifies to write the membership examination after completing 36 months rotation. The examination consists of written essay paper/multiple choice questions/CBT, clinical examinations of short case, long case and Viva Examination. In 2021, OSCE replaced short case and oral examination in ORL examination in the WACS examinations. The examination evaluates the candidate's ability to solve clinical scenarios, elicit and interpret signs, appraise, critique clinical situations, develop, formulate plan of action. Basic surgical skills are also evaluated at this stage. In WACS, the average

pass rate in six random examinations between 2017 and 2022 was 56.2%.

A PASS at the membership/Part I Examination qualifies the trainee to commence the 30-month senior residency training in ORL. It is noteworthy that, at the West African College of Surgeons, the Membership examination is an exit examination, and trainees may opt to seek employment as junior specialist providing middle-level workforce in ORL or continue into the senior residency program.

Part II Final Fellowship Examination is the exit examination for the program. It consists of dissertation defense, long case, and viva examination. The examination tests whether the candidate can function as an independent ORL specialist. On passing this examination, the Candidate is issued a certification at the Convocation ceremony of the relevant College. In WACS, the average pass rate in six random examinations between 2017 and 2022 was 59%. An average of 14 ORL Specialist graduate yearly.

The Colleges plan to in future issue candidates with certificates bearing area of sub-specialization.

Dissertation: As soon as a trainee enrolls into the ORL training program, he/she is expected to choose a dissertation topic and commence writing a proposal. Trainees are however at liberty to delay this until after passing the Part I/ Membership Examination. They are expected to, within 6 months of passing the Part I examination to get ethical approval, write out the, research proposal, submit to the College and get it approved. This is followed by a 6–12-month period of data collection. The research dissertation in its entirety is supervised by two of the trainers, who, along with other trainers in the department periodically assess the trainee on the dissertation. The completed dissertation work is defended by the candidate during the Part II Final Fellowship examination. A pass in the dissertation is necessary before a candidate is deemed to have passed the Part II Fellowship examination.

Current state of training institutions-

The two Colleges conduct fresh accreditation and re-accreditation visits periodically to training institutions to ensure minimum standards are met. Joint accreditation visits by the two Colleges were common. A training institution may be granted full accreditation when it has met 70% or over of the requirements. A partial accreditation is given to institutions that have met between 50-69% of the requirements, whereas accreditation is denied when an institution fails to meet 50% of the requirement for ORL training. Of the twenty institutions studied, eleven had full accreditation and nine had partial accreditation for training in ORL.

The adequacy of institutions in satisfying accreditation requirements is as in the six Tables below

Table 1: Adequacy of outpatient facility requirements in 20 training institutions

Parameter assessed: Out-Patient facility	Number of institutions with requirement	
	adequate (%)	inadequate (%)
Departmental Space (Housing all sections of ORL outpatient)	13 (65)	7 (35)
Consultants/Trainers. >5years post-Fellowship, >/=4 in number	13 (65)	7 (35)
Standard ENT consoles present in at least 2 Consulting rooms	11 (55)	9 (45)
ENT basic instruments tray > 50 pieces of each instrument	9 (45)	11 (55)
Attached Otomicroscopy/Endoscopy room	14 (70)	6 (30)
Patient workload >1000 new patients annually	18(90)	2 (10)

Table 2: Adequacy of in-patient facility requirements in 20 training institutions

Parameter assessed: in-patient facility	Number of institutions with requirement	
	adequate (%)	inadequate (%)
Dedicated ward/Dedicated bed space	18 (90)	2 (10)
Attached Treatment room with satisfactory complement of instruments	9 (45)	11 (55)
Patient workload >150 admissions per annum	16 (80)	4 (20)

Table 3: Adequacy of operating theatre requirements in 20 training institutions

Parameter assessed: Operating Theater	Number of institutions with requirement	
	adequate (%)	inadequate (%)
Operation theatre slot (minimum of 2 days in a week)	18 (90)	2 (10)
Surgical instruments for varieties of basic ORL operations	16 (80)	4 (20)
Variety of surgery conducted-All sub-specialties of ORL	6 (30)	14 (70)
Patient workload >50 per annum	15 (75)	5 (25)

Table 4: Adequacy of Audiology/Speech Units in 20 training institutions

Parameter assessed: Audiology/Speech	Number of institutions with requirement	
	adequate (%)	inadequate (%)
Minimum of 2 Audiologist with MSc Degree	3 (15)	17 (85)
Minimum of 2 Speech Pathologist with MSc Degree	1 (5)	19 (95)
At least 2 other lower Cadre audiology/Speech staff- (B Ed Special Education, Certificate course)	15 (75)	5 (25)
Soundproof Booth/Room	19 (95)	1 (5)
Functional Audiometer	20 (100)	0
Functional Tympanometer	17 (85)	3 (15)
Functional OAE machine	9 (45)	11 (55)
Functional ABR machine	7 (35)	13 (65)

Table 5: Adequacy of ENT Laboratory in 20 training institutions

Parameter assessed: ENT Laboratory	Number of institutions with requirement	
	adequate (%)	inadequate (%)
Fully functional Temporal bone dissection lab	5 (25)	15 (75)
FESS demonstration/Dissection lab/Mannikin	2 (10)	18 (90)
Head & Neck Dissection Lab	3 (15)	17 (85)
Speech Lab	1 (5)	19 (95)
Sleep Lab	1 (5)	19 (95)
Rhinomanometry Lab	0	20 (100)

Table 6: Adequacy of other learning resource

Parameter assessed: Learning Resources	Number of institutions with requirement	
	adequate (%)	inadequate (%)
Seminar room with ICT facilities, Audiovisuals	20 (100)	0
Library	20 (100)	0
Pathology museum	2 (10)	18 (90)

DISCUSSION

Curriculum:

Periodic **r**eview of curriculum helps identify specific actions that will address gaps in the training with the aim of improving the learning experience. An analysis of strength, weakness, opportunities, and threat (SWOT) of the current program should generate questions that should guide the review of the curriculum.
This study noted a few changes in the curriculum by both Colleges, but no major review had been conducted since commencement of the program nearly 40 years ago. In the light of rapid advancement in innovative technology, and the need to adapt the technology to suit local needs, there is a need for periodic review of the curriculum. Furthermore, the on-going debate in Nigeria's academic circle on status of the Medical Fellowship versus the PhD program calls for a look at the curriculum. The National Postgraduate Medical College of Nigeria has since commenced navigating this challenge.
Any curriculum review should be comprehensive enough to not only meet the set standards but also identify inhibitors to attainment of the standards[7,8]. The perspective of the trainees also needs to be considered for a more comprehensive curriculum review[8,9].

Training slots in ORL:

While two hundred and forty-four training slots were created, more than 60% of the institutions were unable to fill these training slots. Nwachukwu reported irregular intake of trainees by 71% of Centers[10]. Reasons advanced for this situation have included embargo on employment of fresh staff, residents' suddenly leaving training posts to seek better pay and working conditions abroad. The consequence of this is overwork on the available trainees making them susceptible to 'burnt-out syndrome' further hampering their training. It is instructive to note that the number of ORL training slots in Nigeria contrast significantly with 8600 slots for ORL training in the United States where the ORL surgeon ratio: population is 1:40,000 [11]. In Nigeria, this ratio appears to be 1:500,000, with an obvious maldistribution of the few ORL specialist available clearly skewed in favor of the major cities where tertiary health institutions are located. There is a definite need to improve the number of training slots as well as encouraging a full subscription of the available training slots. In order to increase the number of practicing ORL specialists, suggestions have been made to reduce the overall duration of training, or produce in greater numbers mid-level providers such as the holders of Membership certification of the West African College of Surgeons, a certificate that is unfortunately not recognized as a specialist certificate currently by the Medical and Dental Council of Nigeria, and as a result, this category of practitioners are not available to add to the workforce, except as trainees. Perhaps the most effective suggestion on addressing this issue is that by Parvin-Nejad *et al* in a publication of surgical sub-specialist in West Africa that "investing in training programs is the most valuable potential strategy to address shortage of sub-specialist"[12]. This investment will include creating new institutions for training, equipping both new and existing institutions, creating additional training slots, designating, and equipping certain centers as centers of excellence in particular subspecialties matching world best standards, inviting seasoned international Faculties from other climes to partake in local training.

Rotations, Courses, and Assessments:

In Nigeria, an aspiring otolaryngologist attends a medical school on completion of secondary school and after graduation from medical school, he/she completes one year internship and another year of National Youth Service. He/she then proceeds to enroll into the 6-7 years ORL residency program. This contrast with the American system in which the aspiring Otolaryngologist must have previously obtained a Bachelor's degree, then proceeded to and completed medical school, before enrolling in a 5-year ORL residency program. The Nigerian system also contrasts with the UK system which though similarly requires 6 years of ORL training, but the aspiring Otolaryngologist must have after completing medical school, proceeded to spend 2 years as Foundation doctor, and another 2 years in core surgical training before enrolling in ORL program[13,14]. All 3 systems have their merits.
Currently, learning activities during each of the 8 to 9 rotations appear to be unstructured in some training centers, giving room for some trainees not putting their training period to effective use. Though course credit units are allocated to different learning activities, skills expected to be acquired during each course/rotation are clearly spelt out, competence-based grading system of the trainees clearly outlined, yet these in practice are not strictly implemented. Many trainees, for example, fail to submit their logbooks in real time for competence assessment during a rotation. This may be partially due to laxity on the part of the trainees and trainers as well as College officers charged with responsibility to ensure compliance. The Colleges have now resorted to online assessment with time limits as a check to ensure timely assessment of competence. In a Guest Lecture at the 29th ORLSON Scientific conference in 2022, it was suggested that training institutions should internally organize an initial three-month foundation training for newly admitted Residents during which the trainees receive guidance/orientation in the direction of their training[15]. If adopted, this suggestion may prove effective in focusing the newly admitted trainee in his/her program.
The introduction of community-based rotation by the West African College of Surgeons to acquaint trainees of practice at the community level is a laudable initiative. With this rotation, trainees tend to get more exposure and hands-on because of the large attendance of mostly indigent patients at these centers. The benefit of this rotation may be further increased by making it available at the senior residency level. This is one important means of adapting

training to local needs, and besides providing middle level workforce, a study has shown that a rotation like this in rural settings may encourage some specialist to stay, reside, and work in these settings improving extension of surgical services to rural settings[16].
The first examination required to enroll in the residency program is the primary examination. This examination over the years has recorded a low pass rate. Before the commencement of CBT examination in ORL, the average pass rate of the exam was 31.2%. This was similar to average pass rates in other surgical specialties of less than 40% reported by Ajah[17]. The implication of this was that the program/examination attracts a large enough pool of prospective surgeon specialists but ultimately only a third get admitted and even fewer graduate from the program[17]. This low pass rate at the entry point of the program has been partially blamed for the small number of ORL specialists eventually produced. On the other hand, lack of preparation for the examination, failure of the aspiring residents to recognize the significance of basic sciences and lack of guidance have been blamed for the low pass rate. The introduction of CBT examination and abolition of negative marking seem to have improved the pass rate in this examination.

Current State of Training Institutions:

Accreditation exercise, a powerful tool for quality assurance is used regularly by both Colleges to ensure minimum standards are met and this has had a tremendous impact in development of ORL training centers in the last 20 years. Most centers strove to achieve minimum requirements, but a lot of gaps still exist.
Details from accreditation visitation reports over a 5-year period show that vestibular testing labs, sleep labs and rhinomanometric labs are virtually non-existent. Temporal bone labs and FESS labs are only fully developed in 25% of the training Centers. Many centers either lack microsurgery ear instruments, or do not perform ear microsurgery. There are only a few Audiologists and speech therapist/Pathologist. Many ENT departments lack adequate space to practice the full range of ENT services, it is however heartwarming to note that many training departments are visibly expanding, securing new blocks capable of accommodating full range of ORL clinical services. A policy of invitation of international Faculty from around the world will help improve the variety of surgical procedures in the training centers, which undoubtedly will benefit trainees and trainers[18].

Skill Acquisition by Trainees:
Majority of training centers have paucity of otology microsurgery, and it is instructive to note that less than 1% of cochlear implants in the world occurred in all the training centers pooled together. Clearly there is a need to improve on this situation. Very few centers have full complements of Temporal bone dissection lab. The setting up of dissection labs/simulation labs are essential to ensure trainees acquire skills without compromising patient safety. Various centers have shared their experiences with setting up and running successful skill acquisition labs[19,20,21]. It has been suggested that full otology practice should be centralized in well-equipped centers, rather than having many partially equipped centers scattered all over[18].

Trainer-Trainee relationship:
The trainers leave a legacy of preserving what they have built by raising younger colleagues. The primary purpose of this relationship is for trainers to inculcate the right attitude and skills on the trainees, in an atmosphere whereby the trainees willingly imbibe the training. Any issues interfering with this relationship will affect training, and such issues should be addressed promptly when they occur. It is important that this relationship remains cordial. In a cross-sectional study on training input from trainees by Adoga et al, it is disheartening to note that 2.6% of respondents (trainees) reported that their trainers instill fear in them and shout excessively at them[9]. This style of training is bound to be counterproductive and must be condemned.

CONCLUSION AND RECOMMENDATION

The training in Otorhinolaryngology has grown steadily from its modest beginning to date, but more and faster progress is required to provide the population with a reasonable number of ORL specialists.
The insufficient available training slots in ORL are not fully utilized. More needs to be done to ensure the enrolment of more trainees on the ORL training. Furthermore, there is a need to arrest the on-going brain drain to save the training from collapse.
Deliberate proactive measures should be taken with periodic curriculum review to keep up with best practices.
Investment in training centres should be a priority with some centers specifically upgraded and designated centers of excellence in one of Otology, Rhinology, Laryngology-Head and Neck so resources can be pooled for effective training.
Invitation of international Faculties to participate in local training should become a policy.

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REFERENCES:

1. Mackenzie I., Smith A. Deafness: The Neglected and hidden disability. Amm Trop Med Parasitol 2009; (7): 565-571
2. World report on Hearing. Geneva: World Health Organization; 2021. License: CC BY NC-SA 3.0 IGO
3. https://npmcn.edu.ng/about-us/Vision-and-Mission accessed on 2nd October 2023
4. https://www.wacscoac.org/index.php/about-us/college-objectives accessed on 2nd October 2023
5. National Policy and Strategic Plan for Ear and Hearing Care 2019-2023. Ministry of Health. Federal Republic of Nigeria
6. Fagan J. Jacobs M. Survey of ENT services in Africa: Need for Comprehensive intervention. Glob Health Action. 2009; 2: 1932
7. Khan RA. Spruijt A. Mahboob U. Van Merrienboer JJG. Determining "Curricular viability" through Standards and Inhibitors of Curricular Quality: a Scoping review. BMC Medical Education 2019; 19(1):1-11
8. Kumar P. Pickering CM. Atta L *et al.* Student Curricular review team, 8 years later: Where we stand and Opportunities for Growth. Medical Teacher 2021; 43(3): 314-319
9. Adoga AS. Maan ND. Adekwu A. Kodiya AM. Nwaorgu OB. Ozoilo KN. Otorhinolaryngology Postgraduate Training in Nigeria: Trainees perspective. J Health Res Rev 2018; 5:48-56
10. Nwachukwu AC. The State of Residency Training in Nigeria-Resident Doctor's Perspective. World J Innovative Research 2019; 6 (4): 109-112
11. Kim JSC. Cooper RA. Kennedy DW. Otolaryngology-Head & Neck Surgery Physician Workforce Issues: An Analysis for Future Specialty Planning. Otol Head Neck Surg 2012; 146(2): 196-202
12. Parvin-Nejad FP. Hoffman GS. Padmanaban V. *et al.* Surgical Sub-Specialty in West Africa: Workforce Size, Training Opportunities and Contributing Factors. Surgery 2021; 170(2): 478-484
13. Michaella Cameron. Alex Yao. Jayesh Doshi. A Career in Ear, Nose and Throat Surgery. BMJ 2019; 366: 14902
14. https://www.healthcareers.nhs.uk/ accessed on 27th September 2023

15. Ezeanolue B C. Current Concepts in Medical Education: The Nigerian ORL-HNS perspective. Guest Lecture at 29th Scientific Conference of Oto-Rhino-Laryngology at Sokoto. 24th November 2022
16. Woolley T. Hogenbirk JC. Strasser R. Retaining Graduates of non-metropolitan Medical Schools for Practice in the Local Area: The Importance of Locally based Postgraduate Training Pathways in Australia and Canada. Rural & Remote Health 2020; 20: 5835
17. Ajah JL. Low Pass Rate in Postgraduate Surgical Examination in Nigeria and Its Contribution to Low Surgeon Workforce in the Country: A Review Article. SICOT-J 2018; 4: 36
18. Agada F. Otology Practice in Nigeria: The way forward. Ann Afr Med 2010; 9:199
19. Ezeome ER. Ekenze SO. Ugwumba F. *et al.* Surgical Training in Resource-limited Countries: Moving from the Body to the Bench-Experiences from the Basic Surgical Skills Workshop in Enugu, Nigeria. Tropical Doctor 2009; 39(2): 93-97Edmistron R. Kumar N. *et al*. Training in Temporal Bone Procedures: ENT and Audiology News 2017; 26 (1)
20. Badash I. Burtt K. Solorzano CA. Carey JN. Innovations in Surgery Simulation: a review of Past, Current and Future Techniques. Am Transl Med 2016; 4(23):453.