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Review Article

## HEAD AND NECK SURGERY: ADVANCED CLINICAL OTOLARYNGOLOGY

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### Abstract:

**Objective:** To understand associated type to the pathological disorders that have an effect on the head and neck regions and square measure managed by the specialty on each patient, and patient basis. And to additionally build up the abilities of outpatient assessment and treatment and inpatient and agent care of patients, particularly those with disarranges of the head and neck locale; the expansiveness of the strength of Otolaryngology-Head and Neck Surgery through an introduction to all regions of the claim to fame: Head and Neck Surgery and Reconstruction, Pediatric Otolaryngology, Otology, Neurotology, Laryngology, Facial Plastic Surgery, Rhinology and General Otolaryngology (Cingi, 2012). **Methods:** The study sample was selected between February and June 2018 from the otolaryngology practitioners at Saudi hospitals. The study sample size was (20) otolaryngology practitioner. And table (1) shows the demographical characteristics of the study sample. **Results:** indicate the approval of the sample to the items measuring the attitudes towards the effectiveness of the undergoing an otolaryngology update training program in Saudi Hospitals as the values all exceed the default mean. More specifically, the item stating that "Otolaryngology update training program in Saudi Hospitals are essential for otolaryngology practitioners" obtained the highest mean with 4.33, with standard deviation of 0.587. Meanwhile, the item stating that "There are no otolaryngology update training program in Saudi Hospitals" obtained the lowest mean value of 3.63, with standard deviation of 0.901. **Conclusion:** Significant progress has been made in the application of otolaryngology update training program in Saudi Hospitals. Decades of research have improved patient safety, outcomes, reduced length of hospital stay, and complication rates. However, there is still significant work to be done.

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### 1.1 INTRODUCTION:

To understand associated type to the pathological disorders that have an effect on the head and neck regions and square measure managed by the specialty on each patient, and patient basis. And to additionally build up the abilities of outpatient assessment and treatment and inpatient and agent care of patients, particularly those with disarranges of the head and neck locale; the expansiveness of the strength of Otolaryngology-Head and Neck Surgery through an introduction to all regions of the claim to fame: Head and Neck Surgery and Reconstruction, Pediatric Otolaryngology, Otology, Neurotology, Laryngology, Facial Plastic Surgery, Rhinology and General Otolaryngology (Cingi, 2012).

Otorhinolaryngology is a sicknesses of the ear, nose, throat, head, and neck are exhibited in inpatient and outpatient otorhinolaryngology. The significance of understanding the anatomical structures for perception of examination, determination, and treatment should be underlined (Windfuhr, Yue-Shih&Remmert, 2004).

The new advances in otorhinolaryngology are modules that furnish the intrigued understudy with lab or clinical research encounter essential for examination of research issues identified with otorhinolaryngology. The understudy may seek after a free research issue or take an interest in an undertaking right now under scrutiny by a staff part. In either case, a workforce coach must be distinguished. All tasks must be checked on and affirmed by the tutor no less than multi month ahead of time of the expected begin date. Understudies will be required to present a composed report at the finish of the module (Laursen, Hunter, Seymour, Thiry& Melton, 2010).

Otolaryngic issues include a critical bit of introducing objections to essential consideration. Around 20% of grown-up general practice discussions are for otolaryngology grievances. An ongoing study of more than 1,000 essential consideration occupants demonstrates that they don't know about the extent of routine with regards to otolaryngology (Domanski, Ashktorab&Bielamowicz, 2010).

Just 47.2% of essential consideration occupants picked otolaryngologists as specialists for thyroid medical procedure, 32.4% for rest apnea, and 2.7% for reestablishing a young confront. Truth be told, just 43% of patients are even mindful that an otolaryngologist is a doctor. There is clearly a misperception among PCPs with respect to the job of an otolaryngologist. By dissecting these

misperceptions, we may discover zones for development in the preparation of PCPs in otolaryngology (Hu, Sardesai& Meyer, 2012).

To train a primary care provider in otolaryngology, There are three opportunities: The first is with undergraduate medical education in medical school; The second is with postgraduate medical education (family medicine or pediatrics) in residency; and the third is with continuing medical education (CME) in practice. A few examinations have inspected the otolaryngology preparing in undergraduate therapeutic instruction and postgraduate therapeutic instruction. There is, be that as it may, a scarcity of concentrates on CME in otolaryngology for PCPs (Glicksman, Brandt, Parr & Fung, 2008).

### 1.2 Problem Statement

Comprising 20-50% of presenting complaints to a primary care provider; Otolaryngic disorders are very common in primary care. There is limited otolaryngology training in undergraduate and postgraduate medical education for primary care. Continuing medical education may be the next opportunity to train primary care providers (PCPs). The objective of this study was to assess the otolaryngology knowledge of a group of PCPs undergoing an otolaryngology update training.

Therefore, the problem of this study is to investigate the effectiveness of the undergoing an otolaryngology update training program in Saudi Hospitals in 2018. Thus the researcher adopted the following hypotheses.

### 1.3 Study hypotheses

In light of the problem of the study, and through its investigations, the researchers have adopted the following hypotheses:

**H0:** There will be no statistically significant differences at the level of significance ( $\alpha=0.05$ ) of the undergoing otolaryngology update training program in Saudi Hospitals in 2018.

### 1.4 Terminology

**Otolaryngology:** A medical specialty concerned especially with the ear, nose, and throat (Hofstetter, Kokesh, Ferguson& Hood, 2010).

**Head and Neck Surgery:** Medical and surgical management and treatment of patients with diseases and disorders of the ear, nose, throat (ENT), and related structures of the head and neck (Flint, Haughey, Niparko, Richardson, Lund, Robbins& Thomas, 2010).

### 1.5 Literature review

Rosenfeld, Schwartz, Cannon, Roland, Simon, Kumar & Robertson (2014) in their study entitled "Clinical Practice Guideline: Acute Otitis Externa Executive Summary" indicated that to help with actualizing the rule suggestions, this article abridges the method of reasoning, reason, what's more, key activity proclamations. The 8 suggestions created address fitting finding of intense otitis externa (AOE) and the utilization of oral and topical antimicrobials what's more, feature the requirement for sufficient help with discomfort. A refreshed rule is required because of new clinical preliminaries, new orderly audits, and the absence of buyer investment in the underlying rule advancement gathering (Rosenfeld, Schwartz, Cannon, Roland, Simon, Kumar & Robertson, 2014).

And Keojampa, Nguyen & Ryan (2004) in their study entitled "Effects of buffered saline solution on nasal mucociliary clearance and nasal airway patency" indicated that both cushioned hypertonic and supported typical saline nasal shower altogether moved forward saccharine freedom times without influencing nasal aviation route patency. Cradled hypertonic saline influenced saccharine leeway times to a more noteworthy degree than supported ordinary saline. Buffered hypertonic and supported ordinary saline showers both enhance mucociliary leeway and ought to along these lines be valuable in conditions, for example, rhinitis and sinusitis, which are related with disturbance of mucociliary leeway. In any case, these showers don't seem to influence the nasal aviation route. Patients may in this manner advantage from different medicines for "nasal congestion"

In (2014), Park, Kim, Eom, Lee & Rho conducted their study entitled "Risk factors and etiology of surgical site infection after radical neck dissection in patients with head and neck cancer" on a sum of 370 patients experienced first RND. The general rate of SSI was 19.7% (73/370). Multivariate examination demonstrated that male sex (chances proportion [OR], 4.281;  $p = 0.004$ ), cardiovascular maladies (OR, 1.941;  $p = 0.020$ ), extensive measure of blood misfortune amid medical procedure (OR, 4.213;  $p = 0.001$ ), and medical procedure enduring longer than 6 hours (OR, 4.213;  $p = 0.002$ ) were fundamentally connected with SSI. The most basic causative pathogen was *Staphylococcus aureus* (32.6%), and 93.2% of *S. aureus* separates were methicillin-safe. *Klebsiella pneumoniae* (13/92, 14.1%), *Pseudomonas aeruginosa* (11/92, 12.0%), and *Enterococcus* species (11/92, 12.0%) were moreover as often as possible recognized. Based on outcomes, anticipate that specific gatherings of patients are at high hazard for SSIs after major HNC medical procedure. Preventive measures or close checking in these patients might be required to decrease the probability of postoperative SSIs. Moreover, despite the fact that extra research is required, we would consider changing the prophylactic anti-infection regimens as indicated by the causative creatures.

### 1.6 Methods and procedures

#### 1.6.1 The study Sample

The study sample was selected between February and June 2018 from the otolaryngology practitioners at Saudi hospitals. The study sample size was (20) otolaryngology practitioner. And table (1) shows the demographical characteristics of the study sample.

Table (1): Demographical characteristics of the study sample

Variable		Frequency
Gender	Male	13
	Female	7
Total		20
Years of experience	2-5 years	3
	5-10 years	4
	10-15 years	5
	Over 15 years	8
Total		20

**1.6.1 The study tool**

The study relied mainly on the self-managed questionnaire designed and prepared by the researchers. After examining the literature and theoretical studies relevant to the subject of this study; whether in periodicals, books or other references, the questionnaire was formed in three parts and as follows:

**Part I:**

Includes information relating to the respondents and their demographic data; gender and age.

**Part II:** Includes two dimensions: (7) paragraphs related to the effectiveness of the undergoing an otolaryngology update training program in Saudi Hospitals.

The questionnaire paragraphs was built upon the five-point Likert scale; to measure the variables of the study, and for the purposes of the analysis the weights of the answers were distributed as shown in the figure (1).

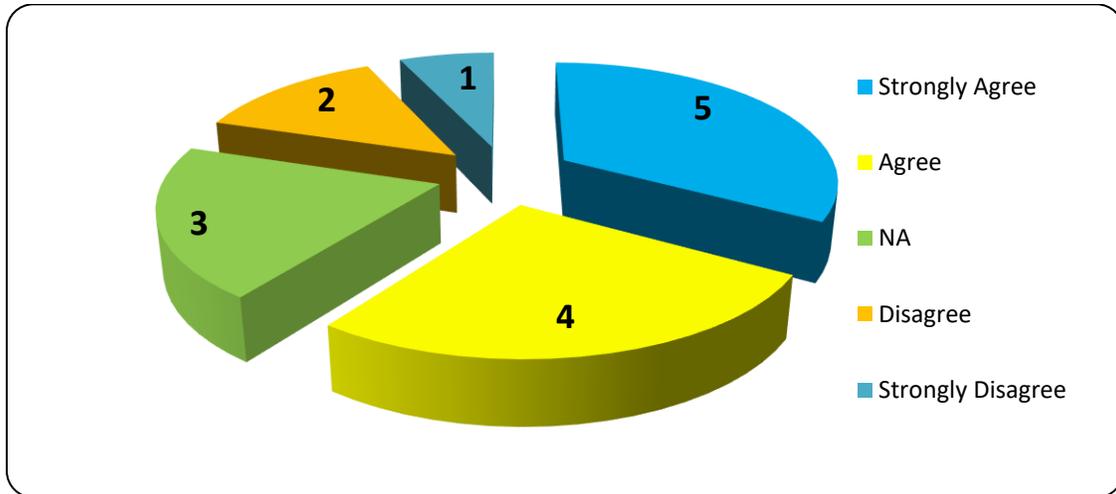


Figure (2): Graphic distribution of the response options in the questionnaire according to the five-point Likert scale.

**1.7 Study results and findings**

**1.7.1 Trend toward the length of hospital stay (LOS)**

Table (1) shows the arithmetic means, standard deviations, rank and the level for the members of the study sample answers measuring the attitudes towards the effectiveness of the undergoing an otolaryngology update training program in Saudi Hospitals.

Table (1): Arithmetic means, standard deviations, rank and level of the sample responses and attitudes towards the effectiveness of the undergoing an otolaryngology update training program in Saudi Hospitals

No.	Statement	AM	SD	Rank	Level
1	Otolaryngology update training program are considered the new advances in otolaryngology	4.29	0.669	2	High
2	Otolaryngology update training program in Saudi Hospitals are essential for otolaryngology practitioners	4.33	0.587	1	High
3	Otolaryngology update training program should be on a continues bases	4.21	0.627	5	High
4	Otolaryngology update training program should be a must for otolaryngology practitioners	4.24	0.620	4	High
5	There are no otolaryngology update training program in Saudi Hospitals	3.63	0.901	7	Medium
6	Otolaryngology update training program will rise the effectiveness of the otolaryngology practitioners	3.65	0.948	6	Medium
7	Otolaryngology update training program upgrades the treatment processes	4.25	0.604	3	High
General average		4.09	0.708		High

(AM): is the arithmetic mean, (SD) is the standard deviation

Data in table (1) shows that the arithmetical means and standard deviation values of the items in light of the responses obtained are ranging from 3.63 to 4.33. These mean values indicate the approval of the sample to the items measuring the attitudes towards the effectiveness of the undergoing an otolaryngology update training program in Saudi Hospitals as the values all exceed the default mean. More specifically, the item stating that "Otolaryngology update training program in Saudi Hospitals are essential for otolaryngology practitioners" obtained the highest mean with 4.33, with standard deviation of 0.587. Meanwhile, the item stating that "There are no otolaryngology update training program in Saudi Hospitals" obtained the lowest mean value of 3.63, with standard deviation of 0.901.

On the whole, the average value of arithmetic mean for all the responses is 4.09, with standard deviation of 0.708, which shows the general approval of the sample study to the items measuring the variable and their positive attitude towards them.

### 1.7.2 Testing the Study Hypothesis

In order to test the hypotheses of the study, of statistical methods were used with the appropriate tests to the nature of the variables and assumptions, using the simple linear regression and the multiple linear regression analysis so as to put the base of acceptances or rejection of the hypothesis as follows:

1. If the calculated value of (T) is higher than the tabulated (T) value at the level of ( $\alpha=0.05$ ), the result will be rejection for the null or the zero hypothesis (H0) and the alternative hypothesis (H1) will be accepted, which indicates the statistically significant relationship effect.
2. If the calculated value of (T) is less than the tabulated (T) value at the level of ( $\alpha=0.05$ ), the result will be accepted for the null or the zero hypothesis (H0) and the alternative hypothesis (H1) will be rejected,

which indicates no statistically significant relationship effect.

3. If the calculated value of (F) is higher than the tabulated (F) value at the level of ( $\alpha=0.05$ ), the result will be rejection for the null or the zero hypothesis (H0) and the alternative hypothesis (H1) will be accepted, which indicates the statistically significant relationship effect.
4. If the calculated value of (F) is less than the tabulated (F) value at the level of ( $\alpha=0.05$ ), the result will be accepted for the null or the zero hypothesis (H0) and the alternative hypothesis (H1) will be rejected, which indicates no statistically significant relationship effect.

**H01:** There will be no statistically significant differences at the level of significance ( $\alpha=0.05$ ) of the undergoing otolaryngology update training program in Saudi Hospitals in 2018.

It is noted from simple regression analysis results described in table (2) that there is a statistically significant difference at the level of significance ( $\alpha=0.05$ ) of the undergoing otolaryngology update training program in Saudi Hospitals in 2018.

This statistically significant difference at the statistically significant level ( $\alpha=0.05$ ), as the calculated (T) value is (8.342), which is higher than the tabulated (T) value, is in line with the simple regression analysis results that explain the (0.196%) variance.

According to that the null hypothesis (H0) will be rejected and the alternative hypothesis will be accepted, that means there is a statistically significant difference at the level of significance ( $\alpha=0.05$ ) of the effectiveness of the undergoing otolaryngology update training program in Saudi Hospitals in 2018.

Table (4): Testing results of the first hypothesis

Significant (T)	Calculated (T)	Tabulated (T)	(R) Square	(R)
0.001	8.342	1.960	0.196	0.456

### 1.8 CONCLUSION:

Significant progress has been made in the application of otolaryngology update training program in Saudi Hospitals. Decades of research have improved patient safety, improved outcomes, reduced length of hospital stay, and complication rates. However, there is still significant work to be done. Additional

evidence is needed to confirm that adoption of otolaryngology update training program in Saudi Hospitals. Future research should focus on understanding which components contribute to improved recovery, and via what mechanism. Studies on individual components of otolaryngology update training program and pathways implemented in

totality need to be accompanied by audit of practices and processes.

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