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Research Article

## PREVALENCE OF EPISTAXIS AMONG MEDICAL STUDENTS IN ALAHSSA, SAUDI ARABIA

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#### Abstract:

**Background:** Epistaxis is a common disorder that affect most of population at least once in their life. It has been estimated that 60% of people have experienced an episode of epistaxis once in their lifetime. Thirty percent of all children aged 0-5 years ,56% of those aged 6-10 years, and 64% of those aged 11-15 years, have had at least one episode in their lifetime.

Objective: We would like to know the prevalence of epistaxis among medical students in AlAhssa, Saudi Arabia Methods and materials: After ethical approval, data information was collected through a questionnaire that involoves 183 medical students in April 2014. Statistical analysis computed using (SPSS).

**Results:** 15% of Al-Ahssa medical students have history of epistaxis, Family of epistaxis is significant in those students.

**Conclusion:** The prevalence of epistaxis among medical students in AlAhssa, Saudi Arabia is considered significant with strong family history.

**Key words**: *epistaxis*, *prevalence*, *medical students*.

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### **INTRODUCTION:**

Epistaxis is one of the commonest otolaryngological emergencies that affect most of people at least once in their life. It has been estimated that 60% of people have experienced an episode of epistaxis once in their lifetime<sup>1</sup>. Thirty percent of all children aged 0-5 years ,56% of those aged 6-10 years, and 64% of those aged 11-15 years, have had at least one episode in their lifetime<sup>2</sup>. In many retrospective studies, epistaxis has been associated with some chronic diseases such as hypertension, hemophilia, and other blood disorders. Also some types of medications has a significant risk factor in predisposing to epistaxis such as aspirin and some other non-steroidal anti-inflammatory drugs are risk factors and even worsens the problem by affecting the coagulation . The climate and the environment have been related to most epistaxis events. For example, the cool or hot dry weather with decreased humidity. These seasons are considered one of the predisposing factors. Epistaxis can be anteriorly or posteriorly, in most cases it can be managed by applying a pressure in the alae nasi for short period until the bleeding stop. This effective especially if it was anteriorly. It is self-limited in most cases, that is why people who frequently suffering from epistaxis usually can manage the problem. Sometimes it is difficult to manage, especially when it is associated with hypertension and some NSAIDs. Nosebleed can be treated by several ways such as cautery, nasal packing, endoscopic guided selective cauterization and in severe conditions, open surgical management may be

required<sup>3</sup>. In this study, we are going to study the predisposing factors for epistaxis including some chronic diseases, blood disorders, some types of medications and tobacco smoking. Moreover, we will discuss the prevalence of nosebleed and our sample will be the medical students in King Faisal University in AlAhssa, Saudi Arabia.

#### **MATERIALS AND METHOD:**

We asked the medical students in King Faisal University, in Al-Ahssa city about the history of epistaxis among them in form of a distributed questionnaire.183 students involved and all of them answered the questions in April, 2014. We used SPSS program version 16 and applied bar graphs and pie graphs as statistical techniques to view the data.

#### **RESULTS:**

All our respondents were male. Their age ranges from 18 to 26 years old with a mean of 21 years old. There were 27 out of the 183 students have epistaxis 14.8 % of them (Fig2). Eleven of the students who have epistaxis have a family history of epistaxis 40.7 % (Fig3). There were 40 students have had trauma in their nose 9 of them have epistaxis 33.33% (Fig4). However, there were only 13 students have polyps in their nose with only 2 students have epistaxis 7.4% (Fig5). Twenty six smoke tobacco with only 4 of them have epistaxis 14.8% (Fig6).twenty five have nasal discharge with 8 of them have epistaxis29.6% (Fig7).

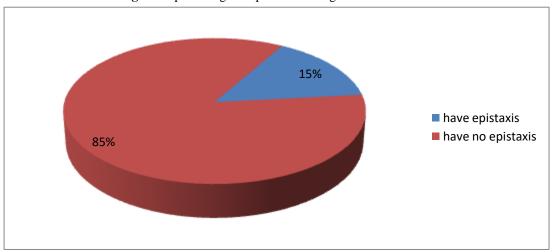


Figure2: percentage of epistaxis among medical students.

Figure3: family history in both who have epistaxis and who have no epistaxis.

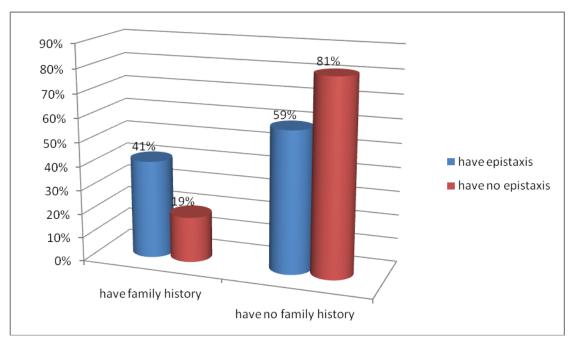
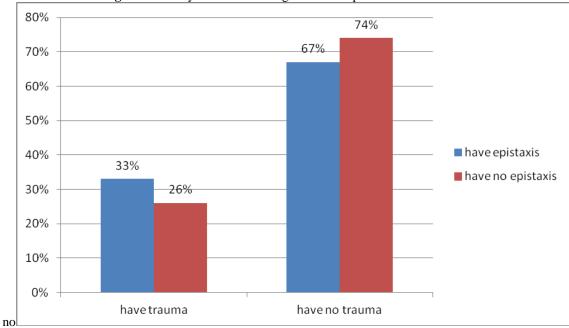


Figure4: history of trauma among who have epistaxis and who have



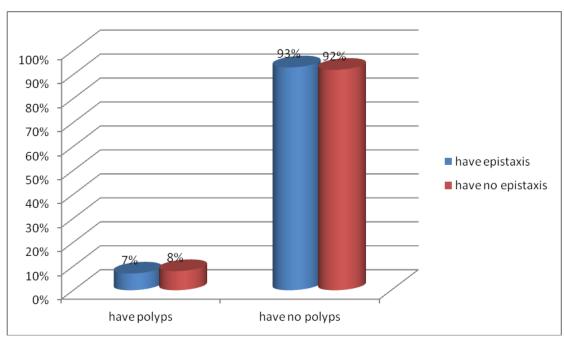
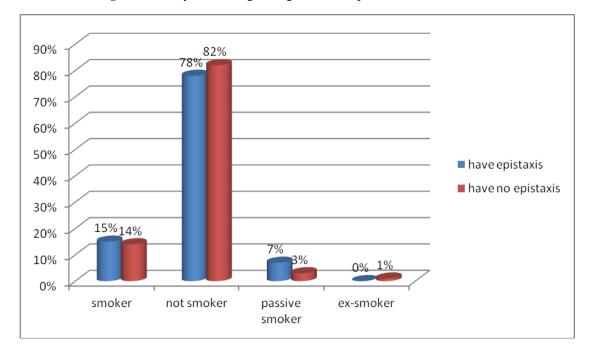


Figure5: history of polyps among have epistaxis and who have no.

Figure6: history of smoking among who have epistaxis and who have no.



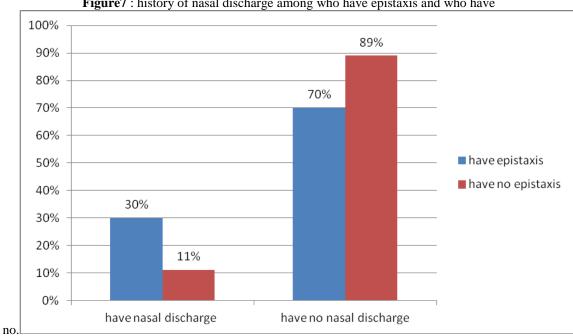


Figure7: history of nasal discharge among who have epistaxis and who have

## **Chi-Square Tests**

	Value	df	Asymp. Sig. (2-sided)	Exact Sig. (2-sided)	Exact Sig. (1-sided)
Pearson Chi-Square	6.847ª	1	.009		
Continuity Correction <sup>b</sup>	5.351	1	.021		
Likelihood Ratio	5.691	1	.017		
Fisher's Exact Test				.015	.015
Linear-by-Linear Association		1	.009		
N of Valid Cases	183				

a. 1 cells (25.0%) have expected count less than 5. The minimum expected count is 3.69.

b. Computed only for a 2x2 table

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Pearson Chi-Square	6.612ª	1	.010		
Continuity Correction <sup>b</sup>	5.379	1	.020		•
Likelihood Ratio	5.861	1	.015		•
Fisher's Exact Test				.020	.013
Linear-by-Linear Association		1	.010		
N of Valid Cases	183				

a. 0 cells (.0%) have expected count less than 5. The minimum expected count is 5.90.

#### **DISCUSSION:**

In our research which involves medical students as a sample, we were focusing on the risk factors for epistaxis. The family history has a significant risk factor from the fact that 41% who have epistaxis also have family history. Some studies support the family history relation to epistaxis and consider it one of the important questions that the physician should ask about. Trauma was not seen as a risk factor in our study in contradictory to other studies which consider that multiple trauma cause severe anterior

hemorrhage<sup>4</sup>. Despite the fact that nasal discharge was not emphasized as a risk factor in some studies, it plays a role in causing nasal bleeding. It may be thought that smoking can lead to epistaxis but in this study, there was no significance of smoking. Only 14 % who have epistaxis have a smoking history although some studies says that tobacco irritates the nasal mucosa and causes epistaxis<sup>5</sup>. Nasal polyps has no contribution to epistaxis. Only 7% from those who have epistaxis had nasal polyps.

b. Computed only for a 2x2 table

## **Acknowledgment:**

We thanks doctor Ali Al-sayid for his assistance in statistics finding.

### **CONCLUSION:**

Fifteen percent of Al-hasa medical students have history of epistaxis. This goes with the international reported percent. Family history of epistaxis is of significant importance among those students.

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