

# Knowledge, Attitude and Practice of First Aid Management of Epistaxis Among General Population in Saudi Arabia

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## ABSTRACT

**Background:** Nasopharyngeal bleeding (epistaxis) could really occur in the anterior and posterior components of something like the respiratory system, with medial and lateral internal bleeding amplifies from the rich vasculature extravascular space of something like the mucus (Kiesselbach's plexus), and is more common in teens and young adults, whereas anterolateral epistaxis (bleeding first from nasal passages) does seem to be more prevalent in the elderly.

**Methods:** The collected data were coded and analysed by using a database software program, Statistical Package for Social Science. Quantitative variables were expressed as the mean  $\pm$  standard deviation (SD) while the qualitative variables were expressed as a number and percentage. The statistical method was used for comparing the percentage of more than two groups and the student was used for comparing between two groups. The results will be considered statistically significant when the significant probability.

**Results:** It was very clear that the participants from both male and female are largely from the age group of 19 to 29 years. In this age group the number of male participants was 406 and the number of female participants 998. The age group 50 consisted of 55 male participants and 69 female participants in the survey group. The legs from 18 or less than 18 age group.

**Conclusion:** The major technique of data acquisition assured that the participants' privacy was respected. All data obtained was used solely for research purposes; the investigator also has no personal interest inside the information. The material was saved in the researcher's smartphone's personal databases and was kept remain until the study trial or sentencing was finished.

**Keywords:** Epistaxis, Nose Bleed, Nasal Haemorrhage, Otorhinolaryngology

## INTRODUCTION

Epistaxis, as well as nostril haemorrhage, is a frequent word sickness that affects almost 60% of something like the general public, is more frequent in children and adolescents and is extremely uncommon amongst infants. It can be exacerbated through either systemic or regional factors that cause. Institutional contributing factors are including high arterial pressure, coagulopathy, cerebrovascular disease, especially inheritable hematoma hypoplasia (HHT), as well as blood people with t2dm as malignant tumours, because although local contributing factors involve respiratory infection, nasopharyngeal nasal congestion, pharyngeal foreign objects, energetic nose going to blow, and just a veered away or pierced nasopharyngeal septum<sup>1</sup>.

Nasopharyngeal bleeding (epistaxis) could really occur within both the posterior parts of something like the nasal passages, with posterolateral internal bleeding up marginally from of the rich blood vessel interstitium of the mucous membrane (Kiesselbach's plexus), and can be more widespread in teenagers and young adults, while posterolateral epistaxis (bleeding from the nasal passages) seems to be more frequent among the elderly. The management of people suffering epistaxis, irrespective of age, commences includes stabilisation, diagnosis of the source of haemorrhage, following management of something like the underlying reason<sup>2</sup>. Because the majority of epistaxis instances occur within the medical environment, it is vital for the public to be aware of and comprehend a few of the basic aid procedures for epistaxis treatment in order to lessen mortality and morbidity in haemorrhaging episodes.

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A KAP study on epistaxis involving school students in India concluded the urgent need for education programs on this first aid procedure among both students and teachers. Scientists determined a lack of comprehension among students at universities in Pakistan, in addition to the need to raise awareness early in school to reduce the occurrence of incidents as well as morbidities<sup>2,3</sup>. In Saudi Arabia, testing learning, attitude, as well as practice concerning epistaxis among the Saudi people demonstrated that they possess a strong understanding of first aid procedures, with such an excellent mean expertise, attitude, including practice (KAP) grade.

Knowledge of first assistance management as well as other aspects linked to emergency prevention strategies is crucial for increasing responsibility and enhancing their position within society. Though several research here on treatment of cyclic vomiting have indeed been written, there have been fewer analyses on the citizenry's attitudes and knowledge to first aiders for epistaxis. The purpose of this study is to examine the KAP of epistaxis treatment among the individuals living in various Saudi Arabian locales<sup>3</sup>. Epistaxis is the increased incidence of blood from nasal passages, larynx, or nose. The preponderance of epistaxis episodes is produced by haemorrhage from nasal cavity. Epistaxis is a prevalent doctor or other health (ENT) and incident and emergency hospital (A&E) emt.

Epistaxis has now been discovered to impact 10percentage points to 60percent in terms of the population. 6percent of total of participants are admitted to medical services to stop the hemorrhaging, while 60percent of respondents reported at least one case of cyclic vomiting in their entire career, with male being so much more likely to suffer from epistaxis than females. Epistaxis is frequent in young people and children, while it is infrequent in newborns. Prevalence peaks in the late 60s. The vast bulk of nosebleeds patients may well be handled with simple first treatment techniques<sup>4</sup>. However, some epistaxis instances needed hospital. First aid supplies treatment of disease or injury to avoid development of state as well as to minimize pain until competent medical attention arrives, in order to reduce the mortality and morbidity of the actual emergency, especially in the event of prolonged bleeding. The goal of this research was to evaluate the Saudi population's knowledge, attitude, as well as practice of nosebleeds basic treatment procedures<sup>4,5</sup>.

To signify the emergence of awareness about epistaxis among Saudi Arabia populations.

To identify the causes of epistaxis among the Saudi Arabian population.

To clarify the remedial measures of epistaxis.

To understand the t-test and other graphical methods.

### METHODOLOGY

The collected data were coded and analysed by using a database software program, Statistical Package for Social Science. Quantitative variables were expressed as the mean ± standard deviation (SD) while the qualitative variables were expressed as a number and percentage. The statistical method was used for comparing the percentage of more than two groups and the student was used for comparing between two groups. The results will be considered statistically significant when the significant probability.

Data Collection: data were collected by using a predesigned online questionnaire, which was distributed among the general population of Saudi Arabia. This study has been conducted in the year 2022. It was self-

administered by participants. The questionnaire included the relevant questions to collect data about: Socio-demographic characteristics included age, marital status, educational level and previous exposure to epistaxis. Other sections included questions designed for assessment of the level of knowledge, awareness and practice of the study sample towards epistaxis.

### RESULTS

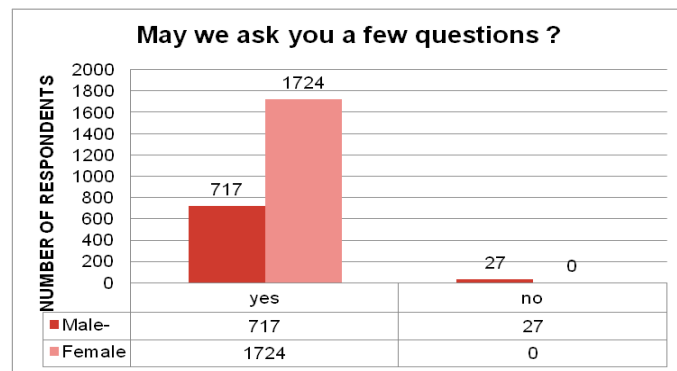


Figure 1: Consent

From the primary investigation the first figure shows that when the question was asked about the consent of respondents, of the total number of male 717 members showed their positive concern and 27 members showed their negative result about that. From the above graph it was also cleared that 1724 members fully gave their consent.

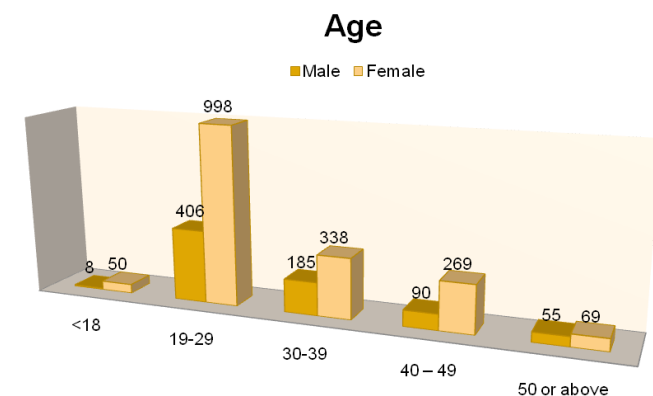


Figure 2: Age Distribution

According to figure 3 it was very clear that the participants from both male and female are largely from the age group of 19 to 29 years.

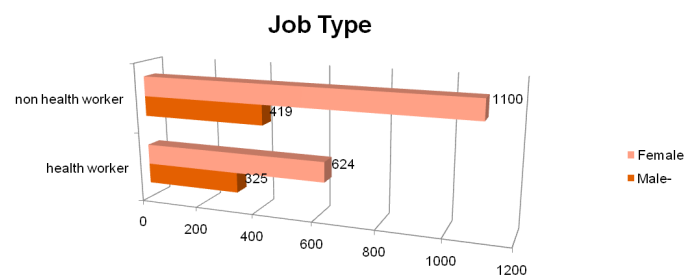


Figure 3: Profession

From the figure 4, it is very much clear that most of the participants were non health workers or not from the medical background. Where the number of respondents 325 male participants and 624 female participants were from medical background or they mention themselves as health workers. At another point 419 male participants and 1100 female participants were not from medical background or they mentioned themselves as non-health workers.



Figure 4: Monthly income

From this salary graph it was clearly mentioned that most of the participants were having salaries of less than 5000 SR, secondly other participants were from 5000-15000 SR group and other participants belonged to >15000 SR group. So from this it may be represented that most of participants were students.

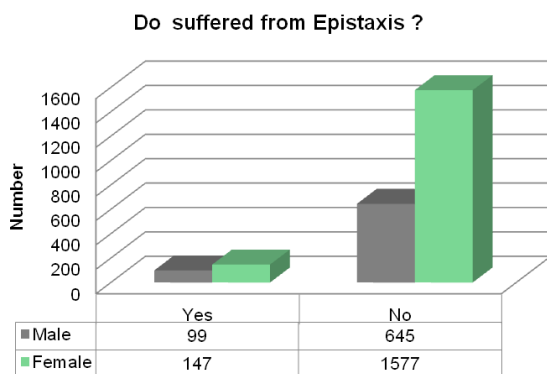


Figure 5: Prevalence of Epistaxis

From figure 6 it is very nice clear that about 99 participants said that they were affected or suffered from Epistaxis and 147 female participants were also set there where they suffered from Epistaxis. In another scenario 645 number of male participants and 1577 female participants did not suffer from Epistaxis. So this indicated that most of the participants did not suffer from the Epistaxis.

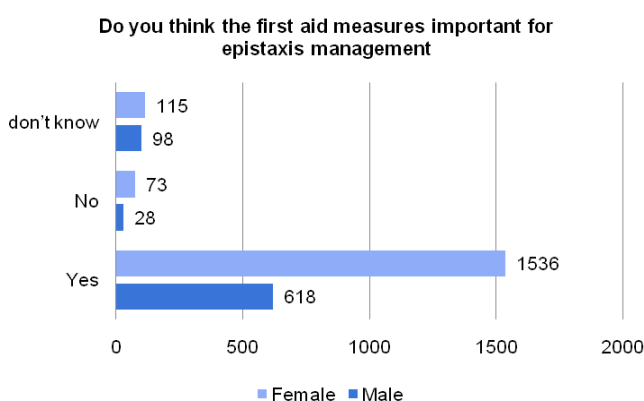


Figure 6: Important of First Aid

In figure 07 the participants support the statement that the first major importance for Epistaxis management were more than 1536 female participants and more than 618 men participants sodeyar positive response on this statement. Where it clearly indicates that the first aid major is very much important for the Epistaxis management.

From the third pie chart or figure number 13 in the question asked that applying pressure on the nose can really stop Epistaxis then in answer 69% of females and 31% of male said yes.

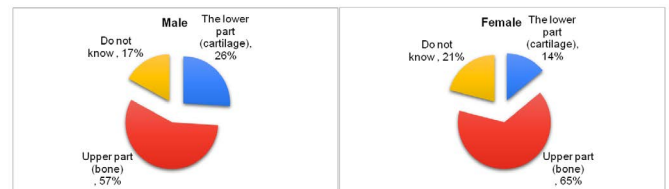


Figure 7: Gender wise comparison, Applying pressure on nose

In figure 7, the question asked which part of the nose you will apply pressure during Epistaxis, in answer most respondents said that the upper part of the nose is pressed so that the Epistaxis will stop. And this statement is supported by 57% of male participants and 65% of female participants.

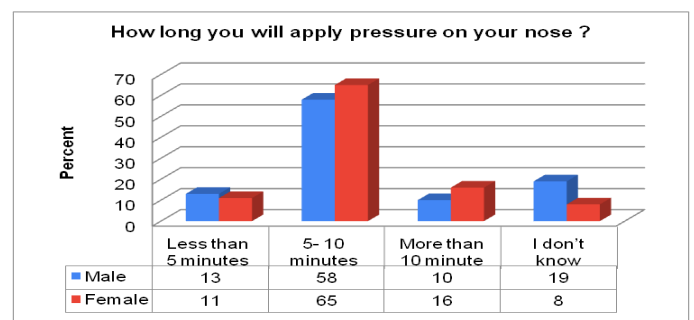


Figure 8: Duration of pressure on nose

In figure 9, it is clear that 5 to 10 minutes is the right and idle time to apply pressure on your nose so that the Epistaxis will stop. This statement was supported by more than 50% of male participants and more than 60% of female participants.

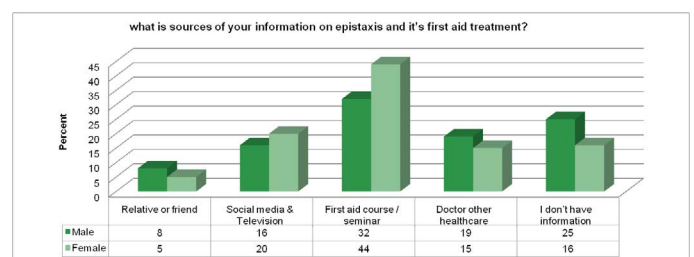


Figure 9: Source of information

## DISCUSSION

It adds substantially to the work in urgent as well as endoscopic clinics, and so it frequently creates anxiety in both patients and healthcare professionals. It really can range from moderate leaking to a major, experienced rhinological catastrophe that presents a challenge to that of an otolaryngologist and can continue for or more a period. Nasal haemorrhage can indeed be caused through either systemic or regional factors<sup>5-9</sup>. Key variables are disease, immune disorders, antithrombotic

use, as well as arterial increased blood pressure, so even though environmental variables incorporate upper airway diseases, nasal allergies, soft tissue introduction into the nasal passages, trauma, as well as tricuspid laceration.

From the above discussion it has been clarified that the survey has basically conducted the answers from the students and it has been derived that the answers are basically in favour of that the students are almost aware of the epistaxis disease and know to do first aid treatment of this disease as well. Here are some preventive points or actions which can be taken immediately such as; During gastrointestinal bleeding (epistaxis), people need take the following measures for at minimum two weeks to let the nasal membrane to heal<sup>6,7</sup>:

Avoid any vigorous activities. This involves running, lifting, mowing the lawn, dancing, competitive sports, as well as any activity that raises the blood pressure or heart rate.

Avoid warm beverages, hot meals, especially spicy foods. Reaction produces blood vessels to dilate, which leads to bleeding<sup>7,8</sup>.

Avoid taking showers and baths or saunas. Warm baths and saunas are not permitted.

Avoid drugs that impair the blood's capacity to clot naturally. Aspirin, tramadol, Tylenol, Advil, Organisation's needs, Chipset, Orudis, Nuprin, Ecotrin, as well as other said anti-inflammatories are samples of such medications. Materials containing Tylenol (paracetamol) have been approved<sup>9-11</sup>.

*Avoid inflating the nose because it could disrupt clots parallel to the longitudinal nasopharyngeal cellular membrane. Sneeze to the mouth open.*

*Avoid any kind of nose trauma. Tobacco use would be discouraged.*

*Use a diffuser in the house where folks sleep and work.*

*Sleep with your chin raised during the day. A lubricating balm (bacitracin, A&D ointment, polysporin) can be applied to the sternum several times daily and prior to going to bed.*

## CONCLUSION

**As per our findings, approximately 80 percent 85% of consumers are knowledgeable of something like the Epistaxis sickness and are aware that it may be a chronic disease. Epistaxis is a frequent symptom in otorhinolaryngology, with the majority of people experiencing one or more episodes over their lifetime. The term epistaxis refers to bleeding from the nostrils, nasal cavity, or nasopharynx. It is induced by the burst of a blood artery inside the nose. Though epistaxis is generally moderate as well as treatable at least, it can become spectacular as well as potentially life-threatening in certain instances. Epistaxis has already been noticed**

**to affect somewhere between 10% to 60% among people. 6% of the patients were admitted to the hospital for hospital attention.**

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**Potential Conflict of Interest:** None

**Competing Interest:** None

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