

Knowledge about the prevalence and attitude of patients experiencing epistaxis in Saudi Arabia

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ABSTRACT

Background: Despite the modern society, nasal bleeding has been increased these days in Saudi Arabia people these days due to multiple factors. People knowledge about this important situation is not quit enough. Attitude toward nasal bleeding is different from one person to another which may reflect the outcomes of nasal bleeding

Objectives: Nasal bleeding (epistaxis) is causing trouble to the patients in a multiple aspect. This study aimed at assessing the prevalence of nasal bleeding (epistaxis) in Saudi Arabia and to know the participants attitude towards it.

Methods: A cross-sectional study on the prevalence of nasal bleeding (epistaxis) and the attitude towards it was randomly investigated among men and women (392 participants) within different social media platforms in Saudi Arabia during the period from January to March 2018.

Results: in 27% of the participants have been suffering from nasal bleeding, only 17.4% seek medical help, 16.3% tried traditional medicine to stop the nasal bleeding, 5.6% are using anticoagulants, 49% had a positive family history of nasal bleeding and 9.4% had a chronic illness.

Conclusion: Our result showed that huge number of the participants was suffering from nasal bleeding (epistaxis) in Saudi Arabia.

Keywords: Nasal bleeding, Epistaxis, Hypertension.

INTRODUCTION

Epistaxis is about acute bleeding from the nasal cavity, nasopharynx or the nose⁽¹⁾. Nasal septum bleeding is the most responsible for most of cases of epistaxis⁽²⁾. Epistaxis is very common in accident, emergency and otorhinolaryngology (ENT) departments^(3,4). There are two anatomical areas within the nose which are often providing epistaxis⁽⁵⁾. Epistaxis is divided into systemic and local causes⁽⁵⁾. The common causes of systemic epistaxis are hypertension which may contribute to bleeding, inherited bleeding disorders, cardiovascular disorders like congestive heart failure, vascular malformation of the nose and rarely nasal tumor^(5,6). Regarding local causes of nose bleeding, trauma is the most common cause followed by other causes like exposure to dry warm air for a long period of time, nasal infection, allergic rhinitis, nasal surgeries, foreign body, perforated nasal septum and cocaine use⁽⁷⁾. Furthermore, weather has also an impact on causing epistaxis. Cold dry winter season leads to a decrease in nasal humidification and the nasal septum will be prone to bleeding⁽⁸⁾. The incidence of epistaxis was reported to be ranged from 10% to 60 % of individuals⁽⁹⁾. 6% of the

individuals were admitted to medical treatment to control the nasal hemorrhage, while 60% of them had at least one episode of epistaxis throughout their lifetime and it mentioned that males were more likely to experience epistaxis than females⁽¹⁰⁾. Epistaxis is common among young adults and children, while it is very rare among neonates and reaches its highest susceptibility in the sixth decade of life⁽¹¹⁾. The majority of patients who are exposed to epistaxis can be managed with standard first aid measures. However, some epistaxis episodes required hospital admission⁽¹²⁾. First aid is the emergency treatment of injury or illness to prevent deterioration of condition and to decrease pain until professional medical help arrives⁽¹³⁾, to reduce mortality and morbidity of the emergency case⁽¹²⁾ especially in persistent bleeding cases⁽¹²⁾.

MATERIALS AND METHODS

A cross-sectional study involving 392 participants from all over Saudi Arabia was done during the period between February-March 2018. The selected sample size for this study was randomly determined. A self-

administered questionnaire was developed after a careful review of literature on the subject and it included 16 questions. The questionnaire consisted of two parts. Part one; demographical data that includes gender, age and marital status. Part two; the participants were asked whether they have epistaxis or not whether they have been visiting a doctor to solve the problem, whether they tried a traditional medicine to stop the nose bleeding and if they have someone in their family is suffering from nose bleeding or not. Participants were also asked if they take anticoagulants medications or not, if they have a chronic disease or high blood pressure or not. They also were asked if they suffer of anemia, had a nose trauma or surgery, which position is ideal to stop the nose bleeding and is the society has a role in educating the people about nose bleeding or not. Data were collected by one method through a distribution of a survey website-link through participants living in Saudi Arabia in multiple social media platforms. Descriptive statistics were used to describe the answers of the participants in the study using numbers and percentages.

Comparing the answers for different questions within the different groups was done using Pearson chi-square test. Statistical significance was set at $p < 0.05$ and analysis

was performed using IBM SPSS statistics, version 23 (IBM, Armonk, NY, USA).

The study was done after approval of ethical board of University of Hail.

RESULT

A total of 392 participants were participated in the study, 45.4% were males and 54.6% were females (Table 1). More than half of the participants (62%) were singles and 38% were married (Table 2). Also, more than half of the participants (52.6) % were between the ages of 20 to 30 years old (Table 3). Regarding patients who were having nose bleeding, 27% of the participants had nose bleeding while 73% do not (Table 4). Only 17.4% of patients having nose bleeding sought medical attention and 16.3% of them tried traditional medicine to stop the nose bleeding (Table 4). As regard to the risk factors, only 5.6% were using anticoagulant, 5.9% suffering from hypertension, 49% have a family member who was suffering from nose bleeding, 15.8% had anemia, 9.4% had a chronic illness, 18.6% had trauma to the nose and only 4.3% had a nasal surgery (Table 5). With regard to the best body position to stop nose bleeding, 56.9% of the participants thought that leaning the head forward is the best body position to stop nose bleeding (Table 6).

Table (1): Sex distribution of the participants

Sex	Frequency	Percent
Male	178	45.4
Female	214	54.6
Total	392	100

Table (2): Marital status of the participants

Marital status	Frequency	Percent
Single	243	62
Married	149	38
Total	392	100

Table (3): Age distribution of the participants

Age	Frequency	Percent
1-10 years	19	4.8
10-20 years	52	13.3
20-30 years	206	52.6
30-40 years	73	18.6
>40 years	42	10.7
Total	392	100

Table (4): Participants suffering from nose bleeding, seeking a medical attention and trying a traditional medicine to stop the nose bleeding:

Nose bleeding	Frequency	Percent
Yes	106	27
No	286	73
Total	392	100
Seeking a medical attention		
Yes	39	17.4
No	185	82.6
Total	224	100
Trying a traditional medicine		
Yes	34	16.3
NO	174	87.7
Total	208	100

Table (5): Risk factors of nose bleeding:

Using anticoagulants	Frequency	Percent
Yes	22	5.6
No	370	94.4
Total	392	100
Suffering from hypertension		
Yes	23	5.9
No	369	94.1
Total	392	100
Positive family history of nose bleeding		
Yes	192	49
No	200	51
Total	392	100
Had anemia		
Yes	62	15.8
No	330	84.2
Total	392	100
Had a chronic illness		
Yes	37	9.4
No	355	90.6
Total	392	100
Had nasal trauma		
Yes	73	18.6
No	319	81.4
Total	392	100
Had nasal surgery		
Yes	17	4.3
No	375	95.7
Total	392	100

Table (6): Positions which could stop the nose bleeding:

Position	Frequency	Percent
Leaning head forward	223	56.9
Leaning head backwards	143	36.5
Laying on the back	20	5.1
Laying on the abdomen	6	1.5
Total	392	100

DISCUSSION

Our study was done to investigate the prevalence of epistaxis among people in Saudi Arabia and how they managed their nasal bleeding once happened. In the present study, we found that there were a huge number of people in Saudi Arabia who are suffering from epistaxis. Among the 392 participants, 106 participants were suffering from epistaxis while 286 were not. Only 39 participants sought the medical help to stop nasal bleeding while 185 did not do anything to deal with it. There were only 34 participants who tried traditional medicine to stop nasal bleeding and 174 of the participants did not try in this way. There were multiple risk factors that could had caused nasal bleeding among the participants like using anticoagulants with 22 participants, 23 were suffering from high blood pressure and 192 were having a family member who had suffered from nasal bleeding. 37 were suffering from a chronic illness; 73 participants had nasal trauma and 17 participants who had nasal surgery. As a consequence of nasal bleeding, 62 participants out of 392 were suffering from anemia. Participants tried a different body position to stop the nasal bleeding and leaning the head forward was the most common body position that had been used to stop the nasal bleeding in 223 participants followed by leaning the head backward in 143 participants, lying on the back in 20 participants and lying on the abdomen in 6 participants. In this study, we found no relationship between epistaxis and hypertension. This conclusion was also confirmed a similar study done in Saudi Arabia⁽¹³⁾. The present study is of great interest to our nation as it was one of the few Saudi studies carried in Saudi Arabia to evaluate epistaxis prevalence and explore the attitude of people towards. The sample size was quite enough; limitation of this study was that we couldn't compare the results of this study with other findings obtained in other communities. Only there were just few trials performed on this subject between population and the sample size

was small to carry out proper correlations between our conclusions and those carried elsewhere.

CONCLUSION

We can conclude that epistaxis prevalence is quite large these years in Saudi Arabia. Participants had a variety of risk factors that can lead to epistaxis eventually. The ministry of health and doctors from all specialties should inform and teach people about epistaxis and how to deal with it in a correct and safe way to stop nasal bleeding and eventually avoid anemia incident.

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