

#### RESEARCH ARTICLE

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# OVERVIEW OF PRIMARY SCHOOL TEACHERS 'FIRST AID TO STUDENTS WITH EPISTAXIS

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#### **ABSTRACT**

Epistaxis often occurs in elementary school aged children. Teachers are the people closest to students and are the first aid to children who experience epistaxis at school. This research aims to identify the ability of MI Manba ul' Ulum Tulungagaung teachers in providing first aid treatment for students with epistaxis. This research used a quantitative descriptive method with a population of all teachers who teach at MI Manba 'Ul 'Ulum Tulungagaung as many as 36 teachers, all of whom are samples in this research using analytical techniques. The results of this study indicate that more than half of the teachers at MI Manba 'Ul 'Ulum Tulungagung's epistasis first aid abilities (52.8%) are sufficient and less than half (25%) are less than half (22.2%) have sufficient abilities. good abilities. Therefore, teachers with sufficient and inadequate skills regarding first aid for epistaxis should increased their knowledge and skills so that they can perform first aid for epistaxis correctly, namely collaborating with community health centers to provide education about first aid, especially epistaxis, in the UKS (School Health Unit).

## Keyword: frist aid; epistaxis

### **INTRODUCTION**

Epistaxis or what is known to the public as a nosebleed, describes a condition where the nose is bleeding. Epistaxis is nasopharyngeal bleeding so it can cause emergencies in (ENT) (1). There are 9% of children experiencing recurrent epistaxis. The nose has many plexiform blood vessels which make it susceptible to bleeding. Mucosal dryness, exposure of anterior septal vessels, trauma (including nose picking), or residual and idiopathic foreign bodies are the main causes of episodes of epistaxis in children. Nosebleeds may also occur less frequently due to local disorders such as upper respiratory infections or inflammation, also known as allergic rhinitis (2).

Epistaxis is prone to occur in children aged 6-10 years. Epistaxis is very rare in children under 2 years of age, with an incidence of only 1 per 10,000 cases (3). Epistaxis is an injury that often occurs at school. As a result of incorrect management of epistaxis, such as positioning the victim looking up, it

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can cause blood flow to form behind the nose so that it can enter the back of the mouth and reach the respiratory tract, which can cause the victim to choke and cough and have difficulty breathing (4).

Based on the results of a preliminary study at Madrasah Ibtidaiyah Manba Ul' Ulum Buntaran-Rejotangan-Tulungagung in the last 5 years there were 2 incidents of epistaxis caused by impact injuries while playing with friends and experienced by students in grades 1 and 2. Results from interviews with the principal and one The UKS teacher said that first aid by the teacher was still the traditional method, namely covering it directly with betel leaves. Betel leaves can be used as a treatment for nosebleeds because they can stop bleeding temporarily by inserting them into the nostrils. This is done by rolling up betel leaves and inserting them into the nostrils as a temporary treatment for nosebleeds (5).

From the results of preclinical tests, betel leaves are anti-inflammatory and do not cause toxicity, but incorrect use or treatment causes betel leaves to be ineffective and have negative impacts, such as using betel leaves directly on the skin or mucosa can cause irritation in some individuals. This can happen especially if betel leaves are used in the form of extract or oil, inserting the betel leaves too deeply and also using betel leaves that are not washed first (6).

Some teachers also don't know the correct management of epistaxis as evidenced by the results of interviews. When a nosebleed occurs, students are even advised to raise their heads. Based on the description above, the author is interested in conducting research with the title Description of Primary School Teachers' First Aid to Students Who Experience Epistaxis in order to find out what the description of primary school teachers' first aid to students who experience epistaxis at Madrasah Ibtidaiyah Manba ul' Ulum Tulungagung.

### **METHODS**

The design used in this study is one type of quantitative descriptive research the population in this study is a class 1-6 teacher in MI Manba ' Ul ' Ulum Tulungagung as many as 36 people sampling techniques in this study using a total sampling of variables from this study is the first aid teacher primary school for students with disabilities epistaxis.

**RESULT**Table 1. General data of Respondents MI Manba 'Ul 'Ulum Tulungagung

Characteristic	es of Respondents	Frequency	Percentage (%)
	Male	8	22
Gender	Famle	28	78
	1-10 year	19	53
Length of Work	11-20 year	5	14
S	21-30 year	9	25
	31-40 year	3	8
	S2	3	8
Last education	<b>S</b> 1	31	86
	Senior high school	2	6

•	Ever	30	83
The teacher experienced epistax	Never	6	17

Based on table 1, it is known that the majority (22%) of the teachers at MI Manba 'Ul 'Ulum Tulungagung are female and only a small portion (22%) are male, more than half (53%) of the teachers at MI Manba 'Ul' Ulum Tulungagung work for 1-10 years, the majority (86%) of teachers at MI Manba 'Ul 'Ulum Tulungagung have a bachelor's degree, the majority (83%) of teachers at MI Manba 'Ul 'Ulum Tulungagung have experienced epistaxis at school.

Table 2. Epistaxis first aid research data, the majority of actions are not carried out and are carried out by teachers

No	Action	Done	(%)	are not	(%)
				done	
1	Ask the victim to sit with their head	23	63,89	13	36,11
	down				
2	Ask the victim to press the bridge of	13	36,11	23	63,89
	his nose and ask him to breathe				
	through his mouth				
3	Ask not to talk, swallow, spit, cough	28	77,78	8	22,22
	or sneeze when providing first aid for				
	epistaxis. So it interferes with blood				
	clotting.				
4	Releasing pressure on the nose every	8	22,22	28	77,78
	10 minutes. If bleeding still occurs,				
	apply pressure for 10 minutes. If the				
	bleeding lasts more than 30 minutes,				
	immediately take it to the nearest				
	health facility for treatment				
5	Observe the bleeding when it stops.	33	91,67	3	8,33
6	Clean the area around the nose after	30	83,33	6	16,67
	the bleeding has stopped while still				
	looking forward				
7	Encourage the victim to rest quietly	28	77,78	8	22,22
	and advise not to exhale loudly				
	through the nose.				

Based on table 5, it shows that of the 36 teachers who performed first aid for epistaxis, there were actions that were most often not carried out, namely that most (77.78%) did not release pressure on the nose every 10 minutes and more than half (63.89%) did not ask the victim to pressing the bridge of his nose and asking him to breathe through his mouth. Meanwhile, the actions carried out were in accordance with the SOP, namely that the majority (91.67%) had observed bleeding (nosebleeds) when it had stopped, the majority (83.33%) had cleaned the area around the nose after the bleeding had stopped.

Table 3. Criteria for teacher ability regarding description of primary school teachers' first aid to students experiencing epistaxis at MI Manba 'Ul 'Ulum Tulungagaung.

Criteria	Frequency	Percentage (%)
Good	8	22,2
Enough	19	52,8
Not enough	9	25
Total	36	100

Based on table 6, it shows that more than half of elementary school teachers' first aid to students who experience epistaxis (52.8%) have sufficient abilities and less than half (25%) have poor abilities and only a small portion (22.2%) have good abilities.

# **DISCUSSION**

Based on the results of research conducted, it shows that more than half of the teachers' ability to provide first aid for epistaxis (52.8%) is sufficient and less than half (25%) has poor ability and a small portion (22.2%) has good ability. These results were obtained from first aid observations of epistaxis. The results of the study showed that (52.8%) had sufficient ability because in observations it was found that the majority (77.78%) had asked students not to talk, cough and sneeze when experiencing epistaxis and advised the victim to remain calm and advised them not to exhale through nose, and more than half (63.89%) had asked the victim to sit with their head down. Less than half (25%) of the teachers were less skilled, this result was obtained from the majority (77.78%) not releasing pressure on the nose every 10 minutes and more than half (63.89%) not asking the victim to press the bridge of the nose and ask for a breath. by mouth. A small percentage (22.2%) of teachers' abilities were said to be good, these results were obtained from observations, where the majority (91.67%) had observed nosebleed bleeding when it had stopped, the majority (83.33%) had also cleaned the area around them. nose.

Teachers should be able to provide first aid because teachers have an important role in preventing serious injuries at school and as the first person responsible at school (7). The role of teachers at school in providing first aid in the event of a child's injury needs to be balanced with the teacher's knowledge in treating injuries. Knowledge of the appropriate methods and techniques for administering

first aid will determine the results of the assistance provided (8). Epistaxis can appear suddenly in everyday life, therefore, it is important to understand how to treat it. There are three main principles in treating epistaxis, namely stopping bleeding, preventing complications, and avoiding recurrence of epistaxis, while ensuring that the body's blood flow remains good (9). Epistaxis can be managed effectively at school with simple actions such as applying pressure to the nose and positioning the head tilted forward or slightly lowered (10). Hemostasis (bleeding control) means treating bleeding, starting with direct pressure on the nose for 5-30 minutes and evaluating every 5-10 minutes whether the bleeding has stopped or not. Epistaxis can be a bothersome condition and in some cases can be dangerous. It is important to stop epistaxis bleeding as quickly as possible to prevent blood loss and to reduce discomfort and reduce the risk of infection. The importance of observation in first aid for epistaxis is to reduce the risk of more blood loss, discomfort in epistaxis sufferers, reduce the risk of infection, prevent anxiety and prevent recurrence (11). After the bleeding has been controlled, the victim remains bent forward, clean around the mouth and victim's nose with warm water (12).

According to researchers, more than half of the teachers' ability to provide epistaxis first aid to students at MI Manba 'Ul 'Ulum Tulungagung is sufficient. Factors that influence teachers' ability to provide first aid due to lack of knowledge related to treating epistaxis were proven after filling out the questionnaire, it was found that the majority (83%) of teachers knew the actions taken to stop epistaxis, but the actions taken were not appropriate, such as raising the head (17%), immediately gagged with tissue (5%), betel leaf gagged (42%), not allowed to squeeze nose (5%). Only (3%) of the teachers (83%) provided appropriate assistance, while (17%) teachers did not know about epistaxis assistance.

The results of observations and filling out questionnaires found that many teachers at MI Manba 'Ul 'Ulum Tulungagung had not carried out appropriate first aid measures as evidenced by the fact that there was still a discrepancy between knowledge, experience and application of epistaxis first aid measures. Researchers found that teachers still used the old and traditional method by raising their heads and immediately blocking the bleeding with betel leaves and tissue. This action still violates the correct procedure according to the epistaxis first aid SOP.

In this study, it was found that more than half (52.8%) had sufficient abilities and only a small portion (22.2%) had good abilities. This requires special attention because first aid for epistaxis is a very important skill for teachers in elementary schools. Children are susceptible to epistaxis, and the ability of teachers to deal with these cases quickly and effectively can make a big difference in pupils' well-being, highlighting the importance of a holistic approach in health education in primary schools. Apart from teaching academic subjects, teachers must also pay attention to students' physical and emotional well-being, including knowledge of first aid measures in emergencies.

### **CONCLUSION**

Based on the research results, it can be concluded that the level of first aid for elementary school teachers to students who experience epistaxis at MI Manba 'Ul 'Ulum Tulungagaung is more than half (52.8%) has sufficient ability and less than half (25%) has less ability and only a small portion (22.2%) had good abilities. With actions that were not carried out in accordance with the SOP, the majority (77.78%) did not release pressure on the nose every 10 minutes and more than half (63.89%) did not ask the victim to press the bridge of the nose and asked to breathe through the mouth and the actions that had been carried out. In accordance with the SOP, the majority (91.67%) had observed bleeding (nosebleeds) when it had stopped and the majority (83.33%) had cleaned the area around the nose after the bleeding had stopped.

#### REFERENCES

- 1. Husni T.R., T., & Hadi, Z. (2019). Literature Review Approaches to Diagnosis and Management of Epistaxis. J. Ked. N. Med, 2(2), 26–32.
- Recht, M., Chitlur, M., Lam, D., Sarnaik, S., Rajpurkar, M., Cooper, D. L., & Gunawardena, S. (2017). Epistaxis as a Common Symptom of Glanzmann's Thrombasthenia, a Rare Qualitative Platelet Disorder: Illustrative Case Examples. 2017. <a href="https://doi.org/doi.org/10.1155/2017/8796425">https://doi.org/doi.org/10.1155/2017/8796425</a>
- 3. Lie, M., & Ali, S. (2019). The Effect of Counseling on Epistaxis First Aid Knowledge among Elementary School Teachers in Penjaringan District.
- 4. Kusumoningrum, D. A. (2019). What do you have to do? First aid. Ambassador Publishers. <a href="https://books.google.co.id/books?id=Ue-oDwAAQBAJ">https://books.google.co.id/books?id=Ue-oDwAAQBAJ</a>
- 5. Putri, A. K., Satwika, Q. E., Sulistyana, Y., & Arindias, Z. (2019). Study of the morphology of Piper betle L. and its use in everyday life. Sebelas Maret University, 1(1), 1–7.
- 6. Rahmawati, N., Mujahid, R., & Widiyastuti, Y. (2020). Cultivation and Benefits of Betel for Health. Indonesian Ministry of Health Health Research and Development Agency, 1–122.
- 7. Ardiani, N. D., & Irdianty, M. S. (2023). Treatment of Epistaxis (Nosebleeds) in Children in Bulu Village, Karanganyar. <a href="http://jurnal.globalhealthsciencegroup.com/index.php/JPM">http://jurnal.globalhealthsciencegroup.com/index.php/JPM</a>
- 8. Ratnaningsih, A., Itsna, I. N., & Oktiawati, A. (2023). First Aid Health Education using Demonstration Methods and Booklet Media can Increase Teachers' Knowledge and Skills regarding First Aid. Malahayati Nursing Journal, 5(3), 846–857. <a href="https://doi.org/10.33024/mnj.v5i3.8180">https://doi.org/10.33024/mnj.v5i3.8180</a>
- 9. Stasya, D. (2019). Understanding of Sebelas Maret University Medical Students, Class of 2018, regarding the Treatment of Anterior Epistaxis. Sebelas Maret University Faculty of Medicine, 1–6.
- 10. Utara, I. S., Research, A., Atala, N. I., Nabilah, R., Afiz, S. Al, Lubis, A. F., Lestari, I. C., Faculty, M., University, K., Sumatra, I., Faculty, D., University, K., Sumatra, I., & Article, H.

- (2024). Description of Al Manar High School Teacher's Knowledge Level About Epistaxis in Students Description of Al Manar High School Teacher's Knowledge Level About Epistaxis In Introduction Epistaxis or better known as nosebleeds is a condition where bleeding occurs. 23(1), 56–61.
  - 11. Nazirah, J., Putri, B. I., Maulina, N., Herlina, N., & Fauzan, A. (2024). Epistaxis Management. Journal of Medical and Health Students Malikussalih, 3(1), 55–67. <a href="https://ojs.unimal.ac.id/galenical/article/view/14853/pdf">https://ojs.unimal.ac.id/galenical/article/view/14853/pdf</a>
  - 12. Panacea, T. B. medical. (2019). Basic Life Support Handbook 13th EDITION (pp. 104–105). EGC Medical Book.