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## Health Education Wound Care On The Readiness Of First Aid To Students And Teachers Of SMP 47 Palembang

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### Abstract

Indonesia is the fifth country with the highest accident rate. Accidents can happen to anyone, anytime, and anywhere, including at school, which can also cause acute injuries such as lacerations or bruises. The severity of injuries resulting from accidents, apart from being determined by the potential for accidents, can also be determined by the level of knowledge and attitude in providing first aid. First aid in accidents (P3K) is aimed at providing emergency care or first aid for victims before further assistance is provided by other health workers. Objective: To determine the readiness of students at SMP N 47 Palembang to treat injuries resulting from accidents regarding their level of knowledge and attitude. first aid for PMR cadres at SMP N 47 Palembang. Research Design: This community service design uses a quasi-experiment prepost-test without control. The knowledge instrument for this community service uses the First Aid questionnaire to assess knowledge. The results of the reliability test were carried out on 10 students at SDN Rumpet Krung Barona Jaya with a score of 0.72 (good level of reliability). The normality test using the Shapiro-Wilk tests ( $p < 0.05$ ) stated that the data was not normally distributed so this study used the Wilcoxon test analysis. Analysis of this community service data uses a computerized statistical analysis program. Conclusion: There is an influence of health education for treating accident injuries on the level of first aid knowledge and attitudes among PMR cadres at SMP N 47 Palembang.

**Keywords:** Health Education, First Aid, Wound Care, Level of Knowledge and Attitude

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## INTRODUCTION

Basic Health Research (RISKESDAS) in 2018 showed an increase in the proportion of injuries at all ages which resulted in disruption of daily activities according to Province, 2007-2018 from 2017 it was 7.5%, in 2013 it was 8.2%, and in 2018 to 9.2%. Based on the characteristics, the highest proportion of injuries in the population aged 15-24 was (12.2%) male (11%) which was higher than female (7.4%) and the highest occupational status was school, namely (13 %). The three most common types of body parts affected by injury are lower limbs (67.9%), upper limbs (32.7%), and head (11.9%). The largest proportions of places where injuries occurred were the home and its environment (44.7%), roads (31.4%), workplace (9.1%), others (8.3%) and schools (6.5% ), (Indonesian Ministry of Health, 2018).

First aid in accidents (P3K) is intended to provide emergency treatment or first aid for victims before further assistance is provided by other health workers. Humans as social creatures should always assist other people who need it, including assisting. Meanwhile, increasing knowledge can be done by providing training or health education (Natalia Gabriel, Mulyadi, 2018).

First aid is usually given to people around the victim, including those who will contact the nearest health worker or someone who will help and ensure that lay helpers can help the

victim. This assistance must be given quickly and precisely because incorrect treatment can cause bad consequences, disability and even death to the victim (Dinkes, 2014). Human knowledge and behaviour greatly influence the speed and accuracy of providing first aid to victims (Aminah, 2017). Therefore, every human being needs to be given health education regarding first aid, especially for students. Health education is a way or method to provide knowledge, information and experience to students regarding health, especially for first aid and aims to achieve changes in maintaining healthy behaviour and environment, (Siwi Indra Sari, Wahyuningsih Safitri, 2018). Bad impacts or consequences of accidents that are not handled or lack of proper knowledge at the time of first aid can occur due to various obstacles such as not recognizing the risks, delays in diagnosing and so on.

Based on observations made using the interview method with students and teachers at SMP N 47 Palembang in Dukun District, it was found that there was still a lack of health education regarding wound care and there were still incidents of students falling or getting injured after sports. From the results of these interviews, it is known that SMP N 47 Palembang was the place taken for this research, because from the results of interviews conducted by researchers with several students with the question "If an accident occurs, what will you do? Will you immediately help the victim and treat his wounds?" Many students still answered no, for the reason that they did not know about first aid for injuries and also from information from several students, employees and teachers that there were still students who were injured either after sports or in the school environment.

## RESEARCH METHODS

This community service activity was carried out based on an assessment of existing health problems at SMP N 47 Palembang through interviews with the school principal and teachers. This community service activity was carried out in November 2023 in collaboration with the SMP N 47 Palembang school. Community service activities were carried out to overcome partner problems by providing health education and wound care skills training to 10 teachers and 30 UKS students at SMP N 47 Palembang. Planning stage The community service team and the school principal agree on the time for carrying out the activities. The principal, assisted by several teachers, invites students, especially those involved as UKS cadres at the school, to attend activities that will be held at previously agreed times. This community service design uses a quasi-experiment pre-post-test without control. The knowledge instrument for this community service uses the First Aid questionnaire to assess knowledge. The results of the reliability test were carried out on 10 students at SMP N 47 Palembang with a score of 0.72 (good level of reliability). The normality test using the Shapiro-Wilk tests ( $p < 0.05$ ) stated that the data was not normally distributed so this study used the Wilcoxon test analysis. This community service data analysis uses a computerized statistical analysis program.

This stage is carried out by preparing the materials and media that will be used. The material is made in the form of PowerPoint, pocketbooks, posters and also leaflets about handling head injuries and wound care. Next, this material is presented at community service implementation activities. Delivery of material begins with direction from the moderator. The moderator opens

the event and leads a group discussion to identify the initial knowledge and skills of teachers and students in understanding material about wound care and injury management.

Participants were given a First Aid questionnaire to assess knowledge before training in wound care management for teachers and students at SMP N 47 Palembang. Then participants were given the same questionnaire again. This stage is the presentation of material by the service team to the teachers and students who were present during the activity. The service team explained and demonstrated how to treat head injuries and how to treat wounds at school. This was followed by a live demonstration carried out by the teachers and students present. The service team accompanied them until the activity was finished. At the end of this stage, the participants present, both teachers and students, discussed again

At this stage, an assessment is carried out on the knowledge and skills of students and teachers regarding head injury treatment material, namely treatment of headaches, brain concussions, head fractures, seizures and wound care which has been provided through discussion and question and answer. The speaker asks students and teachers again about the material that has been given regarding the meaning, causes, signs and symptoms, complications, and treatment carried out when symptoms appear. The presenter, assisted by the facilitator, also holds small group or individual discussions to examine the extent to which the school, namely teachers, has dealt with head injuries that occur at school. The research population is a group of people, objects, or subjects that are the target of research (Suprajitno, 2016). The population in this study were students of SMP N 47 Palembang, with the total number of students in grades 1 to 3 being 569, so the researchers chose 30 PMR members consisting of 10 men, 20 women and 10 teachers.

The data collection tool used in this research is in the form of questions consisting of First aid wound readiness questions which will be filled in by respondents before and after attending health education. Questions for knowledge are taken from thesis knowledge questions (Vinda Kuswana Murti, 2019). The questions consist of 10 items, questions which if answered correctly then score 1 and if incorrectly score 0. The categories are 0-30% = poor (score  $\leq 5$ ), 31-60% = sufficient (score 6-10), and 61-100% = good (score  $\geq 10$ ). Health Education Health education will be provided to the intervention group regarding wound care, for the Extension Event Unit (SAP).

## **RESULTS AND DISCUSSION**

The results of the Wilcoxon test analysis in Table 1 state that the Negative Ranks or the difference (negative) between the knowledge of SMP N 47 Palembang students for the pre-test and post-test is 0, both in the N value, Mean Rank and Sum of Rank. A value of 0 indicates there is no decrease (reduction) from the pre-test to the post-test score. Positive Ranks or the difference (positive) between the knowledge results of SMP N 47 Palembang students for the pre-test and post-test showed 22 positive data (N) which means that 30 students experienced an increase in knowledge from the pre-test score to the post-test score. The Mean Rank or average increase is 10.50, while the number of Positive Ranks or Sum of Ranks is 210.00. Ties are the similarity of the pre-test and post-test scores for student

knowledge, namely 0 means there are no equal scores between the pre-test and post-test.

The output results of "test statistics" obtained a p-value (0.000) < 0.05, it can be concluded that hypothesis H0 is rejected, meaning that there is a difference between the knowledge of SMP N 47 Palembang students regarding Head Injury Management and Wound Care for the pre-test and post-test, So it can be concluded that there was an influence of training in handling head injuries and wound care for students at SMP N 47 Palembang. This activity was attended by 40 participants, consisting of 10 teachers and 30 students at SMP N 47 Palembang. Based on the activity evaluation, shows that teachers and students are very enthusiastic and interested in participating in health education activities. Participants were very interested in the material presented by the service team. It was proven that participants were active during discussion activities and were able to carry out wound care demonstrations. Participants can repeat the material that has been presented and carry out demonstrations again. The school hopes that this activity can be carried out in a sustainable manner considering that the students of SMP N 47 Palembang are cadres who are trained to help teachers at UKS.

Tabel 1. Hasil Uji Wilcoxon

		N	Mean Rank	Sum of Ranks
<i>Post-test dan Pre-test Pengetahuan Siswa</i>	<i>Negatif Ranks</i>	0	0.00	0.00
	<i>Positif Ranks</i>	20	10.50	210.00
	Ties	0		
	Total	20		
	Z	-3.942		
	P	0.000		
<i>Post-test dan Pre-test Pengetahuan Para Guru</i>	<i>Negatif Ranks</i>	15	8.00	120.00
	<i>Positif Ranks</i>	0	0.00	0.00
	Ties	5		

Primary Data, 2023

Knowledge is very important in forming attitudes and behaviour. A higher level of knowledge makes it easier for someone to respond to the needs around them, such as accidents and injuries at school which are a priority to prevent or anticipate. Education and training for teachers need to be provided to increase knowledge about injury management because teachers can practice directly or teach it back to students through the education and training they receive, especially regarding first aid for injuries (Pratama et al., 2020). Research conducted by Triyani & Ramdani (2020) on 40 students using pre-test and post-test regarding the influence of health education on knowledge and skills in first aid for injuries, results showed that there was an influence of health education on knowledge and skills as evidenced by the mean value before health education 46.67 and the mean value after 83.89 using the PRICES method.

Community service activities carried out through education and direct simulation for teacher and student participants are very effective in improving injury-handling skills in schools. In line with community service activities carried out by Oktaviani, Feri & Susmini (2020) on 20 students and the results obtained were an increase in pre-test scores from quite good (55%) to good post-test scores (90%) and participants became skilled in handling injury cases. Community service activities carried out through education and direct simulation for teacher and student participants are very effective in improving injury-handling skills in schools. In line with community service activities carried out by Oktaviani, Feri & Susmini (2020) on 20 students and the results obtained were an increase in pre-test scores from quite good (55%) to good post-test scores (90%) and participants became skilled in handling injury cases.



## CONCLUSION

The results of the Wilcoxon test analysis in Table 1 also state that the Negative Ranks or difference (negative) and N between the knowledge of the teachers of SMP N 47 Palembang for the pre-test and post-test is 15, the Mean Rank value is 8.00, and the Sum of Rank is 120.00. A score of 15 indicates a decrease (reduction) from the pre-test to the post-test score. Positive Ranks or the difference (positive) between the knowledge results of teachers and students at

SMP N 47 Palembang for the pre-test and post-test which shows 0 positive data (N) which means that no teachers experienced an increase in knowledge from the pre-test scores to post-test scores. The Mean Rank or average is 8.00, and the number of Positive Ranks or Sum of Ranks is 8.00. Ties are the similarity of the pre-test and post-test scores for teachers' knowledge, namely 5 means there are different scores between the pre-test and post-test. The output results of "test statistics" obtained a p-value ( $0.001 < 0.05$ ), it can be concluded that hypothesis H<sub>0</sub> is rejected, meaning that there is a difference between the knowledge of SMP N 47 Palembang regarding the handling of wound care for the pre-test and post-test, so it can be concluded the influence of wound care training for teachers at SMP N 47 Palembang

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