

Education on Accident Prevention at School in Madrasah Aliyah Negeri 2 Serang City

Wiwik Eko Pertiwi ^{1*}, Ela Nurdiawati ², Sri Mujiyanti ³, Octoberberry Julianto ⁴

^{1,2} Public Health Program Study, Universitas Faletahan, Serang, Indonesia

³ Nursing Science Program Study, Universitas Faletahan, Serang, Indonesia

⁴ Industrial Engineering Program Study, Universitas Faletahan, Serang, Indonesia

Article Info

Article history:

Received March 16, 2024

Revised April 7, 2024

Accepted May 10, 2024

Keywords:

Accident Prevention
Education

ABSTRACT

School is a place of work for teachers and a place to gain knowledge for students so it should be able to provide guarantees of safety, security and health. The aim of this research is to increase knowledge, understanding and build awareness target audience regarding the importance of efforts to prevent accidents at school for MAN 2 Serang City students. This research uses the methods of pretest and posttest. Research analysis using the t-test. The results of the research show that the p-value is 0.000, $p < \alpha$ so it can be concluded that there is a significant difference between knowledge before counseling and after counseling.

This is an open access article under the [CC BY-SA](https://creativecommons.org/licenses/by-sa/4.0/) license.



Corresponding Author:

Wiwik Eko Pertiwi
Universitas Faletahan
Email: wiek.ep@gmail.com

INTRODUCTION

Educational institutions, in this case schools at the primary, secondary, senior and higher education levels, are places that are not free from the risk of accidents. The risk of accidents is a consequence of the potential dangers that exist in the school environment, the interactions or activities of all school members as well as the presence of equipment/materials in the school and the unsafe conditions of the school environment. The risk of accidents occurring at school can occur to all school members, including teachers, education staff, students and everyone in the school environment.

The level of risk of accidents occurring at school is higher if the conditions and hazard factors at school are not well understood by all school members. The risk of accidents at school can be caused by various factors including the condition of the school, activities at school, the presence of equipment and materials used at school, the level of knowledge of the school community regarding hazard and risk factors, school policies related to safety aspect, supervision and safety culture in schools. In general, the safety culture that is understood by most people is the Occupational Health and Safety (OHS) in industry or companies, while the understanding regarding the implementation of OHS in schools by teachers and students is still lacking.

School is a place of work for teachers and a place to gain knowledge for students. Schools should provide guarantees for safety, security and health to all elements in the school. Having a guarantee of safety, security and health at school will provide comfort to teachers, students and all parties in teaching and learning activities at school. Therefore, implementing OHS in schools is very necessary to prevent and minimize the potential risk of accidents at school as well as prevent and control hazards so that they do not cause health problems at school.

Throughout 2021, there have been several cases of accidents affecting students at school, including a student who died during swimming practice at the Boarding School. Islamic Boarding School which is located in Nanggung Village, Kopo District, Serang Regency, fired at the end of November 2021 and at the end of 2021 there was an accident which caused one of the students suffer quite serious burns due to being splashed by a burning hand sanitizer. In early 2022, five rooms in the Darunnajah 4 Serang Islamic Boarding School caught fire, allegedly due to an electrical short circuit ^{[1], [2]}. These accidents give us an idea of how Occupational Safety and Health (OHS) issues are not only a concern for the business world, but must also be the main focus in the world of education. The implementation of OHS in the school is intended to increase student competence as an effort to prevent and deal with hazards or diseases that arise and minimize the occurrence of work accidents. Good implementation of OHS in the school will have an impact on security, order, safety and encourage increased concentration of teachers and students in the teaching and learning process. Therefore, participation and involvement of all parties in the school is needed to encourage the implementation of OHS in schools.

The implementation of OHS in schools can begin with activities aimed at increasing awareness, knowledge and other activities that educate the entire school community about OHS. Based on research results, it is stated that more than 90% of Madrasah Aliyah students have experienced accidents at school, including slipping, spraining and falling down stairs. Slips at school were the most common type of accident experienced by respondents (50.2%), followed by sprains (16.9%) and 12.7% of respondents fell from stairs ^[3]. Most of these accidents occur in schools that use a boarding system, including Madrasah Aliyah Negeri 2 Serang City. MAN 2 Serang City is a school with a boarding system of 1 year for students who choose sciences, social dan language majors and 3 years for students who choose religious majors. Boarding school is a school system with dormitories for students. With this system, students spend most of their time at school. Therefore, the potential risk of accidents occurring is higher in schools that adhere to the system boarding.

METHOD

The evaluation design for this activity uses a method pretest and posttest to determine the level of knowledge of the target audience regarding work safety aspects in schools. Evaluation of activities was also carried out using a survey method approach to see directly the work safety program assistance activities in schools.

RESULTS

Table 1 Student Knowledge Before Education

	Rates	Min-Max	SD
Student knowledge berfore education	9,83	9-10	0,388

Table 2 Student Knowledge After Education

	Rates	Min-Max	SD
Student Knowledge After Education	9,83	9-10	0,388

Table 3 Differences between students before and after education

	Rates	Difference	CI	p-value
Student knowledge Before Education	7,96	1,870	2,363-1,376	0,000
Student knowledge After Education	9,83			

Based on the results of the questionnaire that was given to all students at MAN 2 Serang City, it was found that there was a difference in knowledge before and after the counseling, namely the students' knowledge before the counseling was 7.96 with a minimum value of 4 and a maximum of 9 and a standard deviation of 1.186. Meanwhile, the students' knowledge after counseling was 9.83 with a minimum score of 9 and a maximum of 10 and a standard deviation of 0.388. This shows that there was an increase in students' knowledge before and after health education regarding accident prevention education at school. There is a significant difference in students' knowledge before and after counseling about accidents at school by 1,870. The results of the t-test show a p value of 0.000, $p < \alpha$ so it can be concluded that there is a significant difference between knowledge before and after education.

Several studies show that providing counseling/education will increase a person's knowledge. Counseling/education can be carried out through various methods and media, such as using lecture methods, videos, mentoring or direct training to respondents. The media used can also vary, including leaflets, books, films and others. All research proves that this counseling/education significantly increases respondents' knowledge. Respondents who had received education/counseling experienced an increase in their scores after t-test and posttest ^{[4], [5], [6], [7], [8]}

CONCLUSION

There was an increase in knowledge after being provided with counseling/education about efforts to prevent accidents in schools. After there has been an increase in knowledge, it is hoped that awareness will grow so that it can change the behavior of students in an effort to prevent accidents at school and can minimize dangers so as to avoid accidents that can occur in the school environment.

REFERENCES

- [1] Kabar Banten.com, “Seorang Santri di Cinangka Kabupaten Serang Meninggal Saat Latihan Renang,” Kabar Banten.com.
- [2] A. Arbi, “Tahun Ini, Angka Kecelakaan Kerja di Banten Meningkat,” Serang, 2016.
- [3] W. E. Pertiwi, “Hubungan Antara Pengetahuan, Sikap Dengan Kejadian Kecelakaan Kerja Pada Siswa Boarding School Dan Pondok Pesantren Di Kota Serang,” *JOURNAL OF BAJA HEALTH SCIENCE (JOUBAHS)*, vol. 2, no. 02, pp. 129–137, Aug. 2022, Accessed: Mar. 24, 2023. [Online]. Available: <http://ejournal.lppm-unbaja.ac.id/index.php/adkes/article/view/2105>
- [4] D. L. HANIFAH, “Perbedaan Pengetahuan Remaja Sebelum Dan Sesudah Diberikan Penyuluhan Gizi Seimbang Dengan Menggunakan Media Video Di Smp Negeri 2 Kartasura,” Surakarta: Unimus Surakarta, 2015.
- [5] N. Lumongga, “Pengaruh Penyuluhan dengan Metode Ceramah dan Diskusi Terhadap Peningkatan Pengetahuan dan Sikap Anak tentang PHBS di Sekolah Dasar Negeri 065014 Kelurahan Namogajah Kecamatan Medan Tuntungan. Medan: Universitas Sumatera Utara.,” *Jurnal USU*, 2013, [Online]. Available: <https://jurnal.usu.ac.id/index.php/kpkb/article/view/2085/1127>
- [6] E. I. Rohima and N. Marthia, “Penerapan Program Penyuluhan Pada Pembinaan Perilaku Hidup Bersih dan Sehat (PHBS) pada Anak Masa Puber di Tingkat Sekolah Dasar,” *INFOMATEK*, vol. 20, no. 1, 2018, doi: <http://dx.doi.org/10.23969/infomatek.v20i1.879>.
- [7] F. A. Saputra, “Efektivitas media video terhadap peningkatan pengetahuan dan perubahan sikap dalam penyuluhan perikanan budidaya,” 2016.
- [8] Z. Ubaidillah, B. Santosa, and A. Rahmawati, “Gambaran Pengetahuan Dan Sikap Remaja Putri Kelas XI Terhadap Pencegahan Anemia Sebelum Dan Sesudah Penyuluhan di SMA Filial Negeri 1 Gubug,” *Jurnal Kebidanan*, vol. 4, no. 1, pp. 25–30, 2015, doi: [10.26714/jk.4.1.2015.25-30](https://doi.org/10.26714/jk.4.1.2015.25-30).