

THE EFFECT OF HEALTH EDUCATION ON ABILITY LEVELS IN BURN FIRST AID IN AL-LATHIFAH ISLAMIC BOARDING SCHOOL

Andres Safitry¹, Janes Jainurakhma², Zulfikar Muhammad³

^{1,2,3}Program Studi Keperawatan Program Sarjana, Sekolah Tinggi Ilmu Kesehatan Kepanjen Malang, Jawa Timur

Email: andressafitry97@gmail.com; janes_j@stikeskepanjenpembkabmalang.ac.id; zoemoeh17@gmail.com

ABSTRACT

Burns can occur due to negligence in everyday life or an accident both at home, industry and even due to mass accidents. With so many people still making mistakes or don't know how to do first aid right. The purpose of this study was to determine whether there was an effect of health education using simulation methods with booklet media on the ability of students to provide first aid to burn victims at Al-Lathifah Islamic Boarding School. This type of research uses experimental research designs with one group pretest-posttest design approach. The sampling technique uses purposive sampling with a sample of 35 respondents. The research instrument used observation sheets which were then analyzed by the Wilcoxon test. From the research results, the mean at pre-test is 1.63 and after the post-test is increased, the mean is 13.66. Based on the Wilcoxon test, a significant P-value of <0.001 is obtained, which can be interpreted as influencing before and after health education is given. With the majority of respondents who were teenagers, health education using simulation methods with a media booklet for 60 minutes was able to influence the level of ability in first aid burns. Giving first aid skills to the right burn victims in the Islamic boarding school environment is very much needed, to prevent defects in the integrity of the skin due to burns.

Keywords: health education, simulations, booklets, first aid burns, ability levels

INTRODUCTION

Burns are damage to body tissues on the skin and others caused by the activities of someone that can potentially occur anywhere and unexpected (Lasut, Mulyadi, & Killing, 2018), in the household, industry, traffic accidents or even natural disasters, as a result, heat sources such as fire, hot water, chemicals, electric current, or radiation

(Hardisma, 2014; Lasut, Mulyadi, & Killing, 2018). Good and proper management of burns can reduce disability or further impact (Lasut, Mulyadi, & Killing, 2018), lack of education and public knowledge about proper assistance to burns that occur by handling the burns themselves which results in induration or precisely aggravate the

wound itself. Thus the need for health education to improve the community's ability to handle or carry out first aid burns (Savitri, 2017), adequate information delivery is able to motivate, direct, and reduce errors in first aid burns (Mardhiah, Abdullah, & Hermansyah, 2015; Permatasari, 2017), one of which is the method of demonstration with a media booklet which is quite effective in improving one's skills (Itsna et al., 2018).

Based on data from the ABA (American Burn Association) in Sari, et al (2018) in 2010-2015, the increase in the United States alone is estimated to be more than 163,000 cases in 2015 to 558,400 cases, where 70% of patients are men with an average around 30 years old, 18% of children are 5 years old and 12% of cases are over 60 years old. Burns with an area of 10% Total Body Surface Area (TBSA) of 7%. The highest causes are due to fires (44%) and the most frequent incidence rate at home (68%). In Indonesia, the prevalence of burns in 2013 was 0.7% and has decreased by 1.5% compared to 2008 which was 2.2%. Provinces with the highest prevalence were Papua and Bangka Belitung at 1.4%, while for East Java the prevalence was 0.7% (Aryati, Setiawan, Ariani, & Hastuti, 2018)

Prevention in East Java, in RSUD Dr. Soetomo Surabaya the number of cases in children who have been treated as many as 106 cases or 48.4% of all plastic surgery sufferers treated are 219 cases, the number of deaths due to burns is 28

fatalities or about 26.4% of all burn patients treated, deaths usually occur in burns with an area of more than 50% or burns that are accompanied by injury to the respiratory tract and 50% occur in the first 7 days of treatment. This is because the number of children and the elderly is quite high and due to the inability of children to avoid fires, the age of children and the elderly are victims with the highest death rates due to burns that occur in Indonesia (Saputro, 2017), anatomically they have thin and brittle skin if when in direct contact with a source of heat in a short time can cause burns (Smeltzer, 2010). Fire events in 2014 there were 896 cases of fires both in residential areas, buildings. And the most common cause of fire is short circuit or short circuit in electricity by 65.5% or as many as 587 cases of fire as many as 26 cases or 2.9% due to explosion of LPG gas cylinders or liquefied petroleum gas and 283 cases or 31.6% fires occur due to human negligence, the production process, and others.

Fire incidents in Islamic boarding schools often occur in various places such as in Nurul Hayat Tuban Islamic Boarding School in 2016. These events often cause casualties or not many female and male students and even board administrators suffer burns (Ayu & Rhomadhoni, 2018). Based on the results of a preliminary study on October 7, 2019, the burn incident that had occurred at the Al-Lathifah Islamic boarding school, out of the 7

students interviewed, some had suffered burns and some had seen family members or friends who were burnt but they still do not know how to first aid burns properly and correctly and students who are in Al-Lathifah Islamic boarding school have a risk and are exposed to mild to moderate burns such as being exposed to hot oil and hot water and electric irons themselves in Al-Lathifah Islamic boarding school. Researchers also conducted a brief interview with the cleric and cleric at the Al-Lathifah Islamic boarding school. They said there was no health education by Public Health Center officials or nursing students and they said that during this time Santriwati was exposed to hot oil or fire and caused burns, the first aid is done by giving or applying toothpaste to the burn. The general public does not understand how the first aid in this burn like applying toothpaste, soy sauce, tomato paste and potato slices (Sari, et al. 2018).

The community has a very important role because good public knowledge about the proper management of burns is a major factor in determining the safety of a person or burn victim (Anneahira, 2012). The purpose of this study was to analyze the effect of health education using simulation methods and booklet media on the ability of Santriwati (female students at Islamic boarding school) in first aid burns.

METHOD

This study uses a one-group pretest-posttest design which is a pre-experimental study carried out in one group without a comparison group, by observing before and after health education using a simulation method with the Booklet media on the level of ability of first aid burns 35 Santriwati in Pondok Al-Lathifah Islamic Boarding School. The study used a purposive sampling approach, with criteria for being willing as respondents and participating in research activities from beginning to end. The intervention was carried out for 60 minutes, with 8 observers and facilitators. Data analysis using the Wilcoxon test. This study conducted informed consent at the beginning of the study, using anonymity and confidentiality. This study was declared ethically feasible after conducting an ethics test at STIKes Kepanjen with letter number No. 019 / S.Ket / PK / STIKesKPJ / I / 2020.

RESULT

Table 1. Distribution of respondent characteristics

No	Age	Gender	(%)
1.	10 – 12 years	Female	11 %
2.	13 – 15 years	Female	43 %
3.	16 – 18 years	Female	46 %
Total		35	100%

(Source: Primary Data Research questionnaire sheet at Al-Lathifah Islamic Boarding School)

Table 2. Distribution of respondent characteristics based on education level

No.	Education	Percentage
1.	No School	11 %
2.	Elementary school	6 %
3.	Junior high school	37 %
4.	Senior high school	46 %
Total		100%

(Source: Primary Data Research questionnaire sheet at Al-Lathifah Islamic Boarding School)

Table 3. Distribution of respondents' characteristics based on ethnicity

No.	Ethnicity	Percentage
1.	Javanese	57 %
2.	Madurese	40 %
3.	Others	3 %
Total		100%

(Source: Primary Data Research questionnaire sheet at Al-Lathifah Islamic Boarding School)

Table 4. Distribution of respondent characteristics based on experience

No.	Experience	Percentage
1.	Never had health education	94 %
2.	Have had health education	6 %
Total		100%

(Source: Primary Data Research questionnaire sheet at Al-Lathifah Islamic Boarding School)

Table 5. Frequency distribution of students' ability to do first aid burns before and after

health education is given using simulation methods with booklet media

	N	Mean	Std. Deviantion	M in	M a x
Pretest	35	1.63	598	1	3
Posttest	35	13.66	1.027	12	16

(Source: Primary Data Research questionnaire sheet at Al-Lathifah Islamic Boarding School)

Table 6. Wilcoxon analysis of students' ability to do first aid burns after being given health education using simulation methods with booklet media

	N	Median (minimum-maximum)	Sig.
Ability before being given health education	35	1.63 (1-3)	< 0.001
Ability after being given health education	35	13.66 (12-16)	

(Source: Primary Data Research Observation Sheet)

The computerized test results from Table 6 show a significant value of <0.001. Thus H_a is accepted, in other words, there is an influence after being given health education using a simulation method with a booklet media on the level of ability of first aid

burns to santriwati at the Al-Lathifah Islamic Boarding School.

DISCUSSION

According to Adinda (2018), said several factors affect one's ability, namely heredity, environment, maturity (age), formation (education), interests and talents, and freedom (mindset). According to Bloom in Rizqina, et al (2017) 6 abilities are consisting of knowledge, understanding, application, analysis, synthesis, and evaluation.

The results showed 100% of respondents were teenagers, 57% were from the Javanese environment, and 94% of respondents had never received health education about first aid burns. Health education is needed because as an effort made so that someone adds knowledge, attitudes and increases skills or abilities following the values of health, so education itself is providing information and adding insight to the community (Sari, et al. 2018). The use of booklet media can make it easier for respondents to remember and the information obtained from the booklet is more detailed and clear because it can review the message or information obtained (Prawiti & Dyah, 2017).

Health education using simulation methods can enrich knowledge, attitudes, and skills in doing first aid burns and also with the simulation process itself respondents can more quickly understand because there is already a picture of how to do first aid burns properly can

develop creativity, enthusiasm and respondent motivation (Yusuf, 2018). The ability of an individual is different, which means the capacity of an individual in carrying out various tasks in a job (Rizqina, 2017). Abilities are things that can be done, known, understood and mastered. Own abilities can be created from the learning received as well as from the experiences of individuals. According to Adinda (2018), the ability of a person is different for each individual due to several factors that influence it, namely heredity, environment, maturity (age), formation (education), interests and talents and freedom. Some domain factors are cognitive, affective and psychomotor. The cognitive domain is related to one's intellectual abilities or abilities in learning science. However, based on the available reality, the most influential factor is the level of education is very important because it is the basis for increasing abilities and knowledge through learning and practice. In addition to education, the experience is also very influential in the ability of individuals themselves. Experience is not only obtained from education but can be obtained directly or have experienced the condition (Rizqina, 2017).

The impact of the lack of information about health, especially on the students when experiencing burns, does not know how to help burns properly so that it can lead to further complications. The need to increase students' awareness and provide easy facilities for learning first

aid. It should be noted that first aid when an accident or disaster occurs is needed as soon as possible and is very urgent because health workers need time to go to the victim at the scene (Rifai and Ilyas, 2019).

Without realizing it with the lack of knowledge and experience of first aid, especially burns, students often panic and do not know what to do during an emergency. So because of the fault of first aid, it can aggravate the situation and condition of the victim (Kumoratih. 2010). According to Balqis, et al (2016) Untreated burns will cause complications such as infection, and bleeding. First aid in a burn can help the healing process of the burn and prevent secondary infection and provide an opportunity for the remnants of epithelial cells to proliferate and cover the surface of the burn.

The provision of health education using an effective booklet is given to increase the knowledge of the respondents and the provision of simulations will improve the ability of students to do first aid burns. The treatment of these respondents is a provision of information or health education to students from health workers, intending to increase the knowledge, attitudes, and abilities of students in performing first aid burns (Naziyah, et al., 2018, Rifai, 2019; Saputro, 2017). Providing health education to students can improve the ability of students to do first aid burns. The treatment of these respondents is a provision of information or health education to

students from health workers, intending to increase the knowledge, attitudes, and abilities of students in performing first aid burns (Saputro. 2017).

Health education about first aid burns to santri in the boarding school environment is very important, because, with santri understanding and being able to improve the ability to do the first aid burns that have been given by health workers, santri can do help quickly and accurately. That way the healing of burns will be much better and the process of healing the wound will be faster, and reduce disability, especially in skin tissue.

CONCLUSION

Health education with simulation methods and booklet media can improve knowledge, attitudes, and abilities motorically, with the characteristics of adolescent students, especially the ability in first aid burn victims. Simulations and booklet media are easier to understand, so students can quickly master the material presented and the results of health education are optimal, especially in the management of pre-hospital burns in the boarding school environment. Prompt and prompt management of burns can prevent disability and even death in society in general.

REFERENCES

Adinda, W. N. (2018). Upaya Meningkatkan Kemampuan Kognitif Anak Usia Dini

- Kelompok B Melalui Kegiatan Senam Otak Di Ra Rahmah Elyunusiah II Medan T.A 2017/2018. Universitas Islam Negeri-Medan: Skripsi.
- Anneahira. (2012). *Pertolongan Pertama Pada Luka Bakar*. Jakarta: CV. Rajawali.
- Aryati, Y. V. P., Setiawan, I., Ariani, N. R., & Hastuti, D. D. (2018). Pengaruh Gel Kombinasi Ekstrak Kulit Semangka (Citrullus lanatus (Thunb .)) dan Ekstrak Kulit Manggis (Garcinia Mangostana L .) terhadap Penyembuhan Luka Bakar pada Kelinci. *Journal of Pharmaceutical Science and Clinical Research*, 2, 117–125. <https://doi.org/10.20961/jpscr.v3i2.22534>
- Ayu, F., & Rhomadhoni, M. N. (2018). Hubungan Tingkat Pengetahuan Santri dengan Tindakan Kesiapsiagaan dalam Penanggulangan Bencana Kebakaran di Pondok Pesantren Al-Fitrah Kedinding, Kota Surabaya. *Prosiding Seminar Nasional GERMAS 2018*.
- Balqis, Ummu, dkk. (2016). Efikasi Mentimun (Cucumis Sativus L.) Terhadap Percepatan Penyembuhan Luka Bakar (Vulnus Combustion) Derajat IIB Pada Tikus Putih (Rattus Norvegicus). Vol.10 No. 2. *Jurnal Medika Veterinaria*.
- Clevo. (2012). *Buku Cerdas P3K: 101 Pertolongan Pertama Pada Kecelakaan*. Yogyakarta: Niaga Swadaya.
- EMSA. (2013). *Emergency First Aid Guidelines For California Schools*. Diambil dari: http://www.emsa.ca.gov/tech_committee
- Hardisma. (2014). *Gawat Darurat Medis Praktis*. Yogyakarta: Gosyen Publisher.
- Itsna, I. N., Hapsari, W., & Indrastuti, A. (2018). Efektifitas pendidikan kesehatan cuci tangan pakai sabun (ctps) dengan metode demonstrasi dan booklet pada siswa kelas VI SDN Kalisapu 04 Slawi. *Jurnal Ilmu Kesehatan (JIK) Bhamada* 9 (1), 8-8.
- Lasut, N. G. C., Mulyadi, & Killing, M. (2018). Pengaruh Pendidikan Kesehatan Perawatan Luka Akibat Kecelakaan Terhadap Tingkat Pengetahuan Dan Sikap Pertolongan Pertama Pada Siswa Kelas X Di Smk Negeri Manado. *Ejournal Keperawatan*, 6(1), 1–7.
- Mardhiah, A., Abdullah, A., & Hermansyah. (2015). Pendidikan Kesehatan Dalam Peningkatan Pengetahuan, Sikap Dan Keterampilan Keluarga Dengan Hipertensi - Pilot Study Health Education In The Improvement Of Knowledge, Attitude And Practice In The Family With

- Hypertension – A Pilot Study
Hipertensi Data D. Jurnal Ilmu Keperawatan Vol.3, No.2.
- Mubarak. (2009). Promosi Kesehatan. Yogyakarta: Graha Ilmu.
- Nofiana, Mufida. (2016). Efektivitas Penerapan Metode Diskusi-Simulasi Terhadap Keterampilan Mengajar Mahasiswa Calon Guru Biolog. Vol.4 No.2. Jurnal Edukasi Matematika dan Sains.
- Notoatmodjo.S. (2012). Promosi Kesehatan dan Ilmu Perilaku. Jakarta: Rineka Cipta.
- Nugroho, Taufan, dkk. (2016). Teori Asuhan Keperawatan Gawat Darurat. Yogyakarta : Nuha Medika.
- Panacea, T. B. (2013). Basic Life Support. Buku Panduan, Ed. 13, EGC.
- Pratiwi, Y. F. & Dyah, I. P. (2017). Efektivitas Penggunaan Media Booklet Terhadap Pengetahuan Gizi Seimbang Pada Ibu Balita Gizi Kurang Di Kelurahan Semanggi Kecamatan Pasar Kliwon Kota Surakarta. Jurnal Kesehatan, Vol. 10 No. 1.
- Puastiningsih, S. (2018). Pengaruh Pendidikan Kesehatan Dengan Model Pembelajaran Think Pair Share terhadap Pengetahuan Dan Sikap Anak Usia Sekolah Dalam Konsumsi Sayura-Experimental. Skripsi thesis, Universitas Airlangga.
- Rahayuningsih. (2012). Asas - Asas Penelitian Behavioral. Yogyakarta: UGM Press.
- Rini, I. S., Suharsono, T., Ulya, I., Suryanto, N., D. K., & Fathoni, M. (2019). Pertolongan Pertama Gawat Darurat PPGD. UB Press.
- Rizqina, Z. A. (2017). Pengaruh Budaya Kerja, Kemampuan, Dan Komitmen Kerja Terhadap Kepuasan Kerja Pegawai Serta Dampaknya Terhadap Kinerja Badan Pengusahaan Kawasan Perdagangan Bebas Dan Pelabuhan Bebas Sabang (Bpks). Vol. 1 No. 1. Jurnal Magister Manajemen,
- Safitri, N. (2014). Penerapan Metode Simulasi Dengan Menggunakan Media Benda Konkret Pada Materi Jual Beli Untuk Meningkatkan Hasil Belajar Siswa Kelas Iii Di Mi Mambaul Ulum Pakis Malang. Thesis: Universitas Islam Negeri (UIN)-Malang.
- Saputro, W. W. (2017). Pengaruh pendidikan kesehatan dengan metode simulasi terhadap pengetahuan dan sikap tentang pertolongan pertama pada kecelakaan di Smk Negeri 1 Mojosongo Boyolali. Skripsi, Thesis, Universitas Muhammadiyah Surakarta. Diakses di

<http://eprints.ums.ac.id/>.

Sari, S. I., Safitri, W., & Utami, R. D. L. P. (2018). Pengaruh Pendidikan Kesehatan Metode Demonstrasi Terhadap Praktik Pertolongan Pertama Luka Bakar pada Ibu Rumah Tangga di Garen RT.01/RW.04 Pandean Ngemplak Boyolali. Jurnal Kesehatan Kusuma Husada.

Savitri, S. H. (2017). Pengaruh Pendidikan Kesehatan Terhadap Pengetahuan Tentang Pertolongan Pertama Pre Hospital Keluarga Dalam Penanganan Luka Bakar Di Desa Sidodadi Kecamatan Puring. Skripsi, Sekolah Tinggi Ilmu Kesehatan Muhammadiyah Gombong.

Smeltzer, S. &. (2010). Buku Ajar Keperawatan Medikal Bedah Brunner Sunddard Vol. 2 edisi 8. Jakarta: EGC.

Yusuf, Maulana, dkk. (2018). Penerapan Metode Simulasi Untuk Meningkatkan Keterampilan Social Siswa Dalam Pembelajaran IPS. VOL. 5 No. 2. Jurnal Tunas Bangsa.