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Effects Of Health Education On Handwashing With Soap In Children Aged 10-12 Years

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ABSTRACT

The behavior of washing hands using soap that is not true is still high in children, so it is necessary to increase knowledge and awareness by taking action on health education, where children are the group most vulnerable to disease as a result of unhealthy behavior. This study aims to determine the effect of health education on handwashing behavior using soap in children aged 10-12 years Bulukumba Regency. The population in this study were students aged 10-12 years, as many as 61 students. The sampling technique used is simple random sampling. This study uses a quasi-experimental design with a non-equivalent control group pre-test and post-test approach. The data collected were analyzed by the Wilcoxon test. Based on the Wilcoxon statistical test results obtained p-value 0.027 (<0.05) which indicates there is a significant value. So it can be concluded that there is an influence of health education on the behavior of washing hands using soap in children aged 10-12 years. The advice from researchers is to provide information and education about the importance of washing hands using soap, to all levels of society and for the future health education can be increased again.

Keywords: Health Education, Hand Washing, Child Behavior

INTRODUCTION

The hands are the parts of our body that are most polluted with dirt and germs. When holding something and shaking hands, of course there are germs attached to the skin of our hands. Worm eggs, viruses, germs and parasites that contaminate hands, will be swallowed if we do not wash hands before eating and handling food. Through our own hands all the germs can also enter the mouth, nostrils, eyes or ear canal, because the habit of inserting a finger into the nose rubs the eye, digging the ear canal, not at the right time ie when the hands are dirty and not washed (Purwandari, Ardiana & Wantiyah, 2013). Washing hands with soap is an easy method and does not need to be expensive. Therefore, getting used to washing hands using soap is the same as teaching children and the whole family to live healthy from an early age. Soap can clean the dirt

and kill germs, because without soap, the dirt and germs are still left in the hands (Atikah and Eni, 2012).

Washing hands with soap is one of the pillars of the Community-Based Total Sanitation (STBM) strategy, which is contained in the decree of the Indonesian Minister of Health No. 852 / SK / Menkes / IX / 2008. It was also found that washing hands with soap can reduce ARI and bird flu by up to 50%, even recommended by the Ministry of Health to prevent the spread of the new H1N1 virus (Indonesian Ministry of Health, 2011). The latest figures from the United Nations International Children's Emergency Fund (UNICEF) and the World Health Organization (WHO) indicate that in 2013 more than 340,000 children under five, nearly 1000 per day died of diarrheal disease due to lack of clean water, basic sanitation and hygiene. In Indonesia, diarrhea is still the main cause of child mortality, which is 31% among children under one year of age and 25% of deaths of children aged between one to four years, by washing hands can save up to 2000 lives in Indonesia (Unicef Indonesia, 2014).

The celebration of World Handwashing Day is an opportunity to emphasize the role of hand washing using soap in the prevention of potentially deadly common diseases such as diarrhea, and various countries around the world hold activities to promote hand washing using soap (Unicef Indonesia, 2014). The Department of Infectious and Tropical Diseases in London, England, said washing hands with soap can reduce mortality from diarrheal diseases and acute respiratory infections (ARI) by 42-47%. Through this study, hand washing is predicted to prevent 1 million child deaths worldwide (BIMKES, 2013). The behavior of washing hands using soap that is not true is still high in children, so it is necessary to increase their knowledge and awareness of the importance of washing hands using soap that can be applied in daily life by carrying out health education measures. Children are the group most vulnerable to disease as a result of unhealthy behavior (Hadiatma & Arifah, 2011).

School-age children are the main assets or capital for future development that needs to be maintained, improved and protected in their health. Schools are a strategic place in children's lives, so schools can function appropriately as one of the institutions that can help and play a role in optimizing the growth and development of school-age children with promotive and preventive efforts (Sitorus and fransisca, 2014). Children aged 10-12 years are more able to work together compared to children under the age of 10-12 years, because they are often less focused and play a lot. Among school-age children that

the proportion of children affected by diarrhea ranges from 2 to 20%, and the ISPA rate in school-age children is quite high at 20% or higher in all provinces. This figure shows the impact on the presence of children in school and reduces the capacity and learning achievement of a child (Joy & Rina, 2010). Knowledge of the importance of cleanliness and its good implications can affect personal hygiene practices. Health education is a dynamic process of behavior change, with the aim of changing human behavior which includes components of knowledge, attitudes or actions related to the goals of healthy living both individually, in groups and society, as well as using existing health service facilities appropriately and appropriately (Triwibowo & Pusphandani, 2015).

Based on research conducted by Listyorini, Irdawati and Zulaicha (2012) in the working area of the Pajang Surakarta Community Health Center, it was found that 17 children were already good at washing their hands, 41 children doing hand washing quite well and 23 children were still lacking in washing their hands. There were 29 children who had diarrhea 1 time, and 7 children had diarrhea 2 times. Based on research conducted by Santi (2015), prior to being given health education as many as 22 children had poor hand washing behavior, but after being given health education as many as 24 children had sufficient hand washing behavior. Based on preliminary surveys conducted by researchers in observations at SDN 323 Tokombeng there were 10 children who appeared to go snack, three children washed their hands using running water, but they only rubbed their palms in addition to not using soap, two children washed their hands using soap, but only on the palms and five other children did not wash their hands.

Initial data obtained the number of students obtained from 323 Tokombeng elementary school in the 2015/2016 academic year with 26 students in grade I, 22 in class II, 25 in class III, 25 in class IV, 18 in class IV. for class V as many as 19 people, for class VI as many as 20 people. So the total number of students at SDN 323 Tokombeng is 130 people. The number of children aged 10-12 years is 61 people (SDN 323 Tokombeng). Based on observations made by researchers at SDN 323 Tokombeng and SDN 182 Dannuang, researchers are interested in researching at SDN 323 Tokombeng because they have adequate facilities for research where there are facilities such as: water faucets, water, soap and hand towels that are always provided by teachers at SDN 323 Tokombeng, while in SDN 182 Dannuang there are no adequate facilities.

Based on several facts and matters described, the problem is the background of researchers to find out the behavior of washing hands in children by conducting research "The effect of health education on hand washing behavior using soap in children aged 10-12 years at SDN 323 Tokombeng, Bulukumba Regency.

MATERIAL AND METHODS

This type of research is a quantitative study using a quasi-experimental design with a non equivalent control group pre-test and post-test approach that is not randomized so that there is a risk of an imbalance of sample characteristics between the treatment group and the control group, determining the appropriate inclusion criteria can minimize the imbalance between the characteristics of the groups (Kelana, 2011). The population in this study were students aged 10-12 years at SDN 323 Tokombeng, as many as 61 students. The sampling technique in this study is the Probability sampling technique with a simple random sampling approach where the method of simple random sampling with the assumption that certain characteristics of the population are not considered in the study (Kelana, 2011).

Of the 38 respondents there were 19 respondents in the intervention group and 19 respondents in the control group. The research instrument used for the intervention group in the pre and post test was the observation sheet and when health education was SAP (Counseling Event Unit) and leaflets. The research instrument used for the control group in the pre and post test was the observation sheet. If done is given a value of 1 and if not done is given a value of 0, there are 8 steps on how to wash hands using soap. Bivariate analysis is an analysis to find out the interaction of two variables, both in the form of comparative, associative and correlative (Saryono, 2011). Bivariate analysis in this study was conducted to determine the effect of health education on the behavior of washing hands using soap in children at SDN 323 Tokombeng. Data obtained through observation sheets were analyzed using the Paired T Test with the alternative Wilcoxon Test.

RESULTS

Table 1. Frequency Distribution of Intervention and Control Group Respondents

Characteristic	Group Intervention		Group Control	
	n	(%)	n	(%)
Age				
10 Year	1	5,3	12	63,2
11 Year	13	68,4	5	26,3
12 Year	5	26,3	2	10,5
Gender				
Male	9	47,4	12	63,2
Female	10	52,6	7	36,8
Amount	19	100	19	100

Based on table 1, the frequency distribution of the intervention and control group respondents at SDN 323 Tokombeng in May-June 2016 showed that of the 19 respondents in the intervention group studied most were found at the age of 11 years as many as 13 people (68.4%), and the least age was found at the age of 10 years, namely 1 person (5.3%). In the sexes the number of women in the intervention group is greater than that of men. Of the 19 respondents in the control group studied the most were found at the age of 10 years as many as 12 people (63.2%), and the least age was found at the age of 12 years ie 2 people (10.5%). In the sexes the number of men in the control group is greater than that of women.

Table 2. Distribution of Hand Washing Behavior Scores Using Soap pre and post test at SDN 323 Tokombeng

Variabel	n	Median (Min-Max)
Pre Hand Washing Behavior Test	38	5,00 (0 - 8)
Post Hand Washing Behavior Test	38	6,50 (0 - 8)

From Table 2 based on the distribution above shows that the pre-test score of hand washing behavior with a median value of 5 has increased in the score of hand washing behavior after an intervention with a median of 6.5.Analisa Bivariat

Table 3. Distribution of Health Education Effects on Handwashing with Soap in SDN 323 Tokombeng

Variabel	n	Median (Min-Max)	*P Value*
Pre Hand Washing Behavior Test	38	5,00 (2 - 8)	0,027
Post Hand Washing Behavior Test	38	6,50 (0 - 8)	

Table 3 shows that the post-test score of hand washing behavior with a median of 6.50 was higher than the score before the intervention was given. This shows that there is a

change in hand washing behavior after administration of the intervention, and based on the results of the Wilcoxon statistical test, a p value of 0.027 (<0.05) indicates a significant value. So it can be concluded that there is an influence of health education on the behavior of washing hands using soap in children aged 10-12 years at SDN 323 Tokombeng.

DISCUSSION

According to Atikah and Eni (2012); Anik (2013) three of them explained that washing hands is very useful to kill germs on the hands. Based on the theory put forward by Triwibowo & Pusphandani (2015) that health education is a dynamic process of behavior change, with the aim of changing human behavior which includes components of knowledge, attitudes or actions related to healthy life goals both individually, groups and society.

The results of this study are in line with the results of research conducted by Nikson Sitorus & Luci Fransisca (2014) with the research title "Effect of Health Education on Knowledge and Attitudes of Handwashing with Soap on 157 Elementary School Students in Palembang City in 2014" using pre-experimental research designs with one-group pre-test post-test design, the test used is the Kolmogorov Smirnov test with the results of research showing there is an effect of health education on the level of knowledge of SDN 157 students about washing hands with soap (p: 0.012 <0.05) and there is an influence of health education on the attitude of washing hands with soap in SDN 157 students (p: 0.001 <0.05). In addition, human behavior does not arise by itself, but due to stimulation (stimulus) both within oneself (internal) and outside the individual (external). And based on research conducted by Santi Septian Ningsih (2015) in her study entitled "The Effect of Health Education on Handwashing on Handwashing Behavior in Children in Muhammadiyah Wirobjaran III Elementary School in 2015" using pre-experimental methods with one group pretest-posttest design , the test used is the Wilcoxon test. Wilcoxon analysis shows that at a significance level of p: 0.05 a p value of 0: 0,000 is obtained so that p <0.05. There is a significant influence of handwashing health education on hand washing behavior in children at SD Muhammadiyah Wirobrajan III.

According to Wartonah (2006) cited in Listyorini, Irdawati & Zulaicha (2012) suggested that one of the factors influencing hand washing behavior is knowledge about the importance of cleanliness and its implications as well as being able to influence the

practice of personal hygiene. This theory is in line with the theory of Lawrence Green (1980) which is explained clearly by Heri (2012) who argues that the factors that facilitate the occurrence of a person's behavior is knowledge. Based on the Wilcoxon Test conducted by researchers in the pre-test and post-test, the results obtained p value: 0.027 <0.05 which indicates a change in the score of hand washing behavior using soap in children aged 10-12 years before and after being given health education. The researcher's assumptions are related to the results of the study found that health education is an object or stimulus that can influence respondents to behave in accordance with the message and content of the counseling conducted. And washing hands using soap is a way to increase public awareness about personal health and the importance of behaving clean and healthy.

CONCLUSIONS

There is an influence of health education on the behavior of washing hands with soap in children aged 10-12 years at SDN 323 Tokombeng. 2. It is hoped that the place of research can provide information to all students at SDN 323 Tokombeng about the importance of health education for handwashing with soap, so that good handwashing behavior is created.

REFERENCES

Bimkes. (2013). *Promosi Kebiasaan Mencuci Tangan dengan Sabun Melalui Media Komik Hand Washing Club.* Retrived Januari 1, 2016 from http://www.bimkes.org/promosi-kebiasaan-mencuci-tangan-dengan-sabun-melalui-media-komik-hand-washing-club/

Budiman. (2013). *Penelitian Kesehatan.* Refika Aditama: Bandung

CDC. (2015). *When and How to Wash Your Hands.* Retrived Januari 16, 2016 from http://www.cdc.gov/

Dahlan, Muhammad Sopiyuddin. (2014). *Statistik untuk Kedokteran dan Kesehatan: Deskriptif, Bivariat dan Multivariat dilengkapi Aplikasi dengan Menggunakan SPSS.* Epidemiologi Indonesia: Jakarta

Del Rosso, Joy Miller & Rina Arlianti. (2010). *Investasi Untuk Kesehatan dan Gizi Sekolah di Indonesia.* http://datatopics.worldbank.org/. Retrived 15 februari 2016

Dharma, Kelana Kusuma. (2011). *Metodologi Penelitian Keperawatan (Pedoman Melaksanakan dan Menerapkan hasil Penelitian).* TIM: Jakarta

Hadiatma, Mega & Siti Arifah. (2011). *Pengaruh Pendidikan Kesehatan Tentang Mencuci Tangan Terhadap Tingkat Pengetahuan dan Perilaku mencuci Tangan Siswa SDN 01 Gonilan.* Jurnal volume 4 nomor 2 halaman 85-94

Kementrian Kesehatan RI. (2011). *Buku Saku Cuci Tangan Pakai Sabun di Masyarakat Untuk Petugas/ Kader.* Pamsimas Komponen B

Kholid, Ahmad. (2014). *Promosi Kesehatan dengan Pendekatan Teori Perilaku, Media, dan Aplikasinya untuk Mahasiswa dan Praktisi Kesehatan,* Ed. 1-2 . Rajawali Pers: Jakarta

Listiyorini, warni, Irdawati & Endang Zulaicha. (2012). *Hubungan Antara Kebiasaan Mencuci Tangan Anak Pra Sekolah dengan Kejadian Diare di Wilayah Kerja Puskesmas Pajang Surakarta*

Maryunanni, Anik. (2013). *Perilaku Hidup Bersih dan Sehat (PHBS).* TIM: Jakarta

Maulana, Heri D.J. (2012). *Promosi Kesehatan.* EGC: Jakarta

Ningsih, Santi Septian. (2015). *Pengaruh Pendidikan Kesehatan Mencuci Tangan Terhadap Perilaku Mencuci Tangan pada Anak Di SD Muhammadiyah Wirobrajan III.* Naskah Publikasi

Nursalam. (2013). *Metodologi Penelitian ilmu keperawatan*, Salemba Medika: Jakarta.

Pieter, Herri Zan, Bethsaida Janiwarti & Marti Saragih. (2011). *Pengantar Psikopatologi Untuk Keperawatan,* ed. 1. Kencana: Jakarta

Pieter, Herri Zan & Numora Lumongga Lubis. (2012). *Pengantar Psikologi dalam Keperawatan,* ed. 1. Kencana: Jakarta

Proverawati, Atikah & Eni R. (2012). *Perilaku Hidup Bersih dan Sehat (PHBS).* Nuha Medika: Yogyakarta

Purwandari, Retno, Anisah Ardiana & Wantiyah. (2013). *Hubungan Antara Perilaku Mencuci Tangan Dengan Insiden Diare pada Anak Usia Sekolah di Kabupaten Jember.* Jurnal Halaman 122-130. ISSN: 2086-3071

Saryono. (2011). *Metodologi Penelitian Kesehatan Penuntun Praktis Bagi Pemula.* Mitra Cendikia: Yogyakarta

Sitorus, Nikson & Lucy Fransisca. (2014). *Pengaruh Pendidikan Kesehatan Terhadap Pengetahuan dan Sikap Cuci Tangan Pakai Sabun pada Siswa SD Negeri 157 Kota Palembang Tahun 2014.*

Soetjiningsih, Christiana Hari. (2014). *Perkembangan Anak Sejak Pembuahan Sampai dengan Kanak-Kanak Akhir.* Prenada: Jakarta

Sugiyono. (2012). *Metode Penelitian Kuantitatif, Kualitatif, dan R & D.* Alfabeta: Bandung

Susilaningsih, Endang Zulaicha & Mega Hadiatama. (2013). *Pengaruh Pendidikan Kesehatan Terhadap Perilaku Mencuci Tangan Siswa Sekolah Dasar.* Jurnal Halaman 145-149

Syamsuddin, et.al. (2015). *Pedoman Praktis Metodologi Penelitian Internal (Pendekatan Kualitatif, Kuantitatif, Pengembangan dan Mix-Method).* Wade Group: Ponorogo

Triwibowo & Pusphandani. (2015). *Pengantar Dasar Ilmu Kesehatan Masyarakat*, Nuha medika: Yogyakarta

Unicef, Indonesia. (2014). *Mencuci Tangan Adalah Sarana Penting dalam Memerangi Ebola dan Penyakit Lainnya.* Retrived Januari 16, 2016

WHO. *Clean Care Is Safer Care Clean Hands Protect against Infection.* Retrived Februari 2, 2016 from http://www.who.int/