

Effectiveness of Emotional Demonstration Method in Counseling Handwashing with Soap in Small Islands of Makassar

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Abstract. Increased knowledge, attitudes, skills and health behaviors can be done through health education, namely counseling. Counseling with the Emotional Demonstration (Emo Demo) method in the application of handwashing with soap (CTPS) is one things that needs to be applied to make people aware of the importance of CTPS in suppressing infectious diseases such as diarrhea and ARI on Barrang Lompo Island. This study aims to see the differences in the level of knowledge and attitudes of children about the importance of CTPS before and after counseling, to find out and analyze the influence of counseling on Emo Demo methods on knowledge and attitudes about CTPS on Barrang Lompo island, Makassar. This study used a quasi-experimental design method with One Group Pretest Posttest Design. Sampling of respondents was done by the total sampling method with 45 respondents at the Barrang Lompo Inpres Elementary School. The results showed a difference in the level of knowledge before and after the intervention (P value = 0.002). There were differences in attitudes before and after the intervention (P value = 0.002). The intervention conducted had a significant influence on the level of knowledge and attitudes of the respondents. Based on the results of the study, it is suggested that the school and parents play a role in shaping health behavior by getting children to wash their hands with soap at important times.

Keywords: Emotional demonstration, ctps, knowledge, attitude

1 Introduction

Health education is a form of individual, group, relationship, community and systemic strategies to improve knowledge, attitudes, skills and health [1]. Health education is an important part of health promotion activities currently occurring in countries that form the WHO Eastern Mediterranean Region. This activity is carried out in schools, workplaces, clinics, and communities that discuss topics related to healthy food, physical activities such as sports, handling tobacco use, mental health, prevention and safety of HIV/AIDS [2].

The application of health education in the community both at work, at school and elsewhere focuses on developing individual capacities through education, motivation, skills development, and awareness-raising techniques. By influencing individual capacity and providing support in the form of a healthy environment, changes in individual and community

health can occur [3]. Research conducted by Hermina and Prihatini (2016) shows that providing education using media is a way that is considered effective for increasing knowledge. The media used by researchers were posters that were used as a tool in providing education [4]. This was in line with the effects of nutrition education conducted by Slater (2012) in Mahdali et al (2014), in the form of counseling and distribution of magazines to adolescents that were applied for 6 months in Brazil which shows significant results increasing self-efficacy [5].

To realize an increase in public health status through health education can be done in the form of direct education, one of which is health education. Emotional Demonstration (Emo Demo) is one method of public education through a new approach that refers to the theory of Behavior Centered Design (BCD). The BCD theory has the principle that behavior can only change in response to something new, challenging, shocking or interesting [6]. This method is a very participatory form of education to convey a simple message in a way that is fun and or touches emotions, so it is very easy to remember and the impact is felt compared to other traditional behavior change strategies. The emo demo method is an effective method of providing education to the community because they can see so that they can touch feelings to want to make changes in healthy behavior [7].

In the process of providing education if the learning outcomes have experienced an increase in understanding, it can be said that the media used is effective [8]. This is in line with research conducted by Astuti (2017) on efforts to provide knowledge and understanding to health cadres at Posyandu, Rangkap Jaya sub-district, Pancoran Mas District who used the lecture method with baby teaching aids and breast props, and emo-demo techniques (emotional demonstration). The average pre-test score is 85.88 and the post-test score is 91.08. Respondents who have a range of knowledge scores of 90-100 are higher in the post-test results (62.5%) than the pre-test results (29.2%). These results indicate that 87.5% of respondents had increased knowledge after training with lecture and demonstration methods with props and emo-demo techniques [9].

The behavior of handwashing with soap is one of the things that needs to be implemented in Indonesia to reduce the incidence of infectious diseases such as diarrhea and upper respiratory tract infections (ARI). Based on data from the Indonesian Basic Health Research in 2018, there has been an increase over the past five years in the behavior of washing hands properly in the population in Indonesia. Whereas in South Sulawesi the proportion of handwashing behavior has been declining in the last five years [10]. The data shows that in South Sulawesi it still requires handwashing behavioral interventions with soap using the right method so that it can reduce the incidence of diarrhea and ARI that often occur at age toddlers and children.

The incidence of diarrhea and ARI is also a special concern on small islands in the city of Makassar. Based on data obtained directly from Barrang Lompo Community Health Center over the past three years, the incidence of diarrhea is among the top 10 diseases most often experienced by the island community. Likewise with the incidence of ARI, which in 2016 entered into the top 10, in 2017 ranks 11th, but in 2018 the ISPA returned to the top 10 for the diseases most often experienced by the island community. Based on this, the researchers were interested in seeing the effectiveness of counseling using the emo-demo method to better change the behavior of environmental sanitation, namely hand washing with soap for school-age children on Barrang Lompo island, Makassar.

2 Materials and Method

2.1 Location of Study

This research was conducted on Barrang Lompo Island, Makassar, precisely at Barrang Lompo Elementary Inpres.

2.2 Design and Variable of Study

This research is a quantitative study using a quasi-experimental design with One Group Pretest Posttest Design. In this study, respondents will be given a pretest before giving an intervention that is counseling with the emo demo method. After the intervention was implemented, respondents will be given posttest [11]. In this study it was intended to determine the differences in the level of knowledge and attitudes of children about the importance of CTPS before and after counseling, to find out and analyze the influence of counseling on emotional demonstration methods on knowledge and attitudes about CTPS.

2.3 Population and Sample

The population in this study were all students in grades IV, V, and VI which were estimated to have 30 respondents. The procedure for collecting samples using the total sampling is sampled if the population is relatively small and meets the inclusion criteria [12]. The inclusion criteria in question are willing to be used as respondents, the intended class students, can read and write correctly. The sample of this study was students of grades IV, V, and VI with a total of 45 respondents.

2.4 Data Collection

Data collection was conducted by using a knowledge and attitude questionnaire. In addition, there are also various materials for counseling based on the Emo Demo module, in the form of health counseling media such as hand washing cards, seven-step hand washing posters, A and B display cards, hand sinks, liquid soap, warning stickers, UV lights, and liquid germs.

2.5 Data Analysis

Data has been collected and then processed based on predetermined criteria, then processed using univariate analysis, which aims to describe the distribution of research variables, namely gender. And bivariate analysis to see differences in the level of knowledge at the pretest and posttest, saw differences in attitudes at the pretest and posttest, and analyzed the effect of the emotional demonstration method on CTPS knowledge and attitudes. Data was processed using SPSS Statistics 20 with the Mc Nemar sign rank test, said to be significant if the value was $p < 0.05$.

3. Results

Table 1. Frequency Distribution of Samples by Gender in Barrang Lompo Elementary Inpres

Gender	Frequency	Percentage
Man	22	48,9
Woman	23	51,1
Total	45	100,0

Table 2. Distribution of the Pretest and Posttest Knowledge Levels of Barrang Lompo Elementary Inpres

Category	Pretest knowledge		Total	
	High	Low		
Post knowledge	High	33	10	43
	Percentage	73,3	22,2	95,6
	Low	0	2	2
	Percentage	0	4,4	33,3
Total	Frequency	33	12	45
	Percentage	73,3	26,7	100

Table 3. Distribution of Pretest and Posttest Knowledge Scores at Barrang Lompo Elementary Inpres

Knowledge Score	n	Min	Max	Mean±SD	P-Value
<i>Pre-Test</i>	45	3	10	7,07±2,368	0,002
<i>Post-Test</i>	45	4	10	8,82±1,336	

Table 4. Distribution of the Pretest and Posttest Attitude of Barrang Lompo Elementary School Inpres

Category	Pre attitude		Total	
	Well	Less		
Post attitude	Well	34	10	44
	Percentage	75.6	22.2	97.8
	Less	0	1	1
	Percentage	0	2.2	2.2
Total	Frequency	34	11	45
	Percentage	75.6	24.4	100

Table 5. Distribution of Pretest and Posttest Attitude Scores at Barrang Lompo Elementary Inpres

Knowledge Score	n	Min	Max	Mean±SD	P-Value
<i>Pre-Test</i>	45	3	10	7,31±2,439	0,002
<i>Post-Test</i>	45	4	10	9,29±1,342	

4 Discussion

4.1 Effect of Counseling with the Emotional Demonstration (Emo demo) Method Against the Level of Knowledge of Hand Washing with Soap (CTPS)

Health promotion to familiarize people with clean and healthy life behavior can be done by counseling. Providing counseling using methods and media is a way that is considered effective for increasing knowledge [4]. One method that data is used is Emotional Demonstration. This method is a very participatory form of education to convey simple messages in a way that is fun and or touches emotions, so that it is very easy to remember and the impact is very much felt compared to other traditional behavior change strategies. The emo demo method is an effective method of providing education to the community because they can see so that they can touch feelings to want to make healthy behavioral changes [7].

Human knowledge is based on curiosity, effort in finding out, and from experience. In relation to maintaining health, individuals respond to environmental behavior, health behavior for themselves [13]. From the results of table 2 which shows the level of knowledge of the respondents of Barrang Lompo Elementary Inpres students before and after the intervention was given in the form of counseling using the emo demo method. Respondents numbered 45 people, of which respondents still had high knowledge at the pretest and post test as many as 33 people (73.3%). While respondents who had a low level of knowledge during the pre test and experienced an increase when post test were 10 respondents (22.2%) and two people (4.4%) respondents who did not experience improvement after being given an intervention. The score of student knowledge based on table 3 (attached) shows that out of 45 Barrang Lompo SD Inpres respondents, the Pre-Post Test average score increased from 7.07 to 8.82. From these data it can be concluded that the significance value (0.002) is less than 0.05, which means that there is a difference in respondents' knowledge before and after counseling CTPS with the emo demo method.

This case caused the respondents already have good knowledge before giving the intervention and when given the intervention the respondent takes good care of the counseling delivered to the emo demo method. The existence of a low level of knowledge is due to the respondents initial knowledge about CTPS is still low, this is seen from the results of the pretest and when giving lectures on ctps conducted by researchers, respondents were not actively arguing. This study discusses with the research of Zafwan (2018) which discusses about 42 respondents, who represent before and after health promotion interventions on knowledge variables ($p = 0.015$) in fifth grade children of SD Inpres Borong Jambu I Makassar City [14].

4.2 Effect of Counseling with the Emotional Demonstration (Emo demo) Method on Attitudes of Hand Washing with Soap (CTPS)

The good knowledge received by someone can help in the application of attitudes to health behavior [15]. Attitudes become a person's closed response to known health behavior. Manifestations of attitudes cannot be directly seen, but can only be interpreted in advance of closed behavior. The real attitude shows the connotation of the suitability of the reaction to a particular stimulus which in everyday life is an emotional reaction to social stimulus (Notoatmodjo, 2007 in Rika, 2016) [16]. Broadly speaking, attitude measurement can be distinguished directly and indirectly. Directly, the subject is directly asked for opinions about his attitude towards a problem that is confronted with him. In this case it can be distinguished

in a structured and structured manner. Directly unstructured for example measuring attitudes and surveys (eg public opinion surveys). While directly structured, namely measurement of attitudes by using questions that have been arranged in such a way in a tool that has been determined and directly distinguished to the subject under study [17].

The questionnaire regarding attitudes given to respondents consisted of 10 numbers in the form of statements in the form of positive statements and negative statements with affirmative answers, namely agreeing and disagreeing. Based on the results of the study it can be seen that the attitude both at the pretest and post test as many as 44 respondent. While respondents who have a bad attitude there is 1 respondent. Also obtained is the pre-post test average value from 7.32 to 9.29. From these data it can be concluded that the significance value (0.002) is less than 0.05, which means that there are differences in attitudes of respondents before and after the CTPS counseling using the emo demo method at Barrang Lompo Inpres Elementary School. The increasing attitude of respondents is influenced by the knowledge of respondents who are also high. The counseling process using the emo demo method also helped respondents to make themselves aware of the importance of CTPS. One way to do this was by directly illustrating the process of germs moving from the hands and food, and the CTPS song accompanied by a handwashing gesture that helped respondents remember CTPS steps. . The research conducted is in line with the research by Sarach (2015), where the results of the analysis through pretest and posttest obtained a significance level of 0,000. Then the p value is compared with 0.05. At posttest, the value of p value <0.05. Shows that there is an influence of counseling about hand washing with soap in fifth grade students of SDN Triharjo Sleman [18].

4.3 Effect of Counseling with the Emotional Demonstration (Emo demo) Method on Knowledge and Attitudes of Hand Washing with Soap (CTPS)

Health promotion interventions in the form of counseling with the emo demo method significantly influence CTPS knowledge and behavior on respondents. This is evidenced by the knowledge of students getting better after getting an intervention. Knowledge of CTPS owned by respondents is inseparable from the attitude that will be applied by the respondents. The success of the interventions that have been carried out to increase the knowledge and attitudes of the respondents is inseparable from the extension process itself accompanied by the methods that have been applied and also the practice of CTPS conducted after counseling. The existence of a handwashing song with soap is used to facilitate the respondent in remembering the CTPS steps properly and correctly, an illustration of the process causes the hands to get dirty and the way germs can move by involving several respondents directly. This process and stage caused the respondents who did not or knew nothing to know, so that after the intervention of knowledge and attitudes of the respondents about CTPS, there was an increase.

Emotional Demonstration (Emo Demo) is a form of health education method created by Global Alliance for Improved Nutrition (GAIN). There are several modules from the emo demo along with the objectives of each of these modules (Gain, 2017) in [7]:

1. ASI is enough, the purpose of the first healthy meeting demonstration is that the mother learns about the size of the baby's stomach aged 0-6 months is still very small, and her needs are met if she only drinks ASI. Furthermore, the mother will learn that the milk will come out according to the needs of the child and the mother can also know that the more often smoked, the more milk will be produced. The first healthy target group is mother of two million and pregnant women.

2. ATIKA Iron Substances, the purpose of the second healthy meeting demonstration is that the mother learns and knows that during pregnancy a pregnant woman needs an intake that contains a lot of iron which is derived from chicken liver, eggs and fish. The target is pregnant women.
3. Random Snacks, the third healthy demonstration, namely mothers learning and knowing that unhealthy snacks contain non-nutritious ingredients for children, and mothers also learn not to give unhealthy snacks to their children despite crying. The target of this healthy meeting demonstration is the mother of baduta.
4. Imagining the Future, the purpose of the fourth healthy meeting demonstration is pregnant women learn and understand that the nutrition of pregnant women affects the future of children. The target is pregnant women.
5. Arranging Beams, the purpose of the fifth healthy meeting is pregnant women and baduta mothers learning about behaviors that support children's growth. The target of this demonstration is pregnant women.
6. Schedule of Feeding Babies and Children, the purpose of the sixth healthy meeting demonstration is so that the mother knows that 1 hour before bedtime baby / child should not give snacks because the baby / child will feel full first. The target is mother of baduta.
7. Ready to travel, the purpose of the seventh healthy meeting is so that the mother understands and knows that giving ASI is very practical and saves time compared to giving formula milk. The target for this demonstration was mothers of two million and pregnant women.
8. Pulled in All Directions, the aim of the eighth healthy demonstration is that during pregnancy the mother learns to pay more attention to herself by routinely checking the midwife to find out the development of the fetus and knowing the development of her health during pregnancy. The target is pregnant women.
9. The portion of Eating Babies and Children, the goal of the ninth healthy meeting is that mothers learn that the portion of food for children and adults is different, because to grow a child they need diverse and highly nutritious food. The target of this meeting is the mother of baduta.
10. Mother and Child Association, the goal of the tenth healthy meeting is the mother learning that breastfeeding provides a comfortable time to create a bond between mother and child. The target is the mother of two million and pregnant women.
11. Hope Mother, the goal of the eleventh healthy meeting is that the mother is expected to know the development of the fetus in the womb as well as things that can be influenced by maternal behavior and food consumed during pregnancy. The target is pregnant women.
12. Wash hands, the purpose of the twelfth healthy meeting is that the mother is expected to be able to know the importance of three moments in washing hands with soap and knowing the five steps in how to wash hands with soap properly. The target of this meeting is the mother of baduta.

It can be seen that the Emo demo method is not only used for CTPS counseling but that the method has also been successfully used in other health education especially regarding nutrition. The application of this method other than based on the module can also be modified to suit the intended respondent. As research conducted by Adriani (2018), researchers conducted education on vegetable and fruit consumption using the Emodemo method for junior high school students in Bone South Sulawesi, the results showed that the method increased the intention, knowledge, and attitude of respondents in consuming vegetables and

fruits [7]. In addition, Emodemo was also carried out by Astuti (2017) in improving the knowledge of Posyandu cadres in lactation management in the rangkap jaya sub-district, Pancoran Mas sub-district, Depok City. The researcher used props and an emo-demo approach. The training succeeded in increasing the knowledge of Posyandu cadres [9].

Regarding counseling that has been done, the availability of facilities and infrastructure such as buckets, clean water channels and soap is needed to support the success of the intervention. The facilities and infrastructure also help respondents to get used to doing CTPS. Familiarize yourself with healthy behavior, namely doing CTPS at important times, which will eventually form healthy behaviors such as getting the respondent to wash their hands with soap with running water before eating and after eating. Interventions conducted have a significant influence on the level of knowledge. Likewise with attitude variables, the intervention provided gave a significant influence on the attitude of respondents. The home environment, especially the role of parents in forming personal healthy behavior children, becomes an important role to familiarize children with simple healthy habits, one of which is hand washing. The research that has been carried out is in line with the research conducted by Amareta and Efri (2017) who found that there were significant differences in knowledge, attitudes and practices of hand washing with soap at the time before and after CTPS counseling intervention with the emo demo method in school-age children in Al-Badri Kalisat MI, Jember Regency [6]. In the research that has been conducted, health promotion interventions can influence the knowledge and attitudes of students on the Barrang Lompo island.

5. Conclusion

There is a difference/increase in the knowledge and attitudes of respondents before and after counseling in Barrang's leapy island. The intervention was carried out in the form of CTPS counseling with the emo demo method, as evidenced by the results of the study seen in the differences before and after the intervention of hand washing with soap students in elementary schools on Barrang Lompo Island. In teaching students to behave well so that teachers and parents play an active role and use interesting methods to remind and guide students to always wash their hands with soap. In addition, for further researchers who wish to conduct similar research, it is expected to further examine the effect of the emo demo method intervention on CTPS knowledge and attitudes both in the school environment and outside the school environment that influence knowledge and attitudes related to CTPS.

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