

Conference Paper

The Effect of Peer Group Discussion (PGD)-Based Health Education in the Attitude and Behavior Toward Among Student in Boarding School

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Abstract.

The high incidence of scabies disease in boarding schools is due to the lack of knowledge among Islamic Boarding School Students about scabies prevention. Absence of exposure to health information about scabies is the cause of their lack of knowledge. This study was aimed to determine the effect of peer group discussion (PGD)-based health education on the attitude and behavior toward among students in boarding school in Serang district. This study uses a quasi-experimental design with one group pre and post-test. The intervention in this study was PGD-based health education with two stages, the first was a lecture about scabies prevention, and the second was PGD about how to prevent scabies. A total of 22 respondents were recruited for this study. Questionnaires of attitude and behavior to prevent scabies were used as data collection instruments. Data collection was performed in 3 stages: before the intervention, one hour after the intervention, and two days after the intervention. The mean scores for attitudes before, one hour, and two days after the intervention were 19.86, 22.59, and 25.27 respectively, and the mean scores for behavior before, one hour, and two days after the intervention were 89.23, 96.27, and 106.95 respectively. The result of a one-way within-subject ANOVA test showed that the mean scores of attitudes and behaviors of students were significantly different during one of the time points. This study recommends the school runs a sustainable program of PGD-based health education about scabies to increase awareness of scabies disease prevention among Islamic Boarding School Students.

Keywords: student, health education, peer group discussion, scabies, attitude, behavior

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1. Introduction

Skin health problems are something that people need to pay attention to because skin health is one of the indicators of a person's personal hygiene assessment, one of the skin health problems associated with personal hygiene is scabies¹. WHO states that scabies often occurs in tropical countries such as Indonesia, in general scabies can infect at least 200 million people at any time. This is related to the annual report which states that there are 300 million cases of scabies every year².

The Ministry of Health of the Republic of Indonesia in 2016 stated that of the 261.6 million population in 2016, the prevalence of scabies in Indonesia was 4.60%-12.95% and ranked third out of the 12 most common skin diseases. According to IACS the incidence of scabies occurred from 0.3% to 46%³. A total of 14 provinces have skin disease prevalence above the national prevalence, namely Nangroe Aceh Darussalam, West Sumatra, Bengkulu, Bangka Belitung, DKI Jakarta, West Java, Central Java, DI Yogyakarta, East Nusa Tenggara, Central Footmantan, South Kalimantan, Central Sulawesi, and Gorontalo⁴.

Scabies caused by *Sarcoptes scabiei*. *Sarcoptes scabiei* is a tiny burrowing mite that can cause an itchy skin rash. Intense itching occurs in the area where the mite burrows. The activity of *sarcoptes scabeis* causes itching and results in cellular and humoral immune responses and is able to increase IgE in both serum and skin. Scabies is transmitted through direct contact transmission from skin to skin, even indirectly it can be contaminated through objects affected by scabies such as bed linen, pillowcases, towels and others⁵.

Scabies causes itching but is often ignored because it is not life-threatening, so treatment is not a priority. However, chronic and severe scabies can cause dangerous complications. Scabies causes discomfort due to itching of the lesions in the form of papules, vesicles, or pustules, especially between the fingers, which is the predilection for this disease. The itching that is felt appears at night which can reduce the quality of life and academic achievement of sufferers. This disease is often found in places with densely populated areas such as dormitories and Islamic boarding schools. Places that are densely inhabited by students plus an environment that is not kept clean will facilitate the transmission and transmission of scabies mites⁶.

Islamic Boarding School Student is student who are in the process of studying religion, almost all Islamic boarding schools require students to live in dormitories.

So, due to living together in a dormitory, the skin disease, namely scabies, allows it to be transmitted between students⁷. Pesantren or Islamic boarding schools are Islamic boarding schools and general education which the percentage of teachings is more Islamic religious education than general science. The students also live in dormitories provided by the Pesantren. During their stay apart from their parents, students will live together with friends in one dormitory, group life will be lived with various characteristics of the students and in group life the problems faced are maintaining cleanliness, namely skin hygiene, hand hygiene and hand hygiene. nails, genital hygiene, environmental hygiene and clothing hygiene⁸. Research result showed that is still 40% personal hygiene of students were unfavorable⁹.

Scabies is often found in Islamic boarding schools because students love to exchange/borrow clothes, towels, covers and even pillows, bolsters and mattresses to each other, which is something they are used to. Conditions like this make it very possible for the transmission of scabies to other people if the students and their managers are not aware of the importance of maintaining cleanliness, both environmental hygiene and personal hygiene¹⁰.

The attitude of the students was formed who thought that there was no problem exchanging prayer tools. As with the attitude related to changing bed linen, most of the students could not mention bed linen, including the transmission medium for scabies. This kind of attitude can create student behaviors that are at risk for scabies transmission, such as exchanging prayer tools due to students' ignorance that this is a risk for scabies transmission¹¹. With the existence of health education or efforts to convey health messages to the community, groups or individuals, it is hoped that with this message, the community, group or individual can gain knowledge about better health, and in the end this knowledge is expected to influence behavior. Where the purpose of this health education is so that people, groups or individuals can behave and behave in accordance with health values¹².

Sondakh shows that attitudes and behavior affect the incidence of scabies in students. The research data shows that students with poor attitudes and behavior are, as a result, more at risk for the incidence of scabies than students with moderate or good attitudes. This variable is the second variable that affects the incidence of scabies, after behavior. This is because attitudes can be influenced by knowledge, which is then justified by someone's actions or behavior. If the attitude about scabies is minimal, it will affect the behavior of students in preventing scabies¹³.

Resnayati mentioned that there was a relationship between attitudes and behavior towards scabies, the majority of students before being given health education had poor attitudes and behaviors and this study illustrates that 95% of students have experienced scabies while in boarding schools, research shows there are significant differences knowledge, attitudes and behavior in the intervention group before and after. This situation shows that health education media can provide significant changes to the increase in knowledge, attitudes and personal hygiene behavior of students¹⁴. Most of students get personal hygiene information from teachers. The lack of availability of health promotion media affects the low condition of student knowledge and attitudes in healthy behaviors¹⁵.

Health education in the form of counseling about knowledge of scabies and a clean and healthy lifestyle to shape the behavior of students in an effort to prevent scabies disease and reduce the incidence of scabies in Islamic boarding schools. So health education must be carried out with effective methods. One of the effective methods is peer group discussions. The peer group discussion method is a group discussion method where teenagers and several other teenagers in a certain group with the same relative age who have the same goal interact with each other and exchange experiences and positive information related to a particular subject¹⁶.

Peer group is a successful peer group where he/she can interact. In a peer group, individuals feel something in common with each other such as in terms of age, needs and goals that can strengthen the group. In addition, peer group allows individuals to interact with each other through socialize and provide encouragement, and motivation to other friends emotionally. The existence of an emotional bond in the life of a peer group will bring various benefits and great influence for individuals who are in the group. Thus it can be concluded that a peer group is a group of peers who have strong emotional ties and they can interact, socialize, exchange ideas, and experiences in providing change and increasing independence in learning¹⁶. Previous research also show that peer roles have significant correlation with personal hygiene⁹.

Based on a preliminary study at the Daar Et-Taqwa Islamic Boarding School, according to the board of the Islamic boarding school, many students are experiencing or have experienced scabies, especially in the dormitory occupied by students and there are 15 students, 10 of them have experienced scabies and 3 of them have experienced scabies. Information was obtained from the caregivers who were responsible for this, on average, new students who did not know about the life of the Islamic boarding

school made them escape from health, so they had the habit of bathing together, towels that were not dried in the sun, borrowing clothes from each other, sleeping together, rarely drying the mattress. Dirty clothes hanging or piled up in the room are examples of student behavior that can cause scabies. The boarding school administrator said that there had never been any socialization or counseling to students about scabies prevention.

2. Methods and Equipment

2.1. Study design

This study design was quasi experimental design. Intervention in this study was Peer Group Discussion or PGD-based Health Education regarding Scabies Prevention.

2.2. Sample

All samples were recruited by using the convenience sampling technique. Samples were 22 students from total population 105 including first year, second year and third year students at Islamic Boarding School, Daar Et-Taqwa Kabupaten Serang. Inclusion criteria of respondent of this study was give the permission from their parents. Respondents who were willing to become respondents were given the freedom to choose the time of data collection. Respondents were given the freedom to refuse to engage in the intervention activity and were also given to refuse to answer questions if they were perceived as disturbing the respondent's comfort, and in the end, the respondent's data would not be used in the study.

2.3. Instrument

Data were collected by using validated and reliable questionnaires including Knowledge of and Scabies Prevention and Attitude toward Prevention Scabies¹⁷

2.4. Data analysis

In this study, data analysis used was paired sample t test to investigate the difference between before and after the intervention. Further data analysis used was repeated measure Annova to investigate the difference among three time point measurements.

2.5. Ethical clearance

Ethical consideration has been received from Ethical Committee of Universitas Faletan No.015/KEPK.UF/VI/2022. Ethical consideration in this study was based on considering the intervention that taking students' time to participate in health education activities.

3. Results

This study showed that the mean of attitude among respondents was investigated in two stages; bivariate using paired sample t test, multivariate using repeated measure Annova. The result describes as follow:

TABLE 1: Attitude and behavior of student toward scabies prevention before and 30 minutes after the intervention (n = 22).

	Mean difference ± SD	SE	df	t	Nilai p
attitude between before and 30 minutes after the intervention	-2.727 ± 2.963	0.632	21	-4.317	0.000
behavior between before and 30 minutes after the intervention	-7.045 ± 6.168	1.315	21	-5.358	0.000

As shown in table 1, this study showed that measurement of attitude and behavior toward scabies prevention were differences between before and 30 minutes after the intervention. This result showed that after 30 minutes after they were given health education, they still able to recall the material of health education regarding attitude and behavior through peer group discussion.

Based on the results of this study showed that measurement of attitude and behavior toward scabies prevention were differences between before and two days after the

TABLE 2: Attitude and behavior of student toward scabies prevention before and two days after the intervention (n = 22).

	Mean difference ± SD	SE	df	t	Nilai p
attitude between before and two days after the intervention	-5.409 ± 3.514	0.749	21	-7.220	0.000
behavior between before and two days after the intervention	-17.773 ± 12.200	0.632	21	-6.833	0.000

intervention. This result showed that after two days that student were given health education, their score of attitude and behavior magnificently increase compare to measurement at 30 minutes after health education.

TABLE 3: Attitude and behavior of student toward scabies prevention in three times point measurement (n = 22).

	Mean difference	Maucly's W	P value
attitude among three times point Before-30 minutes after intervention Before-two days after intervention	2.727 5.409	0.812	0.000
behavior among three times point Before-30 minutes after intervention Before-two days after intervention	7.045 17.727	0.570	0.000

Based on the results of this study showed that among three times point measurement of attitude and behavior toward scabies prevention were differences. This means that if we look at to the result, the highest of increasing attitude and knowledge toward scabies prevention were at the third point of measurement (two days after intervention).

4. Discussion

Based on the results of the study, it was found that there was an increase in the average score of students' attitudes after 30 minutes of being given health education at the Daar Et-Taqwa Modern Islamic Boarding School, Serang Regency in 2022. The results of this study are in line with research before health in preventing scabies disease after being given health education is better than before being given health education on the effectiveness of health education on attitudes about clean and healthy living in preventing scabies in the Islamic Boarding School¹⁸. This study is also in line with research on the effect of health education on adolescent attitudes about scabies at

the Al-Furqon Gersik Islamic boarding school, it was found that there was an effect of health education on adolescent attitudes about scabies prevention before and after being given health education about prevention scabies¹⁹.

Health education is a medium for getting changes in an individual, because by getting information, knowledge will increase, this will certainly affect a person's attitude in improving health, especially in the transmission of scabies skin disease. The higher a person's level of education, the easier it is to receive information so that the more knowledge they have. On the other hand, a lack of education will hinder the development of a person's attitude towards the newly introduced values.

The results of this study showed a conformity where there was a change in attitude towards the better after being given 30 minutes of health education about scabies prevention, besides the use of modules, videos, and leaflets to help stimulate visual acceptance of respondents in reading and listening making it easier for respondents to understand the information conveyed. This proves that the provision of health education can have an effect on changing one's attitude to make respondents aware of making efforts to prevent scabies from occurring.

Based on the results of the study, it can be seen that there was an increase in the average score of students' attitudes two days after being given health education at the Daar Et-Taqwa Modern Islamic Boarding School. The results of this study are in line with research on the effect of scabies prevention education with Madura language leaflet media on students at the Roudlotut Tholibin Islamic Boarding School, there is a significant difference between before and after education. Knowledge, attitudes, and actions regarding scabies prevention education with the Madurese language leaflet media for students increased quite high scores²⁰. This research is also in line with research (Daulian et al., 2016) on increasing knowledge, attitudes, and actions of students through group discussion methods about scabies disease at Islamic boarding school, there was an influence before health education was carried out through discussion of respondents having action bad health education, and after being given health education through discussion there was an increase in health education towards the attitude of students about scabies disease²¹.

Health education in general is any planned effort to influence other people, whether individuals, groups, or communities, so that they do what is expected by the perpetrators of health education or promotion. The increase in attitudes that occur in respondents is probably due to the knowledge gained is able to bring up understanding and confidence

in their needs as respondents who really must have the behavior (knowledge, attitudes and actions) to avoid scabies disease.

The results of this study showed a conformity where there was a change in attitude towards the better two days after being given health education about scabies prevention. The group discussion method in this study used leaflets, modules and videos. The material in the modules and leaflets displays a lot of pictures about scabies disease and contains more detailed and clear information and health messages about scabies disease needed by respondents, this is intended so that respondents can learn the content or messages in the material that has been distributed by the respondent. each student so that they not only receive information from the communicator but can also increase their knowledge by reading, and contribute to attitude change.

Based on the results of the study, it can be seen that there was an increase in the average score of Islamic Boarding School Student behavior after 30 minutes of being given health education at the Daar Et-Taqwa Modern Islamic Boarding School. The results of this study are in line with research on personal hygiene e-booklets on scabies prevention behavior in Islamic boarding school students of Pondok Pesantren Durrotu Aswaja Semarang, showing that there are differences in knowledge, attitudes and practices of students before and after being given counseling. it is said that the hypothesis is accepted and this shows the effect of personal hygiene e-booklets on scabies prevention behavior in students²².

Health education is an effort to influence and invite other people, whether individuals, families, groups or communities to carry out healthy behavior, to stimulate the thoughts, feelings, concerns, and willingness of students so as to encourage the learning process in students, especially in improving clean and healthy living behavior.

The results of this study showed a conformity where there was a change in behavior in a good direction after 30 minutes of being given health education about scabies prevention, group discussion methods, namely the PGD (Peer Group Discussion) method, and using leaflets, modules and videos media. The material in the modules and leaflets displays a lot of pictures about scabies disease and contains clear health information and messages about scabies disease needed by respondents, this is intended so that respondents can learn the content or messages in the material that has been distributed by each student so that they not only receive information from communicators but can also increase their knowledge by reading, and contribute to behavior change.

Based on the results of the study, it can be seen that there was an increase in the average score of Islamic Boarding School Student behavior two days after being given health education at the Daar Et-Taqwa Modern Islamic Boarding School. The results of this study are in line with research about healthy Islamic Boarding School Student increasing knowledge, attitudes and behaviors related to personal hygiene of students in the prevention of scabies in Islamic boarding schools, the effect of increasing actions or behavior from the results of the pretest and posttest can be known through increasing categories occurs in all adolescents¹⁴. A very significant change is an increase in the actions or behavior of adolescents from the less to good category in most adolescents. This was followed by a change in almost half of the adolescents who experienced a change in category from moderate to good. This research is also in line with research on education on skin diseases, clean living behavior, and hand washing with soap for students of the modern Islamic boarding school showing a significant difference²¹. Attitudes and actions, Pre test and Post test scores. The students also understand that scabies can be transmitted. So it can be concluded that there is an effect of providing counseling on the attitudes and actions of counseling participants on the importance of washing hands with soap.

The results of this study showed a conformity where there was a change in behavior in a good direction two days after being given health education about scabies prevention, the group discussion method was the PGD (Peer Group Discussion) method, and by using leaflets, modules and videos media. The material in the module and leaflet displays pictures about scabies disease and contains clear health information and messages about scabies disease needed by respondents, this is intended so that respondents can learn the content or messages in the material that has been shared by each student so that they not only receive information from communicators but can also increase their knowledge by reading, and contribute to behavior change.

Health status is influenced by several factors including a person's attitude in responding to a disease, one of which is scabies which is generally a type of infectious disease. The attitude of the students plays a very important role in preventing scabies in the Pondok Dormitory environment which requires personal hygiene and healthy behavior. The attitudes possessed by students are expected to influence their behavior in order to prevent the occurrence of scabies in the Pondok environment where they live¹⁹.

Peer groups will allow individuals to interact with each other, get along and provide encouragement, and emotional motivation for other friends. The existence of an emotional bond in the life of a peer group will bring various benefits and great influence for individuals who are in the group. Thus it can be concluded that a peer group is a group of peers who have strong emotional ties and they can interact, socialize, exchange ideas, and experiences in providing change and increasing independence in learning¹⁶. Other research result prove that there is correlation between peer group roles with personal hygiene⁹. The results of this study showed a change in attitude towards the good in the three groups of measurement time intervals, the group discussion method was the PGD (Peer Group Discussion) method where peers interacted, exchanged experiences, and information related to a subject matter, and this was very effective in increasing knowledge. Adolescents and provide a comfortable learning situation among peers. And by using media leaflets, modules and videos. The material in the module and leaflet displays pictures about scabies disease and contains clear health information and messages about scabies disease needed by respondents, this is intended so that respondents can learn the content or messages in the material that has been shared by each student so that they not only receive information from communicators but can also increase their knowledge by reading, and contribute to attitude change.

Adequate information can be conveyed through various methods of health education aimed at raising awareness, increasing knowledge, and providing understandings about traditions, community beliefs, and so on, both harmful and beneficial to health. Adequate information retention can affect actions or behavior²⁴. The role of peers in socio-emotional development is very important because of peer group interactions, adolescents can learn how to relate symmetrically and reciprocally, in peer groups adolescents can learn to formulate and express their opinions, learn to negotiate solutions to disputes cooperatively and change the standards of behavior they receive. The results of this study showed a change in behavior towards the better in the three groups of measurement time intervals, the group discussion method was the PGD (Peer Group Discussion) method where peers interacted with each other, exchanged experiences, and information related to a subject matter, and this was very effective in improving knowledge of adolescents and provide comfortable learning situations between peers, with the aim of increasing students' understanding of scabies prevention.

5. Conclusion

This research showed that among three times point measurement on attitude and behavior, there were found significantly differences. Peer group discussion-based health education enable student to increase their knowledge and attitude toward scabies prevention even after two days the health education. Collaboration with other party such as nearby Pusat Kesehatan Masyarakat (Puskesmas) is needed to run health education regarding scabies prevention.

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Conflict of Interest

There is no conflict of interest in this study.

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