



Scabies education and detection at Raudlatul Musthofa junior high school

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ARTICLE INFO	ABSTRACT
<p>Article history Received: 2023-07-29 Revised: 2023-11-03 Accepted: 2023-11-07 Published: 2023-11-07</p> <p>Keywords Fungi Personal hygiene Scabies Skin diseases</p>	<p><i>Scabies is a skin disease endemic in tropical and subtropical climates that is highly contagious and generally affects groups of people with low socioeconomic conditions, poor personal hygiene and sanitation. This activity aimed to make efforts to prevent, provide education, and assist public health development so that it is expected to improve public health in boarding schools students. This study aims to make efforts to prevent, provide education, and assist public health development so that it is expected to improve public health in boarding schools. The sample to be analyzed was 19 students from Raudlatul Junior High School. Examination of parasites that cause scabies is done with a skin swab. The results of observations that have been made of Raudlatul Musthofa Junior High School students show that the majority of students have carried out personal hygiene well, namely all 19 students (100%) bathing at least twice a day using soap, keeping hands and feet clean, and changing clothes when dirty. A total of 14 students (74%) do not exchange personal items such as towels, do not take turns in clothes, and do not dry clothes in the room. A total of 15 students (79%) cleaned the bed, 18 students (95%) did not lend toiletries such as soap, and 16 students (84%) did not experience symptoms of frequent itching at night, rashes (spots), wounds, or dry and crusty skin. The results of skin swab examinations on 19 students at Raudlatul Musthofa seen under a microscope obtained as many as 13 students (68%) samples contained bacteria and as many as 6 students (32%) samples contained fungi.</i></p>
<p>Kata Kunci Jamur Kudis Penyakit kulit Personal hygiene</p>	<p>Edukasi dan deteksi kejadian kudis di SMP Raudlatul Musthofa. Kudis merupakan penyakit kulit yang endemis di wilayah beriklim tropis dan subtropis yang sangat mudah menular dan umumnya menyerang sekelompok orang dengan kondisi sosial ekonomi yang rendah, personal hygiene dan sanitasi yang buruk. Kegiatan ini bertujuan untuk melakukan upaya dalam mencegah, memberikan edukasi, dan membantu pembangunan kesehatan masyarakat sehingga diharapkan dapat meningkatkan kesehatan masyarakat di pondok pesantren. Sampel yang akan dianalisa berjumlah 19 santri dari SMP Raudlatul. Pemeriksaan parasit penyebab kudis dilakukan dengan swab kulit. Hasil observasi yang telah dilakukan terhadap siswa SMP Raudlatul Musthofa diketahui bahwa mayoritas siswa sudah melaksanakan personal hygiene dengan baik yaitu keseluruhan siswa sejumlah 19 siswa (100%) melakukan mandi minimal 2x dalam sehari menggunakan sabun, menjaga kebersihan tangan dan kaki, dan mengganti pakaian ketika kotor. Sebanyak 14 siswa (74%) tidak bertukar barang pribadi seperti handuk, tidak bergantian pakaian, dan tidak menjemur pakaian di dalam kamar. Sebanyak 15 siswa (79%) membersihkan tempat tidur, 18 siswa (95%) tidak meminjamkan alat mandi seperti sabun, dan sebanyak 16 siswa (84%) tidak mengalami gejala sering gatal pada malam hari, muncul ruam (bintik-bintik), luka, atau kulit kering dan berkerak. Hasil pemeriksaan swab kulit pada 19 siswa di Raudlatul Musthofa yang dilihat dibawah mikroskop diperoleh sebanyak 13 siswa (68%) sampel terdapat bakteri dan sebanyak 6 siswa (32%) sampel terdapat jamur.</p> <p style="text-align: right;">Copyright © 2023, Puspitasari et al This is an open access article under the CC-BY-SA license</p> 

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INTRODUCTION

According to the World Health Organization (WHO) in 2020 the incidence of scabies can affect more than 200 million cases with an average prevalence of 5-10% in children in boarding schools. The estimated prevalence of the incidence of scabies in 2020 ranges from 0.2% to 71% of the total population (Nurhayati et al., 2023). According to the Ministry of health

of the Republic of Indonesia, the prevalence of scabies in Indonesia amounted to 5.6%-12.59% of the total population in 2017 (Tajudin et al., 2023).

In Raudlatul Musthofa boarding school students live together and study under the guidance of teachers who are better known as kiai and have a dormitory for students to stay (Heriyaandi, 2022). The students are 2 in a complex that also provides a mosque for worship, space for study, and other activities (Hendrastuty, 2021). With the gathering of students in the dormitory resulting in dense occupancy resulting in frequent direct contact between others resulting in the easy spread of a disease, especially scurvy (Azmi et al., 2023).

Scabies is a skin disease endemic to tropical and subtropical climates that is highly contagious. Scabies in Indonesian is often called "scabies", Javanese call it "gudig" (Navlasari et al., 2022). This disease is also often referred to as body lice disease, budukan, gatas agogo caused by the parasite *Sarcoptes scabiei* variant *hominis* (a type of lice or mites) is characterized by complaints of itching, especially at night and is transmitted through direct or indirect contact through bedding and clothing (Rahmadayani, 2021).

The onset of scurvy caused unhealthy behavior of some students (Navlasari et al., 2022). Most of them consider their habits in maintaining personal hygiene is sufficient and will not cause health problems, especially skin diseases, from some skin diseases such as scabies most often result from unhealthy behavior such as hanging clothes in the room, exchanging clothes and personal objects, such as Combs and towels, influenced also by lack of knowledge about personal hygiene (Khikmah et al., 2021). Such as the intensity of bathing, the use of towels that often borrow memimjam, clothes, toiletries, and bedding that are used simultaneously (Triana & Razi, 2020). Hygiene or cleanliness is an effort to maintain a healthy life that includes personal hygiene, community life, and cleanliness in work (Triani et al., 2017). Efforts are made to deal with scabies infection in addition to maintaining the cleanliness of the body and the environment also need to be given the correct treatment so as to break the life cycle of mites *Sarcoptes scabiei* (Murniati & Rohmawati, 2018).

Community service activities aim to educate and detect scurvy. Examination is carried out microscopically where previously taking samples from respondents, primary data obtained through questionnaires and interviews while preventive activities (prevention) to minimize scurvy. Based on the activities carried out, it acts as a contribution to realizing the 3rd goal of the SDGs. The goal is to ensure the health and well-being of people at all ages (Wisudanto et al., 2022).

METHOD

In the implementation of Public Health Development Practices scurvy extension activities are carried out. The implementation of the activity program has been adjusted to the problems and conditions at Raudlatul Musthofa Islamic boarding school. There is an agenda implemented in this activity, including: Public Health Development Practices; (1) Identifying problems within the Raudlatul Musthofa Islamic boarding school; (2) Formulate the problems that occur in the Raudlatul Musthofa Islamic boarding school; (3) Counseling activities at Raudlatul Musthofa Islamic boarding school; (4) Conducting scurvy-related examinations with samples from Raudlatul Musthofa Islamic boarding school students in the Microbiology Laboratory of stikes Hutama Abdi Husada Tulungagung; and (5) Observation and preparation of Group reports.

Public Health Development Practice (PPKM) activities were carried out on April 2023 with counseling activities carried out at the Raudlatul Musthofa Islamic boarding school Pundunsari Hamlet, Rejotangan Village, Rejotangan District, Tulungagung Regency. Where this activity began by providing counseling which was then carried out examinations related to scurvy with samples from Raudlatul Musthofa Islamic boarding school students at the STIKes Hutama Abdi Husada Tulungagung Microbiology Laboratory located at Jl. Dr. Wahidin Sudiro Husodo No. 1 Tulungagung.

Table 1. Extension Event Unit

Extension Time	Extension Activities	Student Activities
Opening 10 minutes	Introduction	
	1. Convey greetings	1. Answering greetings
	2. Explaining the purpose	2. Listening
	3. Time contract	3. Give a response
Core 90 minutes	Core	
	1. Submission of materials on scabies	1. Students fill out a questionnaire
	2. Filling out the questionnaire sheet	2. Students listen to the material presented
	3. Fill out a willingness sheet to be a respondent	3. Students fill out a sheet of willingness to respondent
	4. Sampling	
Closing 10 minutes	Closure	
	1. FAQs	1. Asking the unclear
	2. Summing up the material	2. Actively summing up the material
	3. Saluting	3. Answering greetings

RESULTS AND DISCUSSION

This analysis was conducted to determine whether there is an effect of interventions conducted in the form of counseling on scurvy education with lecture method on the knowledge of Junior High School students Raudhlatul Musthofa Tulungagung. The Figure 1 is the documentation that is done when doing counseling.



Figure 1. Counseling session

Tabel 2. Results of participant observation sheet of Public Health Development Practice on education and detection of scabies incidence

Question	Frequency	Percentage (%)
Do you shower at least 2 times a day using soap?		
Yes	19	100%
No	0	0%
Total amount	19	100%
Do you exchange personal items such as towels with friends?		
Yes	5	26%
No	14	74%
Total amount	19	100%
do you often wash your bed?		
Yes	15	79%
No	4	21%
Total amount	19	100%
Do you keep your hands and feet clean?		
Yes	19	100%
No	0	0%
Total amount	19	100%
Do you often change clothes with your friends?		
Yes	5	26%
No	14	74%
Total amount	19	100%
Do you hang clothes or underwear in your room?		
Yes	5	26%

Question	Frequency	Percentage (%)
No	14	74%
Total amount	19	100%
Do you sleep together in one bed with a friend?		
Yes	4	21%
No	15	79%
Total amount	19	100%
Do you use blankets together with a friend?		
Yes	1	5%
No	18	95%
Total amount	19	100%
Do you often shake hands when meeting ustad/ustadzah and friends?		
Yes	18	95%
No	1	5%
Total amount	19	100%
Do you use prayer equipment alternately with friends?		
Yes	10	53%
No	9	47%
Total amount	19	100%
Do you often wash bed linen or pillowcases?		
Yes	13	68%
No	6	32%
Total amount	19	100%
Do you often exchange pillows or bolsters with your friends?		
Yes	7	37%
No	12	63%
Total amount	19	100%
Do you often lend toiletries such as soap to your friends?		
Yes	1	5%
No	18	95%
Total amount	19	100%
Do you change clothes when they get dirty?		
Yes	19	100%
No	0	0%
Total amount	19	100%
Do you experience symptoms of frequent itching at night, rashes (spots), sores, or dry, crusty skin?		
Yes	3	16%
No	16	84%
Total amount	19	100%

Table 3. Results of Public Health Development Practice (PPKM) examination on education and detection of scabies

Examination Results	Frequency (n)	Percentage (%)
<i>Sarcoptes scabiei</i>	0	0%
Bacteria	13	68%
Fungi	6	32%
Total	19	100%

Public Health Development Practice (PPKM) study program D-III Medical Laboratory Technology STIKes Hutama Abdi Husada Tulungagung has been implemented in accordance with a schedule that has been planned well and smoothly. In the implementation, there are several activities carried out, among others, counseling in accordance with a predetermined theme and sampling. Then the sample will be taken to the Microbiology Laboratory at STIKes Hutama Abdi Husada Tulungagung for examination (Figure 2).



Figure 2. The process at Microbiology Laboratory

Raudlatul Musthofa junior high school is one of the units of Raudlatul Musthofa Islamic boarding school. In the boarding school students or students will be provided a place to stay. In addition to a place to stay, there is also a mosque for worship, space for study, and other activities within the boarding school. The density of occupancy due to the gathering of students in the dormitory will result in frequent direct contact between others. Thus facilitating the spread of a disease, especially scurvy (Melizar & Yunizar, 2016).

The onset of scurvy caused unhealthy behavior of some students (Qomariyah et al., 2022). In boarding schools the tendency to contract skin diseases due to lack of personal hygiene is very high (Zakiudin & Shaluhiah, 2016). Transmission occurs when personal and environmental hygiene is not properly maintained (Harini et al., 2016). Plus unhealthy behavior, such as hanging clothes in the room or exchanging personal objects, such as combs and towels (Zakiudin, 2016). Lack of knowledge about personal hygiene such as the intensity of bathing, the use of towels that are often borrowed memimjam, clothing, toiletries, and bedding that are used simultaneously are also factors causing skin diseases (Parman et al., 2017).

Hygiene behavior that can be applied is with personal hygiene to maintain one's cleanliness and health for the sake of physical and psychological well-being (Mustikawati & Faradillah, 2013). Many health problems that a person suffers because of not maintaining good personal hygiene (Prayogi & Kurniawan, 2016). Physical disorders that often occur are skin disorders such as skin diseases, disorders of the oral mucous membranes, infections of the eyes and ears, and physical disorders of the nails (Fatmawati & Ftariawati, 2017). Students with good personal hygiene will be more difficult to be infested with mites because by bathing using soap, changing clothes when dirty and washing clothes with soap, and not wearing towels or clothes alternately will eliminate mites that may infect (Tuharea et al., 2021).

From the observation that has been done to Junior High School students Raudlatul Musthofa known that the majority of students have implemented personal hygiene well that the overall number of students 19 students (100%) take a bath at least 2 times a day using soap, keep clean hands and feet, and change clothes when dirty. A total of 14 students (74%) did not exchange personal items such as towels, did not change clothes, and did not dry clothes in the room. A total of 15 students (79%) cleaned the bed, 18 students (95%) did not lend toiletries such as soap, and as many as 16 students (84%) did not experience symptoms of frequent itching at night, rashes (spots), wounds, or dry and crusty skin.

Based on the observation of the overall students in junior high Raudlatul Musthofa as many as 19 students showed that the majority of students have applied good personal hygiene compared to students who do not apply good personal hygiene. "Knowledge of which is good for his health, but in making it happen is still not fully done" is a statement that can be used to describe the results of observations of this activity. This is due to different individual habits. This PPKM activity, added the knowledge of students in this junior high school to pay more attention to their health, especially in terms of personal hygiene in preventing skin diseases, especially scabies. After the counseling, the level of knowledge of students increases, this is known when there is a question-and-answer session conducted.

So that the results of the examination conducted on students in the Junior High School as a whole 19 students (100%) did not find the presence of *Sarcoptes scabiei* on observation under a microscope by taking skin swabs that indicate scurvy. The possibility of not finding *Sarcoptes scabiei* mites due to simple retrieval methods or indeed the absence of these mites.

However, the discovery of *Sarcoptes scabiei* mites does not rule out the possibility that there are other causes that cause skin diseases (Nisa & Rahmalia, 2019). From the results obtained skin diseases experienced by 19 students in Raudlatul Musthofa caused by bacteria as many as 13 students (68%) and fungi as many as 6 students (32%). Skin infections caused by bacteria can cause complications that if developed can become chronic kidney disorders (Prakoeswa et al., 2022).

After knowing the cause of the skin disease suffered by the student, we give an ointment to treat the skin disease according to the cause. In addition, counseling conducted to students is recommended to maintain personal hygiene and apply good personal hygiene. So, from this PPKM activity it can be concluded that overall, 19 students in Raudlatul Musthofa did not suffer from scurvy.

CONCLUSION

Based on the results of research conducted on 19 student respondents in Raudlatul Musthofa, as many as 13 students have bacterial skin diseases (68%) and fungal skin diseases as many as 6 students (32%). It was also found that as many as 16 students (84%) also experienced symptoms of frequent itching at night, rashes (spots), wounds, or dry and crusty skin.

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