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Health Education to Promote and Prevent Tinea Cruris at Darul Fadhli Elementary School Palembang City

Ahmad Ghiffari[1*)]; Resy Asmalia[1]; Raden Pamudji[1]; Heni Nurdita[1]

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ABSTRACT

Tinea cruris is an infectious disease caused by fungal microorganisms that cause severe itching and secondary infection complaints. Skin disease transmission factors in the groin (tinea cruris) include agent, environmental, and host factors. Tinea cruris disease in elementary school students can reduce academic quality. This activity aims to socialize students in tackling the fungal disease infestation. It will increase knowledge about skin diseases, both in terms of knowledge of parasites/fungus and clean and healthy living behavior towards the incidence of tinea cruris. Community service methods include the delivery of material about personal hygiene, distribution of leaflets, post-test, and pre-test. The activity was carried out on March 8, 2022, and initial measurement of the knowledge and behavior of personal hygiene was carried out, followed by all 55 elementary school students. A questionnaire is an instrument to measure the level of knowledge, behavior, and incidence of tinea cruris. The mean value of the pre-test was higher than the mean score of the post-test. It was concluded that the activity could increase knowledge. It is necessary to collaborate with others, such as health monitoring and collaboration with the community health center.

Keywords: Behavior; Knowledge; Personal Hygiene; Primary School; Skin Disease

PENDAHULUAN

Skin disease tinea cruris is an extremely common cutaneous dermatophytosis found worldwide but is most prevalent in tropical regions (Havlickova, Czaika, & Friedrich, 2009). According to dermatophytosis, 20 percent of the world's population suffers from cutaneous infections, such as tinea corporis, tinea cruris, tinea pedis, and onychomycosis (Aly, 1994). Dermatophytosis is prevalent throughout Asia, with 35.6 percent (Sahoo & Mahajan, 2016). The male-to-female ratio was 3:1, and 52.4 percent of the patients were between 20 and 40 years (Singh, 2018). Trichophyton, Microsporum, and Epidermophyton are three of the most frequent dermatophyte genera, and they are the most common causes of superficial fungal infections in children (Farag et al., 2018)

Elementary school-age children participate in various activities that are frequently associated with an unsanitary environment, making them children susceptible to disease. Children's lack of understanding and knowledge of cleanliness leads to their failure to pay attention to their hygiene (Farag et al., 2018). Knowledge of personal hygiene must be taught from an early age to become accustomed to keeping their surroundings clean. Darul Fadhli Elementary School in Palembang City has 55 students in grades 1 to 5. Health education to promote and prevent skin diseases is hoped to reduce the transmission and morbidity of skin diseases in primary school.

[1] Faculty of Medicine, Universitas Muhammadiyah Palembang
Jl. KH. Balqi, Talang, 16 Ulu, Kec. Seberang Ulu II, Kota Palembang, Sumatera Selatan 30116, Indonesia

*) corresponding author

Ahmad Ghiffari

Email: ahmad_ghiffari@um-palembang.ac.id

BAHAN DAN METODE

The activity was carried out on March 8, 2022, with the population being pupils in

grades 1-5 at SD Darul Fadhli, Sako District, Palembang City. We looked at the relationship between knowledge and personal hygiene factors and the occurrence of tinea cruris. A cross-sectional approach was followed with an analytic observational design with 55 participants participating. The information was gathered through the completion of a questionnaire. The data analysis technique is univariate, which describes the variation of all variables by making a frequency distribution table, and bivariate analysis of Kolmogorov Smirnov was employed.

HASIL DAN PEMBAHASAN

Figure 1.
Documentation of students and lecturers with the Principal of SD Darul Fadhli Palembang

The main advantage of the activity is its suitability to community conditions at the location of primary school activities, which are locations with moderate transmission skin cases (Figures 1 and 2). Promotive and preventive efforts, especially personal hygiene, are needed to reduce morbidity due to dermatophytoses (Aryani, Diba, Darmawan, & Garfendo, 2020). *T. rubrum* was the most common dermatophyte species producing tinea cruris and corporis at Ciamis District Hospital, West Java, followed by *E. floccosum* with minor inflammation clinical manifestation and anthropophilic source of infection (Yuwita, Ramali, & N, 2016). Tinea corporis and cruris are common in females, as evidenced by hyphae in potassium hydroxide (KOH) 10–20% in their history and symptoms. The vast majority of patients, particularly those with prominent lesions, were prescribed oral griseofulvin (Sanggarwati, Wahyunitisari, Astari, & Ervianti, 2021). Blood group A was found to have a statistically significant connection with tinea corporis and tinea cruris (M, Jusuf, & Muis, 2019).

From the results, it is known that the level of knowledge and attitudes is good. The respective values for knowledge about Tinea cruris and personal hygiene are 32.7 percent and 67.3 percent, respectively (table 1 and 2). Students' understanding and behavior towards personal cleanliness should be improved to prevent them from developing infections such as tinea cruris (Adzim, Djajakusumah, & Ridwan, 2017) (Table 2). Women over 55 were more likely to have these characteristics, as were housewife work and the distribution of lesions between the thighs (Nursidik, Djajakusumah, & Andarini, 2019).

Table 1.
Distribution of Respondents' Regarding Age, Incidence of Tinea cruris and Knowledge about Tinea cruris (n=55).

Variable	Category	Frequency (n)	Percentage (%)
Age (years)	6-8	32	58.2
	9-11	23	41.8
Tinea Cruris	Was infected	6	10.9
	Not infected	49	89.1
Knowledge about tinea cruris	Good	18	32.7
	Moderate	15	27.3
	Poor	22	40.0

Figure 2.
Preventing and promoting skin health activities of SD Darul Fadhli Palembang

Table 2.
Distribution of Pre-Post Test Regarding Knowledge and Practicing personal hygiene (n=55)

Variable	Category	Pre-Test		Post-Test	
		Freq. (n)	Percent (%)	Freq. (n)	Percent (%)
Knowledge about personal hygiene	Good	39	70.9	49	89,0
	Moderate	8	14.5	4	7.3
	Poor	8	14.5	2	3,7
Practicing the personal hygiene	Good	47	85.5	53	96,4
	Bad	8	14.5	2	3,6

The limitation of the activity is that it does not consider the determining factors other than knowledge, attitudes, and behavior. Other factors such as convenience, availability of facilities, access to

information, and surveillance systems can strongly influence skin disease control. It is necessary to explore further, considering the level of knowledge, attitudes, and good behavior, while the incidence of transmission is still relatively high. Teachers' and parents' supervision of elementary school children is essential to preserve personal hygiene, food and drink hygiene, and environmental health in the classroom. Knowing about one's cleanliness has little relation to other topics (Kusuma, 2019) (Table 3).

Table 3.
Correlation between Tinea cruris with Knowledge and Practicing the personal hygiene (n=55).

Variable		Tinea cruris		Total	*p-value*
		Yes	No		
Knowledge about personal hygiene	Good	34	3	37	0,750
	Moderate	13	1	14	
	Poor	2	2	4	
Practicing the personal hygiene	Good	37	2	39	0,052
	Moderate	8	0	8	
	Poor	4	4	8	

KESIMPULAN DAN SARAN

Fifty-five respondents from SD Darul Fadhli, Sako District, Palembang City have good knowledge and attitudes towards Tinea cruris. The location of the activity is a primary school where high transmission usually occurs. Although the level of knowledge has been good, unfortunately, the incidence of transmission in the school is still relatively high. The mean value of the pre-test was lower than the mean score of the post-test. It was concluded that the activity could increase knowledge. Knowledge of skin diseases and good personal hygiene behavior are not sufficient factors related to tinea cruris fungal infection. It is necessary to consider other factors, such as health monitoring and collaboration with the community health center.

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Conflict of Interests

The authors declared that no potential conflicts of interest with respect to the authorship and publication of this article.

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