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SOCIOECONOMIC INTERACTION, FRIENDS, AND HEALTH WORKER IN INCREASING AWARENESS OF SCABIES PREVENTION BEHAVIOUR

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Abstrak

Skabies adalah masalah kesehatan masyarakat yang signifikan, terutama di lingkungan dengan kepadatan tinggi seperti pesantren. Penularan yang cepat melalui kontak langsung, stigma sosial dan rendahnya kesadaran pencegahan dapat memperburuk penyebaran. Penelitian ini bertujuan untuk menganalisis hubungan antara tingkat sosial ekonomi, dukungan teman dan tenaga kesehatan dengan kesadaran pencegahan skabies pada pengelola pesantren di Kabupaten Malang. Penelitian menggunakan desain korelasional dengan pendekatan cross-sectional, melibatkan 140 responden yang dipilih secara proportional random sampling dari delapan pesantren. Data dikumpulkan dengan kuesioner terstruktur dan dianalisis menggunakan uji statistik Somers'd dan Gamma. Hasil penelitian menunjukkan hubungan signifikan antara tingkat sosial ekonomi dan kesadaran pencegahan skabies (ρ=0,031, r=0,351), serta antara dukungan teman dan kesadaran pencegahan skabies (ρ=0,000, r=0,542). Namun, dukungan tenaga kesehatan tidak menunjukkan hubungan signifikan (ρ=0,152, r=0,183), meskipun tetap berperan dalam edukasi dan pemberdayaan. Tingkat sosial ekonomi dan dukungan teman berperan penting dalam meningkatkan kesadaran pencegahan skabies, sedangkan dukungan tenaga kesehatan tidak memberikan pengaruh signifikan. Oleh karena itu, pendekatan yang melibatkan faktor sosial ekonomi dan dukungan sosial perlu diperkuat dalam upaya pencegahan skabies di pesantren.

Kata kunci: *sosial ekonomi, petugas kesehatan, kesadaran, scabies*

Abstract

Scabies is a significant public health issue, particularly in environments with high population density, such as pesantren (Islamic boarding schools). Its rapid transmission through direct contact, along with social stigma and low awareness of prevention, exacerbates the spread of the disease. This study aims to analyze the correlation between socioeconomic status, peer support, and healthcare worker support with awareness of scabies prevention among pesantren administrators in Malang Regency. The research employed a correlational design with a cross-sectional approach, involving 140 respondents selected through proportional random sampling from eight pesantren. Data was collected using a structured questionnaire and analyzed using Somers' d and Gamma statistical tests. The results indicated a significant correlation between socioeconomic status and awareness of scabies prevention (ρ=0,031, r=0,351), as well as between peer support and awareness of scabies prevention (ρ=0,000, r=0,542). However, healthcare worker support did not show a significant correlation (ρ=0,152, r=0,183), although it still plays a role in education and empowerment. Socioeconomic status and peer support are crucial in enhancing awareness of scabies prevention, while healthcare worker support does not have a significant impact. Therefore, approaches that involve socioeconomic factors and social support need to be strengthened in efforts to prevent scabies in pesantren.

Keywords: *sosioeconomic, health worker, awareness, scabies*

1. INTRODUCTION

Scabies is still a significant public health problem, especially in high-density environments such as Islamic boarding schools. Its rapid transmission is caused by direct contact, and lack of awareness of preventive behavior exacerbates the spread of this disease (Sanei-Dehkordi et al., 2021). Socioeconomic interactions, relationship with friends, and involvement of health

workers play an important role in shaping public awareness of scabies prevention (Ararsa et al., 2023).

The global prevalence of scabies is estimated at 300 million cases each year, with the greatest burden experienced by tropical and low-income countries, including Indonesia (Karimkhani et al., 2017, WHO, 2020). In Indonesia, the prevalence of scabies is in the range of 4.60% to 12.95%, making this disease one of the three most common skin diseases (Mayrona et al., 2018). This condition shows that scabies is not only an individual health problem, but also a public health challenge that requires special attention, especially in environments with limited access to hygiene and health services.

The stigma attached to scabies often results in social isolation and delays in seeking treatment. Many individuals feel embarrassed because scabies is often associated with poverty and poor hygiene, and are reluctant to seek medical help or disclose their condition to friends or the community (Koç Yıldırım et al., 2023). In addition, economic factors, such as limited access to health services and lack of resources to purchase preventive equipment, are the main obstacles in controlling this disease (Gupta et al., 2024).

The role of friends and social networks is also very important. In closed communities, friends can be an effective channel for spreading illness prevention information. Positive support from friends has been proven to significantly improve health behavior, especially in the adolescent and young adult age groups (Cohen et al., 2020).

Health workers, through education and screening programs, contribute to increasing awareness of preventive behavior. They not only provide clinical services but also build public trust to reduce the stigma associated with scabies. Community-based interventions carried out by health workers can have a significant positive impact in changing behavior and increasing awareness (Glanz et al., 2015).

Friend and health worker support is a critical factor in shaping health behaviors, yet its role in promoting scabies prevention remains insufficiently studied. Most existing studies highlight general health behaviors but do not delve into how friendships and peer networks contribute to awareness and practices specific to scabies prevention.

While socioeconomic status is recognized as a determinant of health, there is limited research examining how specific socioeconomic interactions influence awareness and behavior related to scabies prevention. Understanding how economic disparities affect access to information and preventive measures remains underexplored.

2. RESEARCH METHOD

This research used a correlational design with a cross-sectional approach. The research population consisted of 213 Islamic boarding school administrators from eight Islamic boarding schools in Malang Regency. A total of 140 respondents were selected using a proportional random sampling technique taking into account the proportional representation of each Islamic boarding school.

Inclusion criteria include: (1) individuals who: act as teachers in Islamic boarding schools (such as *Gus, Ning, Ustadz,* and *Ustadzah*) or Islamic boarding school staff, (2) able to read and write in Indonesian, and (3) consent to be respondents by signing an informed consent. Exclusion criteria include: (1) the head of the Islamic boarding school (*Kyai*), (2) individuals with hearing impairments, and (3) individuals with visual impairments.

Data collection was carried out from January to March 2024 using a structured questionnaire. The questionnaire in this study consists of three parts. The first is a demographic data questionnaire, which includes age, gender, education level, income, and length of stay in the *pesantren* (Islamic boarding school). The second is a questionnaire on peer support and healthcare worker support, adopted from Mohsenipouya et al., (2018). This questionnaire is completed by marking an "X" in the response column corresponding to the provided statements, which consist of (1) never, (2) rarely, (3) often, and (4) always. The scoring results are categorized as follows: Good: 16–20, Sufficient: 11–15, Less: 5–10. The validity test result for this questionnaire is 0.960, and the reliability test result is 0.729.

The third questionnaire measures awareness of scabies prevention behaviors, adopted from Goudarzi et al., (2020). This is a Likert-scale questionnaire consisting of 4-point response options: never, rarely, often, and always, with a total of 5 items. The scoring results are categorized as follows: Good: 16–20, Sufficient: 11–15, Less: 5–10. The validity test result for this questionnaire is 0.786, and the reliability test result is 0.760.

Univariate data analysis includes gender, age, education level, income, and duration of service at the Islamic boarding school. For bivariate analysis, the Somers'd and Gamma statistical tests were used to measure the correlation between socioeconomics, friend and health workers support, and awareness of taking action in preventing scabies. This statistical method was chosen because it is able to evaluate the correlation between ordinal variables accurately, producing significant findings that can be the basis for drawing conclusions. This study passed the ethical feasibility test with the approval number 306/S.Ket/KEPK/STIKesKPJ/XII/2023.

3. RESULT AND DISCUSSION

The characteristic of respondent include gender, age, level of education, income, duration of service at Islamic Boarding School.

Table 1. General Characteristic Respondent

Variable	Frequency	Percent (%)
Gender		
Male	60	42.9
Female	80	57.1
Age		
16- 25 years old	31	22.1
26- 35 years old	109	77.9
Level of education		
Elementary School	4	2.9
Junior High School	36	25.7
Senior High School	49	35
Higher Education	51	36.4
Income		
< IDR 2.000.000	114	81.4
IDR 2.000.000- 5.000.000	10	7.1
> IDR 5.000.000	16	11.4
Length of Service		
Less than 5 years	96	68.6
5- 10 years	34	24.3
More than 10 years	10	7.1

Based on table 1, most respondents consists of 57.1% female, 77.9% ranging from 26-35 years old. In terms of education, 36.4% of respondents is bachelor degree, while 81.4% respondents has an income of less than 2 million IDR per month. The majority of servitude level is 68.6% with less than 5 years. Overall, this table provides detailed information about the demographic composition of the respondents.

Table 2. Cross Tabulation and Bivariate Test Results of Socioeconomic with Activity Awareness to Prevent Scabies among Islamic Boarding School Administrators

Socio Economic	Scabies Prevention Awareness			p-value	r
	Good	Sufficient	Less		
High	6 (4.3)	8 (5.7)	2 (1.4)		
Middle	0 (0)	9 (6.4)	1 (0.7)	0.031	0.351
Low	16 (11.4)	63 (45)	35 (25)		
Total	22 (15.7)	80 (57.1)	38 (27.1)		

Table 2 shows that there is a tendency that the higher the socioeconomic level, the better the scabies prevention awareness is. The results of the analysis showed a significant correlation between socio-economic level and awareness of scabies prevention (p=0.031) with a moderate correlation (r=0.351).

Table 3. Cross Tabulation and Bivariate Test Results of Friend Support and Awareness of Scabies Prevention among Islamic Boarding School Administrators

Friend Support	Scabies Prevention Awareness			p-value	r
	Good	Sufficient	Less		
Good	8 (5.7)	7 (5)	0 (0)	0.000	0.542
Sufficient	11 (7.9)	42 (30)	16 (11.4)		
Less	3 (2.1)	31 (22.1)	22 (15.7)		
Total	22 (15.7)	80 (57.1)	38 (27.1)		

Table 3 shows that there is a tendency that the better the friend support the better the scabies prevention awareness is. The statistical test results showed that the r between support from health workers and awareness of scabies prevention was not significant (p=0.152) with a weak correlation strength (r=0.183).

Table 4. Cross Tabulation and Bivariate Test Results of Health Worker Support and Awareness of Scabies Prevention among Islamic Boarding School Administrators

Health Worker Support	Scabies Prevention Awareness			p-value	r
	Good	Sufficient	Less		
Good	5 (3.6)	27 (19.3)	5 (3.6)	0.152	0.183
Sufficient	11 (7.9)	41 (29.3)	21 (15)		
Less	6 (4.3)	12 (8.6)	12 (8.6)		
Total	22 (15.7)	80 (57.1)	38 (27.1)		

Table 4 shows that there is no tendency of health worker support to scabies prevention awareness level. The statistical test results showed that the correlation between support from health workers and awareness of scabies prevention was not significant (p=0.152) with a weak correlation strength (r=0.183).

Socioeconomic Correlation with Scabies Prevention Awareness

Based on Table 2, respondents with an income of more than 5 million rupiah (11.4%) shows a varied distribution of awareness of scabies prevention, with 6 people (4.3%) in the good category, 8 people (5.7%), and 8 people (5.7%) in the good category. less than 2 people (1.4%). In the income group of 2-5 million rupiah (7.1%), most respondents showed awareness of prevention in the sufficient (6.4%) and insufficient (0.7%) categories. These results indicate a significant correlation between socio-economic level and awareness of scabies prevention with a value of p=0.031 and a moderate correlation (r=0.351).

According to the Health Belief Model (HBM) theory, awareness and preventive behavior are influenced by individual perceptions of vulnerability and the benefits of preventive actions (Glanz et al., 2015). In the context of this research, a higher socioeconomic level can increase access to health information and facilities, which supports increased awareness. A study by Karimkhani et al., (2017) shows that economic factors and education play an important role in controlling skin diseases such as scabies.

Cookson et al., (2016) also revealed that people with higher incomes tend to have better access to health resources, including educational programs and preventive interventions. This strengthens the finding that economic factors directly contribute to better preventive behavior, especially in controlling infectious diseases.

Governments and health institutions need to develop affordable and sustainable

programs to support health education in underprivileged communities. In addition, strengthening collective awareness through community support can also be an effective approach to increasing scabies prevention behavior, especially in areas with high prevalence.

Correlation between peer support and awareness of scabies prevention

The results showed a significant correlation between friend support and the level of awareness of scabies prevention (p=0.000) with moderate correlation strength (r=0.542). Respondents with good friend support (10.7%) had a dominant level of scabies prevention awareness in the good (5.7%) and fair (5.0%) categories. In contrast, respondents with sufficient friend support (49.3%) were more likely to be at a sufficient level of prevention awareness (30.0%) and a smaller proportion were in the good (7.9%) and poor (11.4%) categories. This emphasizes the important role of social support in increasing awareness of measures to prevent infectious diseases.

According to Fisher et al., (2015) friend support can influence health behavior through emotional, instrumental and information mechanisms. In this context, friends who provide encouragement or share information regarding the importance of scabies prevention can help individuals increase awareness and improve their behavior. A further study by Gilmour et al., (2020) stated that strong social support contributes to reducing disease risk through increasing the ability to adapt to health threats. In this study, the moderate correlation between friend support and awareness of scabies prevention indicates that social aspects play an important role, although not the only determining factor.

The results of this research indicate that Islamic boarding school administrators need to maximize the role of peers in health campaigns, especially to increase awareness of scabies prevention. Strategies that can be implemented include forming health support groups or special training for peers as agents of behavior change. However, it should be noted that although the correlation between peer support and awareness is significant, this approach should be complemented with other interventions, such as health professional support or direct education, to achieve maximum results.

Correlation between support from health workers and awareness of scabies prevention

The results showed that support from health workers had an insignificant effect on the level of awareness of scabies prevention (p=0.152) with a weak correlation strength (r=0.183). In the good health worker support category (26.4%), respondents tended to have sufficient awareness of prevention (19.3%), followed by good (3.6%) and poor (3.6%) categories. In the sufficient support category (52.1%), sufficient prevention awareness was also dominant (29.3%), while the good and poor categories were 7.9% and 15.0% respectively. These results indicate that although there is support from health workers, their contribution to increasing awareness of scabies prevention is not optimal.

According to Gilmour et al., (2020) the role of health workers in supporting awareness and preventive behavior depends on the accessibility, capability and sustainability of the intervention. In this case, health worker support may not have been effectively integrated into the community education and empowerment system, so its impact on awareness is still limited. In addition, a study by Heydari et al., (2021) states that a preventive approach requires not only interaction with health workers, but also trust, good communication, and active involvement of individuals in the disease prevention process.

The results of this study indicate the need for improvements in health worker support patterns. More intensive education and an approach that focuses on the specific needs of Islamic boarding school communities can increase the effectiveness of support. Apart from that, health workers should be more actively involved in providing direct training to Islamic boarding school administrators so that information about scabies prevention can be conveyed comprehensively. Even though the correlation is weak, it is important to maintain and increase the role of health workers as a component of strategic health interventions. By strengthening collaboration between health workers and the community,

awareness of scabies prevention has the potential to increase significantly.

4. CONCLUSION AND SUGGESTION

Based on the research results, there is a significant correlation between socio-economic level and friend support and the level of awareness of scabies prevention. A higher socio-economic level and the support of good friends contribute positively to increasing awareness of scabies prevention. In contrast, support from health workers shows an insignificant influence on awareness of scabies prevention, although it still has an important role in the education and empowerment process. These findings emphasize the importance of a holistic approach that includes socio-economic aspects and interpersonal relationships in scabies prevention strategies, as well as the need to optimize the role of health workers to strengthen promotive and preventive efforts in the community.

Scabies prevention programs are expected to integrate approaches that take into account socio-economic factors and social support from friends as important elements in increasing public awareness. A higher socio-economic level and the support of good friends have been proven to make a positive contribution to awareness of scabies prevention, so educational programs need to target groups with lower socio-economic status and strengthen social networks in the community. Even though the support of health workers does not show a direct significant impact, their role remains vital in providing appropriate education and empowering the community. Therefore, optimizing the role of health workers through training and capacity building is expected to strengthen promotive and preventive efforts at the community level.

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