

Factors Influencing Scabies Among Islamic Boarding School Students: A Scoping Review

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Abstract. A common skin problem, scabies, is spreading very fast because of the way people surround themselves while using a shared place to reside. This study intends to analyze environmental factors involving living conditions, hygiene, and protection strategies which may be causing scabies. A comprehensive study was done to determine how scabies was spreading among Islamic school students, since it has become an almost epidemic like situation with a rising number of students infested with it. Researchers browsed through important studies from 2015 on forward from technical compendiums like Scopus and PubMed. People know scabies, but not how to catch or get around it. Many people are getting it by living in towns that have nothing but flats! Scabies can get near you if you touch or come in close contact with people or animals. In addition it was found that you got scabies more easily if you were young. Some people said that we should be cleaner and study a lot. The results suggest a lack of knowledge about hygiene that continues in schools throughout the area. To prevent the spread of scabies, focus should be placed on changing various factors that cause the infestation. Limiting poor hygiene and living conditions, or overcrowding in certain areas can significantly decrease the spread of the disease. Reducing malnutrition is best completed by enhancing sanctioned living processes and continuously issuing health advice messages.

1 Introduction

The mite *Sarcoptes scabiei*, which causes scabies, a skin infection, can spread through direct contact with an infected person or contaminated objects[1]. This disease can affect anyone, but students at Islamic boarding schools (pondok pesantren) are more likely to get it because they live in close quarters and don't always practice good hygiene[2]. Scabies can make people very itchy, and it can also affect their mental health and sleep patterns, which makes life harder for them [3]. Scabies can cause daily problems and make students miss regular Islamic education classes[4].

According to data from the Ministry of Health of the Republic of Indonesia[4], scabies is the third most common skin condition in Indonesia, affecting between 4.9% and 12.95% of the population. Scabies is spread by touching the skin directly or by using dirty bedding and clothes[5]. This disease spreads more easily in places with a lot of people, like Islamic

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boarding schools. The main risk factors for getting scabies are not taking care of your personal hygiene, living in bad conditions, and not knowing how to keep yourself clean[6].

Due to inadequate hygiene practices, insufficient awareness regarding prevention, and limited medical intervention, scabies has become a significant health issue in Islamic boarding schools [5]. Previous studies have shown that bad hygiene habits are the main cause of scabies outbreaks among students. More research is needed to find out if the different programs to stop scabies, like teaching Clean and Healthy Living Behavior (CHLB), have worked in Islamic boarding schools[7].

Some other ways to lower the number of scabies cases in Islamic boarding schools are to improve sanitation facilities and access to good medical care, teach students more about health, and use the media to raise awareness about hygiene [8]. One more option is to make quick detection tools like "Deskab" that non-medical staff can use to find scabies [9].

Numerous studies have examined the correlation between hygiene practices and scabies incidence in Islamic boarding schools; however, there is limited knowledge regarding the social, cultural, and environmental determinants influencing the prevalence of scabies among students. Additionally, the majority of current research exclusively evaluates existing intervention programs and neglects to investigate the cumulative effects of behavioral, cognitive, and environmental factors [5]. This study seeks to delineate avenues for further investigation by analyzing the determinants influencing the prevalence of scabies through a scoping review methodology.

This study seeks to identify the factors affecting the prevalence of scabies in Islamic boarding schools, focusing specifically on students' personal hygiene practices and housing density. This study aims to develop policy recommendations to reduce the prevalence of scabies in Islamic boarding schools through a community-based approach and the improvement of adequate sanitation facilities [6]. This study is crucial for equipping policymakers with a comprehensive understanding of the factors affecting the prevalence of scabies in Islamic boarding schools, thus facilitating the development of evidence-based and more effective interventions. This study is anticipated to exert a considerable influence on prevention and control initiatives in boarding schools, given the escalating incidence of scabies among students, thereby improving their quality of life and educational experience.

2 Methods

2.1 Study design

This scoping review aims to assess the factors influencing the prevalence of scabies among students enrolled in Islamic boarding schools. The research question examines the factors that affect the prevalence of scabies among students in Islamic boarding schools.

2.2 Patient and public involvement

Patients and the community were not involved in the design or data collection for this scoping review.

2.3 Search methods for identification studies

This study will utilize the National Medical Subject Headings (MeSH) to search the Scopus, PubMed, and ScienceDirect databases for commonly employed terms. The terms "scabies" and "schools," or "Islamic boarding school" and "students," will be employed. The selection

process is based on PRISMA (Preferred Reporting Items for Systematic Review and Meta-Analysis)[10].

2.4 Study eligibility

This article uses the PCC (Population, Concept, Context) design as a method to find studies. P: Learner, C: Scabies, C: School for Islamic Boarding.

2.5 Inclusion criteria

The inclusion criteria for this scoping review are studies written in English and published in the last ten years, from 2015 to 2025. The study population consists of male and female students aged 12 to 18 in junior and senior high schools who are enrolled in Islamic boarding schools. Quantitative studies originating from primary research methodologies, including experimental designs, Randomised Controlled Trials (RCTs), quasi-experimental frameworks, and cross-sectional analyses, are deemed suitable for inclusion.

2.6 Exclusion criteria

This scoping review does not include articles from proceedings, reviews, qualitative study designs, or articles that do not have full text. The excluded population comprises preschoolers, elementary school students, high school health vocational students, and individuals with a formal background in health education.

2.7 Study Selection

The JBI Critical Appraisal Tools Checklist will be employed to assess the quality of qualifying articles[11]. Two unbiased reviewers will assess each study. If the two reviewers can't agree, a third reviewer will be asked to help them come to an agreement.

2.8 Data extraction and categorization

The information gathered for this scoping review will be shown in a table that shows the author (year), method, results, and conclusion.

3 Results And Discussion

The search yields 90 articles. After the removal of 5 duplicates, 79 articles that did not meet the inclusion criteria were obtained and 6 articles that met the inclusion criteria were obtained and analyzed. Details are shown in Figure 1

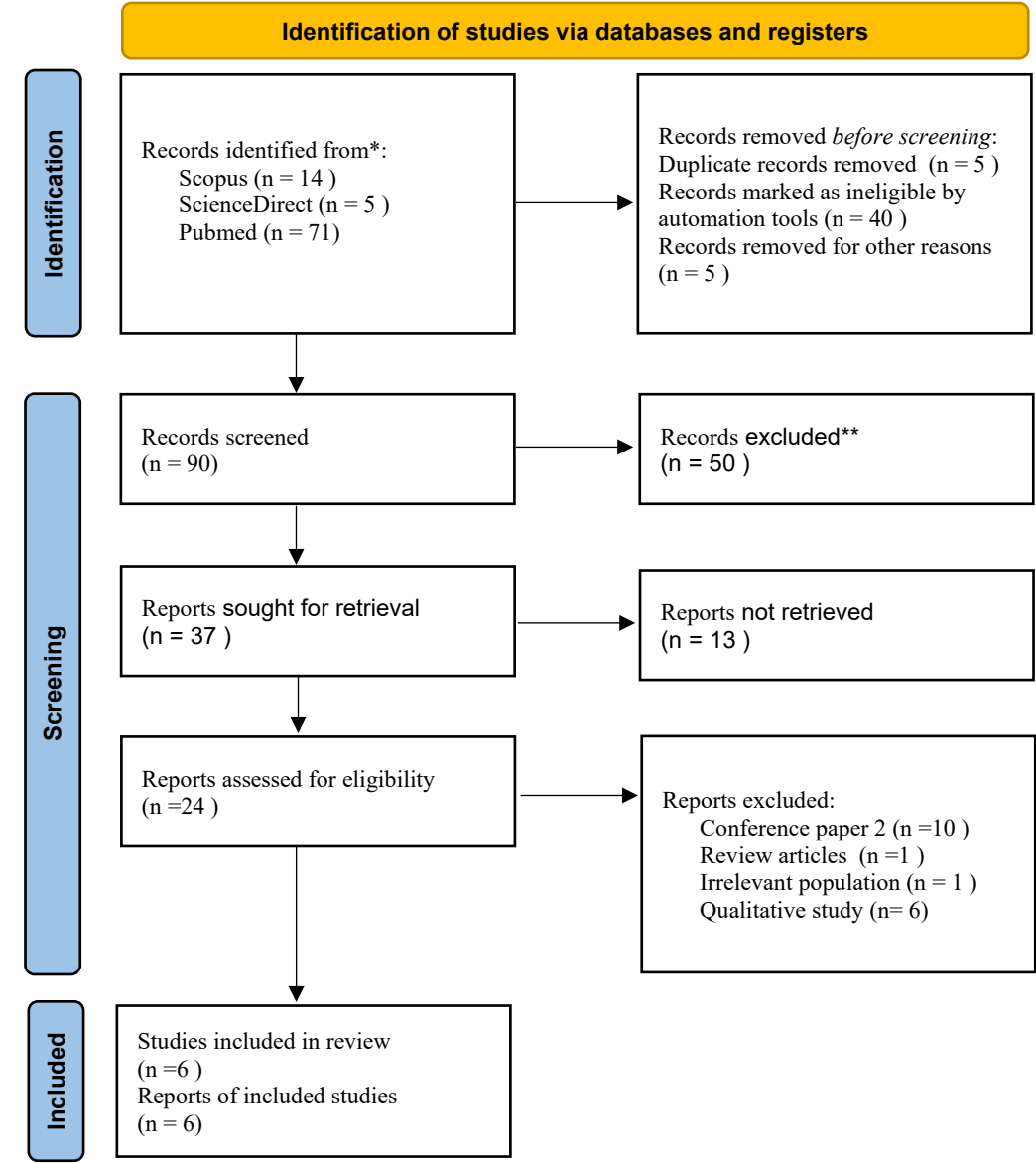


Fig. 1. PRISMA flow diagram of the scoping review process

The included article is a study conducted in 2 countries, namely Indonesia and Bangladesh. in Indonesia there are 5 articles and Bangslades there are 1 articles. For an explanation, it is in Table 1.

Table 1. Papers included in the scoping review

Author (Year)	Country	Method	Results	Conclusion
Fauziah & Suparmi, (2023)	Indonesia	Analytical observational	178 students in As'ad Islamic Boarding School;	Scabies incidence was influenced by insufficient

Author (Year)	Country	Method	Results	Conclusion
		study with a cross-sectional design	majority had poor knowledge, hygiene, contact history, low room humidity, and overcrowded conditions. 60.7% showed scabies symptoms.	knowledge, poor personal hygiene, contact history, low humidity, and overcrowding.
Awisarita et al., (2025)	Indonesia	Cross-sectional analytical approach with questionnaires	123 students in Hamalatul Quran Islamic Boarding School; 62.6% prevalence of scabies, poor personal hygiene in most students.	Personal hygiene is significantly related to scabies; improving hygiene is crucial in preventing scabies transmission in boarding schools.
Hasan et al., (2024)	Bangladesh	Cross-sectional study with 935 children in Madrasahs, Dhaka	34% overall prevalence of scabies; higher in males (39.4%) than females (28.4%). Risk factors include overcrowding, sharing personal items, and pruritus in close contacts.	Scabies prevalence in Madrasahs is high, particularly in males and younger children. Overcrowding, poor hygiene, and shared personal items are key risk factors for scabies transmission.
Mawardi et al., (2024)	Indonesia	Cross-sectional study with 490 students at Imam Syuhodo Modern Islamic Boarding School	16.12% prevalence of scabies, with male students and those under 14 years having higher risk. Sharing personal belongings and a history of itchiness were significant risk factors.	Male gender, younger age, and sharing personal belongings were significant risk factors for scabies. Students with scabies experienced a significant negative impact on their quality of life.
Arisandi et al., (2018)	Indonesia	Cross-sectional study with 93 respondents in two Islamic Boarding Schools	59.6% prevalence in Raudatul Ulum and 56.5% in Mustaqimus Sunnah. Male students, younger age, and overcrowded living conditions were key risk factors.	Overcrowded living conditions, male gender, and younger age were significant risk factors for scabies. These findings should inform elimination strategies.
Sutarti et al., (2018)	Indonesia	Pre-experimental pre-test post-test control group design with 30 respondents	Before the education, 66.7% had fair knowledge about scabies; after health education, 63.3% had good knowledge. The difference in knowledge was	Health education effectively increased students' knowledge about the dangers of scabies, highlighting the importance of health education in preventing scabies in boarding schools.

Author (Year)	Country	Method	Results	Conclusion
			statistically significant (p = 0.001).	

The current analysis identifies a number of scabies risk factors for kids attending Islamic boarding schools, including behavioural, environmental, demographic, and individual factors. The incidence of scabies was consistently correlated with knowledge level [12]. Previous research have found analogous findings, suggesting that insufficient awareness of transmission pathways and prevention strategies contributes to the continued prevalence of scabies in boarding school settings [13].

Personal cleanliness has emerged as a significant driver [5]. Inadequate hygiene behaviours, like irregular bathing and neglecting to change clothes regularly, increase pupils' susceptibility to scabies infection [14]. This observation corresponds with studies indicating that scabies is easily transmitted via direct skin-to-skin contact or the exchange of contaminated personal objects [15].

The historical interactions with infected persons also considerably impacted transmission. Students who engaged in intimate physical contact—such as co-sleeping, cuddling, or sharing garments and towels—with infected peers exhibited a higher likelihood of contracting scabies [10]. The findings support other studies indicating that interpersonal contact is a significant risk factor for scabies transmission in dormitory environments [13].

Environmental factors further facilitated the dissemination of disease. Elevated room occupancy density enabled frequent physical encounters among students, hence enhancing transmission, while inadequate ventilation and elevated humidity created conducive circumstances for mite survival outside the host [13]. Both variables highlight the significance of dormitory infrastructure and housing policy in managing scabies outbreaks [12].

Demographic traits were also identified as influential factors. Younger pupils, especially those below 15 years, had a greater prevalence of scabies, presumably due to insufficient awareness and reduced compliance with hygiene regimens [14]. Furthermore, male pupils have been identified as more susceptible than their female counterparts, with research demonstrating a significantly elevated risk among boys [16].

Social activities involving the sharing of personal goods, such as clothing, bedding, or toiletries, were significantly associated with the spread of scabies. A history of pruritus within peer groups functioned as an early predictor of possible outbreaks, as symptomatic individuals serve as reservoirs for transmission to others [15].

The amount of education was negatively correlated with the probability of scabies. Students with diminished educational attainment, especially at the junior high school level, demonstrated a greater propensity for infection than their senior high school counterparts. Previous studies have shown that health education programs effectively increase knowledge and decrease vulnerability to scabies, hence underscoring the protective function of education [17]

4 Conclusion

The examination of factors affecting the incidence of scabies in Islamic boarding schools reveals that poor personal hygiene, previous exposure to scabies patients, and a lack of understanding about the disease's transmission and control increase the likelihood of infection. Scabies is transmitted via environmental conditions, including high human density

and low humidity levels. Male students and younger persons, especially those below the age of 15, demonstrate increased vulnerability to scabies. The spread of scabies is intensified by the sharing of personal objects, including clothing, bedding, and toiletries. Furthermore, junior high school students and those with lower educational qualifications exhibit a higher susceptibility to scabies than senior high school students. Therefore, reducing the spread of scabies in Islamic boarding schools requires increasing awareness, supporting better hygiene practices, and executing effective health education.

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