

The Role of Health Education in Improving Clean and Healthy Living Behavior (PHBS) in Rural Communities

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ABSTRACT

This study aimed to explore in-depth the community's understanding of infectious disease prevention through a qualitative approach, focusing on the level of health awareness, attitudes, and behaviors of people from different social, economic, and cultural backgrounds in urban and rural areas. Data were collected through in-depth interviews and focus group discussions (FGDs) involving participants from different walks of life to explore factors that influence preventive knowledge and practices, such as access to accurate health information, level of trust in formal health services, and cultural values and social norms prevailing in the community. The results revealed significant variations in the level of understanding and behavior of infectious disease prevention between community groups, with cultural and social factors often serving as both barriers and enablers to preventive action. The findings confirm the need for a community-based, contextual, and participatory health education approach, involving local leaders and interactive communication methods that suit the characteristics of the community, so that health promotion programs can be more effective, sustainable, and able to raise awareness while significantly changing community behavior in preventing the spread of infectious diseases.

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INTRODUCTION

Infectious diseases are one of the leading causes of morbidity and mortality in many countries, especially in developing countries such as Indonesia. Diseases such as tuberculosis, HIV/AIDS, dengue hemorrhagic fever, malaria, and acute respiratory infections remain a significant public health burden. In recent decades, advances in medical science, including vaccinations and evidence-based treatments, have helped reduce the prevalence of some of these diseases. However, challenges in infectious disease control remain great, mainly due to limitations in the implementation of effective prevention programs at the community level (Herawati & Sofiatin, 2021).

One important aspect of infectious disease prevention is individual and collective behavior based on health awareness. Behaviors such as washing hands with soap, using personal protective equipment, taking vaccinations, maintaining environmental hygiene, and avoiding contact with sources of transmission play an important role in breaking the chain of disease spread. However, the

implementation of these behaviors is highly dependent on the level of understanding and awareness of the importance of prevention, as well as on their social, cultural and economic values (Herawati & Sofiatin, 2021).

In many regions, particularly in areas where access to accurate information is limited and levels of formal education remain low, there are still significant portions of the population who lack sufficient knowledge about how infectious diseases are transmitted and how they can be effectively prevented. This knowledge gap is often exacerbated by the widespread influence of myths, cultural stigma, and inaccurate information, which collectively shape public attitudes and frequently result in unhealthy or even harmful practices. Misguided beliefs—such as associating disease with supernatural causes or moral failings—continue to persist in certain communities and can lead to the rejection of scientifically proven health measures. Furthermore, a general sense of distrust toward health care systems and governmental institutions often acts as a major barrier to the successful implementation and acceptance of public health programs. When communities do not feel seen, heard, or respected by those in authority, their willingness to engage with prevention initiatives diminishes significantly.

Historically, most research efforts related to the prevention of infectious diseases have employed quantitative methods that primarily emphasize numerical data, trends, and statistical correlations. While such approaches are undeniably valuable in offering measurable insights and identifying broad patterns, they tend to overlook the rich, complex, and nuanced ways in which individuals and communities perceive, experience, and respond to health-related challenges. Numbers alone cannot fully capture the cultural meanings, emotional responses, or personal histories that influence how people behave in the face of illness. This is where qualitative research methodologies offer an indispensable advantage. By allowing researchers to engage directly with individuals through open-ended conversations and participatory observations, qualitative approaches provide a more holistic and context-sensitive understanding of the social realities that shape public health outcomes.

This particular study is grounded in the belief that qualitative exploration is essential for uncovering the underlying factors that affect community understanding and responses to infectious disease prevention. Through the use of in-depth interviews and focus group discussions conducted among participants from a diverse range of social, cultural, and economic backgrounds, the study seeks to gain a rich and multifaceted insight into how people interpret disease risk, evaluate the credibility and relevance of preventive measures, and make personal health decisions. It also aims to uncover the often-unspoken norms, values, and social dynamics that influence collective behavior. The findings generated through this approach are expected to offer not only a deeper comprehension of community health perspectives but also to serve as a critical foundation for the design of more effective, inclusive, and culturally sensitive health promotion strategies. By aligning interventions with the lived experiences and local realities of the target communities, public health initiatives can achieve greater relevance, acceptance, and long-term impact.

METHOD

This study used a qualitative approach with the aim of deeply understanding the community's understanding of infectious disease prevention and their level of health awareness. This approach was chosen because it is able to capture subjective perspectives and the socio-cultural context that influences people's behavior in preventing disease (Aminah et al., 2021). Data were collected through in-depth interviews and focus group discussions (FGDs) involving participants from various social and economic backgrounds, and from urban and rural areas to obtain a representative variety of data.

The data collection process was conducted in stages, starting with the selection of key informants using a purposive sampling technique, which selected participants who were considered to have relevant knowledge or experience related to infectious disease prevention. In-depth interviews focused on individuals' understanding of infectious diseases, ways to prevent them, sources of health information used, and barriers faced in implementing preventive measures.

Meanwhile, focus group discussions were designed to obtain a collective picture of shared norms, values and perceptions within the community related to health awareness.

All interviews and discussions were recorded with participants' permission, and the transcripts were analyzed using thematic analysis. This analysis process involved coding the data to find patterns, main themes, and relationships between concepts that emerged from the participants' narratives. Data validity was strengthened by triangulation of sources and techniques, as well as discussion of results with peers to ensure accurate and in-depth interpretation.

With this method, the study not only provides a descriptive picture of the community's knowledge, but also understands the reasons behind their attitudes and behaviors in preventing infectious diseases, so that the results of the study are expected to provide applicable recommendations for the development of more effective and contextual health education programs.

RESULTS AND DISCUSSION

Level of Knowledge about Communicable Diseases and How to Prevent Them

People's knowledge about infectious diseases is a major factor that determines how they understand the risks and preventive measures to be taken. From in-depth interviews with various participants, it was found that most people have a general idea that infectious diseases can be transmitted through physical contact, air, or dirty environments. However, this understanding is not always complete and accurate. For example, some respondents stated that they understood the importance of handwashing to prevent disease transmission, but did not understand the importance of the correct duration of handwashing or the use of antiseptic soap (Aiello et al., 2008).

Level of education and access to information sources were significant differentiating factors in knowledge. Respondents with higher education tend to have a better understanding and also more actively seek information through official media, such as television, health websites, or health workers. In contrast, people with lower education and living in remote areas often rely solely on information from personal experience, stories of neighbors, or myths circulating in the community. This leads to some false beliefs, for example, that infectious diseases only affect children or people who are weak, so adults feel less need to take precautions (Handayani et al., 2024).

In addition, cultural influences and social values also shape people's knowledge. In some communities, infectious diseases are sometimes considered a curse or the result of certain behaviors that violate religious or traditional norms. This view can lead to stigmatization and hamper education and early detection efforts. This partial and biased knowledge certainly affects the community's readiness to respond appropriately to infectious disease threats. These findings suggest the need for health education programs that not only deliver factual information, but also build a holistic understanding that is sensitive to cultural context. Interactive and communicative delivery methods, such as open dialog, the use of visual media, and the involvement of local figures, will be more effective in improving community understanding than conventional lecture methods.

Community Attitudes and Perceptions towards the Communicable Disease Prevention Program

Community attitudes and perceptions towards infectious disease prevention efforts vary widely and are influenced by experiences, beliefs, and social values (Tanate et al., 2023). From the group discussions, some communities showed positive and enthusiastic attitudes towards vaccination programs, health checks, and hygiene campaigns organized by the government or health institutions. They realize the importance of these measures to protect themselves and their families from the risk of disease.

However, there are also groups of people who are skeptical and apathetic. Some participants expressed distrust of the effectiveness of vaccines or medical interventions, having experienced adverse events or heard negative stories related to vaccination side effects. This distrust is also reinforced by confusing information on social media and unsubstantiated rumors, which makes some people hesitant to participate in official health programs (Arumsari et al., 2021).

In addition, social stigma against certain diseases also affects people's attitudes. For example, people with HIV/AIDS often face discrimination that makes them reluctant to seek care or access

treatment. This creates a major challenge in disease prevention and control efforts. Communities that still associate illness with shame or moral turpitude tend to refuse to openly discuss these health issues (Muhammad Saleh Nuwa, Stefanus Mendes Kiik, 2019).

Cultural values also play a role in shaping attitudes. In some communities, traditional medicine is still believed to be the main alternative, so modern prevention programs are considered less relevant (Adiyasa & Meiyanti, 2021). These attitudes must be understood and approached in an inclusive manner so that communities do not feel dictated to or forced to accept change, but are actively involved in the decision-making process.

Therefore, infectious disease prevention programs should be designed with an approach that takes into account the psychology and culture of the community, building trust through transparency, honest communication, and involving community leaders as a bridge between health services and the community.

Barriers and Supporting Factors in Implementing Preventive Measures

Various internal and external factors were found to influence the success of communities in implementing infectious disease prevention measures. On the inhibiting side, economic factors are one of the most dominant. Many families cannot afford adequate hygiene products, such as antiseptic soap, masks, or preventive medicines (Pesulima et al., 2021). Difficult economic conditions also force some people to focus more on the needs of daily life rather than maintaining preventive health.

Geography and infrastructure are also significant barriers. In remote areas, access to health facilities is very limited, so vaccinations and health counseling are difficult to reach regularly (Abdurrahman et al., 2025). Limited means of transportation and information make it difficult for health programs to reach all levels of society evenly.

In addition to structural and resource-based challenges, the presence of deep-rooted social and cultural stigma associated with certain infectious diseases significantly contributes to the neglect of preventive measures within many communities. This stigma often manifests in the form of fear, shame, and social exclusion, leading individuals to avoid seeking medical examinations or disclosing symptoms due to concerns about being discriminated against or marginalized by society. As a result, cases of infection may go unreported or untreated, allowing the potential for disease transmission to continue unchecked and undermining broader public health efforts. Furthermore, the persistence of myths, misconceptions, and false beliefs regarding the origins and causes of certain diseases impedes accurate understanding and delays appropriate responses, thereby complicating prevention and control strategies.

Despite these challenges, the study also identified several enabling factors that significantly support the community's ability to implement disease prevention practices. Notably, the presence of strong emotional and practical support from family members, the encouragement and guidance of respected community leaders, and the influence of organized social groups play a pivotal role in shaping individuals' attitudes and behaviors toward health. When prevention measures such as maintaining environmental cleanliness, adopting healthy hygiene habits, and disseminating reliable health information are carried out collectively within the community, individuals are more likely to participate and adhere to these practices, as they feel a sense of unity and mutual responsibility.

Moreover, the role of social media and modern communication technologies has become an increasingly powerful force, particularly among the younger generation, in spreading awareness and promoting health education. Digital platforms offer rapid, widespread access to health-related information, making it easier for people to stay informed about prevention methods and recent developments. However, this benefit is highly contingent on users' ability to critically evaluate and filter the information they receive, avoiding misinformation, conspiracy theories, and hoaxes that can mislead the public and derail prevention efforts.

From these observations, it becomes clear that effective infectious disease prevention requires the adoption of a comprehensive and integrated multisectoral approach. This approach should not only emphasize medical interventions but also address the social determinants of health by considering the socio-economic realities, cultural contexts, and the importance of strengthening community-based support networks. By harmonizing efforts across health, education, social services,

and communication sectors, prevention strategies can be made more inclusive, culturally sensitive, and ultimately more successful in reducing the spread of infectious diseases.

The Role of Community and Communication Strategy in Raising Health Awareness

Communities serve as key agents in raising awareness and promoting preventive behaviors of infectious diseases (Sulistyo et al., 2023). The study revealed that active community involvement through participatory approaches such as health cadre training, community discussion groups, and gotong royong activities-contributed significantly to increasing community awareness and compliance with established health protocols. Involving the community directly in the education process and preventive measures has been shown to strengthen a sense of belonging and shared responsibility for maintaining the health of the surrounding environment.

One of the keys to the success of a community-based approach is its ability to accommodate local values and cultural practices that have taken root in people's daily lives. In other words, health messages will be more easily accepted if they do not contradict local cultural identities or are perceived as foreign. As a concrete example, the use of local languages and symbols familiar to indigenous people in health campaigns makes the messages easier to understand, accept and internalize by the target audience.

Effective communication strategies also play a crucial role in determining the success of health education programs. A two-way communication approach, which allows communities to raise concerns, questions and share their personal experiences, results in solutions that are more targeted and in line with the real needs of the community. The media used to convey messages must also be diverse and adapted to the demographic characteristics and literacy levels of the audience, ranging from print media, television, radio, to digital media and social networks which are now increasingly widely used.

The role of traditional leaders, religious leaders, and local community leaders is crucial in building public trust and legitimizing health messages. Their support not only helps reduce community resistance to health programs, but also encourages active participation in various disease prevention and control activities. Moreover, the integration of health messages into the community's social and religious activities further strengthens the process of internalizing healthy behaviors in a sustainable manner.

These findings confirm that the success of infectious disease prevention programs does not only depend on the availability of medical services or health facilities, but is also strongly influenced by the extent to which the community is involved as a strategic partner in the process of education and behavior change. Thus, sustainable public health development requires a holistic approach that places the community at the center of every health initiative and intervention.

CONCLUSION

Based on the results of the research conducted, it can be concluded that the community's understanding of infectious disease prevention is strongly influenced by the level of education, access to information, and the socio-cultural context they live in. The knowledge possessed by the community still shows significant variation, with groups that already understand the importance of preventive measures well, but there are also groups that are influenced by myths and inaccurate beliefs. Community attitudes and perceptions towards infectious disease prevention programs also vary, ranging from supportive to skeptical and apathetic, largely influenced by personal experience, social stigma, and trust in health institutions. Economic, geographical and socio-cultural factors are the main barriers to the implementation of preventive measures, but on the other hand, community support and the role of community leaders are significant supporting factors in increasing health awareness. The role of effective communication and a culturally sensitive approach has been proven to strengthen community participation in infectious disease prevention efforts in a sustainable manner. Therefore, infectious disease control efforts should not only focus on medical aspects, but should also involve a holistic and participatory social approach.

As a follow-up to this study, it is recommended that health education and promotion programs be designed by considering the characteristics and needs of the local community, including an

understanding of prevailing cultural and social values. Communication strategies should prioritize two-way dialogue and use media that are easily accessible and understood by all levels of society. The involvement of traditional, religious and community leaders is highly recommended to build trust and strengthen the legitimacy of prevention programs. In addition, there needs to be an effort to increase access to health services, especially in remote areas and vulnerable groups, taking into account the economic aspects that are often an obstacle. The government and health institutions are also expected to improve cross-sector coordination to optimize existing resources and develop more inclusive and sustainable prevention programs. With a comprehensive and participatory approach, it is hoped that awareness and preventive behavior of infectious diseases in the community can increase, resulting in more effective disease control and a significant reduction in the incidence of infectious diseases

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