



Case Study of the Role of Health Education in Raising Public Awareness of the Importance of Preventing Infectious Diseases

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ABSTRACT

One of the main factors leading to the high incidence of infectious diseases is the low knowledge and preventive behaviour among the community (Alodokter, 2018; Hellosehat Kemenkes, 2022). This study aims to examine the role of health education in increasing public awareness of the importance of infectious disease prevention, and to analyse the effectiveness of educational methods used in various health programmes. This research uses a case study method with a qualitative approach. Case studies were chosen because they allow researchers to explore in depth the phenomenon of the role of health education in increasing community awareness of the importance of preventing infectious diseases (Ismadi, 2023). The focus of this study was to holistically understand health education interventions in a particular community and their impact on behaviour change and community awareness. From the results shown in Table 1, the attitudes of subjects I and II before being given health counselling related to infectious diseases were in the less category with a percentage of 60%. Table 2 shows that after being given health counselling to improve family attitudes in preventing infectious diseases in adolescents. Subject I where the pre-test results were 60% and post-test results were 90%. The importance of health education in preventive interventions, which has a tangible impact on behaviour change and reduced risk of disease transmission.

Keywords: *Role of Health Education, Public Awareness, Infectious Diseases*



INTRODUCTION

Infectious diseases remain a serious public health challenge, especially in developing countries like Indonesia. The rapid spread of diseases such as tuberculosis (TB), dengue haemorrhagic fever (DHF) and acute respiratory infections (ARI) is often exacerbated by a lack of public awareness of the importance of disease prevention. One of the main factors leading to the high incidence of infectious diseases is the low knowledge and preventive behaviour among the public (Alodokter, 2018; Hellosehat Kemenkes, 2022).

Health education plays an important role in increasing people's knowledge and awareness about the importance of maintaining health and preventing disease. Through effective education programmes, people can be provided with information on appropriate prevention methods, such as maintaining hygiene, following immunisation programmes, and recognising early signs of disease. Good health education can help change people's behaviour towards a healthier lifestyle, which in turn can reduce the incidence of infectious diseases (Fadhol, 2022). Health education plays an important role in changing behaviour and increasing public awareness about disease prevention. Through appropriate education programmes, people can be taught about the importance of maintaining hygiene, undergoing immunisation, and recognising early signs of disease. Studies have shown that continuous health education can improve people's adherence to preventive measures, such as the use of personal protective equipment, handwashing habits, and the adoption of a healthy lifestyle in general (Puskomedia Indonesia, 2024).

While health education has great potential to increase public awareness, the challenges faced in its implementation are significant. In many regions, especially those with low education levels, community participation in health education programmes is often low. Lack of understanding of health issues and limited access to accurate information are major barriers to raising awareness of disease prevention (Sustain.id, 2024). However, the challenges faced in implementing health education often relate to low community participation and understanding, especially in areas with low education levels (Wardah, 2023). Therefore, a more comprehensive and community-based approach is needed in delivering health information that is easy to understand and relevant to everyday life.

This study aims to assess the role of health education in increasing public awareness of the importance of infectious disease prevention, and to analyse the effectiveness of educational methods used in various health programmes. This case study will be conducted in the city of Padang, where the prevalence of infectious diseases is high and health education interventions have been implemented.

METHODS

This research uses a case study method with a qualitative approach. Case studies were chosen because they allow researchers to explore in depth the phenomenon of the role of health education in increasing community awareness of the importance of preventing infectious diseases (Ismadi, 2023). The focus of this study was to holistically understand a health education intervention



in a specific community and its impact on behaviour change and community awareness. The research subjects include health workers responsible for implementing health education programmes, residents who are participants or targets of health education programmes, especially those at risk of infectious diseases, officials or institutions that play a role in health policy in the area.

Data collection was carried out using several techniques, namely: In-depth Interviews: Health workers, stakeholders, and communities will be interviewed to gain an understanding of their perspectives on the health education programme and how it impacts disease prevention awareness and behaviour. Participatory Observation: Researchers will be directly involved in health education activities to see how the programme is run, how the community responds to it, and how effective the methods used are. Documentation: Collection of documents related to the health education programme that have been used to support the research results. This includes activity reports, educational materials, and medical records.

Thematic analysis will be used to analyse data collected through interviews, observation, and documentation. The stages of analysis include: Data Collection: Data collected from observations, interviews, and documents are grouped based on certain themes relevant to the research objectives. Data Presentation: The data that has been grouped is then presented in the form of descriptive stories to provide an overview of the main findings of the research. Research: From the analysed results, the researcher will make conclusions about how effective health education is in raising community awareness and how it impacts infectious disease prevention.

To ensure the validity and credibility of the data, this research will use the triangulation method, which means combining the results of interviews, observations, and documentation to verify the findings. In addition, group member checking will be conducted by giving the interview results to the group members to verify whether the researcher's interpretation matches what the group members intended.

RESULTS

Table 1. Attitude level before health counselling on infectious diseases

Subject	Attitude Level		Mean
	Percentage	Category	
Subject I	60%	Less	56%
Subject II	60%	Less	

Whereas in table 1 it is known that the attitude of adolescents before being given health counseling to improve family attitudes in preventing infectious diseases in adolescents gave results of 60% for subject I and 60% for subject II, both of which can be categorised as less.



Table 2. Attitude level before and after health counselling on infectious diseases

Subject	Attitude Level				Mean
	Pretest	Category	Posttest	Category	
Subject I	60%	Less	90%	Very good	56%
Subject II	60%	Less	82%	Good	

Table 2 shows that after being given health counselling to improve family attitudes in preventing infectious diseases in adolescents. Subject I where the pre-test results were 60% and post-test results were 90%. Then in subject II the pre-test results were 60% and post-test results were 82% so it can be concluded that the subject I family has a greater percentage than subject II because subject I has a very good category while subject II has a good category.

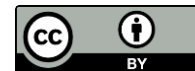
DISCUSSION

From the results shown in Table 1, the attitudes of subjects I and II before being given health counselling related to infectious diseases were in the less category with a percentage of 60%. This shows that before the counselling intervention, the level of knowledge and attitudes related to the prevention of infectious diseases was still relatively low.

However, after counselling, the results in Table 2 show significant changes in the attitudes of both subjects. In subject I, there was an increase from 60% (poor category) to 90% (excellent category), while subject II increased from 60% to 82% (good category). This indicates that health counselling has a positive and significant influence in improving attitudes related to the prevention of infectious diseases. This increase indicates that the health education provided was successful in improving understanding and better behaviour in terms of preventive measures against infectious diseases.

These results can be explained through health education theory, particularly the *Health Behaviour Change Theory* such as the *Health Belief Model* (HBM). According to the HBM, changes in a person's attitude and behaviour in preventing disease are strongly influenced by several factors, including:

1. **Perceived Susceptibility:** After counselling, subjects may become more aware of their susceptibility to infectious diseases (Hapsari et al., 2024; Kurnia & Suprihatin, 2017).
2. **Perceived Severity:** Information regarding the dangers of infectious diseases and their consequences may increase the subject's perception of the seriousness of the issue (Khodaveisi et al., 2021; Miles, 2020).
3. **Perceived Benefits:** Counselling can clarify the benefits of preventive measures, such as maintaining hygiene and adhering to health protocols.
4. **Cues to Action:** Extension interventions act as triggers for behaviour change, encouraging subjects to act more proactively in preventing infectious diseases (Alyafei & Easton-Carr, 2024; Meillier et al., 1997).



In addition, effective health education is also closely related to Albert Bandura's *Social Learning Theory*, which emphasises that new behaviours are learned through observation, modelling and reinforcement. Through counselling, people not only receive information, but are also given examples of good behaviour related to preventing infectious diseases, such as washing hands, maintaining environmental hygiene, and getting vaccinated (Nursandi, 2020). Based on the *Health Belief Model* and Social Learning theory, this attitude change occurs due to the community's increased understanding of the risks and benefits of preventive measures after receiving relevant information. Therefore, health education needs to be developed and implemented consistently to increase public awareness and behaviour in maintaining health, especially in communities with a high risk of infectious diseases (Nurmala et al., 2017).

CONCLUSIONS

This study shows that health education through counselling has a significant influence in improving community attitudes, especially families, towards the prevention of infectious diseases. Before being given counselling, the subject's attitude was in the less category with a percentage of 60%. However, after the counselling intervention, there was a significant increase in both subjects. Subject I increased to 90% with a very good category, while subject II increased to 82% with a good category.

This increase indicates that health education plays an important role in improving community knowledge, awareness, and behaviour related to infectious disease prevention. Well-structured counselling can change people's perception of infectious disease risk and motivate them to take preventive action.

This conclusion confirms the importance of health education in preventive interventions, which has a clear impact on behaviour change and reduced risk of disease transmission.

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