

HEALTH EDUCATION TO PREVENT ACUTE RESPIRATORY INFECTIONS (ARI) AMONG PRISONERS: *LITERATURE REVIEW*

1st Hardiat Dani Satria¹, 2nd Syamsulhuda Budi Musthofa², 3rd Mateus Sakundarno Adi³
hardiat@students.undip.ac.id¹, syamsulhuda@gmail.com², adisakundarno@lecturer.undip.ac.id³

Post-graduate student of Health Promotion, Faculty of Public Health, University of Diponegoro, Tembalang Semarang 50275, Indonesia¹, Study Program of Health Promotion, Faculty of Public Health, University of Diponegoro, Tembalang Semarang 50275, Indonesia², Study Program of Health Promotion, Faculty of Public Health, University of Diponegoro, Tembalang Semarang 50275, Indonesia³

Abstract. Acute respiratory infection or ARI is a disease that is generally suffered by prisoners in prison. The crowded and unsuitable prison environment causes many prisoners to suffer from ARI. Health education programs in prisons are still relatively small, so prisoners' awareness of respiratory health is still very low. Provides an overview of the importance of health education to prevent ARI in prison prisoners. This research method uses literature review techniques to synthesize publications. This literature review method applies the principles of Preferred Reporting Items for Systematic reviews and Meta-Analyses (PRISMA) which aims to identify scientific sources from previous research literature. This literature source search process was carried out in November 2023 on the ScienceDirect, Scopus and PubMed databases. 10 international journals and articles were obtained through searching with the keywords "Health Education", "Acute Respiratory Infections" and "Prisoner". Health education programs need to be provided in prisons to increase prisoners' awareness of the risks of ARI. Empirical evidence-based education regarding the dangers of bacteria, viruses and germs in prisons needs to be provided to prisoners so that they can improve their personal hygiene practices and protect themselves. Prisons also need to provide health consultation services and implement smoke-free policies to reduce the risk of ARI. Apart from that, waste management in prisons also needs to be considered to prevent the transmission of respiratory diseases. Health education programs for prisoners are urgently needed. This program must be followed by a good waste management policy and a smoke-free policy in prisons, so that the transmission of ARI can be reduced. Prisons need to create health education programs and implement these programs so that prisoners' knowledge about health can increase.

Keywords: health education, acute respiratory infections, prisoners, prisons.

INTRODUCTION

The cruel conditions of the prison environment have caused various diseases such as digestive diseases, tuberculosis and malaria (1). During the COVID-19 pandemic situation, conditions in prisons worsened, especially in the emergence of acute respiratory infections (ARI) in the prison environment. ARI is a major cause of morbidity and mortality, affecting patients with weak immune systems, heart and lungs, from various age groups (2). Meanwhile, Severe Acute Respiratory Coronavirus 2 (SARS-CoV-2) is an ARI syndrome caused by the corona virus. This ARI disease is transmitted through respiratory contact between individuals (3).

COVID-19 is an infectious disease that has hit the world since the first cases appeared in Wuhan, China. This disease causes sufferers to experience chronic respiratory disease caused by SARS-CoV-2 (1). As the number of COVID-19 cases increases globally, many countries are taking more aggressive precautions against the pandemic. Transmission of this virus occurs through droplets and direct contact with sufferers. Apart from that, there is also transmission via aerosols in certain circumstances and situations (4).

During the COVID-19 pandemic, prisoners in prison require special attention. This is because many prisoners have various pre-existing conditions, such as diabetes, hypertension and chronic

respiratory diseases. COVID-19 cases and poor prison conditions have led to a greater number of deaths among prisoners (1). Research states that prison sentences are very vulnerable to the spread of infectious diseases such as influenza, tuberculosis and other respiratory pathogens (3).

Health education is considered important to reduce the entry of ARI into prisons. This is because there are significant deficiencies related to health education programs in prisons which aim to increase awareness of the spread of ARI (5). Prison officials also have the authority to create disease prevention programs in an institution and create education and collaboration programs (3). One of the policies that can be implemented is a smoke-free policy in public places, especially in prisons. In several countries, this policy has been proven to reduce the number of ARI sufferers in prison (6). Diseases related to smoking include two, namely respiratory and cardiovascular. A number of drugs in prison are used to treat ARI (6). Health education in prisons is important for prisoners, especially to prevent the emergence of antibiotic-resistant infections. This is worrying, because it has been reported that ARI and oral disease are conditions with a high risk of antimicrobial resistance (5).

This literature review aims to explore and analyse the importance of implementing health education in efforts to prevent ARI among prisoners. By examining a variety of relevant studies and research, the focus is to present evidence supporting the important role of health education in increasing prisoners' understanding of the risks of ARI and ways to prevent it. The aim is not only to raise awareness, but also to empower prisoners to be able to take effective preventive measures, minimize the risk of infection and support their overall health.

RESEARCH METHOD

The design of this research is a literature review which is a description of scientific findings obtained from international journals. Several scientific findings in this international journal are used as references for analysing research. This literature review contains summaries and essences of scientific publications, especially international journals on the topic of health education to prevent ARI in prison prisoners.

Search Strategy. Research journal search methods and internet searches on the ScienceDirect, Scopus and PubMed databases. The journal search was limited to the last five years, namely from 2018 to 2023. For the reference search, the keywords used to collect various relevant journal literature were "Health Education", "Acute Respiratory Infections" and "Prisoner". This literature review method applies the principles of Preferred Reporting Items for Systematic reviews and Meta-Analyses (PRISMA) which aims to identify scientific sources from previous research literature. This literature source search process was carried out in November 2023 and 10 journals were obtained.

Inclusion Criteria. Based on the search results, around 103 journals were found in the ScienceDirect, Scopus and PubMed databases. Based on the inclusion criteria, researchers filtered the journals into the last five years, namely 2018. After that, they found around 20 journals that fit the inclusion criteria. Then the 20 international journals were reviewed and looked for correlations with the keywords "Health Education", "Acute Respiratory Infections" and "Prisoner". So, we found 10 journals that were very relevant to the topic of health education to prevent ARI in prison.

RESULT AND ANALYSIS

The 10 journals selected in this literature review provide a general overview of the importance of the role of health education in preventing ARI in prison. Of the 10 journals, there are 7 which discuss directly the importance of the role of health education in preventing ARI in prisoners. Furthermore, there are 3 articles that discuss the behaviour of the ARI phenomenon in prisons. These ten journals discuss specific ARI cases during the COVID-19 pandemic.

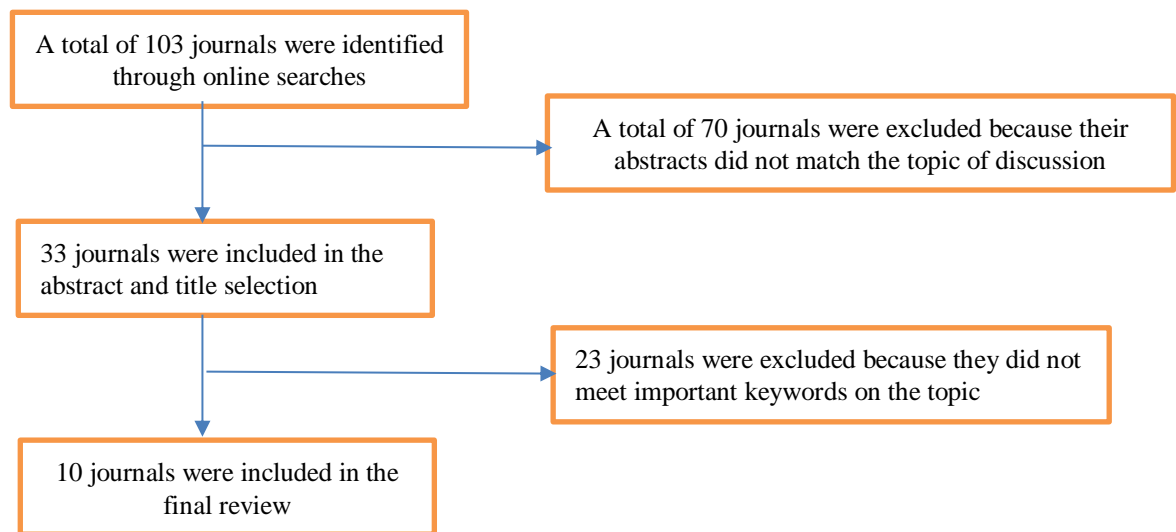


Figure 1. Article Selection Process

1.1 ARI Prevention Strategy

The strategy to prevent transmission of ARI is carried out by breaking the chain of transmission, using a layered mitigation approach, which is often referred to as a hierarchy of control. This approach aims to improve health in an institution by reducing the risk of harm. The form of prevention is in the form of administrative control (management) and the importance of using personal protective equipment (PPE) within an institution (7). Administrative control can take the form of visitor management, by limiting visitors to prevent the spread of ARI (8).

Furthermore, vaccination is also a form of prevention against ARI (9). Vaccination is an effective preventive measure to reduce the risk of transmission (10). From several studies, it can be concluded that the most important prevention strategies are the management of visitors to prisons, the use of complete PPE and education of prisoners in prisons to implement clean and healthy living behaviour (CHLB), maintaining distance from sufferers and regularly checking their health (11).

1.2 Health Education (2)

Prisons have the potential to become central of various infectious diseases (12). The density of prisoners in prisons is the cause of the spread of ARI. Several studies suggest that overcrowding is associated with increased incidence of SARS-CoV-2 in prisons. In addition, overcrowding has also been shown to increase the incidence of other acute respiratory infections (13).

Prison conditions tend to be unsanitary, overcrowded, poor ventilation, lack of health services with prisoners who are vulnerable to ARI (12). Several experts recommend providing health education based on empirical evidence related to the dangers of bacteria, viruses and germs in prisons. This is done so that prisoners can improve their personal hygiene and self-protection practices. Research shows that education and health literacy in prisons tends to be low with the transfer of information tightly controlled, creating fertile ground for misinformation to occur (3).

Therefore, health education is important to increase the awareness of prisoners in prison. Getting education is the right of prisoners in prison (1). Health education to increase awareness of self-protection can be done through training, posters, videos and so on (4). Health education can take the form of training guided by professionals in the health sector. As a result, there was a significant impact from this health training (14).

Health professionals also need to educate about the correct way to use antibiotics. This is done so that the danger of antimicrobial resistance can be prevented. Prisoners need to be educated about the dangers of antimicrobial resistance with empirical evidence (5). To

prevent ARI, prisoners also have the right to good quality food, access and health service infrastructure (1).

Research shows that medical personnel in prisons experience a lack of funds, so they are unable to provide adequate education (3). This needs to be a concern for the government so that they are aware of the importance of education in prisons. Conceptually, prisoners in prison need aspects of health, welfare, skills development, employability, work readiness and relationships with the community (15). Not only that, prisons must also pay attention to the need for consultation services, both physical and psychological health, as part of education (3,4).

Prisons also need to implement smoke-free policies to reduce the risk of ARI. This smoke-free prison policy is also part of health education. As is known, the group most at risk of experiencing ARI complications are smokers. They are at risk of cardiovascular and respiratory problems (12). A smoke-free prison policy can improve the respiratory health of prisoners. The results of the study show that the smoke-free prison policy has a positive effect on reducing ARI in prisons (6).

Apart from that, waste management in prisons also needs to be considered to prevent the transmission of ARI. Studies show that poor wastewater management will influence the transmission of ARI in prisons. Therefore, communities need to pay proper attention to the wastewater treatment system in their area (16).

CONCLUSION

Health education programs for prisoners are urgently needed. The importance of health education in the prison environment is a crucial aspect in preventing the occurrence of ARI. Prisoners, as state citizens, have the right to receive adequate health services, and health education is the main key to achieving this. Prison institutions must prioritize implementing health education programs to provide prisoners with sufficient understanding regarding efforts to prevent ARI, including how to maintain personal hygiene, healthy eating patterns and the importance of proper health care.

The government needs to support this effort by providing adequate allocation of training funds for prisons to organize health education programs. Currently, the lack of funding for health education in prisons is a major obstacle in providing comprehensive understanding to prisoners. Sufficient funding will enable prisons to provide regular health education and education, including specific information about ARI and how to prevent it.

In addition, it is necessary to implement good waste management policies and smoke-free policies in prison environments. Efficient waste management, including proper sorting, management and disposal of waste, can reduce the spread of ARI causing agents which contained in waste. In addition, a smoke-free policy in prisons will reduce exposure to smoke which can trigger or worsen ARI, not only for active smokers but also for other prisoners who are passively exposed to cigarette smoke.

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