Increasing the Productivity of Public Health Awareness Through Quality Education

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Abstract
The purpose of this article is to understand the importance of improving health awareness through education to achieve a quality and productive society. This article presents a synthesis of various scientific studies examining the impact of health education on increasing health awareness and its implications for society. The research methods used included a descriptive qualitative approach, a literature review, and a document analysis. The results show that health education has a positive impact on behavior change towards a healthy lifestyle, decreased disease burden and health care costs, and improved quality of life and productivity. Challenges in implementing health education in schools were also discussed, along with effective strategies to overcome these challenges. The implications of the findings include the need for educational policies and practices that prioritize health education, integrate it into the curriculum, and provide adequate resources and support for teachers. In addition, the article recommends further research and action, including the evaluation of specific health education interventions, exploration of cultural and contextual factors, and collaboration between stakeholders, to support evidence-based health education initiatives. Overall, improving health awareness through education plays an important role in building a quality and productive society.

Keywords: Public Health, Awareness, Quality Education
1. Introduction

Education is capital for the development of a country, the higher the quality of education, the higher the chance for the country to progress. Therefore, in the constellation of a state, the provision of education is not only pinned on the state but also on all stakeholders such as business actors, educational institutions, and community organizations. One very important education sector is health education. Health education plays an important role in improving public health and raising awareness of various health problems. It is a lifelong process that aims to improve the health and quality of life of individuals and communities (Bugshan et al., 2022). Higher education institutions (PT) also have a significant impact on sustainable development, including its social, environmental, and economic aspects (Finder et al., 2019).

Several studies in the Indonesian context prove how health education has an impact on clean and healthy living behavior (PHBS), productive. Erika Untari Dewi in her research entitled The Influence of Health Education on Clean and Healthy Behavior of Scavengers at Wonokromo-Surabaya TPA found that Health Education had a significant effect on Scavenger Life Behavior at Wononkromo TPA Surabaya. Sriyono (2015) also found that the lack of education and understanding of the community led to low hygiene and healthy living behavior. Muhammad Adnan et al (2022) in research entitled The Influence of Education and Health Levels on Labor Productivity in Aceh Province shows that the education level variable has a positive and significant influence on labor productivity in Aceh Province in 2010-2020. Zaraz Obella Nur Adliyani et al (2017) in their research entitled The Influence of Knowledge, Education, and Economics on Clean and Healthy Living Behavior in Pekonmon Village Communities, Ngambur District, Pesisir Barat Regency also shows that knowledge, economics, and education influence clean and healthy living behavior (PHBS ).

Saidang et al (2021) in their research entitled "The Influence of the Level of Formal Education on the Level of Participation in Community Health Care in Massemba Hamlet, Leoran Village, Enrekang District, Enrekang Regency" found that the level of formal education affects a person's level of participation in maintaining public health in Massemba Hamlet, Leoran Village. Enrekang District, Enrekang Regency. Al. Ihksan Agus et al (2021) found that the higher the level of health education, the higher the level of compliance with health protocols for preventing the transmission of Covid-19 at FKM UMI Makassar.

Julianty Pradono and Ning Sulistyowati (2013) found that there was a significant positive relationship between health status and knowledge about environmental health, healthy living behavior, and level of education. Indah Riski Hidayati et al (2019) found that there were differences in students' attitudes before being given knowledge about the dangers of smoking and after being given knowledge about the dangers of smoking. Where the attitude of students after being given knowledge about the dangers of smoking is getting more positive or away from smoking. Reza Azahari (2020) in his research entitled The Effects of Poverty and Education on Public Health found that education has a positive correlation with public health.
The value of Indonesia's health index only occupies the 87th position with a score of around 71.31 points. Likewise, when viewed from the level of education, Indonesia is still below Japan, South Korea, China, and Singapore and even below other ASEAN countries such as Malaysia, Vietnam, and Thailand.

![Figure 2. Countries with the Highest Health Index in the World (Source: Legatum Institute Foundation)](image)

2. Research Methods

This research method uses a qualitative approach that describes the phenomena that exist in the research location. Regarding improving the quality of public health through the quality of education

2.1. Data collection technique

The data collection techniques are obtained from valid and verified sources so that the necessary data and information are as follows:

a. Observations in the field by observing several people related to quality school educators

b. Documentation study through existing archives and official minutes of meetings, as well as through books, photographs, and other archives related to research

c. In-depth interviews with key respondents, paying attention to sentences and also verbal discussion so that they become important and appropriate data

2.2. Data Analysis

In data analysis for further data processing and to find data and information useful for research. Can be used as a basis for making decisions to solve existing problems. This analysis process includes data grouping activities based on their characteristics, data transformation, data intervention, and making data models to find information and data.

3. Results and Discussion

Health awareness refers to the level of knowledge, understanding, and awareness that individuals have about their health and the health issues that affect society. This involves information about various health conditions, preventive measures, and lifestyle choices. Health awareness includes not only the acquisition of knowledge but also the development of attitudes
and behaviors that enhance well-being and prevent disease (Bolte et al., 2021). It is a multidimensional concept that includes cognitive, affective, and behavioral components (Saah et al., 2021).

3.1. The Role in Raising Public Health Awareness Through Quality Education

a. Education plays an important role in increasing health awareness among individuals and society. It provides the knowledge and skills necessary to make informed decisions regarding personal health and well-being. Through formal and informal educational backgrounds, individuals can learn various health topics, including disease prevention, healthy behavior, and the importance of early detection and treatment (Elhadi et al., 2021). Education also helps individuals develop critical thinking skills, enabling them to evaluate health information and make decisions based on evidence (Car et al. 2022).

b. Health education programs should be implemented in schools, universities, workplaces, and community settings to increase health awareness. These programs can cover topics such as nutrition, physical activity, sexual health, mental health, and substance abuse prevention. They can be delivered through a variety of methods, including classroom-based instruction, workshops, seminars, online courses, and community outreach.

c. Health awareness has a direct impact on the quality and productivity of people. When individuals are aware of health problems and have the knowledge and skills to look after their health, they are more likely to adopt healthy behaviors and make informed decisions about their well-being. This can lead to reduced prevalence of preventable diseases, improved overall health outcomes, and increased productivity in various areas of life including work, education, and social interactions (Elhadi et al., 2021).

d. Health awareness can contribute to the development of a proactive and responsible society. When individuals are aware of the impact their behavior has on their health and that of others, they are more likely to engage in health promotion action and advocate for policies and practices that support the well-being of society. This can lead to the creation of a supportive and health-conscious environment that promotes the development and success of individuals and society as a whole (Heqi & Halabi. 2023).

3.2. Integrating Into Raising Public Health Awareness Through Quality Education

a. Integrating health education into the school curriculum is a fundamental approach to increasing health awareness among students. By incorporating health-related topics into subjects such as biology, physical education, and home economics, students can develop a comprehensive understanding of health issues and the importance of maintaining a healthy lifestyle. Schulenkorf et al. (2021). This approach ensures that health education is not treated as a separate entity but rather is integrated into the overall educational experience of students. This enables the strengthening of health knowledge and skills across a wide range of subjects, thereby promoting a holistic understanding of health and well-being (Vamos et al., 2020).

b. Teachers play an important role in facilitating health education and in promoting health awareness among students. They serve as role models and sources of information, guiding students to understand health concepts and adopt healthy behaviors (Akera et al., 2022). Teachers can incorporate interactive teaching methods such as group discussions, case studies, and hands-on activities to engage students and increase their understanding of health topics (Tjulin et al., 2019). Additionally, teachers can create a supportive and inclusive classroom environment that encourages
open discussion of health issues, allowing students to ask questions and share experiences (Vamos et al. 2020). Empowering teachers with the necessary knowledge and skills can effectively deliver health education and inspire students to prioritize their health and well-being.

c. A participatory approach in health education engages students actively in the learning process and encourages their active participation in decision-making and problem-solving (Braga et al., 2021). This approach recognizes that students have valuable insights and experiences that can contribute to the learning and development of their health education programs. Participatory methods such as group discussions, role plays, and participatory mapping allow students to explore health problems from their perspectives and collaborate with their peers to find solutions (Douglas et al., 2020). By involving students in the planning and implementation of health education initiatives, they develop a sense of ownership and responsibility for their health and that of their community (Braga et al., 2021).

3.3. **Utilizing Information Technology and Media in Public Health Awareness Through Quality Education**

a. In today's digital age, technology, and media platforms offer valuable opportunities for health education and awareness. Educational websites, mobile applications, and online platforms provide accessible and interactive resources for individuals to study various health topics (Hübner et al. 2020). These digital tools can convey health information in attractive formats such as videos, infographics, and interactive quizzes, making them more interesting and memorable for students (Stellefson et al., 2020). Social media platforms also play an important role in health education, as they provide a platform for sharing health-related content, raising awareness, and promoting healthy behaviors (Stellefson et al., 2020). It is important to critically evaluate the quality and accuracy of information shared on social media to avoid spreading misinformation (Stellefson et al., 2020).

b. **Behavior Change Towards a Healthy Lifestyle** Increasing health awareness through education has been proven to lead to positive behavior change and the adoption of a healthy lifestyle. Education equips individuals with knowledge and understanding of the importance of healthy behavior, such as regular physical activity, balanced nutrition, and good hygiene practices (Wang et al., 2021). With increased awareness, individuals are more likely to make informed choices and engage in behaviors that enhance their overall health and well-being (Zhang et al., 2021). For example, research has shown that education can influence dietary choices, leading to the consumption of healthier foods and reduced intake of unhealthy substances such as excessive salt (Kovač & Blaznik, 2020). Education also plays a role in promoting regular exercise and physical activity, which are important for maintaining health and preventing chronic disease (Zhang et al. 2021). Empowering individuals with the knowledge and skills to make healthier choices and increasing health awareness through education can contribute to the development of sustainable healthy behaviors and lifestyles.

c. Increasing health awareness through education has the potential to reduce the burden of disease and health costs. When individuals are aware of the risk factors associated with various diseases, they are more likely to take preventive action and seek early detection and treatment (Ferdosi et al., 2019). For example, education can increase awareness of the importance of vaccination, leading to higher immunization rates and decreased incidence of vaccine-preventable diseases (Ferdosi et al., 2019). In addition, education can increase awareness of the importance of routine health checks, such as
mammograms and colonoscopies, which can help early detection of diseases such as breast and colorectal cancer (Ferdosi et al., 2019). Early detection and timely treatment can lead to better health outcomes and potentially reduce the need for costly future interventions. By promoting prevention and early intervention, raising health awareness through education can contribute to reducing the burden of disease and overall healthcare costs.

d. Improving the Quality of Life and Productivity of the Community. Increasing health awareness through education has a significant impact on people's quality of life and productivity. When individuals are knowledgeable about health issues and have the skills to make decisions, they are better equipped to manage their health and well-being (Lu et al., 2021). This can lead to better physical and mental health outcomes, resulting in a higher quality of life (Brumfield, 2023). For example, education can improve self-management behavior among individuals with chronic conditions, leading to better disease control and increased overall well-being (Lu et al., 2021). In addition, increasing health awareness can contribute to disease prevention and the promotion of healthy behaviors, which can result in reduced absenteeism from work or school and increased productivity (Zweerde et al., 2019). Empowering individuals with the knowledge and skills to prioritize their health and increasing health awareness through education can contribute to the well-being and productivity of society as a whole.

3.4. Implementation in Increasing Public Health Awareness Through Quality Education

a. Implementation of health education in schools can be a challenge due to various factors. One of the challenges is the lack of prioritization of health education in the school curriculum and the limited time allotted for health-related topics (Lyon & Bruns, 2019). Schools often face competing demands and pressures to focus on academic subjects, which can result in limited resources and attention given to health education (Eisman et al., 2020). In addition, there may be a shortage of trained personnel and resources to effectively deliver health education programs (Shizume et al., 2021). Inconsistencies between school health programs and national education policies and a lack of coordination and collaboration between the health and education sectors can also pose challenges (Shizume et al., 2021). In addition, cultural and religious sensitivities and resistance from parents and community members can hinder the implementation of certain health education topics such as sex education (Rafiq et al., 2022).

b. Effective Strategies for Overcoming Challenges can be used to overcome challenges in implementing health education in schools. One effective strategy is to adapt interventions to better suit the school context (Naccarella & Guo, 2022). This involves adapting health education programs to the special needs and cultural backgrounds of students and involving key stakeholders, such as teachers, parents, and community members, in planning and decision-making processes (Naccarella & Guo, 2022). Streamlining school health programs and practices to make them more applicable can increase the effectiveness of health education (Eisman et al. 2020). This can involve simplifying and integrating health education into existing curricula and ensuring that teachers have the necessary training and support to deliver health education effectively (Eisman et al., 2020).

c. Strategy Collaboration between the health and education sectors is essential, and regulatory mechanisms can be used to facilitate fundraising and accountability for policies and programs (Naccarella & Guo, 2022). Strengthening evidence based on the effectiveness and cost-effectiveness of health education programs can also help
advocate for their implementation (Naccarella & Guo, 2022). Overall, a comprehensive and collaborative approach that engages all relevant stakeholders and addresses the specific challenges facing schools is essential for the successful implementation of health education programs.

4. Conclusions and Recommendations

4.1. Conclusion

Based on the results and discussion of public health, the following conclusions can be drawn:

a. Through the synthesis of various studies, several key findings and insights have emerged regarding the impact of health education on raising health awareness and the implications for society. Increasing health awareness through education has been found to lead to behavioral changes, such as adopting a healthy lifestyle and preventive measures. This, in turn, can contribute to a reduction in the burden of disease and healthcare costs. In addition, an increase in health awareness has been associated with an increase in people's quality of life and productivity. Integrating health education into the school curriculum, making use of technology and media, and adopting a participatory approach have been identified as effective strategies for improving health education. However, challenges in implementing health education in schools, such as limited resources and competing demands, must be overcome to ensure successful implementation.

b. The need for educational policies and practices that prioritize health education and integrate it into the school curriculum. Education policymakers must allocate sufficient time and resources to health education, ensuring that they are as important as academic subjects. Collaboration between the health and education sectors is essential to ensure the coordination and alignment of health education initiatives. Teacher training and support should be provided to enhance teachers' capacity to deliver effective health education. In addition, the use of technology and media platforms should be encouraged to reach a wider audience and make health education more attractive and accessible.

4.2. Recommendation

Based on the results of the discussion and conclusions about improving health, it can be recommended as follows:

a. Further research is needed to explore the long-term impact of health education on health outcomes and societal well-being. Studies should focus on evaluating the effectiveness of specific health education interventions and strategies in different settings and populations. In addition, research can investigate the role of cultural and contextual factors in shaping health education practice and their impact on health outcomes. It is also important to explore the perspectives and experiences of various stakeholders, including students, teachers, parents, and community members, to inform the development and implementation of health education programs. In addition, action is needed to advocate for the integration of health education into education policy and practice at the national and international levels. Collaboration between researchers, policymakers, educators, and health professionals is critical to ensuring evidence-based and sustainable health education initiatives.

b. Increasing health awareness through education is an important step toward building a quality and productive society. By integrating health education into school curricula,
empowering teachers, adopting participatory approaches, and leveraging technology, individuals can be equipped with the knowledge and skills to make informed decisions regarding their health and well-being. This, in turn, can lead to positive behavior change, reducing the burden of disease, improving quality of life, and increasing people's productivity. However, challenges in implementing health education must be overcome, and further research and action are needed to advance the field of health education and maximize its impact on society.

References


Al.Ihksan Agus, Rahmat Hidayat, Haeril Amir (2021), The Effect of Health Education on Increasing Knowledge and Changes in Attitudes of Lecturers and Employees in Complying with Health Protocols, Journal of Mental Nursing (JKJ): Indonesian National Nurses Association Volume 9 No 4 Pages 919 - 926, November 2021, e-ISSN 2655-8106, p-ISSN2338-2090


Julianty Pradono and Ning Sulistyowati (2013), Relationship Between Education Level, Knowledge About Environmental Health, Healthy Lifestyle Behavior With Health Status Correlation Studies on Population Age 10–24 Center for Public Health Intervention Technology.


Muhammad Adnan et al (2022), The Influence of Education and Health Levels on Labor Productivity in Aceh Province, JIMEBIS – Volume 3 Number 1 May 2022


Zaraz Obella Nur Adliyani et al (2017), The Influence of Knowledge, Education and Economics on Clean and Healthy Behavior in Pekonmon Village Communities, Ngambur District, Pesisir Barat Regency, Majority, Volume 7 Number 1, November 2017