

THE ROLE OF NUTRITIONAL LITERACY IN FACING THE CHALLENGES OF EPIDEMIOLOGICAL TRANSITION IN THE ERA OF MODERNIZATION

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Abstrak

Transisi epidemiologi di era modernisasi membawa perubahan signifikan dalam pola penyakit yang dialami masyarakat Indonesia, dari dominasi penyakit menular ke tidak menular. Salah satu faktor utama yang memengaruhi transisi ini adalah status gizi individu dan masyarakat. Penelitian kualitatif ini bertujuan untuk menggali secara mendalam peran literasi gizi dalam menghadapi tantangan transisi epidemiologi di tengah perkembangan teknologi dan informasi yang pesat. Metode penelitian dilakukan melalui wawancara mendalam terhadap 15 responden yang terdiri dari tenaga kesehatan, pelaku pendidikan, dan kelompok masyarakat dari berbagai latar belakang sosial-ekonomi di wilayah perkotaan dan pedesaan. Data dianalisis menggunakan pendekatan tematik untuk mengidentifikasi pola dan hubungan antara tingkat literasi gizi dengan perilaku hidup sehat serta pencegahan penyakit tidak menular (PTM). Hasil penelitian menunjukkan bahwa rendahnya literasi gizi menjadi salah satu penyebab utama meningkatnya prevalensi obesitas, diabetes, dan hipertensi di kalangan masyarakat urban. Selain itu, akses terhadap informasi gizi yang tidak merata dan adanya mitos-mitos tentang makanan juga memperburuk kondisi. Temuan ini menekankan pentingnya pengembangan program edukasi gizi yang inklusif dan berbasis teknologi sebagai upaya strategis untuk meningkatkan kesadaran masyarakat akan pentingnya asupan gizi seimbang. Penelitian ini merekomendasikan kolaborasi lintas sektor dalam menyediakan sumber daya edukasi gizi yang relevan dan dapat dijangkau oleh semua lapisan masyarakat guna mendukung tercapainya derajat kesehatan yang lebih baik di Indonesia.

Kata kunci: Literasi Gizi, Transisi Epidemiologi, Era Modernisasi

Abstract

The epidemiological transition in the modernization era has brought significant changes in the disease patterns experienced by the Indonesian people,

from the dominance of infectious diseases to non-communicable diseases. One of the main factors influencing this transition is the nutritional status of individuals and communities. This qualitative research aims to explore in depth the role of nutritional literacy in facing the challenges of epidemiological transition in the midst of rapid technological and information developments. The research method was conducted through in-depth interviews with 15 respondents consisting of health workers, education actors, and community groups from various socio-economic backgrounds in urban and rural areas. The data was analyzed using a thematic approach to identify patterns and relationships between the level of nutritional literacy and healthy living behaviors and the prevention of non-communicable diseases (NCDs). The results of the study show that low nutritional literacy is one of the main causes of the increasing prevalence of obesity, diabetes, and hypertension among urban communities. In addition, unequal access to nutritional information and myths about food also worsen the condition. These findings emphasize the importance of developing inclusive and technology-based nutrition education programs as a strategic effort to increase public awareness of the importance of balanced nutritional intake. This study recommends cross-sector collaboration in providing nutrition education resources that are relevant and accessible to all levels of society to support the achievement of better health in Indonesia.

Keywords: Nutritional Literacy, Epidemiological Transition, Modernization Era

INTRODUCTION

The epidemiological transition is a global phenomenon that reflects the change in disease patterns in society from the dominance of infectious diseases to non-communicable diseases. This phenomenon occurs as a result of various factors, including urbanization, modernization, and lifestyle changes. In Indonesia, this transition is increasingly evident with the increasing prevalence of non-communicable diseases (NCDs) such as diabetes mellitus, hypertension, and obesity (Gupta & Xavier, 2018). The development of technology and information accelerates changes in people's lifestyles, but also brings new challenges in maintaining nutritional balance. Therefore, understanding nutritional literacy is very important to face these challenges (Silva et al., 2023).

Nutritional literacy is the ability of individuals to acquire, understand, and use information about nutrition to make informed decisions regarding food intake. This ability includes not only basic knowledge of nutrition, but also awareness of the impact of food on long-term health. Unfortunately, the level of nutritional literacy in Indonesia is still low, especially among people with limited education and economic access. This causes many people to have difficulty in choosing the type of food that is healthy and according to the needs of the body (Saygi & Shipman, 2021). Thus, nutritional literacy is one of the key factors in efforts to prevent NCDs in the midst of the modernization era (Maiyaki & Garbati, 2014).

Previous research has shown that a lack of understanding of nutrition is often associated with unhealthy consumption patterns. People tend to be more susceptible to advertisements or information that is not entirely true about fast food and sugary drinks. In addition, myths about certain foods that are believed without scientific basis also contribute to the worsening of the condition. For example, the notion that ready-to-eat food is more practical and healthier than cooking it yourself is often the reason for some groups of people. This phenomenon shows that there is an urgent need to improve nutrition education so that people can make wiser decisions (Contento, 2007).

The modernization era brings its own challenges in terms of access to nutritional information. Although technology has made it easier to distribute information, the quality of the content delivered often varies. Many sources of information are unverified or even misleading, making it difficult for people to distinguish between facts and opinions. This situation is exacerbated by the lack of systematic and equitable nutrition education programs at various levels of society. Researchers see the importance of developing innovative and relevant educational strategies to overcome this problem (Garcia & Roblin, 2008).

In addition to the information factor, access to nutritious food is also an issue that must be considered. In some rural areas, limited infrastructure and economy make it difficult for people to obtain fresh and nutritious foodstuffs. On the other hand, in urban areas, processed and instant foods that are high in fat, sugar, and salt are actually more accessible and cheaper (Monteiro et al., 2011). This inequality of access widens the gap in inequality in nutritional status between regions. Therefore, there is a need for cross-sector interventions to ensure that all levels of society have equal access to healthy food (Fernandez et al., 2016).

Based on this background, researchers see the need for an in-depth study to explore the relationship between nutritional literacy and epidemiological transitions. This study aims to understand how nutritional literacy affects healthy living behaviors and the prevention of NCDs in the community. Through in-depth interviews with various related parties, researchers try to identify the obstacles faced in improving nutritional literacy. In addition, this study also explores the potential use of technology as an effective educational medium (Edwards et al., 2015). These findings are expected to provide concrete recommendations for stakeholders in designing a more inclusive nutrition education program (Ward et al., 2013).

Overall, this study emphasizes the importance of collaboration between the government, health workers, education actors, and the community in an effort to improve nutritional literacy. With a better understanding of nutrition, it is hoped that people can take proactive actions in maintaining their health. These preventive measures are important to reduce the burden of non-communicable diseases and improve the overall health status in Indonesia. This research is also the basis for recommending policies that are more responsive to the nutritional needs of the community in the modernization era (Pingali, 2007).

METHODS

This study uses a qualitative approach with an in-depth interview method as the main tool for data collection. The goal is to comprehensively understand the role of nutritional literacy in facing the epidemiological transition in the modernization era. The researcher chose a qualitative method because it allows for the extraction of more in-depth and descriptive information related to complex social phenomena. The research subjects were selected through purposive sampling techniques, with certain criteria designed to cover various community backgrounds. Respondents consisted of health workers, education actors, and community groups from urban and rural areas, so that they could provide a broad and relevant perspective.

The data collection process was carried out through a series of semi-structured interviews focused on the topic of nutritional literacy and the challenges of epidemiological transitions. Each interview is recorded with the permission of the respondent to ensure the accuracy of the data obtained. In addition, the researcher also conducted field observations to obtain a more real context picture of how nutritional literacy is implemented in daily life. Additional data are obtained from relevant documentation and literature, such as national and international health reports, to support the validity of the research results. All data was then analyzed using a thematic approach to identify patterns, trends, and relationships between relevant variables.

Data analysis is carried out systematically with the stages of data reduction, data presentation, and conclusion drawn. Data reduction was carried out by sorting out important information from the results of interviews and observations to focus the analysis on core issues related to nutritional literacy. The presentation of data is carried out in the form of narratives and tables to facilitate the interpretation of the results. Conclusions are drawn based on patterns that emerge from the data, and are associated with relevant theories in the field of nutrition and public health. Researchers also pay attention to the reliability and validity aspects of data by

triangulation of sources and methods, so that the results of the research can be scientifically accounted for. Thus, this method is expected to provide a deeper understanding of the dynamics of nutritional literacy in facing modern health challenges.

RESULTS AND DISCUSSION

The results of the study show that nutritional literacy has a significant role in facing the challenges of epidemiological transition in the modernization era. From the in-depth interviews conducted, it was found that most respondents from urban circles tended to have a better understanding of the importance of balanced nutritional intake compared to respondents from rural areas. However, the level of application of such knowledge in daily life is still limited due to busy lifestyle factors and lack of access to nutritious food. Researchers have also found that myths about food are often a barrier to the application of a healthy diet (Deshpande et al., 2009). These findings are relevant to previous studies that suggest that misconceptions about nutrition can affect people's consumption behavior (Glanz et al., 1992).

In addition, the results of the analysis showed that there was a relationship between low nutritional literacy and the increasing prevalence of non-communicable diseases (NCDs) such as obesity, diabetes, and hypertension. Respondents who did not understand the concept of balanced nutrition tended to consume fast food and sugary drinks more often, which are the main risk factors for the disease. This is supported by field observation data that shows that the consumption pattern of urban communities is more oriented towards convenience and time efficiency than nutritional content. This phenomenon reflects how modernization has changed people's food preferences without being accompanied by an increased understanding of its long-term impact (Sun & Ryder, 2016). Therefore, more systematic educational

interventions are needed to increase awareness of the importance of balanced nutrition.

This study also highlights the inequality of access to nutritional information between regions as one of the factors causing low nutritional literacy in Indonesia. Respondents from rural areas revealed that they have difficulty obtaining reliable information about nutrition due to limited technological and educational infrastructure. On the other hand, although urban communities have easier access to information, many of them do not fully understand or doubt the veracity of the content received. This situation shows that not only access, but also the quality of available information is an important issue in improving nutritional literacy. The researcher emphasized the need for cross-sector collaboration to provide an inclusive and reliable nutrition education platform (Aivalli et al., 2024).

The findings of this study also show that socio-economic factors have a major impact on the level of nutritional literacy of individuals. Respondents with higher formal education tended to be more aware of the importance of nutritional intake and more actively seek related information. On the other hand, groups with low education or limited economy often prioritize price over nutritional value in choosing food. This shows that there is a close relationship between socio-economic status and nutritional awareness. In addition, limited household budgets are also the main reason why some groups prefer cheap but less nutritious instant food (Wiig & Smith, 2009). These findings confirm the importance of a holistic approach in improving nutritional literacy (Sun & Ryder, 2016).

In this discussion, the researcher also highlighted the role of technology as a potential nutrition education medium. Many respondents from the millennial and Z generations stated that they prefer to obtain information through digital platforms such as social media and health applications. However, the quality of information spread on these platforms often varies, and some even do not comply with scientific

standards. Therefore, the development of an official application or portal that provides accurate and relevant nutritional information is very necessary. In addition, the educational approach through digital media must be adjusted to the characteristics of the target community to be more effective in disseminating nutrition messages (Mancone et al., 2024).

In addition to technological factors, support from health workers is also an important element in improving nutritional literacy. Interviews with health workers show that they often face challenges in providing nutrition education to patients due to time and resource constraints. In addition, the lack of special training for health workers in the field of nutrition also affects the quality of information delivery. Therefore, the researcher recommends further training for health workers to be more competent in providing nutrition education to the community. Collaboration between health workers, governments, and educational institutions can help increase the overall capacity of nutrition education (Graziose et al., 2018).

Overall, the results of this study show that nutritional literacy is a key factor in efforts to deal with the epidemiological transition in the modernization era. Researchers found that low nutritional literacy is not only influenced by individual factors, but also by systemic factors such as unequal access to information, limited resources, and lack of integrated educational programs. To overcome this challenge, a multisectoral strategy involving various related parties is needed. Recommendations from this study include the development of a reliable digital education platform, training of health workers in the field of nutrition, and increasing public awareness through mass campaigns. With these measures, it is hoped that the degree of public health can be significantly improved (Sørensen et al., 2012).

CONCLUSION

Based on the results of the research that has been conducted, it can be concluded that nutritional literacy plays a strategic role in facing the challenges of epidemiological transition in the modernization era. The findings show that the level of nutritional literacy of the community is still low, especially among those with limited education and economic access. This is one of the factors causing the increasing prevalence of non-communicable diseases (NCDs) such as obesity, diabetes mellitus, and hypertension. Myths about food and difficulties in obtaining accurate nutritional information also contribute to unhealthy consumption patterns. Therefore, increasing nutritional literacy must be a priority in efforts to prevent NCDs and maintain public health.

Researchers also found that the inequality of access to nutritional information between regions, both urban and rural, is a significant obstacle to increasing nutritional awareness. Urban people, although they have easier access to information, often find it difficult to sort out which information is correct and relevant. On the other hand, rural communities face technological infrastructure constraints that make them less exposed to optimal nutrition education. This phenomenon shows the urgent need to provide an inclusive and equitable nutrition education platform. The use of digital technology as an educational medium is considered potential as long as it is supported by valid content and trusted by the wider community.

In general, the results of this study emphasize the need for cross-sector collaboration to improve nutritional literacy in Indonesia. The government, health workers, education actors, and private institutions need to work together in designing effective and sustainable education programs. In addition, further training is needed for health workers to be more competent in providing nutrition education to the community. Researchers recommend the development of mass campaigns that reach all levels of society to raise awareness of the importance of balanced nutrition. With

these measures, it is hoped that the community can be more proactive in maintaining their health and reducing the burden of non-communicable diseases in the future.

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