

## From Curative Habits to Preventive Care: Health Education and Shifting Dental Health Values in Makassar, Indonesia

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### Abstract

This study examines how health education influences dental care behavior and contributes to shifting health values among urban communities in Makassar, Indonesia. Although dental and oral health is an essential component of overall well-being, preventive dental care is often treated as secondary to curative treatment, especially when individuals seek dental services only after experiencing pain or oral health problems. Using a sociological health perspective, this article explores how health education programs shape knowledge, attitudes, and everyday practices related to dental maintenance. The study highlights that health education delivered through campaigns, seminars, counseling, and educational materials can improve public awareness of oral hygiene, encourage regular tooth brushing, reduce harmful dietary habits, and promote routine dental check-ups. More importantly, the findings indicate a gradual shift in health values: dental care is increasingly understood not merely as a medical response to illness but as part of a preventive and healthy lifestyle. However, this behavioral transformation remains uneven. Socioeconomic barriers, particularly the cost of dental services and unequal access to adequate care, continue to limit the ability of low-income groups to translate knowledge into consistent practice. The study argues that effective dental health education must be integrated with broader efforts to reduce access inequalities. By linking behavioral change with social and economic contexts, this article contributes to sociological discussions on preventive health behavior, public health education, and value transformation in urban Indonesia.

**Keywords:** health education; dental care behavior; preventive health; oral health; health value shifts

### 1. Introduction

Oral health is increasingly recognized as an essential component of overall health, well-being, and social participation. It is not limited to the absence of dental disease, but includes the ability to eat, speak, smile, interact socially, and live without pain, discomfort, or embarrassment (World Health Organization [WHO], 2025). Globally, oral diseases remain a major public health burden, affecting nearly 3.7 billion people, while untreated dental caries in permanent teeth is among the most common health conditions worldwide (WHO, 2025). The persistence of oral health problems is particularly concerning because many dental and oral diseases are preventable through appropriate hygiene practices, early detection, regular dental visits, and sustained public health education (WHO, 2022).

In Indonesia, oral health remains a significant public health concern. The 2018 Basic Health Research data show that 57.6% of the Indonesian population experienced dental and oral health problems, yet only 10.2% received dental treatment from health professionals. Dental caries and periodontal disease are also highly prevalent, indicating that oral health problems are not merely individual issues but are connected to broader patterns of health literacy, access to care, preventive behavior, and social inequality (Chairunisa et al., 2024). These figures suggest that oral health education should not only aim to increase knowledge, but also address the social and economic conditions that shape whether people are able to transform knowledge into daily preventive practices.

Health education plays a central role in this process. The WHO defines health education as consciously constructed learning opportunities involving communication designed to improve health literacy, including knowledge, personal skills, and capacities that support individual and community health (Nutbeam, 1998; WHO, 2012). In the field of oral health, education is expected to improve public understanding of oral hygiene, encourage tooth brushing, reduce harmful dietary habits, promote regular dental check-ups, and strengthen preventive orientations toward dental care. Previous reviews

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have shown that oral health education can improve knowledge and support more favorable oral health behaviors, although its long-term impact often depends on the continuity of intervention, social support, and access to dental services (Nakre & Harikiran, 2013; Bashirian et al., 2023).

However, behavioral change in oral health cannot be understood only as the result of individual knowledge. From a sociological perspective, health behavior is shaped by values, norms, economic resources, institutional access, and everyday social environments. People may understand the importance of dental care but still delay treatment because of cost, limited service access, fear, time constraints, or the belief that dental services are necessary only when pain occurs. This means that dental care behavior reflects not only health awareness but also the social organization of health practices. In this sense, education may contribute to a shift from curative habits—seeking treatment only after dental problems appear—toward preventive care, where oral health is understood as part of a healthy lifestyle.

This issue is especially relevant in urban settings such as Makassar, Indonesia. Urban communities are often exposed to more diverse sources of health information through schools, clinics, campaigns, digital media, and community-based programs. At the same time, urban populations also experience socioeconomic variation that may produce unequal access to dental services. As a result, health education may improve awareness among the public, but the actual adoption of preventive dental behavior may remain uneven across different social groups. This tension between knowledge improvement and unequal access is important for understanding how health values change in society. Despite the growing attention to oral health education, many studies still approach dental care behavior mainly as an individual knowledge-attitude-practice issue. Less attention has been given to how health education participates in broader value transformation, particularly how communities redefine dental care from a reactive medical need into a preventive and lifestyle-oriented practice. This article addresses that gap by examining the relationship between health education, dental care behavior, and shifting health values in Makassar. Rather than treating oral health behavior as a purely individual choice, this study situates it within sociological discussions of health literacy, socioeconomic barriers, and changing cultural meanings of prevention.

Therefore, this study aims to analyze how health education influences dental care behavior among urban communities in Makassar and how such education contributes to a shift in health values. Specifically, the study explores how educational programs affect public knowledge, attitudes, and preventive practices; how socioeconomic barriers shape access to dental care; and how communities reinterpret dental health as part of a broader healthy lifestyle. By linking oral health education with social context, this article contributes to international debates on preventive health behavior, public health education, and the sociology of health in urban Indonesia.

## **2. Methods**

### **2.1 Research Design**

This study employed a qualitative case study design to examine how health education influences dental care behavior and contributes to shifting health values among urban communities in Makassar, Indonesia. A qualitative approach was considered appropriate because the study aimed to understand not only behavioral change, but also the meanings, perceptions, social barriers, and value transformations associated with dental care practices. The case study design allowed the research to explore health education as a socially embedded process shaped by knowledge, socioeconomic conditions, access to services, and everyday community practices.

### **2.2 Research Site**

The study was conducted in Makassar, a major urban center in eastern Indonesia characterized by social, economic, and educational diversity. Makassar was selected because urban communities are increasingly exposed to health promotion programs, public campaigns, school-based education, community counseling, and digital health information. At the same time, access to dental health services remains uneven across socioeconomic groups. This context makes Makassar a relevant site for examining how health education contributes to preventive dental behavior while also revealing the social constraints that limit behavioral change.

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### **2.3 Participants and Sampling**

Participants were selected using purposive sampling. The study involved community members in Makassar who had been exposed to oral health education through seminars, campaigns, counseling, school or community programs, or health service activities. To obtain a broader understanding of the issue, the study also included health workers and program facilitators involved in dental and oral health education.

The selection of participants considered variation in age, educational background, occupation, and socioeconomic condition. This variation was important to capture differences in knowledge, access, and dental care practices across social groups. Participants were included when they were able to describe their experiences, perceptions, and behavioral changes related to dental health education and dental care practices.

### **2.4 Data Collection**

Data were collected through three main techniques: in-depth interviews, participant observation, and document review.

First, in-depth interviews were conducted with community members, health workers, and health education facilitators. The interviews explored participants' understanding of dental and oral health, experiences with health education programs, daily dental care practices, barriers to accessing dental services, and perceptions of preventive dental care. The interviews also examined whether participants viewed dental care as a routine preventive practice or as a response only when pain or dental problems occurred.

Second, participant observation was conducted during health education activities related to dental and oral health. Observation focused on how educational messages were delivered, how participants responded to the information, and how preventive dental care was framed by facilitators. The observation also helped the researcher understand the social context of health education, including interaction patterns, participant engagement, and the practical limitations faced by communities.

Third, document review was used to support and contextualize the interview and observation data. The reviewed documents included educational materials, activity reports, public health campaign materials, and available information related to dental and oral health programs in Makassar. These documents were used to identify the dominant messages promoted through health education and to compare them with participants' everyday practices.

### **2.5 Data Analysis**

The data were analyzed using thematic analysis. The analysis began with repeated reading of interview transcripts, observation notes, and relevant documents to gain familiarity with the data. Initial codes were then developed to identify recurring patterns related to health knowledge, dental care practices, preventive behavior, access barriers, and value shifts.

After the initial coding process, related codes were grouped into broader categories. These categories included: increased awareness of oral hygiene, changes in daily dental care behavior, socioeconomic barriers to dental services, and the shift from curative to preventive understandings of dental health. The themes were then interpreted using a sociological health perspective, particularly by examining how individual behavior is shaped by social values, access to resources, and institutional health education.

The analysis did not treat behavioral change as a purely individual outcome. Instead, it examined the interaction between education, social inequality, service access, and changing meanings of dental health within urban community life.

### **2.6 Trustworthiness of the Study**

To ensure the credibility and trustworthiness of the findings, this study used triangulation across interviews, observations, and document review. The use of multiple data sources allowed the researcher to compare participants' narratives with observed practices and documentary evidence. Member checking was also conducted by confirming key interview interpretations with selected participants to ensure that their views were accurately represented.

In addition, the researcher maintained field notes during data collection to record contextual information, informal interactions, and reflections that supported the interpretation of the data. This process helped strengthen the dependability and confirmability of the analysis.

## 2.7 Ethical Considerations

The study followed ethical principles for social and health-related research. Participants were informed about the purpose of the study, the voluntary nature of their participation, and their right to withdraw at any stage without consequences. Informed consent was obtained before interviews and observations. The confidentiality of participants' identities was protected by anonymizing personal information in the reporting of findings. Data were used only for academic purposes.

## 3. Results

The findings show that health education contributed to changes in how participants understood and practiced dental care in Makassar. Before receiving health education, many participants tended to associate dental care with curative action, meaning that dental services were commonly sought only when pain, tooth decay, or other oral health problems had already occurred. After exposure to health education through campaigns, counseling, seminars, and educational materials, participants demonstrated greater awareness of the importance of daily oral hygiene and preventive care.

A key finding is the improvement of oral health knowledge. Participants became more familiar with the importance of brushing teeth regularly, reducing sweet food consumption, maintaining oral hygiene, and visiting dental health services for routine check-ups. This knowledge encouraged some participants to adopt healthier practices in their daily lives. For example, several participants reported brushing their teeth more consistently, paying closer attention to food choices, and becoming more aware of the risks of untreated dental problems.

The study also found a gradual behavioral shift from reactive to preventive dental care. Dental care was no longer viewed only as a response to illness, but increasingly as part of a healthy lifestyle. This shift was especially visible among participants who had repeated exposure to health education activities. They were more likely to understand that maintaining dental health requires continuous effort, not only treatment after problems appear.

However, the transformation was not experienced equally by all participants. Socioeconomic barriers remained an important limitation. Some participants understood the importance of routine dental care but found it difficult to access dental services because of cost, time, and limited availability of affordable treatment. This indicates that knowledge alone is not sufficient to guarantee behavioral change when structural barriers remain.

Overall, the results indicate that health education plays an important role in improving dental health awareness and encouraging preventive behavior. At the same time, the findings show that the success of health education depends on broader social conditions, especially equitable access to affordable dental health services. This supports the central argument of the study: the shift from curative habits to preventive care is not only an individual behavioral change, but also a social process shaped by education, access, and health values.

## 4. Discussion

The findings of this study show that health education plays an important role in moving dental care behavior from a curative orientation toward preventive practice. Participants who were exposed to health education became more aware of the importance of tooth brushing, reducing sugary food consumption, maintaining oral hygiene, and visiting dental services before serious problems occurred. This finding supports previous evidence that oral health education can improve knowledge, attitudes, and oral hygiene practices, although its effectiveness depends on the continuity and quality of the intervention (Nakre & Harikiran, 2013; Bashirian et al., 2023). In this sense, health education should not be understood only as information delivery, but as a process of improving health literacy, where individuals gain the ability to access, understand, and use health information in daily life (Nutbeam, 2000).

The shift from curative habits to preventive care also reflects a broader transformation in health values. Before receiving health education, dental care was often understood as necessary only when pain, cavities, or oral health problems appeared. After educational exposure, participants increasingly viewed dental care as part of a healthy lifestyle. This supports the argument that oral health promotion must go beyond clinical treatment and encourage prevention as part of everyday social practice (Petersen, 2003;

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World Health Organization [WHO], 2022). The finding is also consistent with sociological views of health behavior, which emphasize that individual practices are shaped by social meanings, values, institutions, and everyday environments (Giddens et al., 2017).

However, the findings also show that knowledge does not automatically produce equal behavioral change. Some participants understood the importance of routine dental care but still faced difficulties in accessing services because of cost, time, and limited affordable treatment. This confirms that oral health behavior is strongly shaped by enabling resources, not only by individual awareness. Andersen's behavioral model explains that health service utilization is influenced by predisposing factors, perceived need, and enabling resources such as income, affordability, and availability of services (Andersen, 1995). Therefore, people may develop preventive awareness but remain unable to practice it consistently when access barriers persist.

This point is important in the Indonesian context. National data indicate that dental and oral health problems remain highly prevalent in Indonesia, while the proportion of people receiving professional dental treatment is still limited. Chairunisa et al. (2024), using Indonesian oral health data, note that although 57.6% of individuals experienced oral health problems, only 10.2% sought treatment; dental caries affected 88.8% of the population and periodontal disease affected 74.1%. These figures indicate that the problem is not only behavioral but also structural. The WHO's global oral health agenda similarly emphasizes that oral diseases are widespread and that stronger prevention-oriented and equity-based health systems are needed (WHO, 2022).

The socioeconomic dimension found in this study is also consistent with the literature on oral health inequalities. Watt (2007) argues that oral health inequalities cannot be solved by blaming individuals for poor behavior; instead, policy and public health programs must address upstream social determinants. Similarly, studies on socioeconomic inequalities in oral health behavior and dental service utilization show that income, education, and social position influence both preventive practices and access to care (da Mata et al., 2021; Corović et al., 2023). Therefore, dental health education in Makassar should be linked with affordable services, community-based access, and targeted support for low-income groups.

The main contribution of this study is its sociological interpretation of dental health education. Rather than treating education as a simple tool to transfer knowledge, this study shows that education can reshape how communities define dental care. The change from "going to the dentist when sick" to "maintaining oral health as prevention" represents a shift in health values. Nevertheless, this value shift remains incomplete when socioeconomic barriers prevent people from acting on their knowledge. Thus, effective oral health promotion requires two simultaneous strategies: strengthening public health literacy and reducing structural barriers to dental care access.

Overall, the findings suggest that health education can become a meaningful pathway for preventive dental care in urban Indonesia, but its impact will be limited if it is not supported by equitable access to services. For Makassar, this means that oral health education should be designed not only as campaigns or counseling, but also as part of a broader public health strategy that combines education, affordability, community outreach, and preventive service delivery.

## 5. Conclusion

This study concludes that health education plays an important role in encouraging the shift of dental care behavior from curative habits to preventive care among urban communities in Makassar, Indonesia. Health education delivered through campaigns, counseling, seminars, and educational materials increases public awareness of the importance of oral hygiene, regular tooth brushing, reducing harmful food consumption, and seeking dental check-ups before serious problems occur.

The findings also show that this behavioral change is not only a matter of individual knowledge, but also reflects a broader shift in health values. Dental care is increasingly understood as part of a healthy lifestyle rather than merely a response to pain or disease. This indicates that health education can reshape how communities define and practice oral health in everyday life.

However, the study also reveals that the impact of health education remains uneven. Socioeconomic barriers, especially the cost of dental treatment and unequal access to affordable services, continue to limit the ability of some community members to apply preventive dental care consistently. Therefore,

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improving knowledge alone is not sufficient. Health education must be supported by accessible, affordable, and community-based dental health services.

Overall, this study argues that effective oral health promotion in Makassar requires an integrated approach that combines education, preventive awareness, and equity in service access. By linking dental care behavior with social values and structural conditions, this article contributes to sociological discussions on health education, preventive behavior, and oral health inequality in urban Indonesia.

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