

Implementation of Management Strategy in the Development of Dental Health Services for the Indonesian Maritime Community



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ABSTRACT: Aim: This qualitative research aims to explore the key geographical and demographic characteristics of the Indonesian maritime community and their impact on dental health services.

Research Method: This research will utilize secondary data sources such as existing studies, reports, and statistical data to analyze the geographical and demographic characteristics of the Indonesian maritime community.

Research Findings: The Indonesian maritime community faces complex challenges in dental health services, influenced by factors like access, social and cultural determinants, rural health, and oral health policies. Addressing these challenges requires expanding access, strengthening the dental workforce, and implementing policies that promote oral health. Socioeconomic factors, cultural beliefs, and geographic location significantly influence dental health within the Indonesian maritime community, emphasizing the need for targeted interventions. Evaluating the effectiveness of policies and initiatives related to dental health services is important in reducing disparities and identifying areas for improvement. To implement effective management strategies for dental health services, healthcare management theories, social determinants of health, and collaboration and partnerships are necessary to address the unique challenges in this community.

Conclusion: Implementing a management strategy that addresses the challenges in dental health services within the Indonesian maritime community is essential for improving oral health outcomes. Collaboration and partnerships, along with targeted interventions based on socioeconomic and cultural factors, are key to achieving this goal.

KEYWORDS: demographic characteristics, dental health services, geographic characteristics, Indonesian maritime community, management strategy

I. INTRODUCTION

The implementation of management strategy in the development of dental health services for the Indonesian maritime community is a significant and relevant research topic in the field of dental health services. The research aims to improve access to dental care for a specific community that may have limited access to healthcare services. The research can help identify the challenges and barriers to implementing dental health services in the maritime community and develop strategies to overcome them. The research can also help identify the dental care needs of the community and develop appropriate interventions to address them.

According to a study on factors influencing the utilization of dental services in East Java, Indonesia, there is a need for urgent public health interventions to increase equitable dental care services utilization (Hariyani et al., 2020). Another study on the characteristics of dental services in rural, suburban, and urban areas upon the implementation of Indonesia National Health Insurance (NHI) for oral health needs to be evaluated by observing the dental (Phantumvanit et al., 2020). The World Health Organization (WHO) recognizes oral health as a key indicator of overall health, well-being, and quality of life. The WHO Oral Health Programme leads the work on setting the global oral health policy agenda in close collaboration with member states and other key stakeholders. Recent momentum has led to the development of key policy documents to support countries in moving towards universal health coverage for oral health by 2030. These include the Global strategy on oral health, the Global oral health action plan, and the Global oral health status report (Duangthip & Chu, 2020).

The research on the implementation of management strategy in the development of dental health services for the Indonesian maritime community can contribute to the development of management strategies that can be applied to other communities with

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limited access to healthcare services. The research can also contribute to the development of policies and guidelines for the implementation of dental health services in Indonesia. The research can help improve the quality of dental health services and promote oral health in the maritime community and other communities in Indonesia.

Innovative solutions to address oral health in rural communities include returning the mouth to the body by integrating oral health and primary care, which can address dental health disparities affecting vulnerable populations, including those in rural and underserved areas. The Harvard School of Dental Medicine Initiative Integrating Oral Health and Medicine highlights educational, clinical, outcomes, and policy-based research (RHlhub, 2022).

The implementation of management strategy in the development of dental health services for the Indonesian maritime community is a significant and relevant research topic in the field of dental health services. The research can help improve access to dental care for a specific community that may have limited access to healthcare services. The research can also contribute to the development of management strategies that can be applied to other communities with limited access to healthcare services. The research can help improve the quality of dental health services and promote oral health in the maritime community and other communities in Indonesia.

The Indonesian maritime community is a diverse and complex environment that spans over 17,000 islands and is located between the Indian Ocean and the Pacific Ocean. The community is characterized by its insular character, which has generated cultural diversity and enabled foreign influences (Rochwulaningsih et al., 2019). The Indonesian archipelago represents one of the most unusual areas in the world, encompassing a major juncture of Earth's tectonic plates, spanning two faunal realms, and serving as a nexus of the peoples and cultures of Oceania and mainland Asia. The community is the largest island country in the world, composed of some 17,500 islands, of which more than 7,000 are uninhabited. The major Indonesian islands are characterized by densely forested volcanic mountains in the interior that slope downward to coastal plains covered by thick alluvial swamps that, in some areas, are below sea level. The community is home to hundreds of ethnic groups, each with its own language, and has a highly diverse environment and society that sometimes seem united only by susceptibility to seismic and volcanic activity, close proximity to the sea, and a moist, tropical climate (Legge, 2023).

The population of the Indonesian maritime community is unevenly distributed among the islands and provinces, with Java being the most densely populated island. The population density varies across regions, not only among islands but also among provinces of the same island. The 1990 Population Census indicates that the population density at the national level was 93 persons per square kilometer. The uneven distribution of the population among the islands and provinces poses challenges for the government in managing land across different regions (Salma, 2020).

The Indonesian maritime community is a diverse and complex environment islands and is characterized by its insular character, cultural diversity, and susceptibility to seismic and volcanic activity. The community is home to hundreds of ethnic groups, each with its own language, and has a highly diverse environment and society. The population of the community is unevenly distributed among the islands and provinces, with Java being the most densely populated island.

Existing dental health services available to the Indonesian maritime community face several challenges and gaps. These include:

Limited access to dental care services: According to a study on factors affecting dental service utilization in Indonesia, access to dental care services is limited, particularly in rural areas (Melinda et al., 2020). This limited access to dental care services can be a significant challenge for the Indonesian maritime community, which is characterized by its insular character and remote location.

Limited availability of dental professionals: The number of dental professionals in Indonesia is limited, with only 319 specialist dentists in 2020 (Kushwaha, 2022). This limited availability of dental professionals can be a significant challenge for the Indonesian maritime community, which may have limited access to dental professionals.

Limited awareness of oral health: According to a review of Indonesia's dental health, there is limited awareness of oral health in Indonesia, particularly in rural areas (Anton & Diah, 2014). This limited awareness of oral health can be a significant challenge for the Indonesian maritime community, which may have limited access to dental education programs.

Limited availability of dental insurance: According to a report on the Indonesia dental services market, the availability of dental insurance is limited in Indonesia (Melinda et al., 2020). This limited availability of dental insurance can be a significant challenge for the Indonesian maritime community, which may have limited access to affordable dental care services.

Limited availability of advanced dental technology: According to the same report on the Indonesia dental services market, the availability of advanced dental technology is limited in Indonesia (Melinda et al., 2020). This limited availability of advanced dental technology can be a significant challenge for the Indonesian maritime community, which may have limited access to advanced dental care services.

The existing dental health services available to the Indonesian maritime community face several challenges and gaps, including limited access to dental care services, limited availability of dental professionals, limited awareness of oral health, limited

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availability of dental insurance, and limited availability of advanced dental technology. These challenges and gaps can significantly impact the oral health of the Indonesian maritime community and highlight the need for the development of management strategies to overcome them.

Socioeconomic factors have a significant impact on dental health, including income levels, education, and cultural practices. Here are some key findings from the search results:

Income levels: Lower income levels are associated with a higher risk of dental caries and other oral health problems. This may be due to a lack of access to dental care, as well as a higher prevalence of risk factors such as poor nutrition and smoking (de Lucena et al., 2021; Trohel et al., 2016; Vasireddy et al., 2021).

Education: Higher levels of education are associated with better oral hygiene habits and a lower risk of dental caries. This may be due to increased knowledge about oral health and a greater ability to access and utilize dental care services (Oberoi et al., 2016).

Cultural practices: Cultural practices can also impact dental health. For example, some cultural practices involve the consumption of sugary or acidic foods and drinks, which can increase the risk of dental caries. Additionally, some cultural beliefs may discourage seeking dental care or prioritize other health concerns over oral health (de Lucena et al., 2021).

Overall, socioeconomic factors play a significant role in dental health outcomes. Understanding these factors can help identify populations at risk and inform interventions to reduce disparities in oral health.

A. Statement problem, objective, and research questions

The Indonesian maritime community faces numerous challenges in accessing adequate dental healthcare services due to its unique geographical and demographic characteristics. This research aims to provide a comprehensive overview of the Indonesian maritime community, assess existing dental health services, analyze socioeconomic factors influencing dental health, and evaluate current policies and initiatives. Additionally, the research aims to propose a management strategy for enhancing dental health services within this community.

Statement of the Problem:

The Indonesian maritime community lacks sufficient access to quality dental health services, and this issue is compounded by various challenges and gaps faced by the community. These challenges include limited healthcare infrastructure, inadequate oral health literacy, cultural practices, and socioeconomic factors. Consequently, this study aims to address these existing gaps and challenges to improve dental health services in the Indonesian maritime community.

Objectives:

- To provide a comprehensive overview of the Indonesian maritime community, including its geographical and demographic characteristics.
- To examine the existing dental health services available to the community, identifying key challenges and gaps.
- To analyze the socioeconomic factors impacting dental health within the Indonesian maritime community, such as income levels, education, and cultural practices.
- To evaluate existing policies and initiatives related to dental health services within the community.
- To propose an effective management strategy for the development and enhancement of dental health services within the Indonesian maritime community.

Research Questions:

- What are the key geographical and demographic characteristics of the Indonesian maritime community?
- What are the existing dental health services available to the community, and what challenges and gaps do they face?
- What are the socioeconomic factors influencing dental health within the Indonesian maritime community, such as income levels, education, and cultural practices?
- How effective are the current policies and initiatives related to dental health services within the community?
- What can be done to implement an effective management strategy for the development and enhancement of dental health services within the Indonesian maritime community?

By providing a comprehensive overview, examining existing services, analyzing socioeconomic factors, and evaluating policies and initiatives, this study aims to contribute to the improvement of dental health services in this unique community. By implementing effective management strategies, the Indonesian maritime community can ensure access to quality dental healthcare and address the prevailing challenges and gaps in oral health services.

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II. METHOD

Dental health services play a crucial role in ensuring the overall well-being of individuals and communities. However, many communities, especially those located in remote and maritime areas, face significant challenges in accessing adequate oral healthcare. The Indonesian maritime community is a prime example of such a population, struggling with limited access to dental health services. To address this issue effectively, researchers can adopt qualitative research methods using secondary data, as advocated by Creswell (2014). This study explores the implementation of qualitative research methods using secondary data to study the management strategy for developing dental health services for the Indonesian maritime community.

Qualitative research methods aim to explore and understand the complexities, nuances, and subjective experiences of individuals and groups. It involves collecting and analyzing non-numerical data, such as interviews, focus groups, observations, and archived documents. Secondary data, in this context, refers to existing data already collected by other researchers or organizations, which can be reanalyzed to answer new research questions.

According to Creswell (2014), qualitative research using secondary data offers several advantages. Firstly, it saves both time and resources, as researchers can utilize pre-existing datasets. Additionally, secondary data often provide a larger sample size, allowing for a more comprehensive analysis. Furthermore, revisiting secondary data allows researchers to evaluate the data from different perspectives, potentially providing new insights and confirming or challenging previous findings.

Implementation of Management Strategy:

In the context of the Indonesian maritime community, the implementation of a management strategy is crucial for developing dental health services. This strategy can encompass various aspects, such as infrastructure development, workforce training, and policy implementation. Utilizing qualitative research methods with secondary data can help identify the potential barriers, success factors, and best practices in implementing such a strategy.

To begin the research, one can identify existing datasets related to dental health services in Indonesia. These datasets could include government reports, research papers, and surveys conducted in maritime regions. Researchers can also access oral health records from local health facilities, seeking information on treatment patterns, patient demographics, and overall oral health indicators. These secondary datasets will form the foundation for the qualitative analysis.

III. RESULT

A. Key Geographical and Demographic Characteristics of the Indonesian Maritime Community

Indonesia is an archipelagic country located in Southeast Asia and Oceania, lying between the Indian Ocean and the Pacific Ocean (Djunarsjah & Putra, 2021). The Indonesian archipelago is composed of approximately 17,000 islands, of which more than 7,000 are uninhabited. The major Indonesian islands are characterized by densely forested volcanic mountains in the interior that slope downward to coastal plains covered by thick alluvial swamps. The major islands of Indonesia are Sumatra, Java, Kalimantan, Sulawesi, and Papua (Wolters et al., 2023).

Indonesia is the largest country in Southeast Asia, with a maximum dimension from east to west of about 3,200 miles (5,100 km) and an extent from north to south of 1,100 miles (1,800 km) (Wolters et al., 2023). The government claims an exclusive economic zone of 6,159,032 km² (2,378,016 sq mi). The additional surrounding sea areas bring Indonesia's generally recognized territory (land and sea) to about 5 million km².

The demography of Indonesia is quite particular and is shaping the whole political game since the independence. According to the last detailed population information available (the 2010 census), inhabitants of Java islands (Javanese is the main ethnic group of Java but not the only one, the second most important is the Sundanese followed by the Madurese) were 137M compared to a total population of 237M. Java Island accounts for 58% of the population and only 6% of the landmass. If you factor in people who migrated to other islands, the population hailing from Java represents 64% of the total population (Elliot, 2018).

The Indonesian maritime community is characterized by its strategic location astride or along major sea lanes connecting East Asia, South Asia, and Oceania. The maritime community is involved in various economic activities such as trade, fishing, and other relevant economic factors. The marine policy basis of Indonesia as a maritime state is important for establishing an integrated economy. The national power of Indonesia has great potential to be the global maritime fulcrum. The security dynamics of the Indonesian maritime community are influenced by various factors such as risks to national security and relationships with neighboring countries and other relevant security factors (Latief et al., 2020).

Indonesia's maritime policies and strategies are shaped by various factors, including the country's geography, economy, and security challenges. The following initiatives have been implemented to promote sustainable development in the maritime sector:

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- Establishment of special economic zones and development of infrastructure for maritime trade and transportation to enhance inter-island connectivity.
- Active engagement with neighboring countries to strengthen regional cooperation and address common security challenges in the maritime domain.
- Participation in international maritime security initiatives and efforts to combat piracy, illegal fishing, and other transnational crimes at sea.
- Investment in modernizing naval capabilities and improving maritime surveillance systems to ensure the safety and integrity of its waters.
- Implementation of various measures to promote sustainable and responsible maritime practices, such as establishing marine protected areas and implementing stricter regulations on waste disposal.

Indonesia's President Joko Widodo has articulated a vision of Indonesia as a global maritime axis, seeking to transform Indonesia into a maritime power (Shekhar & Liow, 2014). The country's commitment to maintaining a secure and stable maritime environment is evident through its participation in international maritime security initiatives and its efforts to combat piracy, illegal fishing, and other transnational crimes at sea (Morris & Persi Paoli, 2018).

To promote sustainable development in the maritime sector, Indonesia has established special economic zones and developed infrastructure for maritime trade and transportation to enhance inter-island connectivity (Shekhar & Liow, 2014). The government has also invested in modernizing naval capabilities and improving maritime surveillance systems to ensure the safety and integrity of its waters (Morris & Persi Paoli, 2018).

Moreover, Indonesia has implemented various measures to promote sustainable and responsible maritime practices, such as establishing marine protected areas and implementing stricter regulations on waste disposal.

B. Bridging the Gap: Challenges and Gaps in Dental Health Services Available to the Community

Access to dental health care is essential for maintaining good oral health and overall well-being. However, disparities in access to oral health care exist, particularly for low-income and uninsured individuals (Northridge et al., 2020). Social and cultural determinants also play a significant role in reducing oral health disparities (Frost & Deutchman, 2022). Rural communities face several barriers to accessing dental care, including geographic isolation, lack of transportation, and poverty. Inadequate exposure to fluoride, availability and affordability of food with high sugar content, and poor access to oral health care services are some of the factors contributing to the increase in oral diseases globally (Frost & Deutchman, 2022).

Despite the importance of dental health care, many people face barriers to accessing proper dental care, which means they will continue to suffer pain and other oral health problems (Smith, 2023). The challenges and gaps in dental health services available to the community are complex and multifaceted. By using theories such as access to oral health care, social and cultural determinants, rural health, and oral health policies, we can gain a comprehensive understanding of the existing dental health services available to the community, as well as the challenges and gaps they face.

Some possible gaps and challenges in dental health services available to the community based on the search results are:

- Disparities in access to oral health care, particularly for low-income and uninsured individuals (Northridge et al., 2020).
- Social and cultural determinants that impact the availability and utilization of dental health services (Hannan et al., 2021).
- Barriers to accessing dental care in rural communities, including geographic isolation, lack of transportation, and poverty (RHHub, 2022).
- Inadequate exposure to fluoride, availability and affordability of food with high sugar content, and poor access to oral health care services (Frost & Deutchman, 2022).

To address these gaps and challenges, several strategies can be implemented. For example, expanding access to dental care is a crucial step in addressing oral health disparities. This can include building new dental clinics, particularly in rural areas, and implementing mobile dental units to reach remote populations. Strengthening the dental workforce through training and collaboration between governments, non-governmental organizations, and the private sector can also help to address the dental care gap. Policies that promote oral health and improve access to dental health services are also needed (Frost & Deutchman, 2022).

To address oral health disparities, the following policies and initiatives can be implemented:

- Expanding Medicaid coverage for dental services can reduce financial barriers to care and improve access to dental services for low-income individuals.
- Implementing community water fluoridation programs can prevent tooth decay and improve oral health outcomes.

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- Supporting school-based dental sealant programs can target vulnerable populations, such as children from low-income families who may not have access to regular dental care.
- Public awareness campaigns and education initiatives can promote oral health and encourage individuals to seek regular dental care.

According to the CDC, some racial/ethnic and socioeconomic groups have worse oral health as a result of the social determinants of health, such as lack of access to dental care and insurance (Edelstein, 2002). Expanding Medicaid coverage for dental services can reduce financial barriers to care and improve access to dental services for low-income individuals (WHO, 2023).

Community water fluoridation programs can prevent tooth decay and improve oral health outcomes. The CDC recommends community water fluoridation as a safe and effective way to prevent tooth decay (Hannan et al., 2021).

School-based dental sealant programs can target vulnerable populations, such as children from low-income families who may not have access to regular dental care. A study found that school-based dental sealant programs are effective in reducing tooth decay in children (Maternal, 2022).

Public awareness campaigns and education initiatives can promote oral health and encourage individuals to seek regular dental care. The Healthy People 2020 oral health objectives aim to increase public awareness of the importance of oral health and promote preventive measures such as regular dental check-ups and brushing teeth twice a day with fluoride toothpaste (WHO, 2023).

C. Socioeconomic Factors Influencing Dental Health within the Indonesian Maritime Community

Dental health is an essential aspect of overall health and well-being. However, several socioeconomic factors can influence dental health within the Indonesian maritime community. By using theories such as social determinants of health, cultural beliefs and practices, and geographic location, we can gain a comprehensive understanding of the socioeconomic factors influencing dental health within the Indonesian maritime community.

Based on the search results, some possible socioeconomic factors influencing dental health within the Indonesian maritime community are:

- Age, marital status, education, economic status, health insurance, and dental pain (Melinda et al., 2020).
- Cultural beliefs and practices that may impact oral health-related behaviors and practices (Butani et al., 2008).
- Geographic isolation and barriers to accessing dental care in rural areas (UNODC, 2008).

Socioeconomic factors such as age, marital status, education, economic status, health insurance, and dental pain were associated with dental service utilization in both rural and urban areas of Indonesia (Melinda et al., 2020). This suggests that access to dental care may be influenced by socioeconomic factors. Cultural beliefs and practices can also influence oral health-related behaviors and practices (Trohel et al., 2016). For example, the consumption of sugary or acidic foods and drinks may be influenced by cultural practices. Geographic isolation can also be a barrier to accessing dental care in rural areas. This can be particularly challenging for the Indonesian maritime community, which may be located in remote areas.

To address socioeconomic factors and reduce oral health disparities, the following strategies can be implemented:

- Expanding access to dental care by building new dental clinics, particularly in rural areas, and implementing mobile dental units to reach remote populations.
- Strengthening the dental workforce through training and collaboration between governments, non-governmental organizations, and the private sector.
- Increasing funding for recruitment and scholarships for underrepresented minority, lower-income, and rural populations to attend dental professional schools.
- Implementing policies that promote oral health and improve access to dental health services.

According to a report, expanding the number of public dental clinics and increasing access to dental care for the poor can help reduce oral health disparities (Patrick et al., 2006). However, the United States continues to experience dental health professional shortage areas affecting millions of people, which is one reason for inadequate access to care (Health, 2021).

To address the dental care gap, policies that promote oral health and improve access to dental health services are needed. For example, Healthy People 2020 oral health objectives aim to reduce the proportion of children and adolescents with lifetime tooth decay and children and adolescents with active and untreated tooth decay by improving patient experience and access by addressing barriers such as lack of transportation, limited cultural competence, and dental practice (Office of Disease Prevention & Promotion, 2012).

Moreover, some segments of the population, such as certain racial/ethnic minority groups, people living in poverty, and people living in rural areas, have less access to dental care (Hannan et al., 2021). Strategies to make it easier to get dental care are critical

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for better oral health and overall health outcomes. For example, providing rural training tracks during dental education, admitting dental students from rural areas who would be more likely to practice in a rural community, and providing dental students opportunities to obtain a broad range of dental skills which will be needed in a rural practice can help improve access to oral health services (RHHub, 2022).

Promoting education and awareness about the importance of oral hygiene can play a significant role in addressing oral health disparities. The following strategies can be implemented:

- Emphasizing the importance of regular brushing, flossing, and routine dental check-ups can encourage individuals to take proactive steps towards maintaining good oral health.
- Implementing preventive measures such as community fluoridation programs and dental sealant initiatives can help reduce the prevalence of dental diseases. These initiatives can target vulnerable populations, such as children from low-income families who may not have access to regular dental care.

According to a study, students with higher knowledge scores use oral hygiene aids more frequently, such as dental floss and interdental brushes (Chaushu et al., 2022). Another study suggested that a plan for supervising school brushing could be effective in preventing tooth decay (Saccomanno et al., 2023).

Moreover, the Centers for Disease Control and Prevention (CDC) works to reduce disparities in the rate of cavities and integrate oral health programs into chronic disease prevention and medical care (Edelstein, 2002). The CDC also recommends brushing teeth twice a day with fluoride toothpaste and visiting the dental office/clinic regularly to keep a healthy mouth (ECLKC, 2023).

Implementing preventive measures such as community fluoridation programs and dental sealant initiatives can help reduce the prevalence of dental diseases. For example, community water fluoridation is a safe and effective way to prevent tooth decay and improve oral health (CDC, 2022).

D. Evaluating the Effectiveness of Policies and Initiatives Related to Dental Health Services within the Community

Dental health is an essential aspect of overall health and well-being. Policies and initiatives related to dental health services within the community aim to improve access to dental care and reduce oral health disparities. By using theories such as oral health education, social and cultural determinants, and healthcare outcomes, we can gain a comprehensive understanding of the effectiveness of current policies and initiatives related to dental health services within the community.

Based on the search results, some possible factors that can influence the effectiveness of policies and initiatives related to dental health services within the community are:

- Oral health education (Bashirian et al., 2023; Nakre & Harikiran, 2013).
- Social and cultural determinants of oral health (Patrick et al., 2006).
- Healthcare outcomes, such as health outcomes and healthcare utilization costs (Ghoneim et al., 2022).

Oral health education is effective in improving the knowledge and oral health-related practices of the target population (Bashirian et al., 2023; Nakre & Harikiran, 2013). This suggests that policies and initiatives that focus on oral health education can be effective in improving dental health within the community. Social and cultural determinants also play a significant role in reducing oral health disparities. Policies and initiatives that focus on addressing social and cultural determinants of oral health can be effective in improving dental health within the community. Providing access to dental care can improve health outcomes and reduce healthcare utilization costs (Office of Disease Prevention & Promotion, 2012). Policies and initiatives that focus on improving access to dental care can be effective in improving dental health within the community.

To evaluate the effectiveness of current policies and initiatives related to dental health services within the community, it is essential to consider the outcomes of these policies and initiatives. For example, policies and initiatives that focus on oral health education should be evaluated based on the knowledge and oral health-related practices of the target population. Policies and initiatives that focus on addressing social and cultural determinants of oral health should be evaluated based on the reduction of oral health disparities. Policies and initiatives that focus on improving access to dental care should be evaluated based on the improvement of health outcomes and the reduction of healthcare utilization costs.

To assess the effectiveness of oral health education programs, it is crucial to consider the following factors:

- Accessibility of educational materials
- Level of engagement with the target population
- Extent to which individuals adopt and sustain positive oral health practices

A systematic review found that oral health education programs can be effective in improving oral health status and knowledge, attitude, and practice (Nakre & Harikiran, 2013).

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To evaluate the impact of policies and initiatives aimed at addressing social and cultural determinants of oral health, it is important to consider the following indicators:

- Prevalence of dental diseases
- Utilization of preventive services
- Overall improvement in oral health outcomes

A study found that low socioeconomic status, minority status, and unemployment are associated with patterns of infrequent preventive dental care and high rates of dental diseases (Patrick et al., 2006). Another study suggested that disparities in access to oral health care are a major issue that needs to be addressed (Northridge et al., 2020).

To ensure equitable access to oral healthcare for all populations, it is crucial to examine the accessibility and affordability of dental care. A report suggested that access to oral health care is essential to promoting and maintaining overall health and well-being, yet only half of the population has access to it (Council, 2012).

A comprehensive analysis of the reduction in disparities across different socioeconomic groups and minority populations is necessary to evaluate the impact of policies and initiatives on oral health. By identifying areas of improvement and targeting interventions, policymakers and public health professionals can ensure equitable access to oral healthcare for all populations, contributing to the overall well-being and quality of life of individuals and communities.

E. Implementing an Effective Management Strategy for the Development and Enhancement of Dental Health Services within the Indonesian Maritime Community

Dental health is an essential aspect of overall health and well-being. Developing and enhancing dental health services within the Indonesian maritime community requires an effective management strategy. By using theories such as healthcare management, social determinants of health, and collaboration and partnerships, we can gain a comprehensive understanding of what can be done to implement an effective management strategy for the development and enhancement of dental health services within the Indonesian maritime community.

Based on the search results, some possible strategies that can be implemented to develop and enhance dental health services within the Indonesian maritime community are:

- Providing access to dental care to improve health outcomes and reduce healthcare utilization costs (Hsieh & Shannon, 2005).
- Addressing social determinants of oral health to reduce oral health disparities (Melinda et al., 2020).
- Establishing collaboration and partnerships with other organizations to develop and enhance dental health services (UNODC, 2008).

Effective healthcare management is essential in improving access to dental health services. Providing access to dental care can improve health outcomes and reduce healthcare utilization costs (Barber & Gertler, 2008). This suggests that effective healthcare management can be an effective strategy in developing and enhancing dental health services within the Indonesian maritime community. Addressing social determinants of oral health is also crucial in reducing oral health disparities (UNODC, 2008). Policies and initiatives that focus on addressing social determinants of oral health can be effective in developing and enhancing dental health services within the Indonesian maritime community. Collaboration and partnerships with other organizations can also be effective in developing and enhancing dental health services within the Indonesian maritime community (Kister, 1994). This can involve working with other organizations to build new dental clinics, implement mobile dental units, and provide oral health education.

To implement an effective management strategy for the development and enhancement of dental health services within the Indonesian maritime community, it is essential to consider the unique challenges faced by the community. For example, geographic isolation can be a barrier to accessing dental care in rural areas. This can be particularly challenging for the Indonesian maritime community, which may be located in remote areas. Effective healthcare management should consider these challenges and develop strategies that address them.

To overcome the challenge of geographic isolation in the Indonesian maritime community, implementing mobile dental clinics is one possible strategy. These clinics can travel to remote areas, bringing dental care directly to the community. Additionally, partnerships can be formed with local healthcare providers to establish satellite clinics in areas where access to dental care is limited. These satellite clinics can provide regular dental check-ups, preventive treatments, and basic dental procedures to ensure that the community receives timely and comprehensive oral healthcare. Furthermore, educational programs can be implemented to raise awareness about the importance of dental hygiene and encourage preventive measures within the community. By tailoring strategies to the specific needs of each community, such as offering affordable or free services to low-income individuals

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and providing transportation for those who have difficulty accessing the clinics, the overall oral health of the community can be significantly improved. Additionally, these collaborations can also help identify and address any specific oral health issues that may be prevalent in certain populations, such as children or the elderly, leading to targeted and effective interventions.

According to a study, the primary dentist tends to provide services without clinical intervention on periodontal problems, abscesses, and lesions (Dewanto et al., 2020). Another study suggests that the low number of oral health personnel and the unequal geographical distributions of existing oral health resources are constraints for the provision of oral healthcare (Folayan et al., 2019). However, there are many clinics for dentistry in Indonesia that offer affordable prices. Furthermore, a study aimed to determine the relationship between sociodemographic and healthcare services factors that affect tooth decay and filling in Indonesia (Broomhead et al., 2019). Finally, a study conducted during the COVID-19 pandemic in Indonesia found that it is difficult to limit respondents' geographic location who take online survey research (Pasiga, 2020).

IV. CONCLUSIONS

The Indonesian maritime community is characterized by its strategic location, diverse geography, and unique demography. The community is involved in various economic activities, and its national power has great potential to be the global maritime fulcrum. Understanding the geographical and demographic characteristics of the Indonesian maritime community is important for developing effective policies and initiatives related to dental health services within the community.

The challenges and gaps in dental health services available to the community are complex and multifaceted. By using theories such as access to oral health care, social and cultural determinants, rural health, and oral health policies, we can gain a comprehensive understanding of the existing dental health services available to the community, as well as the challenges and gaps they face. Addressing these gaps and challenges requires a multifaceted approach that involves expanding access to dental care, strengthening the dental workforce, and implementing policies that promote oral health and improve access to dental health services.

Several socioeconomic factors can influence dental health within the Indonesian maritime community. By using theories such as social determinants of health, cultural beliefs and practices, and geographic location, we can gain a comprehensive understanding of these factors. Addressing these factors requires a multifaceted approach that involves expanding access to dental care, strengthening the dental workforce, and implementing policies that promote oral health and improve access to dental health services.

Policies and initiatives related to dental health services within the community aim to improve access to dental care and reduce oral health disparities. By using theories such as oral health education, social and cultural determinants, and healthcare outcomes, we can gain a comprehensive understanding of the effectiveness of current policies and initiatives related to dental health services within the community. Evaluating the outcomes of these policies and initiatives is essential to determine their effectiveness and identify areas for improvement.

Developing and enhancing dental health services within the Indonesian maritime community requires an effective management strategy. By using theories such as healthcare management, social determinants of health, and collaboration and partnerships, we can gain a comprehensive understanding of what can be done to implement an effective management strategy. Providing access to dental care, addressing social determinants of oral health, and establishing collaboration and partnerships with other organizations are some possible strategies that can be implemented. Effective healthcare management should consider the unique challenges faced by the community and develop strategies that address them.

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