
The Relationship Between The Role Of Dental Therapists In Health Promotion And Knowledge Of Oral Health Maintenance Among Patients Visiting The Dental Clinic Of UPTD Sitiung I Public Health Center Sitiung District Dharmasraya Regency

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Abstract

Oral and dental health is an important part of overall health. Good knowledge about maintaining oral and dental health can support the formation of healthy behaviors. Dental and Oral Therapists have an important role in increasing patient knowledge through health promotion activities, especially as educators. This type of research is analytical with a cross-sectional design. The study was conducted in June 2026 at the Dental Polyclinic of the Sitiung I Community Health Center. The sample of the study was 30 respondents aged 20–59 years with an accidental sampling technique, namely the researcher took respondents who were met during the study and met the predetermined criteria. Data collection was carried out through interviews using questionnaires regarding the role of Dental and Oral Therapists in health promotion and knowledge of maintaining oral and dental health. Data analysis was carried out univariately and bivariately using the Chi-Square test, with a significance level of $\alpha = 0.05$. Research Results 53.3% of respondents rated the role of Dental and Oral Therapists in health promotion in the poor category, while 46.7% of respondents rated it good. The level of respondents' knowledge in maintaining dental and oral health is in the category of less than 53.3%, sufficient 40.0%, and good 6.7%. The results of the Chi-Square test showed a p value = 0.004 ($p < 0.05$). There is a significant relationship between the role of Dental and Oral Therapists in health promotion with knowledge of dental and oral health maintenance in patients visiting the Dental Polyclinic of UPTD Sitiung I Health Center. Dental and Oral Therapists should further optimize health promotion activities through structured education and the use of media so that patient knowledge regarding dental and oral health maintenance can be increased.

Keywords: Dental Therapists' Role, Health Promotion, Knowledge, Oral Health Maintenance.

INTRODUCTION

The World Health Organization (WHO) defines health as a state of complete physical, mental, and social well-being, not merely the absence of disease or infirmity. Conversely, maintaining oral hygiene, promoting health, and preventing disease are ways to achieve oral health (Arifin et al., 2016). Oral health is a crucial aspect of general health; an individual's overall well-being can be compromised if oral health is neglected.

In line with this, data from the 2017 Global Burden of Disease Study indicates that dental caries remains a widespread health issue affecting children and adults worldwide. The high prevalence of dental caries suggests that oral health among the general public remains suboptimal. Oral health issues rank at the top of the list of the ten most common diseases reported by the public in Indonesia (Arifin et al., 2016).

Data from the 2023 Indonesian Health Survey (SKI) shows that the prevalence of dental caries across all age groups (≥ 3 years) reached approximately 56.9%, with a figure of 57.6% in the 20-to-59 age group. The incidence rate of dental and oral health problems among the 20–59 age group in West Sumatra Province is notably high, reaching approximately 61.1%. This indicates that dental and oral health issues continue to affect a significant portion of the adult population in West Sumatra.

Findings from a 2025 free health screening program reveal that Dharmasraya Regency has a high prevalence of caries and other dental diseases—approximately 72%. This demonstrates that oral disease is not merely a global issue but also a significant public health

concern at both national and regional levels.

These high figures are directly linked to a lack of awareness regarding oral health maintenance, as well as public attitudes and habits concerning oral health that remain inadequate. An individual's inclination to adopt a clean and healthy lifestyle—including maintaining oral health—tends to increase as their level of knowledge improves. Knowledge serves as the foundation for the formation of attitudes and behaviors.

Healthcare professionals—particularly dental therapists—play a vital role in efforts to enhance public knowledge. Regulation of the Minister of Health of the Republic of Indonesia Number 20 of 2016 concerning the Licensing and Practice of Dental Therapists stipulates that dental therapists are authorized to provide oral healthcare services, including basic dental treatment as well as preventive and health promotion measures. This role encompasses community empowerment, oral health education, and outreach efforts regarding independent oral hygiene maintenance.

In health promotion activities, dental therapists serve as key educators, contributing to the development of oral health knowledge, skills, and public awareness. Dental therapists must be skilled in conveying accurate information regarding oral health maintenance. Such education lays the foundation for improved patient understanding, which in turn encourages the adoption of clean and healthy lifestyles. Consequently, the dental therapist's role as an educator has a significant impact on enhancing patient understanding.

Oral healthcare services for the community are provided by the Sitiung I Community Health Center (UPTD Puskesmas Sitiung I). Beyond curative treatments, the services offered include preventive and promotive measures for patients visiting the dental clinic through outreach activities, such as oral health education.

Data on dental clinic visits at UPTD Puskesmas Sitiung I in 2025 indicates that 567 visits (43%) originated from the 20–59 age group. Among these visits, the majority of cases involved dental caries (73%), while the remaining 27% involved other oral health conditions.

The World Health Organization (WHO) classifies individuals aged 20 to 59 as adults; this group generally possesses the cognitive capacity to receive, comprehend, and process health information. With these capabilities, adults can more readily accept and understand educational material delivered by dental therapists. Thus, evaluating the relationship between the educator role and the level of knowledge becomes more accurate and relevant.

Furthermore, individuals aged 20–59 are highly active and productive, yet they are more susceptible to oral health issues stemming from poor lifestyle choices—such as smoking, consuming cariogenic foods, and inadequate dental hygiene. However, patients in this age group are generally capable of providing independent and objective responses that accurately reflect their actual condition, thereby ensuring the collected data is more valid and reliable.

Preliminary findings indicate that some patients remain unaware of the importance of maintaining oral health, including the need for routine dental check-ups, proper brushing techniques, and appropriate timing for brushing. This situation suggests a need to enhance current health promotion efforts, particularly by granting greater authority to dental therapists.

RESEARCH METHODS

This study employs a cross-sectional design and an analytical approach to examine the relationship between the dependent variable (knowledge regarding oral health maintenance) and the independent variable (the role of dental therapists in health promotion) at a specific point in time. The entire group of subjects to be studied is referred to as the population (Notoatmodjo, 2012). The study population consists of all patients aged 20 to 59 years who

visited the dental clinic at UPTD Puskesmas Sitiung I, Dharmasraya Regency, in June 2026.

A research sample represents a subset of the total subjects under study and is considered representative of the population (Notoatmodjo, 2012). The sample size was determined using a "rule of thumb," establishing a minimum of 30 respondents to satisfy the assumption of a normal distribution for statistical analysis. The study utilizes a cross-sectional design with an accidental sampling technique, selecting patients aged 20–59 years encountered while seeking treatment at the dental clinic of UPTD Puskesmas Sitiung I (Sitiung District, Dharmasraya Regency) during the data collection period. The decision to set the sample size at 30 respondents also took into account time constraints and the uncertainty regarding the number of patient visits within the 20–59 age group during the study period. The research was conducted from June 8 to June 19, 2026, at the dental clinic of UPTD Puskesmas Sitiung I, Sitiung District, Dharmasraya Regency.

Data collected directly from research participants is classified as primary data. Questionnaires addressing the contribution of dental therapists to health promotion and patient awareness regarding oral health maintenance were used to gather data during interviews with respondents. The obtained data underwent processing stages—editing, coding, entry, and tabulation—followed by descriptive analysis involving the calculation of frequencies and percentages, and was subsequently presented in tabular and narrative formats.

RESULTS AND DISCUSSION

General Data

Respondent Characteristics by Gender

Table 1. Frequency Distribution by Gender of Respondents Visiting the Dental Clinic at UPTD Puskesmas Sitiung I in 2026

Gender	Frequency	Percentage (%)
Male	9	30,0
Female	21	70,0
Total	30	100,0

Based on Table 1, it is evident that out of the 30 respondents, the majority were female (21 individuals, or 70.0%), while 9 respondents were male (30.0%).

Respondent Characteristics by Age

Table 2. Frequency Distribution of Respondents by Age Group among Patients Visiting the Dental Clinic at UPTD Puskesmas Sitiung I in 2026

Age	Frequency	Percentage (%)
20–44	30	100,0
45–59	0	0,0
Total	30	100,0

Based on Table 2, it is evident that all respondents fall within the young adult age group of 20–44 years (100.0%).

Respondent Characteristics Based on Education Level

Table 3. Frequency Distribution of Respondents Based on Education Level Among Patients Visiting the Dental Clinic at UPTD Puskesmas Sitiung I in 2026

Education Level	Frequency	Percentage (%)
Basic Education	5	16,7
Secondary Education	23	76,7
Higher Education	2	6,6
Total	30	100,0

Based on Table 3, 23 (76.7%) of the 30 respondents had completed secondary education. Two respondents (6.6%) had higher education, while five respondents (16.7%) had only completed primary education. These findings indicate that the majority of patients visiting the dental clinic at UPTD Puskesmas Sitiung I had completed secondary education.

Frequency Distribution of the Role of Dental Therapists in Health Promotion

Table 4. Frequency Distribution of the Role of Dental Therapists in Health Promotion among Patients Visiting the Dental Clinic at UPTD Puskesmas Sitiung I in 2026

Role of Dental Therapist	Frequency	Percentage (%)
Good	14	46,7
Not Good	16	53,3
Total	30	100,0

Based on Table 4, 16 respondents (53.3%) rated the role of dental therapists in health promotion as poor, while 14 respondents (46.7%) rated it as good.

Frequency Distribution of Knowledge Regarding Oral and Dental Health Maintenance

Table 5. Frequency Distribution of Knowledge Regarding Oral and Dental Health Maintenance Among Patients Visiting the Dental Clinic at UPTD Puskesmas Sitiung I in 2026

Knowledge	Frequency	Percentage (%)
Good	2	6,7
Satisfactory	12	40,0
Needs Improvement	16	53,3
Total	30	100,0

Based on Table 5 regarding the level of knowledge concerning oral health maintenance, the majority of respondents (16 respondents or 53.3%) fell into the "poor" category, followed by the "fair" category (12 respondents or 40.0%) and the "good" category (2 respondents or 6.7%).

Specific Data

The Relationship Between the Role of Dental Therapists in Health Promotion and Knowledge of Oral Health Maintenance

The relationship between the role of dental therapists in health promotion and knowledge regarding oral health maintenance among patients visiting the Dental Clinic at the Sitiung I Community Health Center (Puskesmas), Sitiung District, Dharmasraya Regency, is presented in the following table.

Table 6. Distribution of the Relationship between the Role of Dental Therapists in Health Promotion and Knowledge of Oral Health Maintenance among Patients Visiting the Dental Clinic at UPTD Puskesmas Sitiung I in 2026

No	The Role of Dental Therapists	Knowledge						Total		Sig.
		Good		Fair		Poor				
		F	(%)	F	(%)	F	(%)	F	(%)	
1	Good	2	6,7	9	30,0	3	10,0	14	46,7	0,004
2	Not Good	0	0,0	3	10,0	13	43,3	16	53,3	<
Total		2	6,7	12	40,0	16	53,3	30	00,0	0,05

Based on Table 6, among the 14 respondents who rated the role of the dental therapist as "good," two (6.7%) possessed good knowledge, nine (30.0%) had adequate knowledge, and three (10.0%) had poor knowledge. Of the sixteen respondents who rated the role of the dental therapist as "poor," three (10.0%) had adequate knowledge, thirteen (43.3%) had poor knowledge, and none possessed good knowledge. A significant relationship exists between the role of the dental therapist and knowledge regarding oral health maintenance among patients visiting the Dental Clinic at UPTD Puskesmas Sitiung I, Sitiung District, Dharmasraya Regency, based on the Chi-Square test, which yielded a p-value of 0.004 ($p < 0.05$).

Discussion

This study was conducted at the Dental Clinic of the Sitiung I Community Health Center (Puskesmas) in Sitiung District, Dharmasraya Regency. The study aimed to determine the relationship between the role of Dental and Oral Therapists in health promotion and the level of knowledge regarding oral health maintenance among patients visiting the clinic.

The results showed that the majority of respondents (16 or 53.3%) rated the role of Dental and Oral Therapists in health promotion as "poor," while 14 respondents (46.7%) rated it as "good."

The absence of routine oral health education for every patient visiting the dental clinic is a reason why most respondents still perceived the role of dental therapists as inadequate. Furthermore, the delivery of information—conducted solely verbally with unclear intonation and without the use of educational media or live demonstrations—resulted in patients failing to fully grasp the health messages conveyed. Patients' perceptions of the dental therapist's role as an educator in health promotion initiatives can be influenced by this context. According to Notoatmodjo (2014), the success of health promotion is determined not only by the material presented but also by the delivery method, the health worker's communication skills, the use of educational media, and the two-way interaction between the health worker and the target audience. Based on Green's (1980) explanation of the PRECEDE-PROCEED theory, health workers serve as a crucial reinforcing factor in healthcare services. They play a vital role in enhancing public understanding and influencing health-related behaviors through the provision of continuous education.

Regarding knowledge of oral health maintenance, the study found that the majority of respondents (16 or 53.3%) fell into the "poor" knowledge category, followed by the "fair" category (12 or 40.0%), while two respondents (6.7%) fell into the "good" category.

The respondents' low level of knowledge is also influenced by their diverse educational backgrounds. According to Notoatmodjo (2014), education is a primary factor influencing an individual's knowledge. A person's ability to learn new things and broaden their understanding improves alongside their level of education. Conversely, a lack of knowledge can hinder an individual's ability to comprehend health information conveyed by medical professionals. This aligns with Lawrence Green's theory, which posits that—in addition to

knowledge—environmental conditions, social support, and the availability of adequate health information resources influence health-related behavior.

The study's findings indicate that patients' knowledge levels increase in tandem with the dental therapist's ability to conduct health promotion. Drawing on Notoatmodjo's (2014) concept, health promotion is a learning process aimed at enhancing individuals' capacity to maintain and improve their health status; the data from this study reinforce that theory. This learning process is expected to boost knowledge, which in turn influences the formation of health-related attitudes and behaviors.

These results align with Bloom's hypothesis (cited in Notoatmodjo, 2014), which states that individuals who are well-informed tend to develop positive attitudes and adopt healthy behaviors, particularly regarding oral health maintenance. Furthermore, research by Sadimin et al. (2020) demonstrates that dental health promotion through educational outreach can raise public awareness about oral health maintenance. Engaging material delivery strategies and the use of health education media contribute to this increase in knowledge. According to a study by Melkisedek (2019), the use of pamphlets in dental health promotion improves oral hygiene status, attitudes, and knowledge.

Research by Sari (2022) indicates that patients who receive adequate health education possess better knowledge than those who do not. According to a study by Putri (2023), dental therapists can raise public awareness regarding oral health maintenance by actively participating in outreach, counseling, and health education activities. Furthermore, a study by Nurfadillah (2021) demonstrates that sustained health promotion fosters positive behavioral changes and improves public understanding of the importance of maintaining dental hygiene.

These findings suggest that dental therapists need to play a more significant role in health promotion efforts. This can be achieved by providing more structured guidance, utilizing health education tools—such as pamphlets, posters, dental models, or instructional videos—and offering patients opportunities to practice the information they have learned and ask questions. It is expected that increased patient knowledge and awareness regarding the importance of oral health, fostered through more effective health promotion, will lead to better oral health outcomes.

CONCLUSION

Patient understanding of oral health maintenance is significantly correlated with the role of dental therapists as educators ($p = 0.004 < 0.05$). These findings indicate that patient understanding of oral health maintenance improves with the involvement of dental therapists in health education.

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