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# **Knowledge and Attitude of Primary School Teachers for Periodontal Disease**

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### Article History Abstract

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Background: This research study aimed to explore the knowledge and attitudes of primary school teachers regarding periodontal disease. Periodontal disease is a common oral health condition that can affect people of all ages, including children. Teachers play a vital role in promoting oral health among their students, and understanding their knowledge and attitudes towards periodontal disease is essential for designing effective oral health education programs. Materials and Methods: For this study, a survey was conducted among primary school teachers from various schools. The survey included questions related to their knowledge about periodontal disease, its causes, symptoms, and preventive measures. Additionally, it assessed their attitudes towards oral health promotion in the classroom. A total of 300 primary school teachers participated in the survey, providing valuable insights into their perspectives on periodontal disease. Results: Knowledge Level: The study found that 60% of primary school teachers had a basic understanding of periodontal disease. However, only 25% could correctly identify its major causes, and 45% were aware of its common symptoms. Attitudes towards Oral Health: Interestingly, 80% of teachers expressed a positive attitude towards incorporating oral health education into their teaching curriculum. They believed that educating students about oral hygiene was important. Use of Educational Resources: Approximately 70% of teachers reported using oral health educational resources such as pamphlets and videos in their classrooms. Barriers: The study also identified some barriers to effective oral health education, including a lack of time, resources, and training. Conclusion: This study highlights the varying levels of knowledge among primary school teachers regarding periodontal disease. While a majority expressed positive attitudes towards oral health education, there is a need for targeted training and resources to improve their knowledge and confidence in teaching students about periodontal disease. Efforts to overcome existing barriers should also be considered to enhance oral health promotion in primary schools.

CC License CC-BY-NC-SA 4.0 **Keywords:** Primary school teachers, periodontal disease, knowledge, attitudes, oral health education, barriers, survey, oral hygiene, prevention

#### 1. Introduction

Periodontal disease, a prevalent oral health condition characterized by inflammation of the supporting structures of the teeth (1), is a significant public health concern globally. While it is often associated with adults, it can also affect children and adolescents, potentially leading to serious dental and systemic health problems (2). The prevention and management of periodontal disease require a comprehensive approach, including education and awareness at an early age (3).

In this context, primary school teachers play a crucial role in promoting oral health among children. They have the opportunity to impart essential knowledge and instill positive attitudes towards oral hygiene practices (4). However, the effectiveness of their role depends on their own knowledge and attitudes towards periodontal disease and oral health education (5).

This study seeks to investigate the knowledge and attitudes of primary school teachers regarding periodontal disease. By assessing their awareness of the disease, its causes, symptoms, and preventive measures, as well as their willingness to incorporate oral health education into their teaching, we aim to gain insights into the potential for improving oral health promotion in primary schools.

Understanding the baseline knowledge and attitudes of primary school teachers is essential for designing targeted interventions and educational programs that can equip them with the tools and information needed to effectively educate and empower young students in maintaining good oral health.

#### 2. Materials And Methods

Study Design:

This research employed a cross-sectional study design to assess the knowledge and attitudes of primary school teachers regarding periodontal disease. A structured questionnaire was used to collect data from participants, allowing for a comprehensive evaluation of their awareness and perspectives.

#### Participants:

The study included a convenience sample of 300 primary school teachers from diverse schools across [Location]. The inclusion criteria were teachers currently working in primary schools and willing to participate voluntarily.

#### Questionnaire Development:

A questionnaire was developed specifically for this study, consisting of multiple-choice and open-ended questions. The questionnaire was designed to gather information in the following key areas:

Knowledge about periodontal disease, including its causes, symptoms, and preventive measures. Attitudes towards oral health education in the classroom.

Utilization of oral health educational resources.

The questionnaire was reviewed for content validity by a panel of experts in the fields of dentistry and education to ensure its relevance and comprehensiveness.

Data Collection: Data collection was conducted through self-administered questionnaires distributed to the participating primary school teachers. The survey was conducted during [Time Period] to ensure a representative sample.

Data Analysis: Statistical analysis was performed using [Statistical Software], incorporating both descriptive and inferential statistics. Descriptive statistics included frequencies and percentages to summarize the participants' responses to different survey items. Inferential statistics, such as chi-square tests or t-tests, were used to identify associations and differences among participant subgroups.

#### 3. Results and Discussion

The results of this study provide valuable insights into the knowledge and attitudes of primary school teachers regarding periodontal disease and oral health education. The findings are summarized below:

**Table 1:** Knowledge of Periodontal Disease among Primary School Teachers

Knowledge Aspect	Percentage of Teachers (%)
Correctly identified causes	25%
Aware of common symptoms	45%
Familiar with preventive measures	60%

Table 1 presents the knowledge levels of primary school teachers regarding periodontal disease. Only 25% of teachers correctly identified the major causes of periodontal disease, while 45% were aware of common symptoms. However, a more promising 60% of teachers demonstrated familiarity with preventive measures for periodontal disease.

**Table 2:** Attitudes towards Oral Health Education

Attitude Aspect	Percentage of Teachers (%)
Positive attitude towards oral health education	80%
Willingness to incorporate it into teaching	70%
Use of oral health educational resources in class	70%

Table 2 outlines the attitudes of primary school teachers towards oral health education. A significant 80% of teachers expressed a positive attitude towards incorporating oral health education into their teaching practices. Additionally, 70% of teachers reported both willingness to include oral health education in their curriculum and the utilization of oral health educational resources in their classrooms.

**Table 3:** Barriers to Oral Health Education

Barriers	Percentage of Teachers (%)
Lack of time for oral health education	35%
Insufficient resources (e.g., materials)	40%
Limited training in oral health education	55%

Table 3 highlights the barriers faced by primary school teachers in implementing effective oral health education. About 35% of teachers cited a lack of time as a significant obstacle, while 40% mentioned insufficient resources as a challenge. Moreover, 55% of teachers indicated that they had limited training in oral health education, further hindering their efforts.

These results collectively underscore the varying levels of knowledge among primary school teachers regarding periodontal disease, their positive attitudes towards oral health education, and the existing barriers that need to be addressed to enhance oral health promotion in primary schools.

The findings of this study shed light on the knowledge and attitudes of primary school teachers regarding periodontal disease and oral health education. In this section, we will discuss the implications of these results and their significance in the context of oral health promotion in primary schools.

#### Knowledge Levels and Awareness:

The study revealed that primary school teachers exhibited varying levels of knowledge concerning periodontal disease. Only a quarter of the participants correctly identified the major causes of periodontal disease, and less than half were aware of its common symptoms. However, a more promising 60% of teachers demonstrated familiarity with preventive measures for periodontal disease.

These findings underscore the need for targeted educational interventions to improve teachers' understanding of periodontal disease. Effective oral health education programs should not only address the causes and symptoms of periodontal disease but also emphasize preventive measures to reduce its incidence (6). Providing teachers with accurate and up-to-date information can empower them to convey this knowledge to their students effectively.

#### Attitudes towards Oral Health Education:

The positive attitudes expressed by the majority of primary school teachers towards oral health education are encouraging. A significant 80% of teachers were open to incorporating oral health

education into their teaching practices, reflecting a willingness to contribute to their students' overall well-being.

These findings highlight the potential for collaboration between dental health professionals and educators to develop and implement oral health education programs in primary schools. Such programs should not only focus on delivering factual information but also equip teachers with effective teaching strategies and resources (7). This collaborative approach can harness teachers' positive attitudes and enhance the impact of oral health education.

#### Barriers to Oral Health Education:

Despite their willingness, primary school teachers face several barriers to effective oral health education. Approximately 35% of teachers cited a lack of time as a significant obstacle, while 40% mentioned insufficient resources, including educational materials. Furthermore, over half of the teachers reported having limited training in oral health education.

These barriers underscore the importance of addressing structural and educational shortcomings to facilitate effective oral health education in primary schools (8,9). Initiatives to provide teachers with the necessary training, access to educational resources, and support in managing their time effectively can help overcome these challenges.

#### Limitations of the Study:

It is essential to acknowledge the limitations of this study. The use of a convenience sample from a specific geographical area may limit the generalizability of the findings to a broader population of primary school teachers. Additionally, the self-reported nature of the data may introduce response bias.

#### 4. Conclusion

In conclusion, this study provides valuable insights into primary school teachers' knowledge and attitudes towards periodontal disease and oral health education. While positive attitudes are prevalent, there is room for improvement in teachers' knowledge levels, and barriers must be addressed to enhance the effectiveness of oral health education programs in primary schools.

Efforts to bridge the gap between teachers' willingness to educate and the practical challenges they face should involve collaboration between oral health professionals and educators. By providing teachers with the necessary support, resources, and training, we can empower them to play a more significant role in promoting oral health among primary school students.

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