

The effect of interpersonal communication on dental health promotion on dental and oral health knowledge at SD Plus Rahmat Kediri

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Abstract

Oral health in Indonesia is still a major problem. Based on Basic Health Research (Riskesda) data, the largest proportion of oral health problems is cavities, which amounted to 45.3%. Children are individuals with an age range from 6 years to 12 years or the age of individuals at the elementary school level (SD). A clean and healthy lifestyle is one part of a public health approach that aims to prevent disease and promote health. The formation of PHBS from an early age can be done through health education for children in the school environment. Intrapersonal communication can be an effective communication medium for individuals in fostering good relationships. The results showed that there was a significant difference in respondents' knowledge of oral health after being given oral health education with an interpersonal communication approach.

Keywords: Interpersonal communication; Oral health education; Clean and healthy lifestyle; Dental caries; knowledge

1. Introduction

Oral health in Indonesia is still a major problem. Based on *Riset Kesehatan Dasar* (Riskesda) data, the largest proportion of oral health problems is cavities, which amounted to 45.3%. While the most common oral health problem in Indonesia is gingivitis or dental abscess, which is 14% (Ministry of Health, 2018). Of the incidence of oral and dental diseases, as many as 89% occurred in children (Hidayat et al., 2023).

Children are individuals with an age range from 6 years to 12 years or the age of individuals at the elementary school level. Individuals who are in childhood are individuals in the intellectual stage. Each individual at the intellectual stage has differences that can be assessed from the intellectual aspect (intelligence), verbal ability (language), personality formation, and physical development (Suryana, 2021). Children who have insufficient knowledge of clean and healthy lifestyles (PHBS), especially oral health problems, have a tendency to have poor PHBS. One of the consequences of poor PHBS in the oral cavity is the emergence of infections such as dental caries which can interfere with the growth and development process (Cahyaningrum et al., 2017).

A clean and healthy lifestyle is one part of a public health approach that aims to prevent disease and promote health. The PHBS approach can have an impact on individuals and even society as a whole (Julianti et al., 2018). One of the best efforts to prevent oral diseases can be through the implementation of PHBS in the school environment. The practice of implementing PHBS in the school environment can be in the form of habituation to washing hands, teaching the correct way to brush teeth, and teaching the right time to brush teeth (Oematan et al., 2023). PHBS can be implemented at school through health education.

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The formation of PHBS from an early age can be done through health education for children in the school environment. Children who get good health education are expected to be a better generation in terms of health, intelligence, and can contribute to society. According to Edelman & Kudzma (2021), health education can have a long-term impact on disease prevention. However, health education in Indonesia has received less attention. This is due to several factors such as a lack of understanding of the importance of maintaining health, a lack of available resources, a shift in focus on educational aspects, and poor intrapersonal communication patterns built on health education (Kubb & Foran, 2020).

Intrapersonal communication can be an effective communication medium for individuals in fostering good relationships. According to Tubbs & Moss (2018), there are five things that can be used as a measure of effective communication, namely, pleasure, understanding, influence on attitudes, better relationships, and actions. So that when someone is able to choose the right words, make preparations, and can express appropriately to the listener, it can ensure the results of effective intrapersonal communication. With the creation of effective intrapersonal communication, the health information provided can be well received (Eden et al., 2019). Based on the above background, the researcher wants to prove the effect of intrapersonal communication on oral health knowledge of SD Plus Rahmat Kediri students.

2. Material and methods

This research uses a descriptive qualitative approach because it aims to describe phenomena, events and attitudes of a group. According to Afrizal (2015: 173) qualitative is a scientific procedure to produce knowledge about social reality and is carried out consciously and uses a qualitative approach as a step in conducting research that is expected to find the influence of interpersonal communication on dental health promotion.

The research method used in this study is a descriptive method that aims to describe and explain the state of elementary school students' interest in reading. According to Sukmadinata (2010: 72) descriptive is the most basic research aimed at describing or describing existing phenomena, either natural or man-made phenomena. This activity examines the form, activity, characteristics of changes, relationships, similarities, and differences in other phenomena.

The subjects of this study were 2nd grade students of SD Plus Rahmat Kota Kediri in the age range of 6 - 12 years as many as 97 respondents with 46 male students and 51 female students. The instrument used in the study was the use of questionnaire media. The data collection technique uses a questionnaire / questionnaire method in the form of a statement to determine the extent of students' interest in reading by using interpersonal communication.

3. Results and discussion

This section should be typed in character size 10pt Cambria and alignment justified. Author can directly select Normal The demographic data of the respondents is shown in Table 1. Based on gender characteristics, there were more female respondents (53%) than male respondents (47%). Based on age characteristics and education level, most respondents were in the age range of 10 - 11 years old and grade 5 education level.

Table 1 Respondent Demographics

Characteristics	Category	Number	Percentage
Gender	Male	46	47%
	Female	51	53%
	Total	97	100%
Usia	6 - 7 years	4	4%
	7 - 8 years	9	10%
	8 - 9 years	10	11%
	9 - 10 years	27	27%
	10 - 11 years	39	40%
	11 - 12 years	8	8%

	Total	97	100%
Education level	Class 1	4	4%
	Class 2	9	10%
	Class 3	10	11%
	Class 4	27	27%
	Class 5	39	40%
	Class 6	8	8%
	Total	97	100%

Data on the effect of interpersonal communication on dental health education knowledge is shown in Table 2. In the age range of 6 - 9 years, the classification of very good knowledge does not have a significant difference after being given oral health education. However, in the age range of 9-12 years, the classification of very good knowledge has a significant difference after being given oral health education. In the good classification, the age range of 6 - 9 years has a significant difference while in the age range of 9 - 12 years it is not significant. Significant differences were also seen in the age range of 6 - 9 years in the classification of poor knowledge.

Table 2 Effect of Interpersonal Communication on Dental Health Education Knowledge

Age characteristics of respondents	Knowledge classification	Pre-test	Pos-test	Sig.
6 - 9 years	Very good	13	20	0.06*
	Good	7	17	0.00*
	Fair	48	51	0.06
	Deficient	20	4	0.00*
	Very poor	9	5	0.05
9 - 12 years	Very good	13	25	0.01*
	Good	27	27	0.08
	Fair	34	40	0.09
	Deficient	13	3	0.07
	Very poor	10	2	0.09

The influence of age on knowledge is an interesting topic to discuss because the development of a person's knowledge is often influenced by age, life experience, and learning throughout life. During childhood and adolescence, knowledge development is strongly influenced by formal education at school and the influence of the surrounding environment, such as family and friends (Damayanti *et al.*, 2023). At this age, the human brain is very plastic (able to adapt quickly), so one can absorb large amounts of information relatively quickly. At a young age, the brain's ability to learn new things is very high. Information processing is also fast, as the brain is in the stage of forming more efficient neural networks. Formal education plays a big role in forming a child's knowledge base, which will then develop over time. School subjects such as math, language and science provide a broad knowledge base (Nurhidayah *et al.*, 2021).

In adulthood, life experiences gained from work, social interactions and daily problem-solving are often a major factor in knowledge development (Nurhana *et al.*, 2018). At this age, the ability to acquire new knowledge may not be as fast as in childhood, but individuals tend to have deeper insights into certain topics. Adults often have more applicable and practical knowledge. They tend to rely on personal experience to solve problems. In adulthood, one usually has a better ability to analyze and understand more complex concepts because they have had more diverse life experiences. Although the brain's ability to learn may decline slightly with age, adults who continue to learn, either through further education or work experience, can still develop new knowledge (Aprilia, 2021).

As we age, some physical changes to the brain, such as a decrease in the number of nerve cells and a decline in short-term memory ability, can affect how a person acquires and remembers new information. Despite this, many older people remain knowledgeable thanks to their life experiences. In old age, the speed of information processing may slow down. However, existing knowledge can still be retained for a long time, although it may be more difficult to learn new things. A common decline is in fluid intelligence, which is the ability to solve new, unknown problems. However, crystallized intelligence, which is knowledge gained through years of life experience and learning, tends to remain stable or even increase with age. Despite the decline in the ability to process new information, older people usually have a very deep knowledge of various topics that they have studied throughout their lives (Nurhidayah *et al.*, 2021).

4. Conclusion

Oral health education by applying interpersonal communication shows significant differences in knowledge among respondents. Age affects the response to receiving oral health education information provided through interpersonal communication.

Compliance with ethical standards

Disclosure of conflict of interest

The authors declare no conflicts of interest related to this work.

Statement of informed consent

Informed consent for publication was obtained from the patient.

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