The Relationship Betwen Age And Oral Health Behavior Among Posyandu Cadres In Sendangmulyo Village In The Working Area Of Kedungmundu Community Health Center

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ABSTRACT

Background: *Dental and oral health refers to the condition of a healthy oral cavity, which includes the health of the soft tissues and hard tissues of the teeth, so that an individual can eat, speak, and engage socially without being hindered by functionality and aesthetics, allowing individuals to lead a productive life both socially and financially. This study aims to determine the relationship between age and dental and oral health behaviors, including knowledge, attitudes, and practices, among posyandu cadres in Sendangmulyo Village, the working area of Kedungmundu Public Health Center.*
Method: *This research uses an observational, cross-sectional design and employs simple random sampling, with a total sample of 63 participants. Statistical analysis uses the Chi-square test.*
Results: *The Chi-Square correlation test showed a p-value of 0.005, indicating a relationship between age and dental and oral health behaviors, including knowledge, attitudes, and practices among posyandu cadres.*
Conclusion: *There was a significant relationship between age and dental and oral health behaviors, including knowledge, attitudes, and practices, among the posyandu cadres in Sendangmulyo village, the working area of Kedungmundu HealthCenter.*

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INTRODUCTION

Dental and oral health is the condition of a healthy oral cavity, including the health of soft and hard tissues, so that a person can eat, talk, and interact socially without being functionally or aesthetically disturbed, allowing individuals to live productive lives from a social and financial perspective. The mouth is a functional part and a reflection of healthy teeth, as many diseases often manifest there (Sutrayitno et al., 2023).

Based on 2018 Basic Health Research (Riskesdas) data, the prevalence of dental and oral health problems among the Indonesian population increased from 25.9% in 2013 to 57.6% in 2018 (RISKESDAS, 2018). The latest data from the 2023 Indonesian Health Survey (SKI) shows that 56.9% of Indonesians have problems with their teeth and mouth, confirming the need for attention to health behavior (SKI, 2023). Comparison of the proportion of national dental problems from the 2018 Riskesdas data with the 2023 SKI showed a decrease of 0.5%.

Based on Blum's theory, the health of individuals' teeth and mouths, and that of society, is influenced by four factors: generation, environment, behavior, and health services. These four factors, with behavior being the main factor, are important for maintaining healthy teeth and a healthy mouth (Erlinawati et al., 2022). The three domains of behavior are knowledge, action, and attitude. In the book McDonald's and Avery (2011), it is stated that people's knowledge, attitudes, and behaviors regarding oral health maintenance affect dental and oral diseases. Health behavior is divided into closed behavior, namely science or education, along with health actions, and open behavior in the form of health actions and practices.

In a small area, there are posyandu cadres. Cadres play a big role in implementing posyandu because, apart from being health informants for the community, they also serve as community bearers who visit posyandu to help achieve a clean and healthy life (Kemenkes RI, 2012). Dental and oral health by posyandu cadres has several related factors, including: training in dental and oral care for babies and toddlers by posyandu cadres and maternal support for dental and oral care for babies and toddlers (Fitriyanti et al., 2021).

Based on the background presented, researchers are interested in conducting research on Behavioral Descriptions of Dental and Oral Health within the Posyandu cadre in Sendangmulyo Village, in the Work Area of the Kedungmundu Community Health Center.

RESEARCH METHODS

The research design used in this study is an observational analytics study with a cross-sectional approach. This research was conducted at a posyandu in the working area of the Kedungmundu Community Health Center, Semarang City, namely the posyandu in Sendangmulyo Village in December 2024. The research subjects were 63 posyandu cadres in the Kedungmundu Community Health Center work area, selected using simple random sampling.

The levels of knowledge, attitudes, and practices regarding dental and oral health were assessed using questionnaires that had been tested for validity and reliability among 30 respondents. Next, collect the questionnaire results and double-check that the data provided by the respondent in the form are complete and that nothing is missing. Data analysis in this research involves a Chi-square test.

RESEARCH RESULTS

The results of this research were obtained using univariate and bivariate data analysis as follows:

Table 1. Distribution of Respondents by Age Category

Age	n	%
Young Adults – Middle Ages (< 45 years)	29	46,03
Pre Elderly – Early Elderly (> 45 years)	34	53,97
Amount	63	100

Based on Table 1, it can be seen that the distribution of respondents in the age category shows that the majority of respondents were in the Pre-Elderly group – Early older adults of 34 people (53.97%), meanwhile, 29 respondents (46.03%) were included in the Young Adult – Middle Age category. The total number of respondents was 63 people (100%).

Table 2. Distribution of Respondents by Knowledge Level Category

Knowledge Level Category	n	%
Ok	26	41,27
Enough	14	22,22
Less	23	36,5
Amount	63	100

According to Table 2, 26 respondents (41.27%) had a good level of knowledge about dental and oral health. Nevertheless, there were still 23 respondents (36.5%) with a lack of knowledge, which means that more than a third of the total respondents did not have an adequate understanding of the importance of dental and oral health care.

Table 3. Distribution of Respondents by Attitude Category

Attitude Category	n	%
Positive/Supportive	54	85,71
Negative/Not Supportive	9	14,29
Amount	63	100

According to Table 3, 54 respondents (85.71%) had positive or supportive attitudes towards dental and oral health. This means that the majority of respondents have a good understanding, awareness, and acceptance of the importance of maintaining healthy teeth and a healthy mouth. Meanwhile, 9 respondents (14.29%) were classified as negative or unsupportive. This indicates that a small percentage of respondents still lack strong awareness or willingness to adopt behaviors that support dental and oral health care efforts.

Table 4. Distribution of Respondents by Practice Category

Practice Category	n	%
Ok	29	46,03
Enough	20	31,74
Less	14	22,22
Amount	63	100

Based on Table 4, the majority of respondents (29, 46.03%) practice maintaining good dental and oral health in the good category. A total of 20 respondents (31.74%) had sufficient practice, while 14 respondents (22.22%) were classified as having insufficient practice.

Table 5. Chi Square Test Results Age Category with Knowledge

Age	Knowledge			p-*value*
	Less	Enough	Ok	
Young Adult – Middle-aged	6 (9.5%)	5 (7.9%)	18 (28.6%)	0,004
Pre Elderly – Early Elderly	8 (12.7%)	18 (28.6%)	8 (12.7%)	

Based on Table 5, the Chi-Square test results indicate a significant relationship between age and knowledge of dental and oral health (p-value = 0.004 < 0.05). Therefore, it is concluded that cadres' age influences their level of knowledge, with younger cadres having greater knowledge than older ones.

Table 6. Chi Square Test Results Age Category with Attitude

Age	Attitude		p-*value*
	Positive	Negative	
Young Adult – Middle-aged	28 (44.4%)	1 (1.6%)	0,023
Pre Elderly – Early Elderly	26 (41.3%)	8 (12.7%)	

From the statistical analysis using the Chi-Square test, the Chi-Square value is 5,154, with a p-value of 0.023 (< 0.05), indicating a significant relationship between age and attitudes towards dental and oral health.

Table 7. Chi Square Test Results Age Category with Practice

Age	Practice			p-*value*
	Less	Enough	Ok	
Young Adult – Middle-aged	3 (4.8%)	8 (12.7%)	18 (28.6%)	0,035
Pre Elderly – Early Elderly	11 (17.5%)	12 (19.0%)	11 (17.5%)	

From the statistical analysis using the Chi-Square test, the Chi-Square value is 6.707, with a p-value of 0.035 (< 0.05), indicating a significant relationship between age and oral health practices among Posyandu cadres.

DISCUSSION

Based on research on 63 posyandu cadres from Sendangmulyo Village in the work area of the Kedungmundu health center, it was found that there is a relationship between age and dental and oral health behaviors, including knowledge, attitudes, and practices. The level of knowledge was assessed through questionnaires administered to several respondents who knew about dental and oral health, across young adulthood and middle age. Therefore, it is concluded that cadres' age influences their level of knowledge, with younger cadres having greater knowledge than older ones.

The results of this research are supported by Erlinawati's research et al. (2022) as well as the results of research by Mujiyati & Hamid (2023), which states that age influences a person's level of knowledge, namely that individuals of productive age tend to absorb information more quickly and have a greater interest in accessing educational media related to health. Apart from that, psychological factors at a young age, such as higher levels of self-confidence, strong curiosity, and optimal cognitive abilities, support the learning process and the acquisition of information (Erlinawati et al., 2022). Physically, better health and good stamina also make it easier for them to participate in health education and training activities actively. Given the amount of information obtained and these factors, young cadres' knowledge tends to be better (Mujiyati & Hamid, 2023).

Research on the attitudes of posyandu cadres shows that age can influence their attitudes. Among young people, posyandu cadres show more positive attitudes. Meanwhile, posyandu cadres in the older age group tend to show a more negative attitude, although in general, positive attitudes still dominate.

This is supported by Samsul et al. (2021), who stated that respondents in the 17-year age group had a strong attitude towards dental and oral health. This shows that there is a relationship between age and attitude toward maintaining healthy teeth and a healthy mouth (Samsul et al., 2021). This statement is also supported by Azwar (2006) in Samsul et al. (2021), which states that age is a factor that can determine an individual's maturity, whether in thinking, behaving, or learning, thereby impacting a more mature attitude towards dental and oral health care (Azwar, 2006 in Samsul et al., 2021).

Practical research on posyandu cadres found that younger cadres tended to practice better oral health care than older cadres. These findings align with the research by Simaremare and Sihombing (2023), which showed that 45% of respondents had good brushing practices despite having knowledge or supportive attitudes. This suggests an age relationship with dental and oral health practices. Younger cadres tend to be more physically active and more exposed to health information through digital media, which helps encourage better health practice behavior (Simaremare & Sihombing, 2023).

CONCLUSION

Based on the research results, there is a significant relationship between age and dental and oral health behaviors, including the levels of knowledge, attitudes, and practices of posyandu cadres in Sendangmulyo Village, the working area of the Kedungmundu Community Health Center. The level of knowledge among posyandu cadres was in the good category at 28.6%, with young adults and middle-aged adults. Posyandu cadres' attitudes towards dental and oral health showed a positive attitude of 44.4%. Meanwhile, the practice among posyandu cadres is that the majority have good dental and oral health practices, namely 28.6%.

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