

THE RELATIONSHIP BETWEEN MOTHER'S ORAL HEALTH LITERACY AND ORAL HEALTH-RELATED QUALITY OF LIFE (OHQOL) OF TODDLERS

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Info Article	Abstract
<p>Article History:</p> <p>Received: 28 Feb 2024 Revised: 29 March 2024 Accepted: 5 Apr 2024 Available Online: 16 Apr 2024</p> <hr/> <p>Keywords: Mother's Oral Health Literacy, Oral Health-Related Quality of Life, Toddlers</p>	<p>Background. Mother's Oral Health Literacy is the key to change in children's oral health. The relationship between health literacy and health outcomes has been widely published, but evidence of the impact of oral health literacy remains under-researched. The purpose of the study was to analyze the effect of mother's oral health literacy on the oral health-related quality of life (OHRQOL) of toddlers. Methods. Analytical observational research with a cross-sectional approach in the Silo II Health Center work area for toddlers aged 36-60 months (1027 toddlers). Samples were taken by cluster random sampling of as many as 95 toddlers. The variables of this study were Mother's Oral Health Literacy with the HeLD Index measuring instrument and Oral Health-Related Quality of Life with the Ecohis index measuring instrument. The data were analyzed with descriptive statistics and the Spearman Correlation test. Results. Mother's Oral Health Literacy average of 64.68 ± 33.37 (moderate category). The average Oral Health Related Quality of Life is 29.55 ± 14.97 (moderate category). There is a relationship between Mother's Oral Health Literacy and Oral Health-Related Quality of Life (p-value=0.000). Conclusion. There is a relationship between Mother's Oral Health Literacy and Oral Health-Related Quality of Life.</p>



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Introduction

Internationally, interest in oral health literacy is driven by oral health disparities, particularly for disadvantaged groups, with conditions such as dental caries and periodontal disease contributing substantially to the global burden of disease. Oral health is linked to general health and well-being and impacts quality of life at all ages (Dickson-Swift et al., 2014). The importance of parents' role in helping children with dental care is needed. Mother's Oral Health Literacy is the key to change. Mothers play an important role in overcoming children's dental problems, so education from various dental health literacies is needed (Syagran et al., 2021).

Data on the level of health literacy in Indonesia is

currently limited, there has been no widespread research in Indonesia, but several studies have been conducted related to the level of health literacy of patients with chronic diseases and pregnant women (Gani et al., 2017). The relationship between health literacy and health outcomes has been widely published, but evidence of the impact of oral health literacy remains under-researched (Naghbi Sistani et al., 2014). The purpose of the study was to analyze the relationship between mother's oral health literacy and oral health-related quality of life (OHRQOL) of toddlers.

Method

Analytical observational research with a cross sectional approach in the work area of Silo II Health Center, Jember Regency, East Java. The study population was 1027 toddlers aged 36-60 months. The sample was taken by cluster random sampling as many as 95 toddlers. The formula for calculating the sample size of Slovin (Zuhdi, 2018) is,

$$n = \frac{N}{1 + Ne^2}$$

$$n = \frac{1027}{1 + 1027(0,1)^2}$$

$$n \cong 91.1$$

$$n = 95$$

The variable of this study is Mother's Oral Health Literacy with the Health Literacy in Dentistry (HeLD) Index measuring instrument with 5 categories: 0-23.1 very poor; 23.2-46.3 poor; 46.4-69.5 moderate; 69.6-92.7 good; 92.8-115.9 very good. Oral Health-Related Quality of Life (OHQOL) variable with Ecohis (The Early Childhood Oral Health Impact Scale) index measurement tool with 5 categories: 0-10.3 very poor; 10.4-20.7 poor; 20.8-31.1 moderate; 31.2-41.5 good; 41.6-52 very good. Data from the study were analyzed with descriptive statistics and continued with the Spearman Correlation test to analyze the relationship between Mother's Oral Health Literacy and Oral Health-Related Quality of Life. This research has received Ethic approval, namely The Ethical Committee of Medical Research Faculty of Dentistry University of Jember with Number: 1994/UN25.8/KEPK/DL/2023.

Result

Research on the effect of mother's oral health literacy on oral health related quality of life (OHQOL) of toddlers. The results of the study are shown in the following table.

Table 1. Distribution of respondents by age, gender, mother's education level, mother's occupation and parents' income

Respondent Characteristics			
1	Age	n	%
	25-36 months	32	33,68
	37-48 months	40	42,11
	49-60 months	23	24,21
	Total	95	100
2	Gender	n	%
	Male	46	48,42
	Female	49	51,58
	Total	95	100
3	Mother's Education Level	n	%
	Elementary School	39	41,05
	Junior High School	31	32,63
	Senior High School	22	23,16
	Higher Education	3	3,16
	Total	95	100

Table 1. shows the characteristics of respondents based on age. 42.11 were 37-48 months old, 33.68% were 25-36 months old and 24.21% were 49-60 months old. Toddlers with male gender amounted to 48.42% and female gender amounted to 51.58%. 41.05% of mothers of under-fives had primary school education, 32.63% had junior high school education, 23.16% had high school education and 3.16% had university education. To see the average Mother's Oral Health Literacy and Oral Health Related Quality of Life (OHQOL) of toddlers can be seen in table 2. below.

Table 2. Average Mother's Oral Health Literacy and Oral Health Related Quality of Life (OHQOL) of Toddlers

	Variable	n	Minimum	Maximum	Mean
1	Mother's Oral Health Literacy	95	10	116	64,68±33,37
2	Oral Health Related Quality of Life (OHQOL)	95	10	52	29,55±14,97

Table 2. shows the minimum value of Mother's Oral Health Literacy is 10 and the maximum is 116. The mean of Mother's Oral Health Literacy was 64.68±33.37 (moderate category). The minimum

Oral Health Related Quality of Life score was 10 and the maximum was 52, while the mean Oral Health Related Quality of Life (OHQOL) was 29.55±14.97 (moderate category). Furthermore, the test of the

relationship between mother's oral health literacy and Oral Health Related Quality of Life (OHQOL) of toddlers can be seen in table 3. below.

Table 3. Test of the Relationship between Mother's Oral Health Literacy and Oral Health Related Quality of Life (OHQOL) of Toddlers

Variable	p-value	Correlation coefficient	Description
<i>Mother's Oral Health Literacy - Oral Health Related Quality of Life (OHQOL)</i>	0,000	0,838	There is a strong correlation

Discussion

Most respondents in this study were aged 37-48 months. The number of male and female respondents was almost equal. The majority of mothers' education level was elementary and junior high school (low). On average, Mother's Oral Health Literacy and Oral Health Related Quality of Life (OHQOL) were moderate. Parents have a major role in maintaining children's oral health. Mothers are the immediate and reliable caregivers of children, who have a fundamental and important role in providing knowledge and changing better behavior towards their children's oral health (Chala et al., 2018). Although roles and responsibilities within the family may change, mothers still play an important role in shaping their children's lifestyles, especially oral health (Suryanti & Setiawan, 2021).

The role of parents, especially mothers, is very important in maintaining children's dental health. The level of knowledge and education regarding OHL of a mother affects the oral health status of the child. In this study, the majority of mothers' education levels were elementary and junior high school so that the average Mother's Oral Health Literacy and Oral Health Related Quality of Life (OHQOL) were obtained in the moderate category. A mother plays an important early intervention role in preventing caries in children. Mothers with good OHL levels will be more concerned about their children's behavior in maintaining their children's oral health, so that their children's Oral Health Related Quality of Life (OHQOL) will also be good (Ismail et al., 2018; Jumaa et al., 2022).

There is a relationship between Mother's Oral Health Literacy and Oral Health-Related Quality of Life (OHQOL) of Toddlers. Integrative review by Stormacq et al., (2019) on 16 studies on health literacy related to socioeconomic status and health showed that health literacy contributes to socioeconomic level, education and health status and health-related

quality of life (Stormacq et al., 2019). Oral health literacy or OHL from parents, especially mothers, has a major impact on children's quality of life related to oral health. The higher the mother's OHL, the better the behavior of maintaining oral health, so that it is expected to provide examples of correct behavior to children. Proper oral hygiene behavior can prevent caries formation. Children who are caries-free and have healthy oral teeth will not feel pain and have problems that affect their functional, social and psychological aspects of life. The end result will be a high score on OHRQoL or the quality of life of children towards their oral health (Spanenberg et al., 2019; Vettore et al., 2019).

Conclusions and Suggestions

There is an association between Mother's Oral Health Literacy and Oral Health-Related Quality of Life (OHQOL) of Toddlers.

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