

Toddlers' Oral Health Related Quality of Life (OHRQoL) by Gender

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ABSTRACT

Toddlers' caries prevalence is influenced by some factors such as social status, economic status, parents' educational background, and dietary pattern. Caries in toddlers have a negative impact on their quality of life. The objectives of this research are to analyze the differences in Oral Health Related Quality of Life (OHRQoL) by gender. Analytical observational research design with a cross-sectional approach. The research population is toddlers with their parents in the Silo II Health Centre work area. The sample is 3-5 years toddlers as many as 71 respondents. The variables studied were Oral Health Related Quality of Life (OHRQoL) of male and female toddlers with the Ecohis index measuring instrument. The research data were tabulated and analyzed using the Mann-Whitney test. The majority of respondents were female toddlers (57.7%), the age range of 60-71 months (57.7%), parents' last education is elementary school (49.3%), with an income of less than 2 million per month (59.1%). There are no differences in Oral Health Related Quality of Life of male and female toddlers with a p-value of 0.404. There are no differences in Oral Health Related Quality of Life between female and male toddlers

Keywords: OHRLQoL, Ecohis, male, female

ABSTRAK

Prevalensi karies balita dipengaruhi oleh beberapa faktor seperti status sosial, status ekonomi, pengetahuan orang tua, dan pola diet. Karies balita memberikan dampak negatif pada kualitas hidupnya (OHRQoL). Tujuan penelitian ini adalah untuk menganalisis perbedaan Oral Health Related Quality of Life (OHRQoL) berdasarkan jenis kelamin. Penelitian observasional analitik dengan pendekatan cross sectional. Populasi penelitian adalah balita beserta orang tuanya di wilayah kerja Puskesmas Silo II. Sampel adalah balita usia 3-5 tahun 71 responden. Variabel yang diteliti adalah Oral Health Related Quality of Life (OHRQoL) balita laki-laki dan perempuan dengan alat ukur indeks Ecohis Data hasil penelitian ditabulasi dan dianalisis dengan menggunakan uji Mann Whitney. Mayoritas responden adalah balita perempuan (57,7%), rentang usia 60-71 bulan (57.7%), pendidikan orang tua adalah SD (49.3%), dengan penghasilan kurang dari 2 juta perbulan (59.1%). Tidak terdapat perbedaan Oral Health Related Quality of Life balita laki-laki dan perempuan dengan nilai p-value 0.404. Tidak terdapat perbedaan Oral Health Related Quality of Life balita laki-laki dan perempuan

Kata kunci: OHRQoL, Ecohis, laki-laki, perempuan

INTRODUCTION

Toddlers' caries in Indonesia are classified as very high. The result of Basic Health Research in 2018 stated that caries prevalence in the age group 0-5 years is as many as 90.2%. The average dmft index of deciduous teeth for 5 years toddler is 8.0 for females and 8.3 for males (Riskesdas, 2019). The prevalence of caries among males and females is not significantly different. This is influenced by

several factors such as social status, economic status, parents' educational background, and dietary patterns (Prakasha Shrutha et al., 2013).

Toddlers' caries have a negative impact on their quality of life or known as Oral Health Related Quality of Life (OHRQoL). Pain caused by caries tooth disturbs toddlers' activity, from they eat until when they sleep. In addition, it has an impact on the psychological factor, they can feel scared when they have treatment for the pain they felt (Nóbrega et al., 2019). Toddlers' caries impact on OHRQoL also has an impact on their parents. This happens because the parents have a responsibility for their child's health. Parents commonly are extra sensitive about their child's health because underage children still have less perspective and knowledge. Toddlers who have caries also spent much time thus disrupting parents' work because they must treat or check their child to the dentist. Toddlers' caries also has an impact on family finance because it needs more cost to spend on dental treatment ((Lee et al., 2020; Pakkhesal et al., 2021; Permatasari et al., 2019). The Silo II Health Care work area is located in the Silo district where the majority of the area is coffee farming and plantation which the society is homogeneous. The aim of this study is to analyze the differences in Oral Health Related Quality of Life (OHRQoL) by gender.

METHOD

Analytical observational research design with a cross-sectional approach. The population of the research is 3-5 years toddlers with their parents in the Silo II Health Center work area which consists of 5 villages such as Karangharjo, Harjomulyo, Mulyorejo, Pace, and Silo. The inclusion criteria are 3-5 years of toddlers and willingness to be respondents of the study, while the exclusion criteria are toddlers with physical and mental disabilities. The sample was taken purposively as many as 71 respondents (40 female, 31 male). The variables studied were Oral Health Related Quality of Life (OHRQoL) of male and female toddlers. The measurement tool used is the Ecohis index (Early Childhood Oral Health Impact Scale) with 3 categories of less impact (0-33.3%), moderately impact (33.4-66.6%), and very impact (66.7-100%). The data were tabulated and analyzed using the Mann-Whitney test. Ethical clearance was obtained from the Ethics Committee of the Faculty of Dentistry, University of Jember No. 2031/UN25.8/KEPK/DL/2023.

RESULTS AND DISCUSSION

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The resulting study of the differences in Oral Health Related Quality of Life (OHRQoL) of toddlers by gender can be seen in the table below.

Table 1
Sociodemographic Characteristics of Respondent Based on Gender, Age, Education, Parents' Income/year

Sociodemographic Characteristic	N	%
Gender		
- Male	30	42.3
- Female	41	57.7
Age		
- 36-47 Months	41	57.7
- 48-59 Months	22	31
- 60-71 Months	8	11.3

Parents Education		
- Elementary/less	35	49.3
- Middle School	24	33.8
- High School	12	16.9
- Bachelor/diploma	0	0
Parents' Income per Month		
- < 2jt	42	59.1
- 2-3 jt	20	28.2
- >3jt	9	12.7

Based on table 1, shows the majority of the respondents are female toddlers as many as 41 respondents (57.7%). The age range of the respondents is 60-71 months of 41 respondents (57.7%). Parents' education is elementary school as many as 35 respondents (49.3%), with an income of less than 2 million per month as many as 42 respondents (59.1%). Analysis of differences in Oral Health Related Quality of Life of male and female toddlers can be seen in table 2 below.

Table 2
Mann Whitney test of Oral Health Related Quality of Life of male and female toddlers

Variable	p-value	Description
Oral Health Related Quality of Life male and female	0.404	There is no difference in Oral Health Related Quality of Life between male and female toddlers

Based on Table 2, the results of the difference test show that there are no differences in Oral Health Related Quality of Life for boys and girls with a p-value of 0.404.

The majority of toddlers are female, with an age range of 60-71 months. Parents' education level was mostly elementary school with an income of less than 2 million per month. The mother's education level influences her knowledge of childcare practices and her ability to maintain and care for them (Chowdhury et al., 2021; Le, 2021). If someone has a higher level of knowledge, the concern for oral health is also getting better, on the contrary, when someone has low or even less knowledge, the concern for oral care is also reduced. Parental education is linearly related to income. The higher the level of education the higher the income.

There are no differences in caries in male or female toddlers. Gender does not have an important role to measure the caries index because there are no differences in nutrition, hormonal changes, oral hygiene, and parental care for preschool children (Ismail et al., 2018). Toddlers also cannot choose their diet and responsibilities for their oral health. Risk factors of caries in toddlers are very influenced directly by their parents or guards (Papadaki et al., 2021).

Caries conditions in toddlers can occur in both males and females, directly affecting OHRQoL. Research shows that there is no difference in OHRQoL in male and female toddlers, both toddlers cannot express their feelings such as pain, and discomfort based on the conditions they feel in their oral cavity due to dental caries (Ismail et al., 2018). Similarly, another study found that there was no correlation between gender and OHRQoL (Mohammadbeigi et al., 2015). There is no difference in the effect of caries on male and female toddlers. Caries have factors that can be divided into two,

namely modifiable factors and non-modifiable factors. Modifiable factors such as parental knowledge about oral health and habits, while non-modifiable factors such as the socioeconomic situation of the family. Poor oral hygiene, low parental knowledge, and high snack consumption habits are the most important factors that can be changed (Duangthip et al., 2019).

CONCLUSIONS AND SUGGESTIONS

There are no differences in Oral Health Related Quality of Life between female and male toddlers.

ETHICAL CONSIDERATIONS

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Conflict of Interest Statement

The authors have no proprietary, financial, or other personal interest of any nature or kind in any product, service, and/or company that is presented in this article.

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