Description of the Level of Dental Anxiety Regarding Dental Treatment in Child Patients Aged 8-10 Years at the Shine Dental Care Clinic, Makassar City

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Abstract

Dental and oral health in children needs attention because children tend to have the impression of being afraid of dental care procedures. Anxiety about dental care procedures can result in children being uncooperative and delaying or delaying children from visiting the dentist regularly. This anxiety can be influenced by individual factors of the child patient, factors outside the individual. If anxiety is not handled properly it will cause the child to have anxiety that will continue until the next treatment or until adulthood. This research is a descriptive study using survey, observation and observation methods and is presented in tabular form which was carried out on children at the Shine Dental Care Clinic in Makassar City in September 2023. The population is the total number of patients who visited the clinic and the number of pediatric patients aged 8-10 years old who will undergo dental treatment, while the sample was taken using the positive sampling technique and the Slovin formula so that 28 respondents were obtained. The results of this study show that dental anxiety on a very anxious scale is most often found in children aged 8 years (54.5%) compared to those aged 9 years and 10 years. Based on gender, dental anxiety on the very anxious scale was more common in girls (32.3%) than boys (27.7%). Most dental procedures can cause anxiety in children aged 8-10 years. The conclusion is that dental anxiety on a very anxious scale is found to be more common in younger children than older children and girls experience more dental anxiety on a very anxious scale than boys.

Keywords: Dental Anxiety, Dental Care, Children Aged 8-10 Years

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1. Introduction

Dental and oral health is something that must be considered and must be treated early. Paying attention to dental health from an early age can prevent us from various dental and oral health problems later. In Indonesia itself, dental and oral health problems are a problem that still occurs frequently, especially in cases of cavities. One of the causes of the high number of dental and oral health problems is the lack of public awareness about coming or having their teeth checked by a dentist (Lesmana, 2023).

One of the reasons why someone never goes or goes to the dentist is because they are anxious about dental procedures. Dental anxiety is one thing that must be considered because it will not only cause stress to the patient but also to the dentist when carrying out treatment. Treating anxious and fearful patients can be a major source of stress for dental practitioners in carrying out their profession. For child patients, dental anxiety will result in delays in treatment and a decline in oral health due to the child being afraid to return to the dentist, resulting in an increase in oral problems (Elsa et al, 2023).

Anxiety in children is a problem that causes children to often delay or refuse dental care. Delaying dental care can cause the patient's oral health to worsen and increase children's fear of going to the dentist (Natalia et al, 2023).

The level of anxiety in children is easier to observe at the age of 8-12 years because children aged 8-12 years are considered to be able to recognize their environment and have a high sense of curiosity. Anxiety in children needs special attention because it will affect the success of dental treatment (Stefano, 2023).

The prevalence of dental anxiety throughout the world reaches 6-(15%) and in Indonesia it reaches (22.5%) (Mathius, 2019), with the level of dental anxiety (51%) starting in childhood and (22%) adolescence (Lesmana, 2023).
According to the World Health Organization (WHO) report, around (10%) people in North America, Western Europe, Australia and New Zealand experience clinical anxiety compared to around (8%) in the Middle East and (6%) in Asia (Naim et al, 2021).

The results of the 2018 Basic Health Research show that the percentage of the Indonesian population who have dental and oral problems is 57.6%, but only 10.2% receive care and treatment from medical personnel. The percentage of the 5-9 year age group who have dental and oral problems is 67.3%, and 14.6% have received treatment from medical dental personnel. For the 10-14 year old group, 55.6% had dental and oral problems and only 9.4% had received treatment from medical dental personnel. The largest percentage of dental and oral health problems is in the 5-9 year age group (Ministry of Health of the Republic of Indonesia, 2018).

Based on the description above, researchers are interested in further research regarding the description of the level of dental anxiety regarding dental care in pediatric patients aged 8-10 years at the Shine Dental Care Clinic, Makassar City.

2. Research Methods

Type research used is study descriptive with method survey, observation and observation and presented in form table for know the level overview dental anxiety about maintenance teeth in children aged 8-10 years at the Shine Dental Care Clinic, Makassar City.

3. Results And Discussions

<table>
<thead>
<tr>
<th>Distribution respondents based on type sex</th>
</tr>
</thead>
<tbody>
<tr>
<td>Type Sex</td>
</tr>
<tr>
<td>Man</td>
</tr>
<tr>
<td>Woman</td>
</tr>
<tr>
<td>TOTAL</td>
</tr>
</tbody>
</table>

Data source: primary, 2023
Based on table 4.1, it shows that of the 28 respondents, 14 (50.0%) respondents were male and 14 respondents (50.0%) were female.

**Table 4.2.**
**Distribution respondents based on Age**

<table>
<thead>
<tr>
<th>Age</th>
<th>N</th>
<th>%</th>
</tr>
</thead>
<tbody>
<tr>
<td>8</td>
<td>11</td>
<td>39.3</td>
</tr>
<tr>
<td>9</td>
<td>9</td>
<td>32.1</td>
</tr>
<tr>
<td>10</td>
<td>8</td>
<td>28.6</td>
</tr>
<tr>
<td>TOTAL</td>
<td>28</td>
<td>100.0</td>
</tr>
</tbody>
</table>

Data source: primary, 2023

Based on table 4.2, it shows that of the 28 respondents there were 11 respondents aged 8 years (39.3%), 9 respondents aged 9 years (32.1) and 8 respondents aged 10 years (28.6).

**Table 4.3.**
**Distribution worry respondents based on age**

<table>
<thead>
<tr>
<th>Age</th>
<th>Very No worried</th>
<th>No Worried</th>
<th>Advance Flat</th>
<th>Worried</th>
<th>Very Worried</th>
<th>Total</th>
<th>P-Value</th>
</tr>
</thead>
<tbody>
<tr>
<td>8</td>
<td>0</td>
<td>-</td>
<td>2</td>
<td>6</td>
<td>11</td>
<td>100.0</td>
<td>00.2</td>
</tr>
<tr>
<td>9</td>
<td>0</td>
<td>2</td>
<td>3</td>
<td>4</td>
<td>0</td>
<td>9</td>
<td></td>
</tr>
<tr>
<td>10</td>
<td>3</td>
<td>3</td>
<td>2</td>
<td>0</td>
<td>0</td>
<td>8</td>
<td></td>
</tr>
<tr>
<td>Total</td>
<td>3</td>
<td>10.7</td>
<td>5</td>
<td>17.9</td>
<td>7</td>
<td>25.0</td>
<td>8</td>
</tr>
</tbody>
</table>

Data source: primary, 2023

Based on table 4.3, it shows that child anxiety in the high category is more common in children aged 8 years compared to children aged 9 and 10 years. The high anxiety category in children aged 8 years was (54.5%) while the children in the low anxiety category were (18.2%). In children aged 9 years there were (44.4%) in the high anxiety category and the low anxiety category low (22.2%) for children aged 10 years who had high (21.4%) and low (37.5%) anxiety categories.
The results of this research are in line with research conducted by Muhammad Harun at RSGM Maranata Christian University to determine the description of stress levels in dental care with research subjects of 71 child patients aged 6-8 years with a descriptive analysis approach carried out in 2020 that the results of this research show The majority of children's stress levels are classified as low, this shows that dental care at RSGM Maranatha is not something that makes children stressed, this is similar to Ni Putu Nathalia Emilly's research which shows that the anxiety level of child patients who visit RSGM Maranatha to have their teeth extracted shows that the majority low anxiety as much as (64%) and moderate as much as (36%).

This is the same as Muhammad Harun Achmad's research which shows that the higher a child's age, the anxiety score decreases. This is because the younger age group is not yet able to express basic emotions of fear and anxiety, whereas children aged 8-10 years can express what they feel and tend to be able to control what they feel. And according to Mohammad Aldosary, age is one of the factors that has a big impact on anxiety about dental care in children. Younger children tend to be more anxious about going to the dentist compared to older children. Children's cognitive abilities develop with age, resulting in more awareness and understanding (Debora et al, 2022).

Older children will be more able to control themselves, have greater cognitive abilities, socio-emotional changes, self-control and have a faster ability to understand information. (Rahmaniah, 2021).

This is also in line with various studies conducted on various age groups showing that age has a relationship with individual anxiety, where increasing age is inversely proportional to anxiety levels (Andayani et al, 2022).

Table 4.4
Distribution of respondents' anxiety based on gender

<table>
<thead>
<tr>
<th>SCALE</th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>966</td>
<td></td>
</tr>
</tbody>
</table>
The research results in table 4.4 show that female respondents had a high anxiety category of (21.4%) and a low anxiety category of only (7.1%) and male children had more anxiety with The low category is (7.1%) while the high anxiety category is (27.7%). This shows that most of the children in the high anxiety category are girls.

The results of this study are in accordance with research conducted by Pratami which stated that anxiety is more common in female children compared to male children.

Boys and girls have different taste thresholds, one of which is pain. The pain threshold for boys is higher than for girls, so boys can still tolerate the pain that occurs. Apart from that, girls are more open in expressing their anxiety than boys (Natalia et al, 2023).

Some theories say that anxiety is more often experienced by women than men, because women are more sensitive to their emotions, which in turn are also sensitive to their feelings of anxiety. The results of this research are also in accordance with the theory which states that girls will worry more easily compared to boys because girls' personalities are more unstable, and there is an influence of hormones on emotional conditions (Danu et al., 2019).

Therefore, based on the Pediatric Dentistry Infancy Through Adolescence research, it is stated that gender has no relationship with dental anxiety, but is influenced by cultural norms such as habits, customs and behavior (Debora et al, 2022).

### Table 4.5
**Distribution of respondents when undergoing dental treatment**

<table>
<thead>
<tr>
<th>Maintenance</th>
<th>n</th>
<th>%</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Total</strong></td>
<td>967</td>
<td>100.0</td>
</tr>
</tbody>
</table>

Data source: primary, 2023
The research results in table 4.5 show that 1 person (3.6) underwent scaling treatment, 13 people (46.4%) underwent fissure sealant and 14 people (50.0%) underwent tooth extraction.

4. Conclusion

From the research results, it can be seen that pediatric patients aged 8 years have a very anxious level. In pediatric patients who underwent dental treatment with tooth extraction, it reached (50.0%) with a total of 14 respondents.

5. Compliance with ethical standards

Acknowledgments

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Disclosure of conflict of interest

This research collaboration is a positive thing for all researchers so that conflicts, problems and others are absolutely no problem for all writers.

Statement of informed consent

Every action we take as authors is a mutual agreement or consent.
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