

REASONS FOR EXTRACTING CHILDREN'S TEETH AT THE DEPARTMENT OF PEDIATRIC DENTISTRY, RSGM BAITURRAHMAH

Alasan Ekstrak Gigi Anak di Departemen Gigi Anak RSGM Baiturrahmah

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ABSTRAK

Latar Belakang : Pencabutan gigi sulung merupakan bagian yang relatif umum dalam praktik kedokteran gigi anak, seringkali dimasukkan sebagai bagian dari perawatan berdasarkan pertimbangan karies, trauma, dan ortodontik. Objek: Sampelnya adalah 30 anak yang dilakukan pencabutan gigi di RSGM Baiturrahmah. Metode Penelitian : Penelitian dengan mengisi informed consent Penelitian dengan cara wawancara ditanyakan langsung kepada ibu dan anak pada saat anamnesis sebelum anak dilakukan pencabutan gigi di kamar. Hasil : Hasil penelitian berdasarkan sampel 30 anak yang dilakukan pencabutan gigi di RS Baiturrahmah, jumlah terbanyak adalah pencabutan gigi seri sebanyak 14 anak dengan alasan gigi goyang atau gigi gigih, 8 anak mencabut gigi geraham 1 karena giginya sudah tanggal, goyang dan rongga. 7 anak dilakukan pencabutan gigi geraham 2 dan 1 anak dilakukan pencabutan gigi taring karena gigi goyang dan berlubang. Kesimpulan: Berdasarkan alasan mengapa anak melakukan pencabutan gigi, yaitu karena karies gigi merupakan penyebab yang paling sering, diikuti oleh mobilitas dan persistensi.

Kata Kunci: cabut gigi; jenis gigi; alasan pencabutan gigi

ABSTRACT

Background : Extraction of primary teeth is a relatively common part of pediatric dentistry practice, often included as part of treatment based on caries, trauma, and orthodontic considerations. **Object:** The samples were 30 children who had their teeth extracted at RSGM Baiturrahmah. **Research Methods:** Research by filling out informed consent Research by interview was asked

directly to the mother and child during the anamnesis before the child had a tooth extraction in the room.

Results: The results of the study were based on a sample of 30 children who had their teeth extracted at the Baiturrahmah Hospital, the highest number was the extraction of the incisors as many as 14 children on the grounds that the teeth were loose or the teeth were persistent, 8 children extracted the 1st molars because the teeth had been lost, rocking and cavities. 7 children had their 2nd molars extracted and 1 child had their canines extracted due to loose teeth and cavities. **Conclusion:** Based on the reasons why children do tooth extraction, that is because dental caries is the most common cause, followed by mobility and persistence.

Keywords: tooth extraction; type of tooth; reason for tooth extraction

INTRODUCTION

Tooth decay in a population can provide information about the prevalence of dental care, availability of dental care, and attitudes towards tooth extraction. Although the prevalence of dental caries in children has declined sharply in recent years, caries continues to increase¹.

Affects many children in the general population, particularly in developing countries where the rate of disease is increasing. Whittleetal reported dmf data on children aged 5 years (1989-1994)¹⁻². from an area in Manchester, England, which showed an increase



in the “m” component and a decrease in the “f” component. Studies on the reasons for tooth extraction in general dental practice have been carried out in many countries all aimed at assessing the relative significance of caries and periodontal disease as causes of tooth loss in adults¹⁻².

Of the 12 studies published since 1984, 11 stated that caries had been the main cause of tooth loss and caused a higher percentage of extractions in adults than periodontal disease². 2-13 A number of these studies have found caries to be the main cause of permanent tooth loss regardless of age, 4 others reported that extraction for periodontal disease exceeds extraction for caries in older patients.⁹ Stephens et al reported that, in patients under age 20 years, extractions for orthodontic purposes account for 33% of extractions in certain Canadian populations².

Taiwo's study (2014) Tooth extraction during childhood is widespread in less developed countries, especially sub-Saharan Africa because of the high prevalence of oral disease in the population. The majority of extractions occurred in the 6-9 year age group 96 (53%). The mandibular posterior teeth are the main teeth extracted in the age group of 6-9 years and 10-13 years. In contrast, the maxilla is the primary tooth that is removed in the 0-5 year old age group. Further studies revealed a high prevalence of trauma-related tooth extraction. This also suggests that ANUG and other childhood aggressive periodontitis remains a problem in the region.

Demiriz's research (2018) child tooth extraction in developing countries. For primary school-aged children in Zonguldak, Turkey, the majority of primary tooth extractions due to dental caries (51.6%) school-based oral health programs have been reported to be effective in providing preventive and curative services than community-based approaches and parents play an important role in helping their children maintain good oral hygiene by controlling their children's diet and requiring regular tooth brushing. However, it is more difficult to ensure these children are compliant throughout school; thus, decreased oral hygiene levels can lead to caries. The caries-related loss rate of primary

teeth is extraordinary. This situation shows that the extraction of primary teeth due to caries is still a health problem. In the programs that need to be developed and implemented to reduce this, it is necessary to provide information to school-aged children, teachers and parents must be trained in oral hygiene, parents must be informed about the importance of consulting a dentist for primary teeth that require treatment, and that they should not be late in ensuring that their children receive treatment.

Murray et al, in a survey of Ontario general dentists, reported that orthodontic considerations are the leading reason for permanent tooth loss in childhood, caries continues to be an important cause of tooth loss at all ages, and periodontal disease is a more common cause²⁻³. teeth fall out after 40 years of age.¹⁴ Although few have looked at the reasons for the extraction of different types of teeth, analysis by tooth type shows that third molars are the most common type of tooth extracted. However, there are differences, based on age, in the type of tooth extracted³.

Ong et al, in a survey of reasons for permanent tooth extraction in Singapore, showed that posterior teeth were extracted more often than anterior teeth with third molars accounting for 25% of all extractions. ¹⁵ Molars are often lost due to caries, and the lower anterior teeth are most commonly lost for periodontal reasons³⁻⁵. Vignarajah has proposed that the teeth most frequently extracted as a result of caries are the permanent and upper first molars, and the teeth that are periodontally involved most frequently extracted are the lower middle incisors and upper third molars⁴. ¹⁶ In Japan, Mortia et al reported that anterior teeth, especially in the mandible, constituted the highest percentage of periodontal extractions. ¹⁷ In males, maxillary premolars and molars were extracted for periodontal disease as well as for caries, whereas caries was the main reason for the loss of all maxillary teeth in females⁵.

Although many studies document the reasons for extraction of permanent teeth, there is little information explaining the reasons for extraction of primary teeth, and the types of teeth extracted⁶. To develop strategies for reducing tooth loss in the future, it is important to understand the factors that cause such loss and the relative

contribution of caries, periodontal disease, trauma, and orthodontic considerations⁷⁻⁸.

METHOD

Research by interview was asked directly to the mother and child during the anamnesis before the child had a tooth extraction in the room. the child can give a brief explanation. When asked what the reason is for the child coming to have a tooth extraction to the dentist, such as because the teeth are loose, the permanent teeth have grown while the primary teeth have not been removed, the child's teeth hurt and for full reasons, ask the mother directly when accompanying the child.

the age of the children involved in the study were 7-11 years old and informed consent was given to the mother to be signed that the mother agreed to have her child's teeth and mouth examined and tooth extraction.

This study documents extraction rates of primary teeth in an urban outpatient setting. Although extractions are often the result of developmental problems such as excessive retention of primary teeth or orthodontic guides, most extractions are still due to caries and pulp sequelae. Despite the tremendous progress made in the prevention and management of dental caries in children, tooth extraction, the sine qua non of failed prevention efforts, continues to be a common occurrence for many children. Other studies analyzing other practices and populations could further document the prevalence of dental caries in primary teeth. Prevention of caries. primary teeth should start early to identify those at risk. Certainly this study and many other studies support the need for further studies that define these risk factors and explore methods of intervention in those at risk.

RESULTS AND DISCUSSION

Tooth extraction in a population can provide information about the availability of dental care, prevalence of dental disease, and attitudes towards tooth loss. Although many studies have examined the nature of tooth loss and tooth extraction in permanent teeth, surprisingly little information exists regarding tooth loss in primary teeth.

Extraction of primary teeth is a relatively common part of pediatric dentistry practice, often included part of treatment based on caries, trauma, and orthodontic considerations. In this study, dental charts of 2,000 dental patients were reviewed to examine the frequency of extractions, types of teeth extracted, and reasons extraction. Extraction of primary teeth was a common procedure in the population studie, with more than 10% of patientsto extractions performed during the study period.

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Regarding the extraction of primary teeth, several findings can be seen from these data. First of all, caries and the resulting pulmonary pathology are the most common reasons for extraction. Second, differences in the types of teeth extracted existed between different age groups. These differences reflect the chronology of dental development and age differences in susceptibility to traumatic injury and dental caries. Third, among the different types of teeth, the differences in the reasons for the extraction are evident. These differences reflect the chronology of dental development and patterns of dental disease.

Caries and pulpal disease often require extraction of primary teeth with 53% of teeth extracted as a result of pulpal and periapical disease, which cannot be treated with pulp therapy. Despite dramatic improvements in pediatric oral health over the last few decades, recent evidence suggests that tal disease remains a source of ongoing tooth loss in a percentage of all pediatric population. Studies in the last 18 decades have identified that the incidence of dental caries among U.S. children appears to be concentrated in approximately 20-25 percent of the U.S. pediatric population. Data from the current rental study support these findings and add to the growing number of studies suggesting that investigations are identified.

this subgroup of children at risk of caries, even in fluoridated communities, is urgently needed. The epidemiology of early childhood caries shows that even in low-risk populations 4- 5% of children will develop this type of aggressive decay and sequelae. In our study, 53% of extractions were due to dental caries. Because this study did not include children treated under general anesthesia, it underestimated the effect of Early Childhood Caries (ECC) in the population. Regardless of the exact number of tooth extractions (in the study population) required as a result of caries, the data clearly show that dental caries remains a significant cause of tooth loss. However, a significant percentage of tooth loss is due to causes related to tooth development and orthodontic considerations.

As expected, given the chronology of tooth eruption, differences exist in different age groups with respect to the particular tooth extracted. The incisors are the teeth most commonly extracted in young children (3 to 5 years of age), probably because of the pattern of decay in the ECC and as a result of dental trauma. In older children, posterior teeth are extracted more frequently because of the chronology of eruption and exfoliation, and they are frequently involved in dental caries in school-age children. In both cases, extraction of primary teeth for reasons of secondary caries was common in all age groups. Primary second molars are rarely extracted in the youngest age group probably due to relatively late eruption. Doctor's reluctance to extract this tooth in this age group.

The reasons for extraction vary among different types of teeth. Primary incisors were extracted due to dental caries and pulp disease, as well as traumatic injuries. This is in contrast to permanent dentition where incisors are rarely extracted due to caries and are extracted more frequently due to traumatic injury and periodontal disease. Kuthy¹⁹ reported that orthodontic considerations were more often the reason for extraction of infrequently extracted primary canines as a result of caries or trauma. Finally, primary molars are often extracted with most of them extracted due to dental caries and pulp involvement.

The purpose of this study was to find out the reasons why children pulled teeth at RSGM Baiturrahmah. The results and discussion of the research include several stages, namely: research preparation, informed consent, research implementation, research data and discussion of research results.

Research Preparation

- ✓ The sample is 30 children who do tooth extraction at RSGM Baiturrahmah
- ✓ Disseminate informed consent and ask children directly about the reasons for tooth extraction
- ✓ Collecting data
- ✓ Processing data

Research result

Tabel 1. Distribution of tooth extraction by tooth type

Teeth Type	Patient	Reasons for Tooth Extraction
Insisivus tooth		
Up Lower	11	Tooth mobility and persistence
	3	
Canine Tooth		
Up Lower	1	Mobility and caries
First molars		
Up Lower	4	Mobility and caries
	4	
Second molars		
Up Lower	5	Mobility and caries
	2	

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Research discussion

Extraction of primary teeth is a common procedure in pediatric dentistry. There are many causes of tooth extraction such as caries, persistence, trauma, periodontal, malocclusion and root resorption. Research conducted by Mohammed and Nsour also shows that tooth

mobility and persistence are also one of the causes of tooth extraction in children. In a study conducted by Mohammed found 20 teeth out of a total of 130 extracted teeth were caused by tooth mobility (12.3%) while there were 14 teeth (8.6%) for tooth persistence. Research conducted by Nsour HF was also not much different where there were 29 teeth (12%) extracted due to tooth mobility and 20 teeth (8%) due to tooth persistence.

From the research that has been done, there are reasons for tooth extraction that are mostly found in incisors on the grounds that the teeth have mobility and persistence and the first molar is also the reason for the second most extraction on the grounds that children have mobility and have caries/cavities.

CONCLUSIONS

The results of a study conducted using informed consent at RSGM Baiturrahmah with a sample of 30 children showed that most of the extractions were performed on incisors and then on molars for reasons of extraction, namely the teeth experienced swaying, cavities and persistence.

Suggestions from this study are that further research is needed on the reasons why children perform tooth extractions with more samples and different research methods

CONFLICT OF INTEREST

Lack of knowledge of mothers and children about loose teeth and persistent teeth. This research also teaches the importance of paying attention to the growth and development of children's teeth and is also useful for adding references.

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