

Practices towards oral health among caretakers of children below 5 years at Masaka regional referral hospital, Masaka district. Cross-sectional study.

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Abstract

Background:

The aim of the study is to assess the practices towards oral health among caretakers of children below 5 years at Masaka regional referral hospital, Masaka district.

Methodology:

A cross-sectional descriptive research design in nature was used in this study. The group was composed of caretakers of children below 5 years in the Masaka region. A simple random sampling technique was used to select respondents from the source population.

Results:

Most (42%) respondents had attained secondary level of education, (52%) were Catholics, and (74%) were Baganda by tribe. The majority of the respondents (70%) had not yet taken their children to visit a dentist, whereas the minority (2%) had taken their children to visit a dentist after the eruption of the first milk tooth. Most of the respondents (86%) reported that they took their children to visit a dentist only during problems. Most of the respondents (40%) reported that they commenced cleaning of their children's teeth after 4-6 milk teeth erupted, while the least (10%) reported they commenced cleaning of their children's teeth soon after the first milk tooth eruption. Almost half of the respondents (48%) used toothbrushes to clean their children's teeth. Most of the respondents (60%) brushed their children's teeth once a day, whereas the least (10%) had no particular time to brush their children's teeth. Half of the respondents (50%) didn't have a particular time for changing their children's toothbrushes, whereas the least (2%) changed their children's toothbrushes once a month.

Conclusion:

Participants possessed very bad practices towards oral health in children below 5 years

Recommendations:

Health workers at Masaka regional referral hospital should sensitise people about the importance of regular dental visits.

Keywords: *Practices towards oral health, Oral health among caretakers of children, Masaka Regional Referral Hospital*

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Background

The Global Burden of Disease study 2019 estimated that oral diseases affect close to 3.5 billion people worldwide, and 520 million children suffer from caries of primary teeth (WHO, 2022). In Egypt, dental caries is rapidly increasing in children compared with adults; nearly about 60%90% of school children suffer from this chronic disease. Primary tooth decay is categorised as the 12th most predominant condition, affecting 500 to 60 million children (Helal et al, 2022). Child's oral health care in Western Maharashtra revealed that more than half (58%) of mothers replied that their child's first dental visit was after the age of 3 years and

above (Dhande et al, 2021). Mothers reported having started using a toothbrush and paste after all the primary teeth erupted. (Dhull et al., 2018). In Morocco, findings in relation to practices showed that previous children's use of dental services was reported by 45.7% of the mothers, emergency dental care was reported by 46.9% of the mothers, and 13.7% of the mothers reported that they sought treatment for their children from a dental practitioner for a toothache (Chala et al, 2018). The aim of the study is to assess the practices towards oral health among caretakers of children below 5 years at Masaka regional referral hospital, Masaka district.

Methodology

Study design

A cross-sectional descriptive research design in nature was used in this study. The design was considered favourable because it enabled the researcher to use various survey methods to gather quantitative data within a reasonable period of time.

Study area

Masaka regional referral hospital is located in the Southern-central part of Uganda, in the city of Masaka, approximately 128 kilometres from Kampala. The hospital comprises the following clinics and departments: Eye, ART, Dental, Laboratory, Pharmacy, antenatal, inpatient and out-patient department, Accident and Emergency; Wards that include: medical, surgical, gynaecological and obstetrics, paediatrics, maternity, major and minor theatres, plus Nutrition department. The hospital acts as a referral unit to health centres like Nyendo Health Centre III, Kalisizo Hospital, Lwengo Health Centre III, Lwengo Health Centre IV, and others. The facility receives an average of 30 patients in the paediatrics OPD and every Thursday covers children with chronic conditions.

Study population

The study population refers to a large group of people possessing one or more characteristics in common on which a research study focuses. Therefore, the study targeted a population of caretakers of children below 5 years and present during the period of data collection in the pediatric ward and the paediatric OPD.

Sample size determination

Sample size determination is the number of items to be selected from the universe to constitute a sample. The sample size was calculated using Burton's formula (1905).

$S=2(QR)O$; where

S= required sample size

Q= number of days the researcher spent while collecting data

R= maximum number of people per day

O= maximum time the interviewer spent on each participant

Therefore,

R= 10 respondents

Q= 5 days

O= 1 hour

$10 \times 5 \times 1 = 50$, therefore, the researcher will use 50 respondents.

Study variables

Dependent variables

The dependent variable in this study was oral health in children below 5 years.

Independent variables

Independent variables were knowledge and attitude towards oral health among caretakers.

Inclusion criteria

The inclusion group was composed of caretakers of children below 5 years in Masaka regional referral hospital present during the period of data collection and willing to consent to take part in carrying out the study.

Exclusion criteria

The exclusion group was composed of caretakers of children in Masaka regional referral hospital present during the period of data collection, and not willing to consent to take part in carrying out the study, and caretakers of children above 5 years of age.

Sampling technique

A simple random sampling technique was used to select respondents from the source population. This technique was preferred because it ensured freedom from human bias and each member of the target population had an equal and independent chance of being included.

Data collection method

A semi-structured questionnaire was designed and used by the researcher to collect data from respondents. The questionnaire was designed according to the specific objectives of the study with open and closed-ended questions, written in the English language and later translated into the local language (Luganda) for respondents who were not able to comprehend English. The questionnaire was preferred because it was suited to collect data from a larger sample, considering the nature of the study population.

Pre-testing of the questionnaire

For uniformity of the data collection, pretesting of the questionnaire was done among 15 caretakers of children below 5 years in Kalisizo general hospital, Kyotera district, in order to ensure that questions were easily understood by all the respondents, and the pre-tested instruments helped to identify questions that might have caused ambiguity and contradiction.

Data collection procedure

After approval of the research proposal, an introductory letter from Kampala School of Health Sciences' research committee to the study area seeking permission to carry out the study was obtained. When the permission was granted, the researcher and two trained research assistants administered the questionnaire to the respondents through an interview in a local language (Luganda). The purpose of the study was explained to the participants, and data collection began with the signing of a consent form among the caretakers of children below 5 years at Maternal and Child's clinics. The data collection process was done in a way that alphabet letters written on papers were given to the respondents to pick; those who picked letter "A" were interviewed first after consenting, and the process continued until the required sample size was attained. The respondents

were asked questions following the designed questionnaire to avoid being biased. After the interview, each respondent was thanked for participating in the study.

Quality control

The right respondents were selected through the inclusion and exclusion criteria.

All activities regarding data collection were under the monitoring and supervision of the research assistants.

The research team met after data collection to review the collected data and cross-check the filled questionnaires and completeness.

Standard operating procedures for coronavirus were followed and maintained for the purpose of protecting the study participants and data collectors from risks of coronavirus

Therefore, quality control was done to ensure the accuracy and validity of the data to be collected.

Data analysis and presentation

Data was analysed manually using tally sheets and entered into a computer using the Microsoft Excel computer

program to generate tables, pie charts, and bar graphs for easy presentation of findings.

Ethical considerations

Ethical considerations in the conduct of research were followed to prevent ethical dilemmas. To ensure ethical conduct of the study, a letter of introduction was obtained from Kampala School of Health Sciences and addressed to the medical director of Masaka Regional Referral Hospital, Masaka district, requesting permission to conduct the study. When permission was granted, consent was obtained from each participant, and respondents were assured of utmost confidentiality. The respondents were assured of anonymity and the ability to withdraw from the study at any time. No names will be written in the questionnaire. The questionnaires were kept separate from consent forms to avoid association of the two.

Results

Demographic data

Table 1 shows the distribution of respondents according to demographic data

Response	Frequency (f)	Percentage (%)
Age		
18-23 years	7	14
24-29 years	26	52
30-39 years	11	22
≥40 years	6	12
Total	50	100
Education level		
Never went to school	5	10
Primary	14	28
Secondary	21	42
Tertiary institution/ University	10	20
Total	50	100
Religion		
Protestant	11	22
Muslim	12	24
Catholic	26	56
Others	4	8
Total	50	100
Tribe		
Muganda	37	74
Munyankole	10	20
Musoga	3	6
Others	0	0
Total	50	100
Marital status		
Single	7	14
Married	29	58
Separated	11	22
Widow	3	6
Total	50	100
Occupation		
Un employed	28	56
Employed	12	24
Self employed	10	20
Total	50	100

Table 1, most of the respondents (52%) were within the age bracket of 24-29 years, whereas the least (12%) were within the age bracket of 40-45 years. As regards education levels, almost half of the respondents (42%) had attained a secondary level of education, whereas the least (10%) had

never gone to school. The study further revealed that half of the respondents (52%) were Catholics by religion, whereas the least (22%) were Protestants by religion. The study revealed that most of the respondents (74%) were Baganda by tribe, whereas the least (6%) were Basoga by tribe.

Findings obtained from 50 respondents showed that the majority of the respondents (58%) were married, whereas the minority (6%) were widows. Based on the study

findings, most of the respondents (56%) were unemployed, whereas the least (20%) were self-employed.

Practices towards oral health among caretakers of children below 5 years.

Figure 1: Distribution of respondents according to when their children had a first dental visit. (N=50)

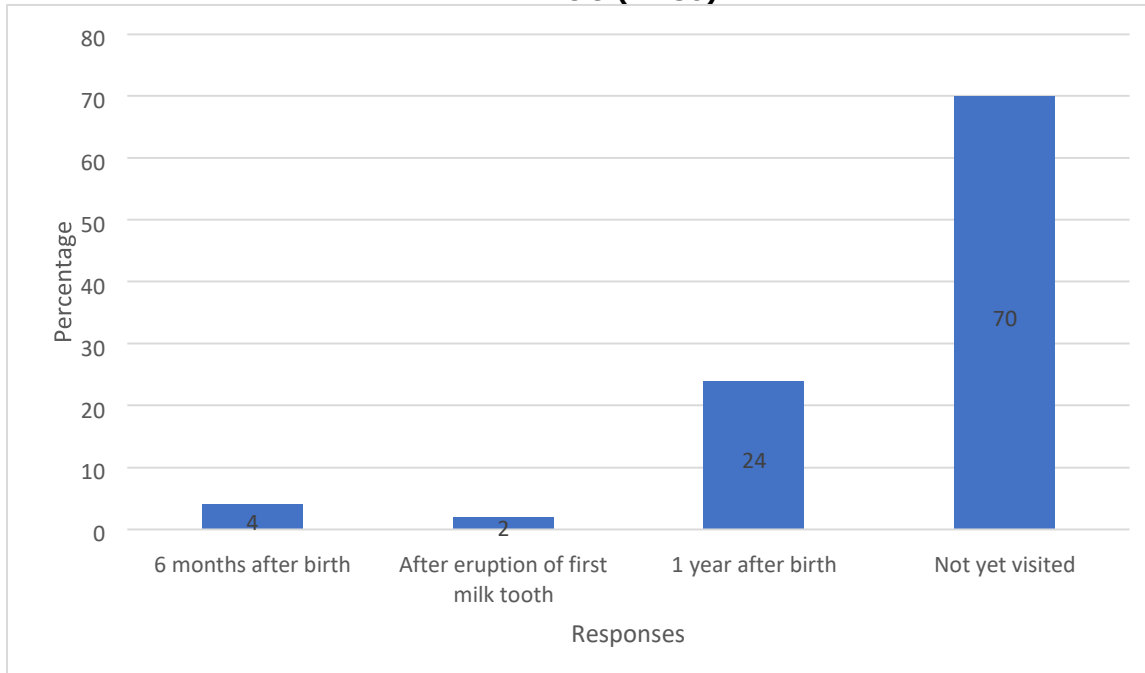


Figure 1: The majority of the respondents (70%) had not yet taken their children to visit a dentist, whereas the minority (2%) had taken their children to visit a dentist after the eruption of the first milk tooth.

Figure 2: Distribution of respondents according to when they take their children to visit the dentist. (N=50)

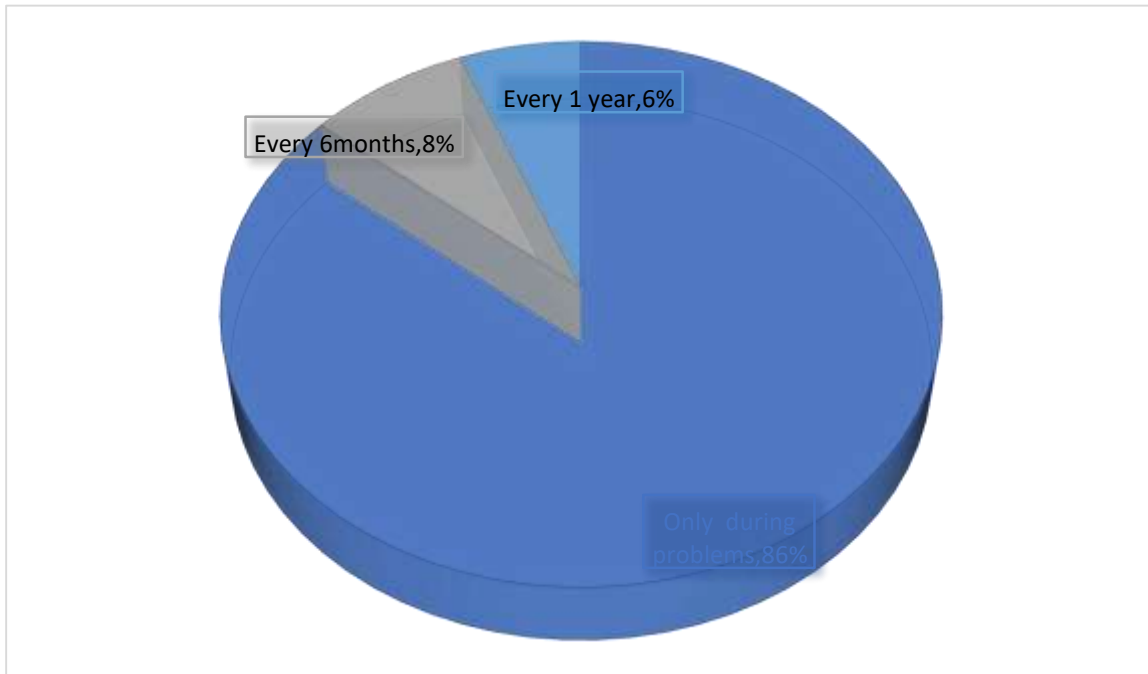


Figure 2, most of the respondents (86%) reported that they took their children to visit a dentist only during problems, whereas the least (6%) took their children to visit a dentist every 1 year.

Table 2: Shows the distribution of respondents according to when they commenced cleaning their children's teeth.

Response	Frequency (f)	Percentage (%)
Soon after the first milk tooth eruption	5	10
After all the milk teeth have erupted	9	18
After 4-6 milk teeth erupt	20	40
I don't remember	16	32

Table 2, most of the respondents (40%) reported that they commenced cleaning of their children's teeth after 4-6 milk teeth eruption, while the least (10%) reported they commenced cleaning of their children's teeth soon after the first milk tooth eruption.

Figure 3: Distribution of respondents according to which aids they used to clean their children's teeth. (N=50)

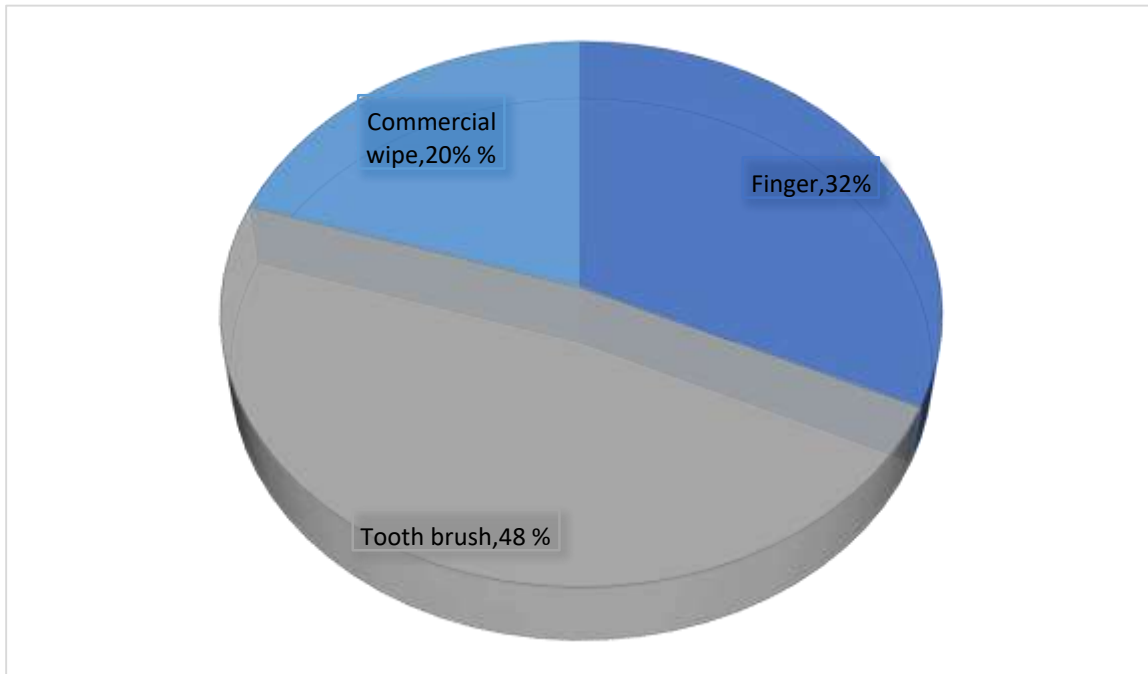


Figure 3, almost half of the respondents (48%) used tooth brushes to clean their children's teeth, whereas the least (20%) used commercial wipes.

Figure 4: Distribution of respondents according to the number of times they brush their children's teeth in a day. (N=50)

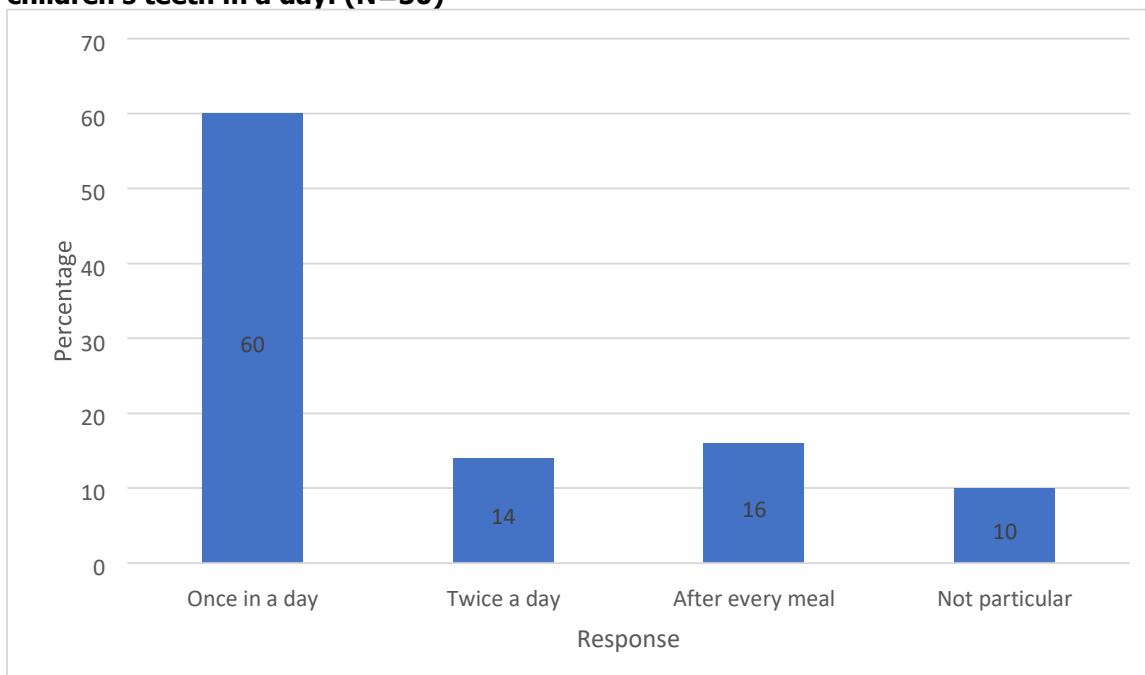


Figure 4, most of the respondents (60%) brushed their children's teeth once a day, whereas the least (10%) had no particular time to brush their children's teeth.

Table 3: Distribution of respondents according to when they change their children's toothbrushes.

Response	Frequency (f)	Percentage (%)
Once a month	1	2
Once the bristles fray out	10	20
Every 2-3months	12	24
Not particular	27	54

Table 3, half of the respondents (50%) didn't have a particular time of changing their children's toothbrushes, whereas the least (2%) changed their children's toothbrushes once a month.

Discussion

Practices towards oral health among caretakers of children below 5 years.

From the study findings, most of the respondents (70%) had not yet taken their children to visit a dentist. This implies that the majority of the respondents were not aware of the preventive dental practices. The study results were consistent with Noura et al (2017), where findings revealed that

40.5% of the mothers had not taken their children to visit a dentist yet. Findings from the study revealed that the majority of respondents (86%) took their children to visit a dentist only when they had problems. This could be attributed to the fact that the study participants didn't take it as a major concern until there was a problem. The study results agreed with Chala et al (2018), where findings showed that emergency dental care was reported by 46.9% of the mothers.

In view of the study results, less than half of the respondents (40%) reported they commenced cleaning of their children's teeth after 4 to 6 milk teeth. This signifies poor practices towards the infant's oral health. Study results were in line with Dhande et al (2021), where results revealed 42% of the mothers reported they started cleaning their child's teeth after the eruption of 4 to 6 milk teeth.

The study findings revealed that almost half of the respondents (48%) use toothbrushes to clean their children's teeth. This shows that toothbrushes were convenient and easier to access for the respondents. The study results were quite similar to findings obtained from Mubeen et al (2015), where results showed that 69.8% cleaned their children's teeth with a brush.

The study discovered that most of the respondents (60%) brushed their children's teeth once a day. This implies that the respondents do not have enough time for that activity. The study results disagreed with Noura et al (2017), where results showed that 60.1% of the mothers reported brushing their children's teeth twice a day.

Conclusion

Participants possessed very bad practices towards oral health in children below 5 years old.

Recommendations

Health workers at Masaka regional referral hospital should sensitise people about the importance of regular dental visits, as most of the respondents hadn't taken their children to visit a dentist yet.

The health workers should continue to educate people about the number of times they should at least brush their children's mouths a day and its importance to eliminate the problems that result from poor brushing practices.

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List of abbreviations

ART : Anti-Retroviral Therapy
WHO : World Health Organisation

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The study was not funded.

Conflict of interest

The author did not declare any conflict of interest.

Author biography

Mariam Katongole is a student of clinical medicine and community health at Kampala School of Health Sciences. Stephen Oketcho is a tutor at Kampala School of Health Sciences,

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