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KNOWLEDGE, ATTITUDE, AND FACTORS ASSOCIATED WITH ORAL HEALTH CARE SEEKING BEHAVIORS AMONG SCHOOL-AGED CHILDREN IN BUGESERA DISTRICT, RWANDA

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Abstract

The knowledge, attitude and factors linked with oral health among school-aged children is a crucial aspect of promoting oral health and preventing dental issues. This study has the objective of investigating the knowledge, attitudes, and factors linked with oral health care seeking behaviors among school-aged children residing in the Bugesera district of Rwanda. The study was quantitative cross sectional and targeted 1505 primary school students of 6 to 12 years old, all from randomly selected schools in Bugesera district. The sample size of 308 students was calculated using Fisher formula. The study used SPSS, version 21.0 in data analysis. P-value of ≤0.05 at bivariate and multivariate regression analysis was taken as statistically significant. The findings of this study demonstrated that the 40.9% of the participants have a low level of understanding. About 59.7% of the participants have positive attitude. About 52.3% of the respondents have visited health professional when they had oral health problem. About 55.6% of the respondents have positive behavior. The children aged between 10 and 12 years old were 1.6 times significantly associated to positive oral health seeking behavior with AOR(CI)=1.612(1.027-2.530), p<0.038. Also, having a private health insurance was three times more likely than not having a medical insurance associated to positive oral health seeking behavior with AOR 3.259 95% CI (1.469-7.231), p<=0.001. The father and the mother being monthly salaried employees was three times more likely associated to positive oral health seeking behavior for their children with AOR 3.424 95% CI (2.491-9.568), p<=0.001. In conclusion, this study has revealed that more than the half of the respondents was found with high level of knowledge and positive attitude on oral health-care seeking behavior and twelve factors are associated to oral health seeking behavior. The study recommends implementing and strengthening the systematic oral health promotion program with emphasis in the community level to educate the rural community the benefit of oral hygiene for closing the gap of poor oral health in rural area.

Keywords : Knowledge, Attitude, Oral health, Care seeking, Behavior.

Introduction

Approximately 3.5 billion people worldwide exhibit active oral disease (Watt *et al.,* 2019).The World Dental Federation (FDI) estimates that 60–90% of schoolchildren and nearly 100% of adults worldwide have experienced tooth decay in their lifetimes. The knowledge, attitude and factors linked with oral health among school-aged children is a crucial aspect of promoting oral health and preventing dental issues. At the international level, understanding the necessities for and barriers to oral health is crucial for lowering the incidence of oral illness among school-aged children (Dye, 2015). Despite significant advances in improving universal health coverage, the WHO estimated that over 3.5 billion people worldwide were affected by oral disorders, with three out of every four of these people living in middle-income countries. In addition, 514 million children globally have primary tooth decay, and billions more individuals are predicted to have persistent dental decay in 2025 (WHO, 2022a).

The study conducted in USA showed a high prevalence (50.5%) of dental caries among 6-11 years old children during the National Health and Nutrition Survey (Fleming & Afful, 2018). In the North-East of Jordan, dental caries prevalence was 78.7% among 6-12 year children and dietary habits played an important role in dental caries development (Sarah *et al.,* 2018).

More than 480 million Africans are affected by oral disorders such as dental caries and periodontal disease, but oral health remains a low priority in many countries, resulting in limited financial preventative and care services. African countries have formed a regional health plan to treat oral disorders as part of non-communicable disease prevention and control way to universal health coverage (WHO, 2021). In Rwanda, the analysis of data revealed a high prevalence of dental caries (ranging from 42.42% to 71.5%). Surprisingly, 60% of school-aged children suffered tooth decay (Rwanda Information Society Authority, 2019). In the first oral health survey conducted in Rwanda, which was published on creating oral health research infrastructure, the survey found that 64.9% of the 2097 participants had experienced caries and 54.3 had untreated caries. The majority (70.6%) had never gone to a dental professional.

Therefore, there is an urgent need to investigate and address oral health knowledge, attitude, and factors linked with oral health-care seeking behaviors among school-aged children, as it has been observed that a significant portion of the population lacks adequate awareness, holds misconceptions, and exhibits suboptimal oral health care practices. A study is needed to examine

oral health knowledge, attitude, and factors linked with oral health-care seeking behaviors among school-aged children in Bugesera district as this district is inhabited by population in rural area where citizens can neglect oral health.

Materials and methods

Research design

In this study, the researcher used a cross-sectional research design and adopted a quantitative research approach.

Participants

Target populations of this study were 1505 students from primary schools from Bugesera district. The study included students aged between 6-12 years old. Nyamata Bright School count 531 of students aged between 6-12 years old and Groupe Scolaire Gashora counts 974 which make a total of 1505 students.

Research instruments

Data collection exploited quantitative methods Interviewer administered questionnaire were distributed to the study respondents. The respondents were students and their parents. For parents, data was collected using structured self-administered questionnaire with the help of an assistant. The questionnaire was developed in Kinyarwanda and translated in English.

Data analysis procedure

Data was analyzed by SPSS version 21-computer program and summarized using descriptive statistics and presented in tables as frequency distributions. Statistical significance of linked variables was investigated using the cross-tabulation test. All variable which had a significance level of less or equal to 0.05was taken as significant. The attitude was measured using Likert scale. The knowledge was evaluated using a closed-end interviewer administered questionnaire which was distributed to students. The students who scored marks less than the half of the questions related to the evaluation of the knowledge were taken as unknowledgeable for oral health. Each question on the variable of knowledge was score 1 mark.

Results

Table 1. Oral health knowledge among school-aged children in Bugesera district, 2024 (n=308)

Variables	Frequency	Percentage
How often teeth should be brushed		
Once a day	74	24.0
Twice a day	148	48.1
Three times a day	62	20.1
Not necessary to everyday	24	7.8
What should be used to brush		
Finger	50	16.2
Tooth brush	172	55.8
Chewed stick	74	24.0
I do not know	12	3.9
Consequences of irregular tooth brushing		
Dental decay and gum disease	37	12.0
Bad smell from the mouth	49	15.9
All of the above	222	72.1
How can we prevent dental problems		
Brushing and rinsing properly at least twice a day	24	7.8
Regularly visit the dentist	50	16.2
All of the above	209	67.9
There is nothing you can do	25	8.1
Should the mouth be rinsed after meals		
Yes	234	76
No	74	24

Source: Data from the questionnaire (2024)

Regarding oral health knowledge among school-aged children in Bugesera district, Table 4.2 demonstrated that 48.1% of the respondents said that teeth must be brushed twice a day and 55.8% said that tooth brush should be used. The majority of the respondents (72.1%) admitted that dental decay and gum disease and bad smell from the mouth are consequences of irregular tooth brushing. Also, the majority of the respondents (67.9%) recognized that brushing and rinsing properly at least twice a day and regularly visiting the dentist can prevent dental problems and 76% of the respondents recognized that the mouth should be rinsed after meals.

Table 2. Attitude towards oral health care of the respondents, 2024 (n=308)

	Strongly	Disagree	Uncertain	Agree	Strongly

	disagree n(%)	**n(%)**	**n(%)**	**n(%)**	**agree n(%)**
Maintaining healthy mouth is an individual responsibility	13(4.2)	25(8.1)	12(3.9)	85(27.6)	173(56.2)
It is required to visit a dentist periodically to maintain the oral health	15(4.9)	29(9.4)	119(38.6)	60(19.5)	85(27.6)
It is necessary to change tooth brush before bristles get frayed upif it has been used for a while	25(8.1)	22(7.1)	56(18.2)	123(39.9)	82(26.6)
The amount of toothpaste which does not cover all the length of the toothbrush is sufficient for dental brush	13(4.2)	12(3.9)	13(4.2)	86(27.9)	184(59.7)
Cleaning tongue can improve oral health	21(6.8)	22(7.1)	11(3.6)	96(31.2)	158(51.3)
Rinsing your mouth after meals can improve oral health	15(4.9)	16(5.2)	52(16.9)	82(26.6)	143(46.4)
The proper way of brushing teeth is to brush them according to a designed technique/method	36(11.7)	73(23.7)	74(24)	24(7.8)	101(32.8)
Oral hygiene helps to prevent oral diseases	26(8.4)	18(5.8)	12(3.9)	58(18.8)	194(63)

Source: Data from the questionnaire (2024)

The results of the present study showed that 56.2% strongly agreed that preserving healthy mouth is an individual responsibility. About 38.6% are uncertain on the following assertion: It is necessary to make a visit to a dentist every so often to preserve the oral health. About 39.9% agreed that it is necessary to change tooth brush before bristles get frayed up if it has been used for a while. Likert scale was the basis of this evaluation and its scores were the following: D (1), SD (0), U(2), SA (4) and A (3) and the calculation of the mean cut off is: (4+3+2+1+0)/5=2. As a result, individuals possessing more than 2 were deemed to have a positive attitude, whereas those with fewer than 2 were labeled as having a negative attitude (WHO, 2020).

Table 3.Oral health-care seeking behavior among school-aged children in Bugesera district, 2024 (n=308)

Variables	**Frequency**	**Percentage**
Did your child ever visit health professional when he/she has oral health problem?		
Yes	161	52.3
No	147	47.7
If yes, for what reasons?		

Pain	50	16.2
Swelling	49	15.9
Decay	37	12.0
Follow up	25	8.1
N/A	147	47.7
If yes how many times in last 12 months?		
One time	87	28.2
Two times	65	21.1
More than two times	12	3.9
Never	147	47.7
If yes where did you seek oral health care for her/him?		
At a healthcare facility	112	36.4
In traditional healer	25	8.1
Buy medicine in pharmacy	24	7.8
Did not seek any healthcare	147	47.7
If Not, for what reasons?		
Bad quality of previous treatment	37	12.0
Lack of health insurance	37	12.0
Lack of money	49	15.9
No available healthcare service	24	7.8
N/A	161	52.3
If your child has not visited a dental clinic during the last 12 months, what was the main reason?		
Dental visit expensive	37	12.0
Fear dental equipment	25	8.1
No oral issue experienced	87	28.2
No dental clinic nearby home	12	3.9
N/A	147	47.7
What kind of the nearest health facility having dental service for you?		
Public and private healthcare services	87	28.2
Only public healthcare facilities	160	51.9
Only private healthcare facilities	37	12.0
No healthcare facility available	24	7.8
When does a child should attend an oral health care professional facility?		
After six months for checkup	42	13.6
As soon as the child presents oral diseases	189	61.4
When a disease become severe	53	17.2
Oral diseases for children are self-cured	24	7.8
Have you spoken to your child about oral health?		

Yes	123	39.9
No	185	60.1

Source: Data from the questionnaire (2024)

As shown in Table 4.4, about 52.3% of the respondents have visited health professional when they had oral health problem. Among them, 16.2% visited health professional for pain, 15.9% for swelling, 12% for decay and 8.1% for follow up. In the last twelve months, 28.2% visited health professional one time, 21.1% two times and 3.9% more than two times. About 36.4% went to seek oral health care for their children at a healthcare facility, 8.1% went in traditional healer and 7.8% bought medicine in pharmacy.

Table 4. Parent knowledge on oral health, 2024 (n=308)

Variables	Frequency	Percentage
Services provided by oral health care professionals		
Teeth treatment and cleaning	25	8.1
Oral health education	49	15.9
Medicine prescription	61	19.8
All of the above	173	56.2
Common oral diseases		
Dental caries	161	52.3
Gum diseases	37	12.0
Herpangina	13	4.2
All of the above	97	31.5
Cause of tooth decay for children		
Eating ice creams and sweets	171	55.5
Not properly brushing	12	3.9
Not regularly visit the dentist	12	3.9
All of the above	113	36.7
Are oral health diseases hereditary		
Yes	74	24.0
No	234	76.0
How many times should one visit oral health care for checkup		
Once a year	87	28.2
Twice a year	173	56.2
It is not necessary	48	15.6

Source: Data from the questionnaire (2024)

As shown in Table 4.5, about 56.2% of the respondents recognized that the services provided by oral health care professionals include teeth treatment and cleaning, oral health education and medicine prescription. About 52.3% of the respondents recognized dental caries as the common

oral disease. About 55.5% recognized eating sweets and ice creams as the cause of tooth decay for children. About 76% of the respondents disagreed that oral health diseases are hereditary while 56.2% said thought that one should visit oral health care for checkup twice a year.

Table 5. Parents attitude toward oral health care seeking, 2024 (n=308)

	Strongly disagree n(%)	**Disagree n(%)**	**Uncertain n(%)**	**Agree n(%)**	**Strongly agree n(%)**
Do you think it is necessary for a child to attend dental facility anytime the child develops oral disease?	21(6.8)	21(6.8)	39(12.7)	123(39.9)	104(33.8)
Do you think Oral health problems in childhood continue in adulthood?	136(44.2)	99(32.1)	37(12)	24(7.8)	12(3.9)
Do you think the number of health care services in your location is enough?	117(38)	103(33.4)	47(15.3)	18(5.8)	23(7.5)
Do you think increase of oral health care services can influence oral health care seeking?	18(5.8)	41(13.3)	19(6.2)	117(38)	113(36.7)
Is the cost of dental services affordable by the ordinally people in your area?	160(51.9)	83(26.9)	34(11)	16(5.2)	15(4.9)
Do you think the quality of services provided at health care is good?	25(8.1)	49(15.9)	62(20.1)	74(24)	98(31.8)

Source: Data from the questionnaire (2024)

The results of the present study showed that 39.9% agreed that it is necessary for a child to attend dental facility anytime the child develops oral disease. About 44.2% strongly disagreed that oral health problems in childhood continue in adulthood. About 38% strongly disagreed that the number of health care services in their location is enough. About 38% agreed that increase of oral health care services can influence oral health care seeking. About 51.9% of the respondents strongly disagreed that the cost of dental services is affordable by the ordinally people in their area while 31.8% strongly agreed that the quality of services provided at health care is good.

Likert scale was the basis of this evaluation and its scores were the following: D (1), SD (0), U(2), SA (4) and A (3) and the calculation of the mean cut off is: (4+3+2+1+0)/5=2. As a result,

individuals possessing more than 2 were deemed to have a positive attitude, whereas those with fewer than 2 were labeled as having a negative attitude (WHO, 2020).

Table 6. Bivariate analysis of factors associated to oral health-care seeking behavior

Particulars	**Oral health care seeking behavior**		**Chi-square**	**P-value**
	Positiven(%)	**Negativen(%)**		
Gender			3.455	0.063
Male	98(57)	74(43)		
Female	63(46.3)	73(53.7)		
Age			4.328	**0.037**
6-9	74(46.5)	85(53.5)		
10-12	87(58.4)	62(41.6)		
Class			0.421	0.516
1-3	87(54)	74(46)		
4-6	74(50.3)	73(49.7)		
Age of the parent			3.660	0.160
Less than 30	33(44.6)	41(55.4)		
31-40	69(58.5)	49(41.5)		
More than 40	59(50.9)	57(49.1)		
Religion			2.596	0.273
Christian	119(54.8)	98(45.2)		
Muslim	25(50)	25(50)		
Other religion	17(41.5)	24(58.5)		
Ubudehe category			37.362	**0.001**
Category 1&2	47(29.6)	112(70.4)		
Category 3&4	114(76.5)	35(23.5)		
Living area			0.298	0.585
Rural	112(53.2)	98(46.8)		
Urban	49(50)	49(50)		
Medical insurance			34.588	**0.001**
RSSB	25(67.6)	12(32.4)		
Mutual health	66(47.8)	72(52.2)		
Private insurance	31(93.9)	2(6.1)		
No health insurance	39(39)	61(61)		
Parents living in the family			0.207	0.976
All of them	98(53.3)	86(46.7)		
Only the father	25(50)	25(50)		
Only the mother	25(51)	24(49)		
None of them	13(52)	12(48)		
Number of family members			3.401	0.334
Two	24(66.7)	12(33.3)		
Three	25(51)	24(49)		
Four	50(50.5)	49(49.5)		

More than four	62(50)	62(50)		
Occupation of the father			22.641	**0.001**
Monthly salaried	25(67.6)	12(32.4)		
Cultivate his farm	92(52.9)	82(47.1)		
Entrepreneur	12(24.5)	37(75.5)		
Commercialist	32(66.7)	16(33.3)		
Occupation of the mother			20.844	**0.001**
Monthly salaried	37(50.7)	36(49.3)		
Cultivate his farm	76(55.5)	61(44.5)		
Entrepreneur	15(28.3)	38(71.7)		
Commercialist	33(73.3)	12(26.7)		
Education level of the father			28.997	**0.001**
Not completed primary school	3(8.1)	34(91.9)		
Completed primary school	84(49.1)	87(50.9)		
Completed secondary school	49(76.6)	15(23.4)		
Attended university education	25(69.4)	11(30.6)		
Education level of the mother			7.738	**0.046**
Not completed primary school	29(46.8)	33(53.2)		
Completed primary school	74(50)	74(50)		
Completed secondary school	29(50)	29(50)		
Attended university education	29(72.5)	11(22.5)		
Distance to dental healthcare facility			7.005	**0.030**
Less than 30 minutes	50(64.9)	27(35.1)		
Between 30 minutes and 1 hour	62(46.3)	72(53.7)		
More than 1 hour	49(50.5)	48(49.5)		
Oral health knowledge among school-aged children			6.354	**0.012**
Low level of knowledge	55(43.7)	71(56.3)		
High level of knowledge	106(58.2)	76(41.8)		
Attitudes on oral health care among school-aged children			17.179	**0.001**
Positive attitude	114(62)	70(38)		
Negative attitude	47(37.9)	77(62.1)		
Parent knowledge on oral health			8.908	**0.003**
Low level of knowledge	53(42.1)	73(57.9)		
High level of knowledge	108(59.3)	74(40.7)		
Parent attitude towards oral health care seeking behavior			21.373	**0.001**
Positive attitude	120(62.5)	72(37.5)		
Negative attitude	41(35.3)	75(64.7)		

Source: Data from the questionnaire (2024)

The results of the present study indicated that the relationship between twelve factors (age, ubudehe category, medical insurance, occupation of the mother and father, education level of the mother and father, distance to healthcare facility, oral health knowledge and attitude among

school-aged children, parent knowledge on oral health, and parent attitude towards oral health care seeking behavior) and oral health seeking behavior was statistically significant with a p-value of less than 0.05. Being aged between 10 and 12 years old presented a relationship with positive oral health care seeking behavior with 58.4%, X^2=4.328, p<0.037; also, being in ubudehe category 3&4 presented a relationship with positive oral health seeking behavior with 76.5%, X^2=37.362, p<0.001; having a private health insurance presented a relationship with positive oral health seeking behavior with 93.9%, X^2=34.588, p<0.001;the father being a monthly salariedemployee presented a relationship with positive oral health seeking behavior with 67.6%, X^2=22.641, p<0.001;the mother being commercialist presented a relationship with positive oral health seeking behavior with 73.3%, X^2=20.844, p<0.001; the father having completed secondary school presented a relationship with positive oral health seeking behavior with 76.6%, X^2=28.997, p<0.001; the mother having attended university education presented a relationship with positive oral health seeking behavior with 72.5%, X^2=7.738, p<0.046; using less than 30 minutes to the health facility was associated with positive oral health seeking behavior with 58.2%, X^2=6.354, p<0.030; Oral health knowledge among school-aged children presented a relationship with positive oral health seeking behavior with 64.9%, X^2=7.005, p<0.012; Attitudes on oral health care among school-aged children presented a relationship with positive oral health seeking behavior with 62%, X^2=17.179, p<0.001; Parent knowledge on oral health presented a relationship with positive oral health seeking behavior with 59.3, X^2=8.908, p<0.003; The positive attitude of the parents towards oral health care seeking behavior was also associated with positive oral health seeking behavior with 62.5, X^2=21.373, p<0.001. The relationship of other factors (gender, class, age of the parent, religion, living area, parents living in the family and number of family members) toward oral health seeking behavior, were not statistically significant with p<0.05.

Table 7. Multivariate analysis of factors associated to oral health-care seeking behavior

Particulars	**AOR**	**95% C.I**		**P-value**
		Lower	Upper	
Age				
6-9	Ref.			
10-12	1.612	1.027	2.530	**0.038**
Ubudehe category				
Category 1&2	Ref.			
Category 3&4	7.762	4.664	12.918	**0.001**

Medical insurance				
No health insurance	Ref.			
Mutual health insurance	1.834	0.827	2.657	**0.034**
Private health insurance	3.259	1.469	7.231	**0.001**
RSSB	2.273	1.057	4.884	**0.014**
Occupation of the father				
Cultivate his farm	Ref.			
Entrepreneur	1.857	0.877	3.931	**0.015**
Monthly salaried	3.424	2.491	9.568	**0.001**
Commercialist	2.042	0.418	2.596	**0.014**
Occupation of the mother				
Cultivate her farm	Ref.			
Monthly salaried	2.676	1.197	5.981	**0.016**
Entrepreneur	2.207	1.051	4.634	**0.036**
Commercialist	5.967	2.858	13.980	**0.001**
Education level of the father				
Not completed primary school	Ref.			
Completed primary school	1.696	0.279	1.737	0.214
Completed secondary school	2.354	1.090	5.083	**0.032**
Attended university education	5.758	1.499	12.085	**0.001**
Education level of the mother				
Not completed primary school	Ref.			
Completed primary school	2.636	1.111	6.256	**0.012**
Completed secondary school	2.636	1.227	5.667	**0.013**
Attended university education	3.000	1.276	7.052	**0.001**
Distance to dental healthcare facility				
More than 1 hour	Ref.			
Between 30 minutes and 1 hour	1.814	.981	3.353	**0.047**
Less than 30 minutes	2.151	1.206	3.834	**0.009**
Oral health knowledge among school-aged children				
Low level of knowledge	Ref.			
High level of knowledge	1.800	1.138	2.849	**0.012**
Attitudes on oral health care among school-aged children				
Negative attitude	Ref.			
Positive attitude	2.668	1.669	4.266	**0.001**
Parent knowledge on oral health				
Low level of knowledge	Ref.			
High level of knowledge	2.010	1.268	3.188	**0.003**
Parent attitude towards oral health care seeking behavior				

Negative attitude	Ref.			
Positive attitude	3.049	1.887	4.926	**0.001**

The results of the present study revealed that the children aged between 10 and 12 years old were 1.6 times significantly associated to positive oral health seeking behavior with AOR(CI)=1.612(1.027-2.530), p<0.038. Also, being in ubudehe category 3&4 was seven times more likely than being in category 1&2 associated to positive oral health seeking behavior with AOR 7.762 95% CI (4.664-12.918), p<=0.001. Also, having a private health insurance was three times more likely than not having a medical insurance associated to positive oral health seeking behavior with AOR3.259 95% CI (1.469-7.231), p<=0.001. The father being a monthly salaried employee was three times more likely associated to positive oral health seeking behavior with AOR 3.424 95% CI (2.491-9.568), p<=0.001.Also, the mother being a commercialist was six times more likely associated to positive oral health seeking behavior with AOR5.967 95% CI (2.858-13.980), p<=0.001. The father having attended university education was five times more likely associated to positive oral health seeking behavior with AOR 5.578 95% CI (1.499-12.085), p<=0.001.Also, the mother having attended university education was three times more likely associated to positive oral health seeking behavior with AOR 3.000 95% CI (1.276-7.052), p<=0.001.Using less than 30 minutes to the nearest health facility was 2 times more likely associated to positive oral health seeking behavior with AOR 2.151 95% CI (1.206-3.834), p<=0.009.The school-aged children having a high level of knowledge on oral health care was 1.8 times more likely associated to positive oral health seeking behavior with AOR1.800 95% CI (1.138-2.849), p<=0.009.The school-aged children having positive attitude on oral health care was two times more likely associated to positive oral health seeking behavior with AOR2.668 95% CI (1.669-4.266), p<=0.001.The parents having a high level of knowledge on oral health care was 2 times more likely associated to positive oral health seeking behavior with AOR 2.010 95% CI (1.268-3.188), p<=0.003. The parents having positive attitude towards oral health care seeking behavior was three times more likely associated to positive oral health seeking behavior with AOR 3.049 95% CI (1.887-4.926), p<=0.001.

Findings Discussion

The findings showed that the participants who have a low level of knowledge were 40.9% while the participants who have a high level of knowledge were 59.1%. Similarly, Shammari (2016); in his survey found the same results as the ones found in the present study. According to

Shammari's study, a significant number of participants (65.1%) lacked basic knowledge about dental health, such as proper brushing techniques and the importance of regular dental check-ups. In the same order of ideas, Molete (2018) reported similar findings in a study including South African schoolchildren, where a significant (49.6%) proportion displayed low understanding regarding oral hygiene habits. The level of oral health knowledge among school-aged children varies, but several studies indicate that many youngsters lack this knowledge. Owino (2018) investigated the oral health knowledge of Kenyan schoolchildren and discovered that 57.4% of the participants were unaware of fundamental oral hygiene activities such as brushing techniques and the significance of regular dental check-ups. This similarity may be due to the resemblance in the population targeted by these studies.

Concerning the attitudes related to oral health care, the results indicated that 59.7% of respondents exhibited a positive attitude, while 40.3% demonstrated a negative attitude, as illustrated in Figure 4.2.Coherently, higher results were found by Sabra et al. (2015). These authors carried out a cross-sectional study in eight randomly chosen public primary schools in Upper Egypt and to ascertain the relationship between primary school students' attitudes and their oral health knowledge. Their study targeted pupils in the fifth and sixth class, and students under the 10 years old were not invited to participate. As a result, Sabra et al found that Positive attitudes were present across the board in 72.3% of students (and for 59% of the questions).

Concerning oral health-care seeking behavior among school-aged children, the data revealed that 55.6% of respondents displayed positive behavior, whereas 44.4% exhibited negative behavior.In comparison to other studies, the higher results were discovered by Sabra et al. (2015). According to them, in the six months before to their most recent dental visit, two-thirds of students reported having tooth pain (91.8%). Examination of the patient's teeth (44%), followed by tooth extraction (28.8%), were the most frequent treatments provided during the most recent appointment.

Concerning the factors linked to oral health-care seeking behavior, the results showed that the children aged between 10 and 12 years old were 1.6 times significantly associated to positive oral health seeking behavior with AOR(CI)=1.612(1.027-2.530), $p<0.038$. Similarly, Gathecha *et al.* (2016) stated that a high proportion of respondents (68%) have not visited the dentist

elsewhere, which could be due to accessibility issues, as most health centers in low-middle-income countries lack dental facilities, resulting in a delay in seeking dental services.

Similar to the present findings, Berhane et al. found that favorable oral health attitudes are connected with better oral health outcomes and a higher likelihood of engaging in preventative behaviors such regular brushing and flossing and routine dental check-ups. Attitudes regarding oral health can have a big effect on oral health habits (Berhane *et al.,* 2017). However, contrary to the findings obtained in the present study which state that age was not associated to oral health behavior, the results of the Patel's study (2020) found that the students' satisfaction with their dental health was on a significant manner related to their age. Satisfactory attitude toward oral health was substantially related to elder age of the students, greater father and maternal schooling and the size of the family. Additionally, the students' older age, higher father and mother education, and small family size were significantly linked with positive attitudes towards oral health.

In conclusion, this study exhibits both strengths and limitations. The conclusions drawn from the research are reflective of the viewpoints of school aged children and their parents in Bugesera District on oral health-care seeking behavior and the researcher gathered information from diverse sociodemographic contexts, enhancing the robustness and credibility of the findings.

Conclusion

In conclusion, this study has found that 55.6% of respondents displayed positive behavior, whereas 44.4% exhibited negative behavior. In addition, twelve factors (age, ubudehe category, medical insurance, occupation of the mother and the father, education level of the mother and the father, distance to health care facility, oral health knowledge and attitude among school-aged children, parent knowledge on oral health and parent attitude towards oral health care seeking behavior) are associated to oral health care seeking behavior. The relationship of other factors (gender, class, age of the parent, religion, living area, parents living in the family and number of family members) toward oral health seeking behavior, were not statistically significant with $p<0.05$.

Recommendations

In the mirror of research findings, the researcher recommends the Ministry of health to implement and strengthen the systematic oral health promotion program with emphasis in the community level to educate the rural community the benefit of oral hygiene for closing the gap of poor oral health in rural area.

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