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KNOWLEDGE, ATTITUDE AND PRACTICE OF ORAL HYGIENE AMONG PUPILS IN AHENEMA KOKOBEN

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KEYWORDS
Knowledge; attitude; practice; oral hygiene

ABSTRACT

The study examined the knowledge, attitudes and practices of oral hygiene among students in Ahenema Kokoben. The study employed descriptive design of the quantitative approach. The study sampled 60 respondents of which 85 was made up of students. The study employed questionnaire. With the quantitative data, it was analysed using frequencies and percentages with the aid of Statistical Package for Service Solution. The study found that students were knowledgeable about oral hygiene. Students have good attitude towards oral hygiene. They thought that brushing their teeth regularly will help prevent oral problems; regular visit to dentist is relevant; and think that maintaining good healthy teeth is an individual responsibility. Students have good practice regarding oral hygiene. Respondents spend small time in brushing their teeth while small respondents brush under the supervision of their parents. It was recommended that students should be encouraged to continue to visit the dentist regularly and not to wait till they have issue with their teeth. Also, students should be encouraged to spend more time in brushing their teeth regularly and also twice a day. Moreover, parents should be encouraged to supervise their children when brushing their teeth, especially, among students who have decayed teeth or oral problems. Students should be educated or sensitize about the negative effect of sweet on their oral health. Rinsing of their mouth after meals should be encouraged among students to ensure proper oral hygiene.

INTRODUCTION

Despite worldwide initiatives to improve people's health, it is still widely disregarded as a priority (Soni et al., 2014). The high frequency and social effect of oral disorders remain a public health concern despite the growing recognition of the importance of oral health to overall health (Aggnur et al., 2014). Constant exposure to external elements, such as mechanical, chemical, and bacterial interactions, makes oral tissues susceptible to disease (Singh et al., 2012). Since "knowledge is the precursor to action and behavior change" (Udoye & Aguwa, 2009), oral health educators work to provide useful information about improving people's oral health. The World Health Organization (WHO) recommends promoting children's oral health in schools in order to increase students' awareness, understanding, and practice of good oral hygiene (Petersen, 2003). Dental caries and periodontal disorders can be prevented, but only if people change their bad habits (Selwitz et al., 2007; Reisine & Psoter, 2001). As lifestyle habits formed in childhood greatly affect adult health, early intervention is critical during childhood (Cohen-Carneiro et al., 2010).

Better oral health knowledge is related to better oral health habits (Smyth et al., 2007), and better oral health knowledge influences positive attitudes (Ab Murat & Watt, 2006). Prevention of dental caries and periodontal disease relies heavily on self-care routines like brushing and flossing (Ab Murat & Watt, 2006). It is recommended that you brush your teeth at least twice a day (Löe, 2000) to keep your gums and teeth healthy. In addition, females are more likely to stick to proper brushing procedures than males are (Maes et al., 2006). Different studies (Farsi et al., 2004) show, however, that school-aged youngsters still don't floss very often.

Taking care of one's teeth is an example of health activity that contributes to overall wellness (Steptoe et al., 2008). Due to the close relationship between oral and systemic health, it is crucial for dentists and doctors to work together (Base et al., 2008; Mumtaz & Khan, 2009; Usman et al., 2007). Oral health is defined as the absence of oral and face pain, cancer of the mouth and throat, ulcers in the mouth, cavities, tooth loss, and other oral problems by the World Health Organization (WHO, 2018). The state of one's oral health has far-reaching consequences for one's general health and quality of life, and this is true across the lifespan (Zusman et al., 2016).

Due to dietary changes and other variables, the prevalence of oral illnesses is expected to rise in low- and middle-income countries (WHO, 2018). Many countries, especially those with lower-middle incomes, lack the resources to treat oral disorders because of their high cost. Due to a lack of oral health specialists and suitable services, access to primary oral healthcare is restricted in certain areas (WHO). The World Health Organization (WHO) has identified oral health promotion in schools as a crucial technique for addressing these issues and preventing oral illnesses. As poor dental hygiene can lead to serious health problems, it is essential that people understand the importance of maintaining good oral health (Gopikrishna et al., 2016). Children's overall health and well-being can be improved with early instillation of oral health care practices such brushing, flossing, and frequent dental visits (Suga et al., 2014). Teachers, as children's first point of contact, have an important responsibility to instill in them lifelong healthy oral hygiene practices (Amin & Al-Abad, 2008).

To sum up, maintaining good oral hygiene is crucial in the fight against tooth cavities and periodontal disease. Too few people in many cultures understand the need of good oral hygiene, and many people still use outdated techniques like using salt water to rinse their mouths after eating (Gopikrishna et al., 2016). Having a parent present during a child's daily oral care routine is important for the child's dental health (Amin & Al-Abad, 2008). Despite this, primary school students in Ghana know relatively little about oral health, which is why it's important to gauge students' perspectives on the topic (Al-Omiri et al., 2006). This study attempts to fill that void by investigating elementary school students' oral health-related knowledge, attitudes, and behaviors in Ahenema Kokoben.

RESEARCH METHOD

The study was conducted using a descriptive research design. As noted by Cheruiyot (2018), descriptive study embraces collecting data to answer questions about the contemporary situation of the study. This research design was chosen because it helps to find suitable answers to the research question regarding the attitude, knowledge and practices of oral hygiene among students. The study was conducted in Ahenema Kokoben. The school is a public school that is located at Ahenema Kokoben, south of Anyinam and northeast of Brofoyeduru in the Atwima-Kwanwoma district of the Ashanti Region. The general population of this study comprises of students in Ahenema Kokoben. Basic students in Ahenema Kokoben (JHS 1-JHS 3) were included while students who were found between class 1 to 6 were excluded. Simple random

sampling technique was used to select sixty (60) students to formed part of the study. Prior the data collection exercise, an introductory letter was obtained from the Head, nursing training college to allow the researchers to introduced themselves to the management of the school. Following that, the researcher sought permission from the respondents. With their consent, the researcher assured them that the study was for academic purposes only and that their responses would be kept strictly confidential and secret. Teachers of various pupils signed the informed consent for on behave on their pupils and ensured that their pupils were by no means harm during and after the research activities. Overall, the students were given 20 minutes to fill the items on the questionnaires and were immediately collected at the spot which allowed the researcher to carefully checked for any missing information.

Data were gathered from the respondents through the administration of questionnaire. Data were cleaned and coded before actual data analysis. Data entered were saved on the removable disk and kept in a drawal which is locked. This prevented anyone from getting access to the data of the study. All the responses for each item in the questionnaire were then entered, processed and analysed with the help of Statistical Product for Social Science (SPSS) and with the results presented using descriptive statistical tools such as frequencies, percentages, mean and standard deviation. For instance, frequencies, percentages and tables were used to analyse the demographic information of respondents whereas means and standard deviation were also used to analyse the research objectives. After the data analysis, the data was discarded from the removable disk and permanently deleted from the computer.

RESULTS AND DISCUSSION

Demographic Information of Respondents

About 65 percent of the respondents were females while 35 percent was males. This shows that most of the respondents were females. Most of the respondents were above 15 years of age while small proportion was below 15 years of age. Also, about 10 of the respondents where found below 12 years of age. It was found that majority of the respondents were Christians, followed by moslem while few of the respondent was traditionalist. About 26 of the respondents were found in JHS1, followed by JHS2 while few of the respondents were found in JHS 3. More than half of respondents stayed with their parents while about 42 percent of the respondents do not stay with their parents.

Knowledge of Students on Oral Hygiene

Objective one sought to examine the knowledge of students on oral hygiene. Therefore, data were gathered on different issues concerning oral hygiene and the results are presented in Table 1.

Table 1. Knowledge of students on Oral Hygiene

Statements	Yes	No	Don't know
Teeth is an important part of your body	60(100)	0	0
Oral health has an impact on general health	59(98.3)	0	1(1.7)
We should brush our teeth twice daily	59(98.3)	0	1(1.7)
Brushing your teeth regularly will prevent oral problems	60(100)	0	0
Irregular tooth brushing causes tooth ache	54(90)	0	6(10)
Sweets negatively affect teeth	16(26.7)	0	44(73.3)
Fizzy drinks negatively affect teeth	52(86.7)	0	8(13.3)
Teeth cleaning prevents dental caries	56(93.3)	0	4(6.7)
Use of Fluoride is essential for teeth	56(93.3)	0	4(6.7)
Improper cleaning of tongue results in bad breath	52(86.7)	0	8(13.3)
Sweets/Fizzy drinks causes oral problem	54(90)	0	6(10)
Mouth rinsing after having meals , sweets and drinks prevents oral problems	52(86.7)	0	8(13.3)

Statements	Yes	No	Don't know
Maintaining a good oral hygiene prevents tooth decay	60(100)	0	0
Decayed/caries teeth affect the teeth appearance	57(95)	0	3(5)
The dentist examines the patients and inform about dental problem	60(100)	0	0
The appearance of decayed teeth affects human	53(88.3)	0	7(11.7)
The regular visits to dentist are essential	57(95)	0	3(5)

Table 1 shows that all the respondents (100%) know that their teeth is an important part of their body and therefore, bushing their teeth regularly will prevent oral problems. About 98 percent of the respondents agreed that oral health has an impact on their general health and therefore believed that they should brush twice a day.

Also, majority of the respondents (86.7%) believed that fizzy drinks negatively affect teeth, 93 percent said that teeth cleaning prevents dental caries and use of fluoride is essential for teeth, and about 86 percent of the respondents believed that improper cleaning of tongue results in bad breath. However, only about 26 percent of the respondents were aware that sweet negatively affect their teeth.

Moreover, all the respondents agreed that maintaining a good oral hygiene prevents tooth decay and see a dentist as a professional who examine the patients and inform about dental problems. Furthermore, about 95 percent of the respondents agreed that regular visit to dentist are essential. This is very important since most of the people only visit the dentist when they have oral problems.

Attitude of Students on Oral Hygiene

Objective two sought to examine the attitude of students on oral hygiene. Therefore, data were gathered on different issues concerning oral hygiene and the results are presented in Table 2.

Table 2. Attitude of Students on Oral Hygiene

STATEMENTS	Yes	No	Don't know
Do you think it's important to brush your teeth twice daily?	59(98.3)	0	1(1.7)
Do you think brushing your teeth regularly will prevent oral problems	60(100)	0	0
Do you think improper cleaning of tongue results in bad breath?	58(96.7)	0	2(3.3)
Do you think poor oral hygiene prevents you from smiling & laughing with friends?	49(81.7)	0	11(18.3)
Do you think oral problems force you to miss school?	25(41.7)	2(3.3)	33(55)
Do you think maintaining healthy teeth are an individual responsibility?	59(98.3)	0	1(1.7)
Do you think school plays an important role in maintaining oral hygiene?	59(98.3)	0	1(1.7)
Do you think regular visit to dentist is necessary?	56(93.3)	0	4(6.7)
Do you think dentist helps to maintain oral health?	56(93.3)	0	4(6.7)
Do you think your parents are the cause for your visit to dentist?	7(11.7)	0	53(88.3)
Do you think pain or discomfort is the only reason for you to visit a dentist?	9(15)	0	51(85)

Table 2 revealed that all the respondents (100%) agreed that brushing their teeth regularly will help prevent oral problems and therefore, maintaining good healthy teeth is an individual

responsibility. Also, about 98 percent of the respondents believed that school has a role when it comes to oral hygiene, 93 percent of the respondents thought that regular visit to dentist is necessary; and dentist helps to maintain oral health.
Moreover, about 41 per cent of the respondents thought that oral problems force children to miss school and about 15 percent of the respondents though that children visit dentist only due to pain or discomfort.

Practices of Students on Oral Hygiene

Objective three sought to examine the practice of students on oral hygiene. Therefore, data were gathered on different issues concerning oral hygiene and the results are presented in Table 3, 4, 5, 6, 7, 8 and 9.

Table 3. How often do you brush your teeth regularly

	Frequency	Percent
Once	27	45
Twice	33	55
Total	60	100

Table 3 shows that about 27 of the respondents brush only once in a day while 33 respondents claimed that they brush twice in a day. Thus, a little beyond half of the respondents brush twice daily. This is a good practice and therefore, more children should be encouraged to do same for proper oral hygiene.

Table 4. What do you use to brush your teeth regular

	Frequency	Percent
Tooth paste and tooth brush	45	75
Tooth powder	1	1.7
Mouth wash	14	23.3
Total	60	100

Table 4 shows that about 45 respondents used tooth paste and tooth brush in brushing their teeth often, followed by 14 respondents who used mouth wash sometimes. However, only a respondent used tooth powder to brush his/her teeth. It can be deduced that majority of the respondents used the right materials or things to brush their teeth. However, just mouth wash is not advisable, especially, when it is used daily in the morning without proper brushing.

Table 5. Do you brush in front of your parents

	Frequency	Percent
Yes	20	40
No	40	60
Total	60	100

Data were gathered on the supervision of the parents on children during their teeth brushing period. Table 5 shows that about two-thirds of the respondents brush without the presence of their parents while about 40 percent of the respondents do so before their parents. This shows that most of the respondents brush their teeth without any supervision form their parents while small proportion always need supervision and guidance in brushing their teeth.

Table 6. How often do you change your brush

	Frequency	Percent
Every month	17	28.3
Every 2 months	15	25
Every 3 months	13	21.7

	Frequency	Percent
Every 6 months	14	23.2
A year	1	1.7
Total	60	100

Data were gathered on how often respondents change their brush and the result is presented in Table 6. It was revealed that about 17 respondents change their tooth brush monthly, followed by 15 respondents who change their tooth brush every 2 months while only a respondent change his/her brush yearly. This implies that majority of the respondents often change their tooth brush at least for every quarter. This is a good practice to ensure proper oral hygiene since most of the children mishandled their tooth brush and therefore, replacing them quarterly will help a lot.

Table 7. Some practice of students on oral hygiene

STATEMENTS	Yes	No	Don't know
Do you rinse your mouth after meal/sweets/fizzy drinks	33(55)	27(45)	0
Do you clean your tongue regularly	55(91.7)	5(8.3)	0
Do you parents follow up on you when brushing your teeth	13(21.7)	47(78.3)	0
Have you visit a dentist before	40(66.7)	20(33.3)	0

According to Table 7, a little about half (55%) of the respondents agreed that they rinse their mouth after meal/sweets/fizzy drinks while small proportion (25%) of the respondents do not. This shows that about half of respondents do not rinse their mouth after meals.

Also, majority of respondents (91.7%) clean their tongue regularly while only few (8.3%) of the respondents do not. Moreover, 13 (21.7%) of the respondents' parents follow up on them when brushing their tenth while 78 percent of the respondents' parents do not. Thus, majority of respondents brush their teeth without any supervision from their parents.

On visit to the dentist, about two-thirds of respondents have visited before while about one-third of the respondents have not. It deduced that most of the respondents have visited the dentist before.

Table 8. Time used by respondents to brush their teeth

Time needed to clean your teeth	Frequency	Percent
Less than a minute	2	3.3
A minute	3	5
Two minutes	22	36.7
More than two minutes	18	30
Don't know	16	25
Total	60	100

According to Table 8, 22 respondents used two minutes to brush their teeth, followed by 18 respondents who used more than two minutes. In addition, only 5 respondents used less than two minutes to brush while 16 respondents do not know the exact time they take to brush their teeth. This means that only small number of respondents spend more time to brush their teeth.

Table 9. How often students eat sweet in a week

Often	Frequency	Percent
Daily	12	20
Once a week	36	60
Twice a week	3	5
No sweet	9	15
Total	60	100

Table 9 shows that about two-thirds of the respondents eat sweet once a week, followed by 12 respondents who eat sweet daily and 3 respondents eat sweet twice a week. However, only 9 respondents do not eat any sweet.

Table 10. Number of decayed teeth

	Frequency	Percent
One	18	30
Two	2	3.3
None	40	66.7
Total	60	100

Table 10 shows that about 30 percent of the respondents have one decayed teeth, followed by 2 respondents who have 2 teeth decayed while 40 respondents do not have any decayed tooth. Thus, about two-thirds of the respondents do not have any decayed tooth.

Table 11. When do you clean your teeth

	Frequency	Percent
Before eating	42	42
After eating	2	2
Before going to bed	33	33
At any time	3	3
Before eating and before going to bed	20	20
Don't remember	0	0
Total	100	100

Time for brushing teeth is crucial when it comes to oral hygiene. Therefore, data were gathered from the respondents to indicate the time they used to brush their teeth and the result is presented in Table 11. It shows that 42 percent of the respondents brush before eating, followed by 33 percent who claimed that they brush before going to bed and 3 respondents brush their teeth any time. However, 20 of the respondents brush their teeth before eating and before going to bed daily. Thus, small number of respondents brush their teeth twice in the day, thus, before eating and before going to bed. This is the recommended standard for proper oral hygiene.

Discussions

Knowledge of Students on Oral Hygiene

The study found that all the respondents (100%) know that their teeth is an important part of their body and therefore, bushing their teeth regularly will prevent oral problems. About 98 percent of the respondents agreed that oral health has an impact on their general health and therefore believed that they should brush twice a day. Also, majority of the respondents (86.7%) believed that fizzy drinks negatively affect teeth, 93 percent said that teeth cleaning prevents dental caries and use of fluoride is essential for teeth, and about 86 percent of the respondents believed that improper cleaning of tongue results in bad breath. However, only about 26 percent of the respondents were aware that sweet negatively affect their teeth. Moreover, all the respondents agreed that maintaining a good oral hygiene prevents tooth decay and see a dentist as a professional who examine the patients and inform about dental problems. Furthermore, about 95 percent of the respondents agreed that regular visit to dentist are essential.

Oral health knowledge is necessary for establishing healthy behaviors, and studies have demonstrated a link between improved knowledge and better oral health (Gupta et al., 2012; Haque et al., 2016). This finding is similar to the view of Yusuf et al. (2007) that pupils are

knowledge able about their oral health and pupils often referred to as the intellectual period or the period of school compatibility.

Attitude of Students on Oral Hygiene

It was revealed that all the respondents (100%) agreed that brushing their teeth regularly will help prevent oral problems and therefore, maintaining good healthy teeth is an individual responsibility. Also, about 98 percent of the respondents believed that school has a role when it comes to oral hygiene, 93 percent of the respondents thought that regular visit to dentist is necessary; and dentist helps to maintain oral health. Moreover, about 41 per cent of the respondents thought that oral problems force children to miss school and about 15 percent of the respondents thought that children visit dentist only due to pain or discomfort. Ab-Murat and Watt (2006) reported that appropriate oral health education can help to implant good oral health practice. Therefore, with adequate knowledge and attitude, pupils were expected to put it into a good practice.

Practices of Students on Oral Hygiene

It was found that a little beyond half of the respondents brush twice daily. This is a good practice and therefore, more children should be encouraged to do same for proper oral hygiene. About 45 respondents used tooth paste and tooth brush in brushing their teeth often, followed by 14 respondents who used mouth wash sometimes. However, only a respondent used tooth powder to brush his/her teeth. It can be deduced that majority of the respondents used the right materials or things to brush their teeth. However, just mouth wash is not advisable, especially, when it is used daily in the morning without proper brushing.

Most of the respondents brush their teeth without any supervision form their parents while small proportion always need supervision and guidance in brushing their teeth. Majority of the respondents often change their tooth brush at least for every quarter. A little about half (55%) of the respondents agreed that they rinse their mouth after meal/sweets/fizzy drinks while small proportion (25%) of the respondents do not. Also, majority of respondents (91.7%) clean their tongue regularly while only few (8.3%) of the respondents do not. Majority (78%) of respondents brush their teeth without any supervision from their parents. On visit to the dentist, about two-thirds of respondents have visited before while about one-third of the respondents have not. It deduced that most of the respondents have visited the dentist before.

Only small number of respondents spend more time to brush their teeth. Two-thirds of the respondents eat sweet once a week, followed by 12 respondents who eat sweet daily and 3 respondents eat sweet twice a week. However, only 9 respondents do not eat any sweet. About 30 percent of the respondents have one decayed teeth, followed by 2 respondents who have 2 teeth decayed while 40 respondents do not have any decayed tooth. Thus, about two-thirds of the respondents do not have any decayed tooth. About 42 percent of the respondents brush before eating, followed by 33 percent who claimed that they brush before going to bed and 3 respondents brush their teeth any time. However, 20 of the respondents brush their teeth before eating and before going to bed daily. Thus, small number of respondents brush their teeth twice in the day, thus, before eating and before going to bed. This was in support of Ab-Murat and Watt (2006) who found that tooth brushing and dental flossing are important self-care practices for prevention of dental caries and periodontal diseases. According to research on young Saudi people' perceptions of their own oral health habits undertaken by Al-Ansari et al. (2020), those with a poor grasp of oral health and an addiction to the Internet consumed less sugar than those with an average or high Internet consumption. Oral health education in elementary or secondary school may lead to better oral health practices, as suggested by research by Taniguchi-Tabata et al. (2017) on links between dental knowledge and oral behavior in Japan.

CONCLUSION

Students were knowledgeable about oral hygiene. They knew the essence of oral hygiene; the importance of brushing regularly, visiting dentist regularly and maintain a good oral hygiene.

Students have good attitude towards oral hygiene. They thought that brushing their teeth regularly will help prevent oral problems; regular visit to dentist is relevant; and think that maintaining good healthy teeth is an individual responsibility.

Students have good practice regarding oral hygiene. Thus, they brush regularly with appropriate resources or materials such as tooth brush and tooth paste while few brush twice a day. Respondents spend small time in brushing their teeth while small respondents brush under the supervision of their parents.

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