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ASSESSMENT OF ATTITUDE TOWARDS DENTAL HEALTH CARE AMONG PRIMARY SCHOOL PUPILS IN KADUNA STATE, NIGERIA

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Abstract

The study was conducted to assess practice towards dental health care among primary school pupils in Kaduna State. An ex-post facto research design was used to study 400 subjects drawn from twelve primary schools in the six (6) local government areas from the three senatorial zones in Kaduna state. The subjects were drawn through stratified, simple random, purposive, proportional and systematic sampling techniques. A close-ended questionnaire was used to obtain responses from the subjects. Four hundred (400) questionnaires were returned. Descriptive statistics of frequency, percentages, means and standard deviation were used to describe the demographic characteristics of the respondents. One research question was asked and one hypothesis was tested at a 0.05 level of significance using a one-sample t-test. The findings of the study revealed that the attitude of primary school pupils towards dental health care in Kaduna State is positive. It was therefore recommended that primary school pupils should be encouraged by their teachers, parents and health personnel on how to maintain a positive attitude towards dental care.

Keywords: Attitude, Dental care, Primary school, Pupils.

Introduction

Oral health is important for appearance, sense of well-being and also health and oral health can affect the quality of life. Oral health has been linked to sleeping problems, as well as behavioural and developmental problems in children. Oral health may be defined as a standard of health of the oral and related tissues which enables an individual to eat, speak and socialize without active disease, discomfort or embarrassment and which contributes to general wellbeing (Raymer & Gift, 2010). Good oral health practices are necessary from a young age to ensure positive long term dental health and hygiene (Peterson, 2017) and the oral health of children is important towards their overall wellbeing (Peter, 2014). Oral health is an integral part of general health, not giving due care to the teeth and the buccal cavity will lead to dire health and social consequences (Palmer, 2010 and Oluniya, 2014). Oral health status is often determined by the amount deposited on the surfaces of teeth and poor oral hygiene is a predisposing factor to periodontal diseases (National Health Insurance, 2011). Furthermore, poor oral hygiene is associated with cardiovascular diseases and pre-term low-birth-weight infants (Palmer, 2010). In contrast, healthy oral behaviours reduce the amount of plaque deposited on the surfaces of teeth (Oluniya, 2014). In a developing countries like Nigeria, Dental hygiene is poor with inadequate and improper brushing of teeth, no washing of mouth after intake of sweets, widespread substance abuse and addiction, hyperacidity, increased consumption of refined sugar and sweetened foods. Use of toothbrush in underdeveloped areas is grossly limited and toothpick is traditionally utilized for dental cleaning. Regular brushing of teeth after principal meals is not practised universally (Lin, 2012).

Socio-behavioural and environmental factors play an important role in maintaining good oral health (Murphy, 2012). These include nutritional status, tobacco smoking, alcohol, hygiene, stress, systemic condition (Varmaine, Hoogstralitenl, Loveren, Poorterman& Van Exel, 2010). Since the

mouth is regarded as the mirror of the body, it is very important to have good oral health for maintaining good general health. Oral health directly or indirectly influences the quality of a person. Especially in children, the negatives impact of oral diseases, on quality of life has been reported for many years (Allukian, 2012). In young children, the burden of oral diseases restricts their activities in school, particularly their attention in-class work (Paterson, 2017).

Poor oral health can have detrimental consequences on the physical and psychological wellbeing of primary-school-age children which lead to absence in school and poor performance in school, disturbance of sleep, anxiety, irritability; withdrawal from normal activities, difficulty to relax and paying attention in class. Oral diseases may directly affect a limited area of the human body, but the consequences and impact affect the body as a whole. Children with missing front teeth often have a problem forming words correctly and tend to retreat into shyness and avoid socializing. Infected teeth may lead to ear infections, sinus infections, abscesses, painful teeth make chewing and difficult in swallowing. The researchers observed that tens of thousands of primary school age are still affected by noma in the poorest areas of Kaduna State. Moreover, one in every 500 to 700 children is born with a cleft lip and/or palate. And oral and facial trauma, associated with the unsafe environment, sports and violence, exacts a high toll, particularly on primary school-age children in Kaduna State. It is against the background that, the researchers become motivated to study the practice of dental health care among primary school pupils in Kaduna State.

Research Question

What is the attitude of primary school pupils toward dental health care in Kaduna state?

Hypothesis

The attitude of primary school pupils in Kaduna State toward dental healthcare is not significant.

Material and Methods

The ex-post facto research design was used for this study. The population of the study consists of Primary 3 to 6 pupils within the age bracket of 9-12years in Kaduna state whose population is 920,891 (Universal Basic Education, 2017). For this study, 400 respondents was used as the sample size for this study; based on Yamane (1967) formula for determining sample size. To arrive at the stated sample size, a Stratified sampling technique was used to divide the state into three (3), already existing senatorial zone as strata namely Kaduna Northern zone Kaduna central zone and Kaduna southern zone senatorial. In each of the three (3) senatorial zone or strata, a simple random technique was used to select two Local Government Areas with regard to dental health care among primary school pupils in the state. In each selected Local Government Area, a simple random technique was also used to select two public schools for this study. To compute the number of respondents in each selected public primary school, a proportionate sampling technique was used. This technique was used to give all the respondents an equal chance of been selected for the study.

Systematic sampling was used to select the classes based on the odd number because most of the public schools have more than two arms of the classroom for the sample and in this technique, the researcher and his research assistants will start counting classrooms beginning with primary four (4) A and the third classroom will be selected. This technique was also applied to both primary five (5) and six (6). In each classroom, the researcher and his research assistants will purposively administer a copy of the questionnaire to a respondent in that classroom based on their seating arrangement in the class. This technique is used until the required number of primary school pupils in that classroom has been sampled. The researcher retrieved the filled questionnaire at a spot. The process of data collection lasted for three months. The instrument that was used for data collection is a questionnaire. The questionnaire consists of two sections. Section A: Demographic characteristics of respondents with four (4) items. Section B: contains ten (10) items on the practice of the respondents towards dental health care. To score the

responses of the respondents, based on how they felt towards a particular item, the 4-point Modified Likert scale was used as follows: SA - Strongly agree = 4 points. A – Agree = 3 points. D – Disagree = 2 points. SD – Strongly disagree = 1 point. To ensure the face and content validity of the instrument, the draft copies of the researcher-structured questionnaire was submitted to five (3) jurors in the Department of Human Kinetic and Health Education, Nursing science department and Community medicine department of Ahmadu Bello University Zaria for vetting. The comments and suggestions of the jurors were taken into consideration and reflected in the final clean copies that were distributed to the respondents. The researcher administered and collected the questionnaire forms within three (3) months. The completed questionnaires were collected, coded and analyzed using both descriptive and inferential statistics. Descriptive statistics of frequencies and percentages were used to analyze section A of the questionnaire which deals with demographic characteristics of the respondents, mean score and standard deviation (SD) were used to answer the stated research questions and a one-sample t-test was used to analyze the formulated hypotheses on the practice of primary school pupils towards dental health care.

Results and Discussion

Table 1: Demographic Characteristics of the Respondents

S/N	Variable		Frequency	Percentage
1	Gender			
		(a) male	119	29.75
		(b) female	281	70.25
	Total		**400**	**100**
2	Age Range			
		(a) 9 – 10	97	24.25
		(b) 11 – 12	107	26.75
			196	49
		(c) 13 and above		
	Total		**400**	**100**
3	Class			
		(a) Primary 3	58	14.5
		(b) Primary 4	71	17.75
		(c) Primary 5	103	25.75
		(d) Primary 6	168	42
	Total		**400**	**100**

Table 4.2.1 above reveals that 119 (29.75%) of the respondents were male pupils, while 281 (70.25%) were female pupils. Concerning the age range of the respondents, the table further shows that the majority 196 (49%) of the respondents were between ages 13and above, 107 (26.75%) were of ages 11-12 years, while, 97 (24.25%) were aged 9-10 years.

The table further indicates that 58(14.5%) of the adult respondents were in primary 4 class, 71 (17.75%) were in primary class 5, while 168(42%) were in primary class 6. Hence, it is assumed that Primary School pupils used as subjects for this study can read and write.

Researcher Question: What is the attitude of primary school pupils toward dental health care in Kaduna state?

The analysis of data to answer this research question is presented in table 2 as follows:

Table 2: Mean Scores of Responses of Adults on Attitude towards dental healthcare

S/N	Statement	Mean	SD
1	I prefer brushing the inner surface of my teeth with the same brush position and gentle back and forth circular motion.	3.13	0.79
2	I like to wash my mouth before and after meals.	1.62	0.72
3	I prefer telling my teacher/ parent whenever I notice pain in my teeth.	3.72	0.53
4	I like using fluoride-containing toothpaste.	3.40	0.65
5	I always like to dispose my toothbrush after a long period of usage.	3.26	0.88
6	Overconsumption of soft drinks cordial and package, fruit juices can cause teeth decay.	2.74	1.05
7	I prefer to take care of my tooth myself whenever my teeth are paining me.	3.27	0.10
8	I like using both school and home hand wash to rinse my mouth as important things to prevent and control the spread of oral disease.	3.77	0.46
9	I like taking my time to brush my teeth properly.	1.64	0.89
10	I prefer using a toothpick – stick to brush my teeth.	1.48	0.88
	Aggregate Mean Score	**2.80**	**0.69**

The aggregate mean score of 2.80 for pupils indicated that the pupil's attitude towards dental health is positive. Furthermore, it can be inferred from the table that the majority (83%) of the respondents had a positive attitude towards dental health while only 17% of the respondents had a negatives attitude towards dental health. The result revealed that most of the pupils preferred brushing their inner surface of the teeth with the same brush position and gentle back and forth circular motion with a mean of 3.18. The result further revealed that the pupils used fluoride-containing toothpaste for their teeth with a mean score of 3.40.

Hypothesis: The attitude of primary school pupils in Kaduna State toward dental healthcare is not significant.

The summary result of the t-test on sub-hypothesis II is giving in table 3

Table 3: one-sample t-test Analysis on Attitude of Pupils towards Dental Health Care in Kaduna State

Variable	Mean	Std.	Df	t-value	P-value.
Attitude	2.8030	.89272	9	9.929	.000

t (8)= .000< 0.05

The above table reveals that the observed t-value of (9.929) for the test at 9 degree of freedom and a significance level of .000 (p< 0.05) is enough evidence to reject the null hypothesis and adopt an alternate hypothesis that the attitude of primary school pupils in Kaduna state towards dental health care is significantly adequate.

Discussion

As regards the attitude of primary school pupils in Kaduna state towards dental health care the finding revealed that 83% of respondents had a positive attitude while 17% had a poor attitude. Albino and Lawrence (2013) stated that Zimbabwe primary school pupils have a positive attitude towards dental health care but still lack appropriate knowledge and safe practices in dental care. The belief and method of dental care prevention pupil's males and females sometimes differ probably because of individual knowledge, background, culture, awareness or work. Marga (2011) indicated a significant positive attitude of primary school pupils on their belief towards dental health care and their responding evaluation of consequences of the disease. This finding is in line with Al-Ansari (2016), who revealed that primary school pupils showed a positive attitude towards dental care, the level of trust given to health personnel by these primary school pupils males and females provide information on dental health care. This finding is also in line with Applewhite (2012), who pointed out that there is a high level of belief in preventive ways of dental care. She emphasizes the need for more health education programmes to improve dental care.

Conclusion and Reccomendation

Based on the result and in view of the limitation of the study it was concluded that the attitude of primary school pupils towards dental health care in Kaduna State is positive. Based on the findings of this study, it was recommended that primary school pupils should be encouraged by their teachers, parents and health personnel on how to maintain a positive attitude towards dental care.

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