Oral Health Related Knowledge and Behavior Among Nursing Students in a Nigerian Tertiary Hospital.

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Abstract

Aim:
The purpose of the study was to investigate oral health knowledge and behaviour amongst nursing students in a Nigerian tertiary hospital.
Materials and methods:
The study was conducted at University of Nigeria Teaching Hospital on respondents aged 17 to 40 years, using self administered structured questionnaire.
Result:
From oral health knowledge variables, only level of study, knowledge of calculus and orthodontics and role of fluoride in caries aetiology were significant. However, no oral health behaviour variable was significantly associated with oral health knowledge. About 11.0% of the respondents had visited the dentist within the last 12 months as against 68% that had never. About 53% brushed once daily, 43% brushed more than once a day and 2.7% brushed occasionally.
Conclusion:
The respondents had good oral health knowledge, but further improvements, especially on oral health behaviour should be stepped up.

INTRODUCTION

Health is a state of complete physical, mental and social well being and not merely the absence of diseases or illness (1). On the other hand, 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 well being (2).

It is the primary concern of oral health educators to impart a positive oral health knowledge and behaviour in the society. This knowledge is usually derived from information and the information, when believed translates into an action. Behaviour is the outcome when that action is sustained. However, only a weak relation exists between knowledge and behaviour (3,4). Nonetheless, there are reports that there is an association between increased knowledge and better oral health (5,6).

Several factors may affect oral health behaviour of an individual, among which are, acquisition of Western education, values and cultures, etc. Al-Ansari et al (7) reported that oral diseases are related to behaviour, and that the prevalence of dental caries and periodontal disease decrease with improvements in oral hygiene and a decrease in the consumption of sugar. In contrast to twice daily tooth brushing in Western countries (8,9), this behaviour is lacking in developing nations (10, 11).

It is reported that women have better oral health behaviour than men (12, 13). Women brush their teeth 4 times more than men (11), while others (4) found no differences in brushing frequency between genders. Al – Omari (5) reported that women had dental checkups as often as men. There is a strong association between oral health knowledge and use of fluoride paste (7). Also very good knowledge between sugar and its role in the process of caries formation has been reported (7). While unmarried subjects have better knowledge than married, more than half of the subjects have visited a dentist in the last 12 months. Increased oral health knowledge is associated with increasing age (7).

By virtue of their professional role, nursing personnel play a vital role in health promotion and preventive information dissemination. It is therefore important that their own oral health knowledge is good and their oral health behaviour conforms to expectation of the population. The purpose of the study was to investigate oral health knowledge and behaviour among nursing students in a Nigerian tertiary hospitalRESULT

Figure 1

TABLE 1: SUMMARY VARIABLE OF ORAL HEALTH KNOWLEDGE AND BEHAVIOUR AMONG NURSING STUDENTS

VARIABLE AGE (YRS)	N	χ^2	SD	P – VALUE
16 – 20	50	19.30	0.95	
21 – 25	142	22.64	1.37	
26 – 30	44	27.55	1.41	P < 0.05*
31 – 35	5	32.60	1.34	
36 – 40	3	37.67	2.08	
MARITAL STATUS				
Single	219	22.85	3.39	
Married	25	26.56	3.55	p=0.000*
STUDY LEVEL				
Year One	51	20.98	3.40	
Two or more years	193	23.82	3.39	p=0.000*
FINANCIAL STATUS				
Very good/good	194	23.15	3.52	
Below Average	50	23.92	3.78	p=0.126
DO YOU THINK YOU HAVE DENTAL DISEASE?				
Yes	34	23.88	3.24	
No	181	23.29	3.73	p>0.05
Do not know	29	22.07	2.75	
PERCEIVED ORAL HEALTH?				
Poor	1	19.00	-	
Average	74	23.23	3.68	p=0.968
Good	169	23.25	3.54	
LAST DENTAL VISIT				
In the last 1 year	29	22.38	3.61	
Over 1 year ago	49	23.88	4.59	p>0.05
Never	166	23.19	3.21	
DO YOU KNOW WHAT IS CALCULUS				
Yes	167	23.60	3.50	
Don't know	77	22.43	3.64	p=0.017*
SHOULD BABY TEETH BE BRUSHED AFTER BOTTLE FEEDING?				
Yes	106	23.36	3.58	
Don't know	138	23.13	3.59	p=0.620
REASON FOR LAST DENTAL VISIT				
Check-up	41	23.12	4.78	
Treatment	44	23.32	3.52	p=0.826
TOOTH BRUSHING FREQUENCY				
Once a day	131	23.66	3.52	
More than once a day	106	22.72	3.66	p>0.05
Occasional	7	22.86	2.61	
ROLE OF FLUORIDE IN A TOOTH PASTE				
Yes	195	22.98	3.48	
Don't know	49	24.20	3.86	p=0.033*
DO YOU KNOW ROLE OF SUGAR IN CARIES?				
Yes	173	23.25	3.56	
Don't Know	71	23.17	3.66	p=0.874
IS EXTRACTION THE ONLY OPTION FOR A PAINFUL TEETH?				
Yes	19	23.37	3.99	
No	181	23.37	3.56	p>0.05
Don't Know	44	22.48	3.47	
DO YOU KNOW WHAT IS ORTHODONTICS?				
Yes	91	23.27	3.82	
No	153	22.20	3.44	p=0.025

A total of 244 respondents (220 females and 24 males) aged 17 to 40 years (mean:23.23 ±3.58) participated in the study. The mean ages of females (range: 17 to 40 years) and males (range: 18 to 36 years) were 22.91±3.33 and 26.17± 4.48, respectively. Of the 244 respondents, 219 (89.8%) were unmarried ($p = 0.000$), while 194 (79.5%) were of very good/good financial status as against 50 (20.5%) that were of below average status ($p=0.126$). Only level of study, knowledge of calculus and orthodontics and role of fluoride in caries actiology were significant ($p < 0.05\%$) (Table 1), whereas no oral health behaviour variable was significantly associated with oral health knowledge ($p > 0.05$) (Table 1). Only 29 (11.9%) of the respondents had visited the dentist within the last 12 months as against 166 (68.0%) that had never and 49 (20.1%) that visited more than 12 months ago ($p > 0.05$). Only about 41 (16.8%) visited the dentist for a check-up, while 44 (18.0%) went for treatment ($p=0.83$). About 131 (53.7%) respondents brushed once daily, 106 (43.4%) brushed more than once daily and 7 (2.7%) brushed occasionally ($p > 0.05\%$) (Table 1).

DISCUSSION

By virtue of their professional role and education, nurses are models on health issues. Therefore, it is expected of them to be more knowledgeable in the community about oral health and its diseases, so as to be a positive model to the society. Exact relationship between knowledge and behaviour is yet unclear. However, a clue was glimpsed by Freeman et al (19) in their report on 14 – 16 year olds where they noted that oral health knowledge does not necessarily relate to better health behaviour. However, they (19) found that subjects who assimilated oral health knowledge and feel a sense of personal control over their oral health are more likely to adopt self care practices.

The gender comparison in the present study showed that womens' participation was far ahead of that of men, mainly because there are often more female nurses than male nurses. The subjects' level of education, knowledge of what calculus and orthodontics are, role of fluoride, as well as perceived oral health, are significantly associated with oral health knowledge. This is in agreement with the report of Zavras et al (20), that education plays important role in oral health knowledge. They (20) found that the higher the educational status the more positive the attitude about dentistry; the higher the educational status, the more knowledgeable the subjects are about oral health and its diseases. The reported 169 (out of 244) that perceived their oral health as being very good/good, as well as 181 (out of 244) that claimed they had no oral disease in this study, may be a pointer to over reporting suggested by Zavras et al (20) as being characteristic of epidemiological based questionnaire studies. Logically, this is a natural attribute of man, not being able to see negative aspects of selves.

Dental attendance in the present study (11.9%) in the last 12 months compared abysmally low when compared with the findings of Al Ansari et al (7) (60.2%) and that of Behhehani et al (21) among Kuwaitis. Furthermore, 68% respondents had never attended a dentist. Though the respondents had significant oral health knowledge, their poor dental attendance may be attributed to several factors, among which are poor preventive behaviour of Nigerians and Africans in general, which may be a highlight of the importance of cognitive factors. Other reasons for poor attendance pattern may be lack of access, perception need, poor financial status, though majority (79.5%) reported of very good/good financial status in the current study. Nevertheless, the profession believes that regular attendance is beneficial to oral health (22). Only about 43.4% brushed twice or more a day. This is higher than that reported by Al – Ansari et al (7), but lower than the findings of Vigild et al (23) and Al – Tamini et al (24) among Saudi Arabian school children. Since the respondents in the current study are general nursing personnel, limited dental topics in their curriculum may have contributed to their lack luster brushing frequency per day.

CONCLUSION

The study population had good oral health knowledge, but inclusion of more dental topics in their curriculum would improve further, their oral health behaviour and knowledge, so as to be a good model to patients and the community.

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