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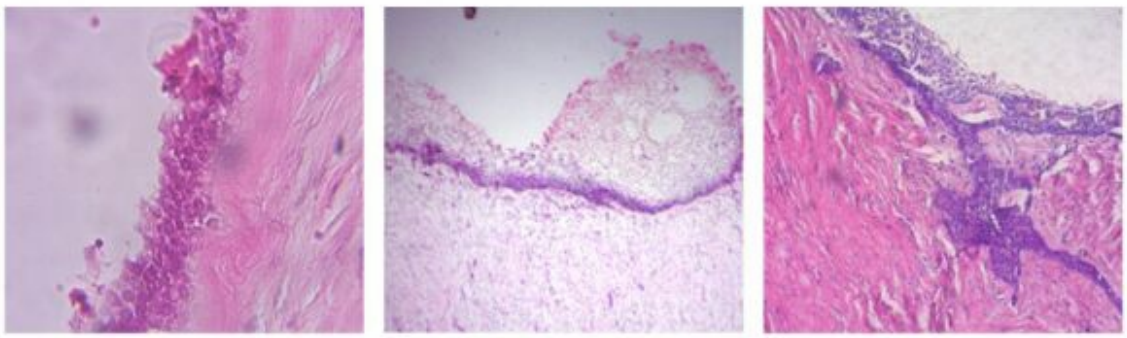

Relating Formal, Informal Religious Activities With Complete Denture Satisfaction

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ABSTRACT

Objective: Psychological factors determine satisfaction with complete dentures. Psychological well-being, which determines self-perception of health, is also influenced by level of involvement in formal religious activity. The objective of this study was to determine the influence of patients' involvement in religious activity on their satisfaction with complete dentures.

Methods: This study was conducted in the Outpatient Clinic of the Prosthetic unit of the Lagos University Teaching Hospital, Lagos, Nigeria. New complete dentures were made for patient and they were recalled over a 2-year period. A structured 2-sectioned questionnaire was administered. Information sought in the first section prior to fabrication of denture was socio-demographics, socioeconomic status, religion, formal religious activities and motivation for treatment. The second section of the questionnaire on satisfaction was administered at the recall visit. Data was analyzed using SPSS (version 21.0).

Results: A total of 44 patients were seen, 39 patients came for recall visit. Mean age was 66.31±17.42 years. Male participants were 61.5%. Majority (52.94%) of the patient were on soft diet. Aesthetic (64.7%) and mastication (64. 7%) were the main motivation factors seeking teeth replacement. Majority (55.6%) of the participants who rated self has "not religious" were satisfied with dentures (p=0.39). Participants with low level of involvement in religious activities had higher level of satisfaction with dentures (p =0.41).

Conclusion: Patients' level of religious activity had no influence on their complete denture satisfaction.

Keywords: Complete denture, religious activity, and satisfaction.

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INTRODUCTION

A large population of complete denture wearers exists and it has been suggested that this population will continue to increase over the next 20 years.[1] This indicate a need to focus on the management of edentulous patient.

The management of edentulous patient is usually a difficult task because of the various perceptions of the patient needs.[2] A poor quality denture may be well tolerated by one person, while a good quality denture may result in failure in another person.[3] There is also the problem of continuous resorption of ridges that necessitates repeated replacements and refitting of the dentures and periodic occlusal reshaping[2]. This problem has not been solved with the suggested special impression procedures and materials.[4] The patients' expectation that their new dentures will bring an improvement compared to their previous dentures is not often actualized.[5]

Recently, placement of implants over dentures has been proposed as a treatment option in edentulous patients but all patient cannot benefit from this due to low socioeconomic and health background. [6,7]

In epidemiological studies on patients' satisfaction with their dentures of varying ages and qualities, the proportion of unsatisfied patients has been reported to range between 20% and 45%.[8,9] Factors affecting satisfaction of complete dentures have been investigated by various researchers with different results.[2,8,11] Literature search revealed psychological factors also having a significant influence on the satisfaction of complete denture.[12-15]

It has been stated that individuals who report more frequent formal religious participation will report higher levels of psychological well-being.[16] Psychological well-being has been reported to determine self- perception of health.[17] It is

therefore necessary to determine whether frequent formal religious participation have any influence on satisfaction of complete dentures.

MATERIALS AND METHODS

This study was conducted in the Outpatient Clinic of the Prosthetic unit of the Lagos University Teaching Hospital. Ethical approval was obtained from the Ethical Board of Lagos University Teaching Hospital. Participants were selected randomly from the edentulous patients attending the Outpatient Clinics. Informed consent, both written and verbal, was obtained from the selected patients before starting of the study. Non-consenting selected patients did not participate in the study. A total of 44 patients participated in the study but only 39 conformed to the protocol of the study. The study period was 2 years (from 2014 to 2016).

Participants were administered a revised version of a questionnaire previously used in another study.[18] The questionnaire had two sections. The first section sought information like socio-demographics, socioeconomic status, religion, formal religious activities (number of times prayer is done daily, number of times participants attended place of worship in a week, role participants play in place of worship and past visit to holy place) and patients' motivation for treatment. Level of involvement in religious activity was determined both objectively and subjectively. Subjective was based on participants' self-report. Objective was determined by grading their responses to questions. The questions on formal religious activities were used to classify patients into two groups (high involvement and low involvement of religious activities). The positive response to each question on religious activities was scored as one. The summation of all questions was made and a score ≥5 was classified as high involvement and score <5 was rated low involvement. The first section of questionnaire was administered prior to treatment participants were examined and dentures were fabricated. The second section of the questionnaire on satisfaction was administered at the recall visit. Three calibrated investigator assessed fabricated complete denture before fitting. Satisfaction of denture was self-reported through the structured questionnaire. The quality of dentures was assessed based on quality of fit, aesthetic, extension, vertical relation, and occlusion using a rating scale of 1-5.[19] The rating were as follows:- Quality of fit = 1, extension = 1, vertical relation = 1, aesthetics = 1, and occlusion = 1. The total sum is 5 and was assessed as follows: - 1 was rated poor quality, 2 was rated fair quality, 3 was rated good qualities, 4 was rated very good quality and 5 was rated excellent quality.[19]

RESULTS

A total of 44 patients were examined but only 39 patients came for recall visit. Mean age was 66.31+/-17.42 years. Male participants were 61.5%. Female were 38.5 % (Table 1). Table 2 showed that "not religious" participant were the most satisfied (p=0.389). Those with low involvement of religious activities were the most satisfied (p=0.41). Those who took soft diet were most satisfied (p =0.65). Those using both upper and lower complete denture were most satisfied (p=0.36) and participants with no oral related habit were more satisfied with their dentures (p=0.18) (Table 2). Figure 1 shows that the "not religious" groups were the most satisfied (55.6%). Most participants could use denture to eat only soft diet (52.9%) (Figure 2) Periodontitis was the major cause of tooth loss (Figure 3).

Table 1: Sociodemographic characteristics of participants

Variables n=39	Frequency(%)
Age (years)	
≤ 45	6(15.4)
45-60	5(12.8)
61-75	18(46.2)
>75	10(25.6)
Gender	
Male	24(61.5)
Female	13(38.5)
Educational level	
Non formal	10(25.6)
Primary	2(5.1)
Secondary	9(23.1)
Tertiary	18(46.2)
Occupation	
Retired/ Not active	6(15.4)
Active	33(84.6)
Religion	
Christianity	24(61.5)
Islam	13(35.3)
Traditional	2(5.1)
Ethnic group	
Yoruba	36(92.3)
Igbo	3(7.7)
Marital status	
Single	1(2.6)
Married	31(79.5)
Divorced	2(5.1)
Windowed	5(12.8)

In Table 2, the highest (64.7%) proportion of the population studied used only I set of complete dentures. Aesthetic (64.7%) and mastication (64.7%) were the main motivating factors for seeking treatment. More than half (55.9%) of the populations were self-motivated. The majority of participants had used only one denture (Table 3).

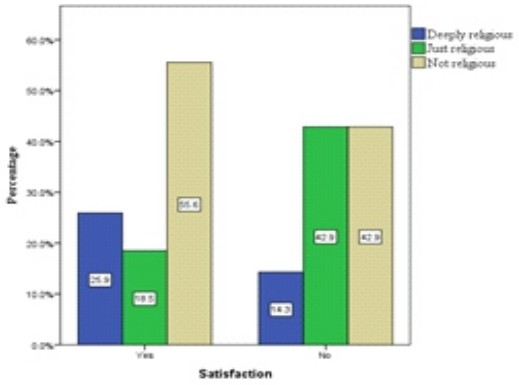

Figure 1: Relationship between participants' level of satisfaction and their level of religious involvement

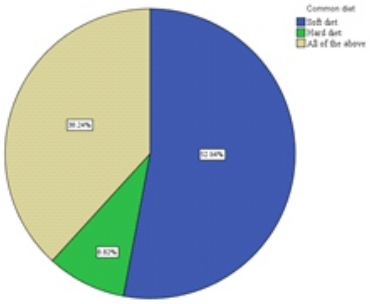

Figure 2: Type of diet taken among the participants

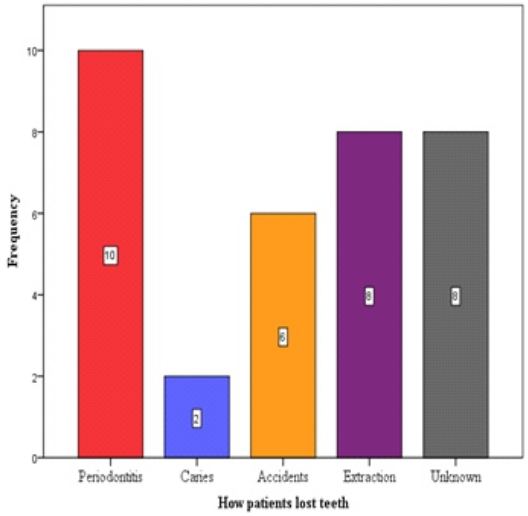

Figure 3: Factors causing tooth loss among the participants

Main reason for seeking dentures was appearance (64.7%). The motivation for seeking treatment was mainly relatives (20.6%). In table 4 a higher (55.9%) proportion of participants rated the upper denture staying in position as "well", more than the proportion (44.1%) of those who rated lower denture as "well". Rating of chewing for upper denture (41.2%) as "well" was the same as for lower denture (41.2%). The proportion of those who liked the appearance of the denture was 58.8%. The proportions of those comfortable with their dentures were 52.9%. The level of satisfaction was rated by 55.9% of upper denture wearers as ""well satisfied". Table 5 shows 22.2% of lower denture wearers rating the comfortability as uncomfortable.

Table 2: Religious activities, diet, oral related habit, complete denture and satisfaction

Variables	Satisfaction		P-value
	Satisfied n(%)	Not satisfied n(%)	
Self-perceived being religious			0.389
Deeply religious	7(25.9)	1(14.3)	
Just religious	5(18.5)	3(42.9)	
Not religious	15(55.6)	3(42.9)	
Level of involvement in Religious activities			0.41
High involvement	7(25.9)	6(50)	
Low involvement	20(74.1)	6(50)	
Type of diet			0.65
Soft diet	14(51.9)	4(57.1)	
Hard diet	3(11.1)	0(0)	
All of the above	10(37.0)	3(42.9)	
Type of complete denture			0.36
Both	21(67.7)	4(50.0)	
Upper	8(25.8)	4(50.0)	
Lower	2(6.5)	0(0)	
Oral related habit			0.18
Yes	5(62.5)	3(37.5)	
No	22(84.6)	4(15.4)	

Table 3: Experience with denture usage amongst denture wearers

Variables		Frequency (%)
Number of denture used by patients	1	22(64.7)
	2	9(26.5)
	≥3	3(8.7)
Reason for seeking denture treatment (Multiple response)	Appearance	22(64.7)
	Speech	2(5.9)
	Mastication	22 (64.7)
Source of motivation for seeking treatment	Relatives	7(20.6)
	Doctors	43(11.8)
	Self	19(55.9)
	Friends	1(2.9)
	Nothing	3(8.8)

Table 4: Level of satisfaction with denture

	Very well	Well	Poorly	Very poorly
How well is your upper denture made in teaching hospital staying in position	9(26.5)	19(55.9)	2(14.7)	0(0.0)
How well is your Lower denture made in teaching hospital staying in position	7(20.6)	15(44.1)	5(14.7)	0(0.0)
How well can you chew with upper denture	9(26.5)	14(41.2)	8(23.5)	1(2.9)
How well can you chew with lower denture	8(23.5)	14(41.2)	6(17.6)	1(2.6)
How well do you like the appearance of the denture	12(35.3)	20(58.8)	2(5.9)	0(0.0)

Table 5: Rating of comfortability with dentures

	Very comfortable	Comfortable	Uncomfortable
How comfortable the upper denture made in hospital is	9(26.4)	18(52.9)	5(14.7)
How comfortable the Lower denture made in hospital is	7(20.6)	14(41.1)	6(22.2)

DISCUSSION

There are various factors that affect complete denture satisfaction some of these factors are patient personality, and psychological factors which is influenced by level of involvement in religious activities. More persons with lower level of involvement with religious activities were satisfied with their dentures. Religion is said to be doctrines, practices, and routines connected to the supreme; where the supreme is God. There are specific doctrines about life after death and guidelines to the comportment within social group.[20]

The finding in this study conforms to studies which found little or no significant association between psychological factors and satisfaction of dentures.[21,22] It did not conform to a previous study that states that religion and involvement in religious activities help dental patient to cope with dental adverse condition.[23] It also did not conform to other studies[24,25] which states that only psychological factor have a significantly influence denture satisfaction and profiles. It has been stated that measures of religious involvement and related health outcome are more present in public religious involvement (i.e. religious attendance) than private religious involvement (e.g., self- rated religiousness, frequency of private prayer). The finding in this study revealed that majority had low involvement with religious activity which can be attributed to the fact that healthy people (dentate person) are more likely to be more involved in public religious activites.[26] It therefore suggest that other factors are contributing to the general satisfaction of complete dentures[27] or other psychological tools could be used to relate religion and satisfaction of complete denture. Controversial results exist among researchers investigating satisfaction of complete denture and personality. There is still lack of enough evidence between satisfaction of complete dentures, personality profiles, psychology and impacts on daily living. Further investigation are still required to investigate the psychological traits and it's impact on complete denture prosthesis with daily living, religion and

satisfaction of complete dentures.[28]

The present use of upper complete denture was higher than lower complete denture. This was similar to a study done in Brazil.[29] The type of complete denture did not determine the satisfaction of dentures this conformed to a previous study.[29] The present study indicates that less than half of the population could chew with either the upper or lower denture this was a contrast to the Brazil study[29] which recorded a higher percentage of chewing ability. The reason for the pattern in this present study is as a result of the local diet that comprises mainly of hard fiber. The use of complete denture that is not fixed to denture bearing area will not afford efficient mastication of this local diet.[30] The absence of chewing efficiency for hard fiber can explain why the present study recorded high proportion of participants eating soft fibers. In this study, the upper denture stayed in position more than the lower denture. This is expected since upper denture bearing area is larger than the lower denture bearing area.[31] This increased surface area for upper denture will enhance it staying in position than the lower denture.

CONCLUSION

In this study it was pointed that most of the complete denture wearers had low involvement in religious activities. It was also established that both private -self perceived religiosity - and public religious activities had no significant influence on satisfaction of dentures. Therefore this psychological factor had no significant impact on satisfaction with dentures.

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Oral Health Knowledge and Attitude of Diabetic Patients in Lagos State University Teaching Hospital, Lagos State

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ABSTRACT

Objective: To investigate the oral health knowledge, attitude and practices of diabetic patients in Lagos State University Teaching Hospital and to assess their awareness of oral diseases as complications associated with diabetes mellitus.

Methods: This study was a questionnaire based cross sectional-survey of 261 diabetic patients attending the diabetic clinic in Lagos State University Teaching Hospital (LASUTH). Questionnaires were distributed, data obtained were analyzed using SPSS version 20 and a comprehensive descriptive statistics was produced.

Results: The majority (92.5%) of the participants had type 2 diabetes, 9.5% had type 1. dental complications: 10.3% knew diabetics are prone to oral disease; 1.1% knew diabetes mellitus (DM) can cause dental caries; 4.6% knew DM can affect the gingiva. medical complications: 28.7% were aware of DM's effects on the eyes; 87.4% aware of effects on heart and 72.4% aware DM can lead to diabetic foot. frequency of tooth brushing: 76.8% brushed after every meal; 1.8% brushed twice daily; 21.4% brushed once daily. on readiness to accept dental education: 94.3% of the respondents were ready; 5.7% declined.

Conclusion: Diabetics were more aware of medical complications resulting from diabetes mellitus than dental complications. Their oral health attitude was good and they showed readiness to be educated on dental complications of DM.

Keywords: diabetes mellitus, oral health, knowledge, awareness, attitudes.

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Diabetes mellitus (DM) could be defined as a clinical syndrome categorized by hyperglycemia due to absolute or relative lack of insulin.[1] This endocrine-metabolic disorder results in complications such as microvascular, macrovascular, neuropathic and periodontal disorders.[1] The economic cost of managing diabetes mellitus is a significant health burden on both patients and healthcare systems worldwide. The total number of people with diabetes mellitus according to the World Health Organization (WHO) report is projected to increase from 171 million in 2000 to 366 million in 2030.[2,3] The greatest increase in prevalence of diabetes mellitus is expected to occur in Asia and Africa due to urbanization, changes in diet and lifestyle.[4] Already, prevalence varying from 0.65% in rural Mangu village in Plateau State Nigeria to 11.0% in urban Lagos has been reported.[5] In Port Harcourt, another city in Nigeria, the prevalence of diabetes was found to be as high as 23.4% among the high socioeconomic group and 16% among the low socioeconomic group.[6]

Research have shown that diabetes mellitus has negative effect on oral health and that diabetic patients have been found to show worse oral health status than non-diabetic patients.[7] Since oral health is an important factor in determining the general health status of an individual, a more favourable oral health status would thus prevent the community from many diseases not only at oral health level but also at systemic level.[8] The oral complications of diabetes mellitus, particularly from the poorly controlled disease include xerostomia, dental caries, gingivitis, burning mouth syndrome, median rhomboid glossitis, denture stomatitis, angular cheilitis, Lichen planus, parotid enlargement, halitosis and periodontal destruction with resultant tooth/teeth loss.[1,8-15] Periodontal disease is considered the sixth complication of both type 1 and type 2 DM[16] after microangiopathy, retinopathy, neuropathy, microvascular disease and delayed wound healing.[17] Studies have proved that a bi-directional unwanted relationship exists between DM and periodontal disease such that DM