

Do Stages of Dentistry Training Affect Anxiety Provoking Situations?

Obarisiagbon A, Azodo CC¹, Omoaregba JO², James BO²

Department of Oral and Maxillofacial Surgery, University of Benin Teaching Hospital, ¹Department of Periodontics, University of Benin, Benin City, ²Department of Clinical Services, Federal Psychiatric Hospital, Uselu, Benin, City, Edo State, Southern Nigeria

Address for correspondence:

Dr. Azodo CC,
Department of Periodontics,
Prof Ejide Dental Complex,
Room 21, 2nd Floor, University
of Benin Teaching Hospital,
P.M.B. 1111 Ugbowo, Benin City,
Edo State, Nigeria.
E-mail: clementazodo@yahoo.com

Abstract

Background: Undetected and unaddressed anxiety negatively affects performance in clinical learning environments. **Aim:** The aim was to investigate the anxiety provoking situations in clinical dental care delivery among students of preclinical and clinical years and house officers. **Subjects and Methods:** A 38-item modified Moss and McManus clinical anxiety questionnaire, general health questionnaire-12 (GHQ-12) and the Zung self-rating anxiety scale were the data collection tools. **Results:** Of the 84 recruited, 79 completed the study giving 94.0% (79/84) response rate. The median age of the participants was 25 years with 50.6% (40/79) being 20-25 years. Gender distribution revealed that males constituted 60.8% (48/79) of the participants. House officers constituted 29.1% (23/79), clinical students 36.7% (29/79), and preclinical students 34.2 (27/79) of the participants. The top anxiety provoking situations using the modified Moss and McManus clinical anxiety questionnaire were extracting wrong tooth 3.24 (1.06), inability to pass examination 3.32 (1.01), achieving examination requirement 3.19 (1.01), fracturing a tooth 3.08 (0.98) and accidental pulp exposure 2.96 (1.04). Getting diagnosis wrong, help in faint episode, not developing radiograph properly and coping with children were the anxiety provoking situations that showed statistically significant difference in the 3 studied training stages of dentistry. Bonferroni *post-hoc* analysis significant difference was in the preclinical and clinical students' pair for getting diagnosis wrong, not developing radiograph properly and coping with children while house officers/clinical students and house officers/preclinical students' pairs were for help in faint episode. Overall, 2.5% (2/79) had severe, 69.6% (55/79) moderate, 26.6% (21/79) mild clinical anxiety while 1 (1.3%) of the participants expressed no clinical anxiety. **Conclusion:** Data from this study revealed that the clinical anxiety of moderate severity was prevalent among the studied dental healthcare students. The anxiety-provoking situations were also found to be majorly similar in preclinical, clinical and post-graduation clinical stages of dental training stages in Nigeria.

Keywords: Anxiety provoking situation, Clinical anxiety, Dental care, Dental health workers

Introduction

Dentistry in Nigeria is a five or six university academic session program when admitted through direct entry or University Matriculation Examination respectively. The first three academic sessions are spent studying General Studies, Physical and Life Sciences, Basic Medical and Dental Sciences (Anatomy,

Biochemistry, Physiology and Oral Biology). The fourth academic session is spent studying preclinical courses that include operative and prosthetic techniques, pharmacology and pathology. The fifth session is spent on medicine and surgery, while the sixth session on dentistry. From this dental curriculum, the 4th year is referred to as the preclinical stage, 6th year as dental clinical stage. In this curriculum, if any student fails any course, he or she is entitled to retake the examination (resit examination) in three months. Further failure of the resit examination will lead to the student repeating that academic session (repeat). One year mandatory internship after graduation is a prerequisite for full registration with Nigeria Medical and Dental Council of Nigeria.^[1] This means that fully registered dentists in Nigeria must have passed through preclinical, clinical and post-graduation clinical stages of dental training.

Access this article online

Quick Response Code:	Website: www.amhsr.org
	DOI: *****

Clinical training for dental students and house officers remain undisputedly, a vital component of the dental education offering a wide variety of learning opportunities.^[2] It is an invaluable resource in preparing students for the reality of their professional role, supporting the integration of theory and practice, and linking the 'knowing what' to do with the 'knowing how' to deliver care.^[3] This exposure to the reality of professional practice in the clinic is essential in producing skilled clinicians. However, the learning that occurs in clinical settings presents challenges that may cause students to experience anxiety. This anxiety can impair learning, critical thinking, clinical performance, decision-making, caring capabilities thereby constituting a threat to the success of the clinical training.^[4-8] It has been reported that task performance is negatively affected in clinical learning environments especially if anxiety is undetected and unaddressed.^[9] Dental career training is burdened with challenges at different stages especially during clinical training, which may undermine excellent dental healthcare delivery, if not conquered.

In the adaptation of examination anxiety, clinical anxiety is the emotional reaction that health professionals face before delivering health care.^[10] This anxiety occurring at the transition from preclinical to clinical stage is peculiar in health career training. It is known that anxiety can be beneficial or harmful depending on the severity and the adaptability of the affected individual. Minimal anxiety is good for students because it makes them task oriented, aids concentration, accentuates alertness and improves emergency situation response. However excessive anxiety on the other hand can be very debilitating, increase the risk of suffering illness, decrease learning, impair performance and undermine optimal healthcare delivery.^[4,11] The adverse effect of anxiety on the overall performance of students leads to a cascade of consequences at both personal and professional levels, which include school dropout, impaired ability to work effectively, degeneration of the relationship, marital disharmony and suicide.^[12] The supportive learning environment conducive for clinical learning can be facilitated by understanding the anxiety provoking situations.^[9] Hence, the objective of this study was to investigate the anxiety provoking situation in dental clinical care delivery in Nigerian dental students and house officers.

Subjects and Methods

After obtaining ethical approval from University of Benin Teaching Hospital Ethics and Research Committee, the questionnaires were hand delivered to all the dental house officers of University of Benin Teaching Hospital, clinical (6th year) and preclinical (4th year) dental students of the University of Benin, Benin-City, Nigeria between May and June 2012. Written informed consent was obtained from the participants. All the dental students of the school were included because of the small size of the study population. However, students absent from class during the period of study were excluded. The house officers had their questionnaire

during the postgraduate interdepartmental seminars and collected at the end of the seminar. Participation was voluntary, and no incentive was offered. The questionnaire was a self-administered anonymous questionnaire with no identifiers. The questionnaire was pre-tested among 10 dentists who completed their internship within the last 3 months. The average time for completing the questionnaire obtained during pre-testing was 15 min. The questionnaire had 4 sections namely Section A-demographic information; Section B-a modified version of the self-administered Moss and McManus questionnaire;^[13] Section C-the general health questionnaire-12 (GHQ-12)^[14] and Section D - the Zung self-rating anxiety questionnaire.^[15]

Demographic information was obtained regarding age, gender, personal desires to study dentistry, previous academic challenges and dental treatments. The median age of the participants was 25 years with 50.6% (40/79) being 20-25 years and 49.4% (39/79) being more than 25 years. Gender distribution revealed that males were 60.8% (48/79) and females 39.2% (31/79) of the participants.

To investigate anxiety provoking situations, a modified version of the self-administered Moss and McManus^[13] questionnaire was used. This had 38 questions with 20 questions from the original document and 18 added questions to cover dental specific perceived sources of anxiety. The situations were assessed using a 4-point Likert scale of not anxious, slightly anxious, fairly anxious and very anxious. The scoring was 1 (not anxious) to 4 (very anxious) meaning that the minimum and maximum anxiety scores obtainable were 38 and 152 respectively. The higher score indicates higher clinical anxiety and the lower score also indicates lower clinical anxiety.

To investigate the general health of each member of the study group, the GHQ-12 was administered, and each item on the questionnaire was scored on the Likert scale of 0, 1, 2, 3. A minimum score of 0 and a maximum score of 36 are obtainable. The cut-of for the healthy is score 12 and above this score is unhealthy.^[14]

To quantify each student's level of anxiety, and that of the group, the Zung self-rating anxiety questionnaire which is a 20-item questionnaire was administered and each question was scored on a Likert type scale of 1-4 based on these replies: "A little of the time," "some of the time," "good part of the time," "most of the time".^[15] The minimum and maximum scores obtainable were 20 and 80 respectively. The higher score indicates higher anxiety and the lower score also indicates lower anxiety.

The data collected were subjected to frequencies, percentages and cross-tabulations and parametric statistics (one-way ANOVA and Bonferroni *post-hoc*) using Statistical Package for the Social Science (SPSS version 17.0, Chicago, IL, USA). For the purpose of analysis, the situations reported among the participants as not anxious, slightly anxious, fairly

anxious and very anxious were interpreted as none, mild, moderate and severe clinical anxiety state.

Results

A total of 100 students and house officers met the inclusion criteria, but only 84 of them participated. Of the 84 dental students and house officers that participated in the study, 79 of them completely filled the questionnaires, that were finally used this study. Preclinical dental students constituted 34.2% (27/79) of the participants, clinical dental students 36.7% (29/79) and dental house officers 29.1% (23/79). The majority had no prior degree 96.2% (76/79), had resit examinations 57.0% (45/79), never repeated any training stage of dentistry 69.6% (55/79) preferred dentistry 69.6% (55/79), had no dentist sibling 93.7% (74/79). The mean GHQ for preclinical, clinical dental students and house officers were 18.30 (3.36), 18.00 (3.43) and 18.65 (2.55) respectively. The mean Zung self-rating anxiety score for preclinical, clinical dental students and house officers were 30.89 (7.98), 27.59 (4.74) and 28.43 (5.41) respectively [Table 1].

The overall prevalence of clinical anxiety among the participants was 98.7% (78/79) [Table 2]. The 10 top anxiety provoking situation were extracting wrong tooth 3.24 (1.06), inability to pass examination 3.32 (1.01), not meeting requirement for examination 3.19 (1.01), fracturing a tooth during extraction 3.08 (0.98), accidental pulp exposure 2.96 (1.04), dealing with psychiatric patients 2.87 (1.07), getting infected by patients 2.80 (1.07), telling consultant, I don't know anything 2.78 (1.13), discovering calculus after scaling 2.77 (0.99), inadvertently hurting patients 2.72 (1.06), using ultra speed hand piece 2.72 (0.99). The 10 least anxiety provoking situation were discussion with patients 1.19 (0.62), interacting with staff 1.29 (0.75), taking pulse 1.32 (0.73), taking blood pressure 1.32 (0.71), taking patient history 1.42 (0.81), filling of blood request form 1.49 (0.83), examining patient 1.58 (0.97), joining the theatre team 1.62 (0.90), being asked difficult questions by patient 1.94 (0.82) and telling patient I don't know anything 2.00 (0.96). There existed significant differences in the four anxiety provoking situation among the participants namely getting diagnosis wrong ($P = 0.021$), help in a faint episode ($P = 0.004$), not developing radiograph properly ($P = 0.014$) and coping with children ($P = 0.006$) [Table 3]. Bonferroni *post-hoc* analysis significant difference was in the preclinical and clinical students' pair for getting diagnosis wrong, not developing radiograph properly and coping with children while house officers/clinical students and house officers/preclinical students' pairs were for help in faint episode.

Discussion

The initial dental clinical experience can be stressful and intimidating; particularly because of its variance with other healthcare delivery implying that mental health may worsen

Table 1: Demographic characteristics of the participants

Characteristics	4 th year students	6 th year students	Students house officers	Total
Age (years)				
20-25	23	17	0	40
>25	4	12	23	39
Gender				
Male	17	16	15	48
Female	10	13	8	31
Previous degree				
Yes	1	2	0	3
No	26	27	23	76
Resit examination				
Yes	5	22	18	45
No	22	7	5	34
Repeat				
Yes	4	15	5	24
No	23	14	18	55
Prefer to dentistry				
Yes	15	21	19	55
No	12	8	4	24
Sibling as dentist				
Yes	2	2	1	5
No	25	27	22	74
GHQ score				
Mean (SD)	18.30 (3.36)	18.00 (3.43)	18.65 (2.55)	18.29 (3.15)
Zung self-rating anxiety score				
Mean (SD)	30.89 (7.98)	27.59 (4.74)	28.43 (5.41)	28.96 (6.29)

SD: Standard deviation, GHQ: General health questionnaire

Table 2: Prevalence and severity of clinical anxiety among the participants

Clinical anxiety	4 th year students	6 th year students	House officers	Total
Normal	0 (0.0)	1 (3.4)	0 (0.0)	1 (1.3)
Mild	11 (40.7)	3 (10.3)	7 (30.4)	21 (26.6)
Moderate	14 (51.9)	25 (86.2)	16 (69.6)	55 (69.6)
Severe	0 (0.0)	0 (0.0)	0 (0.0)	2 (2.5)

after beginning dental school and remain poor throughout training. This is not limited to the undergraduate study period but may continue into internship, postgraduate study, and specialist practice life and may eventually reach a burnout level. This was substantiated by the presence of high psychological morbidity and general anxiety among the participants in this study. Strong association between psychological morbidity and study difficulty has been reported in a Nigerian University.^[16]

In this study, the overall prevalence of clinical anxiety among the participants was 98.7% (78/79) with the majority experiencing a moderate level of anxiety and minority, severe level of anxiety. The mean clinical anxiety score was 88.27 (18.47). This mean score was highest among the clinical dental students, followed by the preclinical dental students and the house officers. This

Table 3: Mean scores of anxiety provoking situations among the participants

Characteristics	Mean (SD)			
	4 th year students	6 th year students	House officers	Total
Getting diagnosis wrong*	3.00 (1.00)	2.28 (0.96)	2.39 (1.08)	2.56 (1.05)
Presenting in the clinic	2.44 (0.80)	2.31 (1.00)	2.65 (0.98)	2.46 (0.93)
Inadvertently hurting patients	2.63 (1.01)	2.79 (1.21)	2.74 (0.96)	2.72 (1.06)
Telling consultant, I don't know anything	2.59 (1.08)	2.72 (1.19)	3.09 (1.08)	2.78 (1.13)
Getting infected by patients	2.78 (0.89)	2.90 (1.21)	2.70 (1.11)	2.80 (1.07)
Dealing with psychiatric patients	2.74 (1.06)	3.10 (1.11)	2.74 (1.01)	2.87 (1.07)
Making diagnosis	2.04 (0.76)	2.21 (1.05)	1.74 (0.68)	2.01 (0.87)
Being asked difficult questions by patients	2.04 (0.85)	1.83 (0.89)	1.96 (0.71)	1.94 (0.82)
Treating paediatric patients	2.22 (0.85)	2.52 (1.02)	2.35 (1.03)	2.37 (0.96)
Telling patients that I do know their diagnosis	2.48 (0.85)	2.10 (1.18)	2.30 (0.76)	2.29 (0.96)
Administering local anaesthetic agent	2.19 (0.96)	2.24 (1.15)	2.17 (1.03)	2.20 (1.04)
Examining patient	1.59 (1.01)	1.69 (1.11)	1.43 (0.73)	1.58 (0.97)
Telling patient, I don't know anything	2.11 (1.05)	2.00 (1.00)	1.87 (0.81)	2.00 (0.96)
Taking history	1.48 (0.94)	1.45 (0.87)	1.30 (0.56)	1.42 (0.81)
Taking blood pressure	1.44 (0.93)	1.17 (0.47)	1.35 (0.65)	1.32 (0.71)
Joining the theatre team	1.70 (0.91)	1.69 (0.97)	1.43 (0.79)	1.62 (0.90)
Filling of blood request form	1.56 (0.93)	1.62 (0.94)	1.26 (0.45)	1.49 (0.83)
Interacting with staff	1.48 (0.94)	1.24 (0.79)	1.13 (0.34)	1.29 (0.75)
Taking pulse	1.48 (0.94)	1.17 (0.60)	1.30 (0.56)	1.32 (0.73)
Discussing with patients	1.41 (0.84)	1.10 (0.56)	1.04 (0.21)	1.19 (0.62)
Holding extraction forcep	1.93 (0.73)	2.34 (0.97)	2.04 (1.07)	2.11 (0.93)
Arresting post extraction bleeding	2.19 (0.74)	2.62 (0.90)	2.43 (1.08)	2.42 (0.91)
Helping in a faint episode*	2.30 (0.72)	2.66 (1.08)	3.22 (1.00)	2.70 (1.00)
Fracturing a tooth	3.00 (0.78)	3.14 (0.99)	3.09 (1.20)	3.08 (0.98)
Using ultra speed hand piece	2.70 (0.95)	2.97 (0.98)	2.43 (0.99)	2.72 (0.99)
Accidental pulp exposure	2.74 (0.98)	3.00 (1.00)	3.17 (1.15)	2.96 (1.04)
Extracting wrong tooth	3.00 (0.96)	3.38 (1.05)	3.35 (1.19)	3.24 (1.06)
Not taking radiographs properly*	2.41 (0.80)	2.62 (0.94)	2.22 (0.74)	2.43 (0.84)
Not developing radiograph properly	2.11 (0.80)	2.72 (0.88)	2.22 (0.74)	2.37 (0.85)
Not being able to interpret radiographic findings	2.30 (0.78)	2.62 (0.90)	2.26 (0.69)	2.41 (0.81)
Discovering calculus by supervisor after scaling	2.63 (0.84)	3.00 (1.04)	2.65 (1.07)	2.77 (0.99)
Not able to defend diagnosis	2.67 (0.92)	2.93 (0.96)	2.43 (0.90)	2.70 (0.94)
Not meeting requirement for examination	2.96 (0.98)	3.38 (0.98)	3.22 (0.09)	3.19 (1.01)
Inability to pass	3.07 (1.14)	3.52 (0.87)	3.35 (0.98)	3.32 (1.01)
Coping with children*	2.33 (0.92)	3.10 (0.86)	2.65 (0.83)	2.71 (0.92)
Communication with elderly	2.07 (0.78)	2.41 (1.18)	1.87 (0.81)	2.14 (0.97)
Traumatizing gingiva	2.52 (0.85)	2.62 (1.01)	2.09 (0.90)	2.43 (0.94)
Fear of patient satisfaction	2.37 (0.79)	2.59 (0.98)	2.04 (0.71)	2.35 (0.86)
Overall	86.70 (18.81)	91.76 (17.54)	85.70 (19.32)	88.27 (18.47)

*Statistically significant. SD: Standard deviation

shows that the anxiety is prevalent among dental students and house officers as they face a constant barrage of clinical situations with which they are expected to cope. The studies that reported dental education as stressful featured curriculum issues prominently as a major stressor.^[17,18] The pressure to meet certain clinical standards on a wide variety of situations in the evaluation of dental students and house officers may precipitate anxiety. The challenges and stress at different stages of dental career training and multiple emotions encounters during the transformation from unsure student to a confident dental surgeon may elicit and heighten anxiety as seen in this study.

In developing countries, tooth extraction is the dominant dental procedure performed in dental clinics. In this study,

extracting wrong tooth and fracturing a tooth during extraction were the topmost and fourth top anxieties provoking situations respectively. The presence of complications from this procedure considered simple by the general public may result in untold consequences on the clinician. This belief may explain the high rating of tooth extraction related issues with a high level of anxiety among the participants. It has been established from previous studies on clinical medical and nursing students that fear of making mistakes is one of the significant causes of anxiety.^[4,13]

Performance, award of honors and career opportunities are parameters tied to achievements in school systems. Achievement as an important goal therefore portends its

attainment, as an anxiety precipitator. The high rating of inability to pass examination and meeting requirement for examination may be connected with the high prevalence of resit examination and repeat in dental school among the studied participants. A further understanding of the relationship between these factors would be of value to dental educators in developing anxiety ameliorating/reduction models.

The accidental pulp exposure results in a change of the treatment plan from conventional restorative treatment to complicated endodontic treatment. The non-predictability of such exposure on pulp vitality and patient reaction when informed may explain why the participants rated it high, as anxiety provoking situation. This high rating of pulp exposure may also be explained by the high rating of anxiety related with ultra-speed hand piece which is used for cavity preparation.

There has been the stigma, negative attitudes and varied forms of discrimination toward psychiatric patients among different categories of healthcare workers that are necessarily related to poor awareness and knowledge of the condition. The associated fear coupled with poor awareness about psychiatric condition explained why the participants rated dealing with psychiatric patients among the ten top anxiety provoking situations.

Dental profession has been considered, a dangerous profession because of the possibility of infection acquisition and contagion by the dental healthcare provider. The increasing survival of patients with contagious and infectious diseases coupled with their increased dental healthcare seeking behavior has continued to be a source of worry for dental healthcare providers. This is therefore a possible explanation for getting infected, being rated high as an anxiety provoking situation. Similar rating of high anxiety for becoming infected has been reported in clinical dental and medical students.^[13,19]

The clinical training of dental students and house officers lies on the shoulders of consultants/specialists. The assessment associated with training, results in anxiety thus informing the consultant about deficient knowledge of clinical issues, was a high anxiety provoking situation among the participants. Discovering calculus and inadvertently hurting patients are indicators of poor quality treatment, which is common among young practitioners. The inability to achieve perfection in any activity is a source of anxiety, and this may be worse in clinical care provision because of the consequences of ineffective treatment on patients and healthcare providers.

The patients treated by dental students start from Oral Diagnosis Department where the initial clerkship and diagnosis are made before referral to other Dental Departments for their specific treatment. The diagnostic radiological investigations are usually performed by the students, and this includes the exposure of X-ray films and the development of the radiographs. The noneffective development of radiograph that may lead to the requesting for another film and a convincing

patient on the need for another X-ray radiation exposure may trigger the highest level of anxiety among clinical dental students. There is no specific postgraduate fellowship training in Oral and Maxillofacial Radiology in Nigeria, which implies that the undergraduate training is either by other Dental Specialists or Medical Radiologists without specifics in Oral and Maxillofacial Radiology. The reduction of anxiety with ascent to house officer status reflects increasing confidence at performance of the diagnostic tests.

The coping with children climaxed in clinical dental students explained the low interest in specializing in pedodontics in Nigeria.^[20] The high reports of challenges among Nigerian postgraduate dental surgeon in pedodontics exist in the literature.^[21]

Ascent in the dental profession is usually associated with increasing clinical activities. The increased activities may be associated with increasing exposure to emergencies like syncope that have been reported with high unpreparedness for emergencies in the dental office. This explains why help in faint climaxed in-house officers.

The fear expressed among students about ability to perform the procedure in preclinical students is already known explaining why the act of getting diagnosis wrong was significantly higher in the 4th year dental students. The increasing attention given at the point of transition to clinical stage among preclinical students is thereby imperative. This attention resulted in a reduction in anxiety. The findings indicate that dental clinical trainers should be intentionally aware of anxiety-provoking situations and model ways to ameliorate and reduce it.

Although this study is limited by the size of study population, it can consider as necessary baseline information that can facilitate comparison with other studies and from which larger scale studies can be modeled from.

Conclusion

Data from this study revealed the clinical anxiety of moderate severity was prevalent among the studied dental healthcare workers. The anxiety-provoking situations were also found to be majorly similar in the pre-exposure, exposure and post-exposure dental clinical training stages in Nigeria.

References

1. Medical and Dental Council of Nigeria. Rules of Professional Conduct for Medical and Dental Practitioners in Nigeria. 1998:1-42.
2. Henzi D, Davis E, Jasinevicius R, Hendricson W. North American dental students' perspectives about their clinical education. *J Dent Educ* 2006;70:361-77.
3. Chan DS, Ip WY. Perception of hospital learning environment: A survey of Hong Kong nursing students. *Nurse Educ Today* 2007;27:677-84.

4. Kleehammer K, Hart AL, Keck JF. Nursing students' perceptions of anxiety-producing situations in the clinical setting. *J Nurs Educ* 1990;29:183-7.
5. Bell ML. Learning a complex nursing skill: Student anxiety and the effect of preclinical skill evaluation. *J Nurs Educ* 1991;30:222-6.
6. Bremner MN, Aduddell KF, Amason JS. Evidenced-based practices related to the human patient simulator and first-year baccalaureate nursing students' anxiety. *Online J Nurs Inform* 2008;12. Available from: http://www.ojni.org/12_1/bremner.html. [Last accessed on 2014 Jan 14].
7. Audet MC. Caring in nursing education: Reducing anxiety in the clinical setting. *Nursingconnections* 1995;8:21-8.
8. Hutchinson TL, Janiszewski Goodin H. Nursing student anxiety as a context for teaching/learning. *J Holist Nurs* 2013;31:19-24.
9. Moscaritolo LM. Interventional strategies to decrease nursing student anxiety in the clinical learning environment. *J Nurs Educ* 2009;48:17-23.
10. Hashmat S, Hashmat M, Amanullah F, Aziz S. Factors causing exam anxiety in medical students. *J Pak Med Assoc* 2008;58:167-70.
11. Barbería E, Fernández-Frías C, Suárez-Clúa C, Saavedra D. Analysis of anxiety variables in dental students. *Int Dent J* 2004;54:445-9.
12. Sharif F, Armitage P. The effect of psychological and educational counselling in reducing anxiety in nursing students. *J Psychiatr Ment Health Nurs* 2004;11:386-92.
13. Moss F, McManus IC. The anxieties of new clinical students. *Med Educ* 1992;26:17-20.
14. Goldberg DP, Gater R, Sartorius N, Ustun TB, Piccinelli M, Gureje O, *et al.* The validity of two versions of the GHQ in the WHO study of mental illness in general health care. *Psychol Med* 1997;27:191-7.
15. Zung WW. A rating instrument for anxiety disorders. *Psychosomatics* 1971;12:371-9.
16. Osasona SO, Morakinyo O, Akhigbe KO. Study difficulty amongst undergraduates in a Nigerian university: Pattern and relationship with psychiatric morbidity and academic performance. *Niger J Psychiatry* 2011;9:46-53.
17. Sofola OO, Jeboda SO. Perceived sources of stress in Nigerian dental students. *Eur J Dent Educ* 2006;10:20-3.
18. Orenuga OO, daCosta OO. A survey of challenges and career aspirations of clinical dental students in Nigerian universities. *Niger Dent J* 2009;17:19-23.
19. Kieser J, Herbison P. Clinical anxieties among dental students. *N Z Dent J* 2000;96:138-9.
20. Arowojolu OM, Aderinokun GA, Arotiba JT, Dosumu OO. Choice of specialty training among Nigerian dental graduates. *Odontostomatol Trop* 1997;77:21-4.
21. Onyeaso CO, Dosumu EB, Obuekwe O. Postgraduate dental education in Nigeria: Professional knowledge self assessed in relationship to skills among resident dental surgeons in Nigerian teaching hospitals. *Niger J Med* 2004;13:18-25.

How to cite this article: ????

Source of Support: Nil. **Conflict of Interest:** None declared.