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## Psychosocial problems of pre-clinical students in the University of Ibadan Medical School

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### Summary

Recent changes in the psychosocial environment of the university campus such as the steep rise in student numbers, the high cost of living standards and the increase in violence and cult activities has prompted the need to assess the impact of these changes on the students. A cross sectional study was carried out among pre-clinical medical students to identify their psychosocial problems. A self-administered questionnaire was used to collect information about socio-demographic variables including age, sex, sources of financial support, type of accommodation, smoking and drinking habits and use of recreational facilities. Causes of insecurity and depression among students were also recorded. The General Health Questionnaire GHQ – 12 was used to assess their mental health status. One hundred and seventy-six students responded to the enquiry, 94 males (53%) and 80 females (45%). One hundred and thirty-seven (79%) live on the campus while 37 (21%) live off campus. Only 9 of the students (5%) were smokers and 28 (16%) were drinkers. Monthly pocket money ranged from ₦1, 000 to ₦25, 000. Forty-one (23%) thought their pocket money was adequate, 92 (52%) thought it was fair and 39 (22%) thought it was inadequate. Causes of insecurity on the campus were cultism 34 (19%), lack of money 27 (15%), lack of textbooks 13 (7%) and stealing 10 (6%). Causes of depression include fear of failure of examinations, 62 (35%), lack of money, 48 (27%) and family problems 17 (10%). Mental health scores ranged from 1 to 10. Using a cut off point of 3 to delineate those with traits of poor mental health, 35 (21%) fell into the category 15 boys and 20 girls. Mean mental health score were higher for females, those living on campus, smokers and drinkers but this was not statistically significant. Fear of failure of examinations, cultism and lack of money are major concerns among medical students on the main university campus. Counselling services should be provided to assist students with these problems.

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### Résumé

Les changements récents sur l'environnement psychosocial au campus universitaire tels que l'augmentation du nombre des étudiants, augmentation du niveau de vie, l'augmentation de la violence et des cultes secrètes ont poussé le besoin d'étudier l'impact sur les étudiants. Une étude longitudinale était faite parmi les étudiants en préclinique pour identifier leurs problèmes psychosociaux. Un questionnaire était administré pour avoir les informations à propos des variables socio-démographiques inclus, âge, sexe, accommodation, fumeurs ou alcoolique et l'utilisation des places de recreation. Les causes d'insecurité et de dépression parmi les étudiants étaient enregistrés. Les questionnaires de santé générale (GHQ-12 était utilisé pour analyser le statut de santé mentale. Cent soixante seize étudiants complétaient le questionnaire chacun, quatre vingt quatorze males (5.3%) et quatre vingt females (45%). Cent trente sept (79%) vivait au campus et 37 (21%) hors du campus. Seulement neuf étudiants (5%) était fumeurs et 28 (16%) alcooliques. L'argent de poche mensuelle variait entre 1.000 – 2.500 Naira. vingt trois pour cent pensait que l'argent de poche était adéquate 92 (52%) et vingt deux pour cent inadéquate. Les causes d'insecurité sur le campus étaient les cultes secrètes 34 (19%), manque d'argent 27 (15%), manque de livres 13 (7%) et le vol était de 6%. Les causes de dépression inclus la peur d'échec aux examens à 35%, le manque d'argent à 27% et les problèmes familiaux à 10% des étudiants.

### Introduction

The recent changes in the psychosocial environment on university campuses have been a cause of concern. Factors contributing to these changes include the steep rise in student numbers in the face of deteriorating infrastructure and facilities for learning due to poor funding of universities, the increase in violence and cult activities on the campus and interruption of academic programmes by incessant strikes and student activism.

These changes have brought to the fore the need to assess the effects of these stressors on students living in these conditions. Several studies on stress among university students have been carried out in other countries [1-3]. Reports from Nigeria focussed on substance use among university students [4,5] and personal characteristics and mental health status of students [6,7]. However, most of these studies were conducted over a decade ago before the adverse changes in the socio-economic fortunes of the country. Thus apart from the usual stressors such as academic demands and peer pressure, students in the campus now have to cope with additional stress produced by these changes. A report on counselling needs of students at the University of Ibadan recorded a higher demand from medical students compared to their other colleagues on the campus [8]. This may imply that medical students are more exposed to stress than other students or that they are less able to cope.

This study conducted an inquiry into the psychosocial problems of medical students living on the main university campus.

### Methodology

The pre-clinical medical school on the main campus of the University comprises students at the 200 and 300 levels. The study was conducted among 300 level students. The students had just moved from the 200 to the 300 levels at the time of the study and hence they had spent at least one year in the medical school.

A self-administered questionnaire was distributed among students after lecture sessions with the assistance of one of the lecturers in the Department of Anatomy. The questionnaire sought information on socio-demographic variables such as age, sex, sources of financial support, type of accommodation, smoking and drinking habits and use of recreational facilities. Information was sought about causes of insecurity and sources of stress on the campus. The General Health Questionnaire (GHQ) - 12 [9] was used to assess the mental health status of students. Scores were calculated with a 0-0-1-1 scale with a maximum score of 1 and a minimum of 0 for each item.

### Results

One hundred and seventy-six students responded to the enquiry, out of the 303 students registered for this level study, a response rate of 58%. Respondents comprised of 94 males (53%) and 80 females (45%). They were all single and predominantly Christian 151 (86%).

One hundred and sixty-four (93%) were sponsored by their parents, 8 (5%) were supported by some

scholarship and 3 (2%) were self-sponsored. Monthly pocket money received ranged from ₦1,000 to ₦25,000. Forty-one (23%) reported that their pocket money was adequate, 92 (52%) thought it was fair and 39 (22%) thought it was inadequate. More females than males felt their pocket money was adequate  $p < 0.001$ .

Monthly expenditure ranged from ₦1,500 – ₦26,000. Of those who indicated that their pocket money was inadequate, 20 asked friends for money, 4 engaged in business ventures and only 1 worked part-time to supplement his income.

### Lifestyle

One hundred and thirty-seven (79%) lived on the campus and 37 (21%) lived off campus. The number of occupants in a room ranged from 1 to 15 with a mean of 5. Forty-one (23%) were squatters while 135 (77%) were legal occupants. Thirtyseven (21%) belonged to social clubs, males, more than females,  $p < 0.05$ . Eighty-five (48%) engaged in some form of sporting activities. This was also recorded more among males  $p < 0.01$ . One hundred and eighty students (61%) had access to television and spent a mean of 2.5 hours a day watching it.

The prevalence of cigarette smoking was 5% by a total of 9 students, 6 boys and 3 girls. One hundred and forty-nine (85%) had never smoked. Twenty-eight (16%) were current drinkers, 3 (2%) indulged in marijuana, 2 (1%) cocaine and 1 (0.6%) heroine. There was no sex difference between drinkers,  $p < 0.05$ . However, other substances used were indicated by males only.

### Psychosocial factors

Only 4 students (2%) reported that their relationship with the opposite sex was not cordial. Twenty-four (14%) had a steady relationship with plans for marriage, 19 (11%) had a steady relationship with no plans for marriage. More females than males had a steady relationship. Twenty-five students (14%) felt less privileged than their colleagues. Reasons for this include lack of money indicated by 12 students and not owning a car indicated by 5 students.

**Table 1:** Causes of insecurity on the campus

Cultism	34	19%
Lack of money	27	15%
Lack of Textbooks/Learning aids	13	7%
Sexual abuse	12	7%
Stealing	10	6%
Violence	8	5%
Sexual harassment	3	2%

Causes of insecurity on the campus are shown on Table 1 and include cultism 34 (19%), lack of money 27 (15%), lack of textbooks 13 (7%), sexual abuse 12 (7%) stealing, 10 (6%) and violence 8 (5%). Sexual abuse was indicated by more girls than boys  $p < 0.05$  while lack of money was more frequently indicated by boys  $p < 0.05$ . Cultism was more frequently mentioned by males but this was not statistically significant  $p > 0.05$ . Only 2 students (1%) reported that they were always depressed while 151 (86%) reported that they sometimes felt depressed. Causes of depression shown in Table 2 include fear of failure of examinations, 62 (35%), lack of money, 48 (27%), and family problems 17 (10%).

**Table 2:** Causes of depression (%) among pre-clinical students

Fear of failure of exams	62	35%
Lack of money	48	27%
Family problems	17	10%
Broken relationship with opposite sex	11	6%
Stress	7	4%
Fear of the unknown	3	2%
Health problems	1	0.6%

**Mental health assessment**

One hundred and sixty-six filled the mental health section of the questionnaire. Scores ranged from 0 to 10 out of a maximum of 12 with 67 (38%) recording a score of 0. The mean score for boys was 1.24 and 1.79 for girls  $p > 0.05$ . Using a cut off point of 3 to delineate those with traits of poor mental health, 35 (21%) fell into this category, 15 boys and 20 girls.

The mean score for those living off campus was lower than for those living on campus. A greater percentage of smokers (44%) had a mental health score of 3 and greater compared to 22% of non-smokers  $p < 0.05$ . Similarly 30% of those who do not watch television had a mental health score of 3 or higher compared to 16% of those who do  $p < 0.05$ . The corresponding figures for those who feel less privileged was 42% compared to 18% among those who did not feel less privileged.

Eighteen percent of those that had a cordial relationship with the opposite sex had a score of 3 or greater while the corresponding figures for those who were indifferent and had an incordial relationship with the opposite sex was 27% and 100%, respectively,  $p < 0.05$ .

Table 3 shows the mean scores for students for each of these variables. GHQ scores were not associated with

age, relationship with parents or assessment of adequacy of pocket money.

**Discussion**

Cultism was a major concern among medical students in the main campus and was the most frequently reported cause of insecurity. Lack of money was ranked high on the list of causes of insecurity and depression. Students' assessment of the cost of living on the campus ranged from N2, 000 to N10, 000 per month with a median of N4, 000. About a quarter of the respondents though their pocket was inadequate to meet their needs. The lack of money has been reported to be a source of stress among university students in Britain [10]. The study reported that students who complained of inadequate funds were more likely to have associations with antisocial persons in the society.

**Table 3:** GHQ scores among pre-clinical students

Student Characteristics	Mean Score	S.D	N	P value
Male	1.24	1.69	90	
Female	1.79	2.19	76	0.07
On campus	1.79	1.30	36	
Off campus	1.58	2.1	129	0.29
Drinkers	2.07	2.69	28	
Non Drinkers	1.38	1.76	136	0.26
Smokers	2.67	3	9	
Non smokers	1.49	1.93	141	0.31
Access to television	1.317	1.87	104	
No Access to television	1.803	2.07	61	0.12
Feel less privileged	2.21	2.48	24	
Do not feel less privileged	1.46	1.85	136	0.24

Fear of failure of examinations was the major cause of depression among pre-clinical students. Examinations in the university are a major source of stress [3] and can be regarded as an occupational hazard of students [11]. The high failure rates has made the Part I MBBS examination the most dreaded academic event in the medical school [12]. The consequences of failure include the repetition of the year or outright dismissal from the University. The latter option often involves drastic adjustments in the students' lives as they may have to seek admission to other universities to start the medial programme afresh or choose a new course altogether. It may be necessary to reconsider the options for Part I MBBS failures and facilitate their relocation to other faculties of the University.

Mental health assessment revealed that 21% of the students had scores of 3 or higher. Thus, about one-fifth of the students have traits of poor mental health. A high level of stress in the pre-clinical years was observed by Olutimehin who recorded a high attendance of the counselling centre by medical students [8].

In this study, mean GHQ health scores were higher among females, those living on campus, drinkers, smokers, those with no access to television and those who felt less privileged. Although these associations were not statistically significant, they indicate that females possibly feel more vulnerable on the campus. Some studies have reported a female preponderance of mental health traits [14].

Many smokers and drinkers engage in the habit to cope with stress. High mental health scores among these groups may indicate that in spite of this coping strategy they are at risk of mental health problems. This possibility is corroborated by the findings of high stress scores among smokers than non-smokers [15].

In this study, GHQ scores were higher among those living on campus compared to those who were off campus [2]. Students on the main campus lived with up to 15 students in a room. Living in overcrowded conditions is a source of chronic stress and has been shown to have a deleterious effect on psychological well-being [16]. It is noteworthy however that this problem has already been addressed by the University authorities and the hostels on the campus have been decongested.

This study concludes that fear of failure of examinations is a major cause of stress among pre-clinical students and that females, smokers, drinkers and those who lived on campus may be more vulnerable to mental health problems. Counselling services should be provided to assist students with these problems.

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