

Mistreatment among undergraduate medical trainees: A case study of a Nigerian medical school

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Abstract

Background: Several international studies have shown that abuse or mistreatment is a regular phenomenon faced by medical students. However, there is limited information on medical student abuse/mistreatment in Nigeria. The study was therefore conducted to assess the prevalence and patterns of mistreatment experienced by Medical Students in the University of Calabar.

Materials and Methods: A descriptive cross-sectional study was conducted among 451 undergraduate medical trainees in the University of Calabar. Systematic sampling was used in recruiting participants into the study. A self-administered questionnaire was then employed to obtain information on patterns of mistreatment experienced by medical undergraduates. Data were analyzed using Statistical Package for Social Scientists version 19 and level of significance set at <0.05.

Results: More than a third (35.5%) of all respondents interviewed had experienced one or more forms of mistreatment during their training, with 38.5% of them experiencing it weekly. The most common form of mistreatment experienced was verbal abuse (52.5%), and the main perpetrators of these incidents were medical consultants, (18.6%) other cadre of doctors (17.3%) and lecturers (14.4%). Being in the clinical level of study and aged above 25 years were significantly associated with experiencing mistreatment in this study ($P < 0.05$). However, only 8.8% reported these incidents.

Conclusion: With more than a third of undergraduate medical trainees experiencing mistreatment, development of appropriate strategies for the prevention and reduction of these incidents are strongly recommended.

Key words: Abuse, medical students, mistreatment, Nigeria

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Introduction

Medicine is a hierarchical profession and medical students are at the bottom of that hierarchy. The perception of being taken advantage of or abused is common among medical students.^[1-4] The overall prevalence of abuse ranges from 74% to 98%, with verbal abuse being the most commonly reported ranging from 87% to 98%, respectively. A number of studies have shown that bullying, abuse, harassment, mistreatment, or belittlement affect not only medical students,^[1,3,5] but also doctors in training,^[6-10] doctors undertaking research,^[11] and other healthcare professionals.^[12] A survey conducted

among final year students in Pakistan revealed that 52% of respondents reported that they had faced bullying or harassment during their medical education, with about 28% of them experiencing it once a month or even more frequently. The most common form of mistreatment was verbal abuse (57%), and the main perpetrators were medical consultants (46%).^[8]

Furthermore, research has clearly shown that perceived mistreatment is viewed by medical students as a major

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source of stress.^[6] More than a third of medical students in a study reported that they had considered dropping out and about a fourth reported that they would have chosen a different profession had they known about the extent of bullying in medical schools.^[13] The experience of bullying and harassment has also been shown to be associated with long-term severe adverse mental health consequences, including increased binge drinking,^[14] depression, and suicide attempts in doctors.^[11,13] Despite this profound effect, less than a third of affected students report incidents of abuse to faculty or medical school administrators,^[13,15,16] due to fear of reprisal or concern of potential repercussions on performance evaluation.^[5,16] In a study of 2884 medical students from 16 US medical schools, having been harassed or belittled was significantly associated with ever having suicidal ideation in the past year, having made a suicide attempt, increased alcohol consumption, and frequency of binge drinking.^[17] Students also reported a lack of confidence in clinical skills and ability to provide compassionate care.^[18] Medical student abuse occurs most often during the clinical years,^[19,20] with faculty, house staff, and nurses being the most common abusers.^[16,21-23]

Although, there is a worldwide awareness on the negative consequences of mistreatment encountered in the course of medical training, which affects the physicians' well-being and quality of care given to their patients,^[13-18] limited information exists concerning this problem in Nigeria. Currently, there is only one documented report from a Nigerian medical school.^[24] This study was therefore conducted to fill the knowledge gap regarding mistreatment/abuse which often times is overlooked, but tends to have dire consequences. The knowledge from this study will guide the design of appropriate intervention strategies to reduce the level of mistreatment encountered during undergraduate medical education. The aim of this study was to assess the prevalence and patterns of mistreatment experienced by medical students in the University of Calabar, College of Medical Sciences.

Materials and Methods

A cross-sectional survey was carried out among medical students at the College of Medical Sciences, University of Calabar, Cross River state, Nigeria during the period of October–December 2011. The college was established in 1975. The University is one of the largest universities in the South-South geopolitical zone of Nigeria. Ethical clearance to carry out the survey was sought and obtained from the University of Calabar Teaching Hospital Research Ethical Review Committee. A written informed consent was also obtained from all students. Respondents were assured of utmost confidentiality.

Medical students from all levels of the study were recruited into the study. However, at the time of the study only four levels of the study were available (1, 2, 4 and 5). This was

due to the fact that the third level students had just written their professional examination and was on vacation. Similarly, the final year students had just graduated from the medical school. All medical students who were available at the time the study was conducted were eligible to participate. The class representative of each class was consulted a day before and informed in preparation for the data collection exercise. Immediately after their lectures, a brief explanation of the survey and its instruments were given to the students. Thereafter, a self-administered questionnaire was distributed by the investigator and two trained research assistants. The questionnaires were retrieved immediately following completion and this was repeated for the rest of the classes visited. The students were asked to give their honest responses to each question and were not allowed to discuss with one another while completing the questionnaires. A total of 451 questionnaires were administered and all were returned.

The questionnaire was a semi-structured one and questions were adopted and modified to this environment from the British Medical Students Welfare and Education Survey.^[25] It was divided into sections to elicit information on socio-demographic characteristics, prevalence of mistreatment, rate of occurrence including perpetrators and report of these incidents.

Data analysis

Questionnaires were inspected daily so as to detect errors, and ensure that it was properly filled. Questionnaires were manually sorted out, coded before entry and cleaned. Thereafter, it was entered into the computer for statistical analysis using IBM Statistical Package for Social Scientists SPSS for windows version 19.0. Frequency, proportions, means, and standard deviation were generated to summarize variables. Chi-square test was used to determine the association between categorical variables and level of significance was set at 5%.

Results

The mean age of respondents was 23.44 ± 4.38 years. Majority 288 (63.8%) of the respondents interviewed were males, 437 (96.9%) were single and 294 (65.2%) of the students were from the clinical level of study. About half, 233 (51.7%) of the medical students interviewed resided on campus and all were of the Christian religious faith [Table 1].

Reports on mistreatment, revealed that more than a third, 160 (35.5%) of the students had experienced one or more forms of mistreatment in the 6 months period prior to the study. The most commonly experienced form of abuse was verbal 84 (52.5) and the least form of mistreatment reported was sexual 3 (1.8%). The frequency of occurrence of mistreatment [Figure 1] ranged from weekly 62 (38.8%) to less than once in a month 40 (25%) and at least once monthly 17 (10.6%) [Figure 2].

Among the medical students interviewed, 695 incidences of mistreatment were reported. Verbal abuse was the most common form of mistreatment reported by 320 (46%), followed by experiencing inappropriate behavior 136 (19.6%) and perception of being excluded or ignored 97 (14%). The least reported forms of mistreatment reported were physical abuse, 50 (7.2%) written abuse 29 (4.3%) and sexual abuse 13 (1.9%). Most common perpetrators of this form of abuse were medical consultants 84 (18.6%) followed by other cadre of medical doctors 78 (14.4%) and lecturers 65 (14.4%) [Table 2].

Respondents' responses to abuse/mistreatment are as shown in Table 3. Among those who experienced mistreatment, 79 (49.4%) did nothing about the incident, while 14 (8.8%) reported the incident to other people. The reports were made mainly to close friends, 35 (43.2%) colleagues 23 (28.4%) and members of their families (24.7%). However, majority, 406 (90%) indicated that there were not aware of any support in place for students reporting cases of mistreatment in the medical school or even in the University of Calabar.

Table 4 shows the association between socio-demographic characteristics of the respondents and recent experience of mistreatment. A significantly higher proportion of respondents 67 (52.3%) who were above 25 years were more likely to experience mistreatment compared with 93 (28.8%) aged 25 years or less ($P < 0.001$). The proportion of students who experienced mistreatment increased from 11% to 53.6% among those in the 1st and 5th year, respectively ($P < 0.001$).

Discussion

Repeated evidence that medical students are subjected to considerable stress has been published over the past decades^[17,26-28]. A major stressor brought to the fore in this study was a recent experience of mistreatment/abuse. This stressor was experienced by more than a third (35.5%) of the medical students interviewed. This figure was lower than what was observed in a study by Shoukat and colleagues in Pakistan^[2] and Owoaje *et al.*, in South western Nigeria,^[24] where almost all the students interviewed experienced one form of abuse or the other. This may be attributable to the fact that in Owoaje *et al.*, study only final year students were included in the study. Also abuse or mistreatment tends to be more prevalent in the clinical levels compared to the pre-clinical levels of study.^[1,3] The commonest form of abuse experienced by the undergraduate medical trainees in this study was verbal. These findings were consistent with what was observed in similar studies from different parts of the world.^[1,4,8,24-25]

Although students, lecturers, resident doctors and other staff were implicated in this form of abuse, the commonest perpetrators of this form of abuse were consultants. This may be attributed to the fact that the consultants or

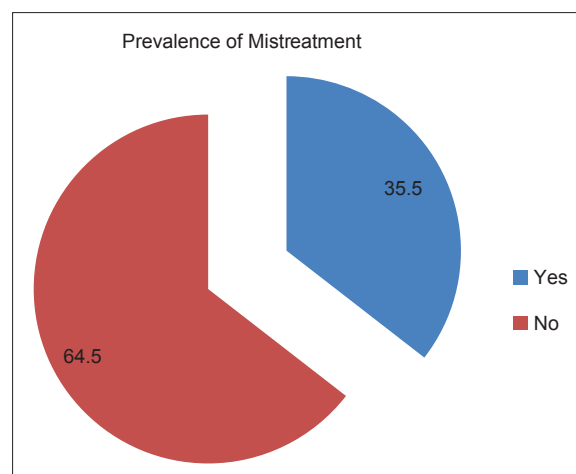


Figure 1: Prevalence of mistreatment

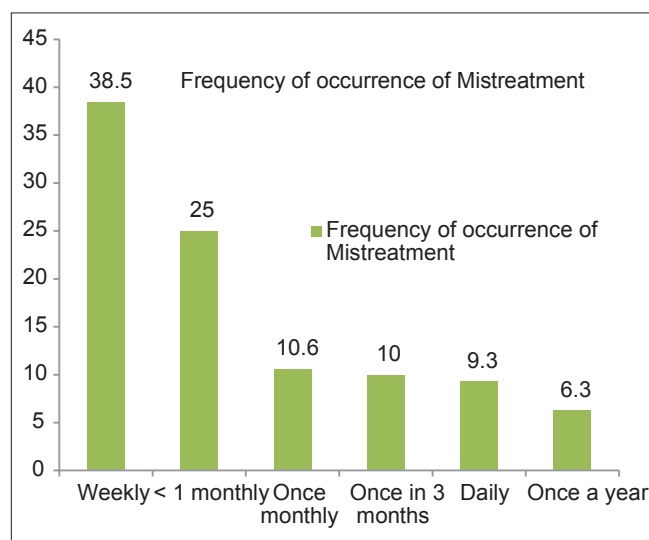


Figure 2: Frequency of occurrence of mistreatment among respondents ($n = 160$)

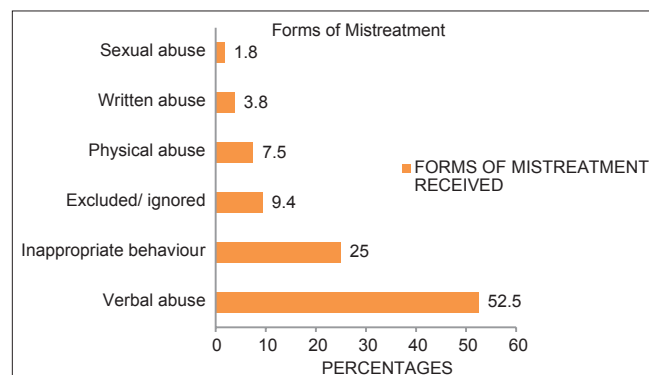


Figure 3: Forms of mistreatment/abuse experienced by respondents ($n = 160$)

senior doctors are the ones with the highest degree of authority in our set up of clinical rotations with almost no checks and balances, so they tend to misuse the given authority.^[2]

Consistent with the findings of other studies, significantly higher proportions of students in the clinical years of study had experienced at least one form of mistreatment.^[1,3,24] This was also more prevalent amongst medical students in the 5th year on clinical rotations in Paediatrics and Obstetrics/Gynecology compared to those in the 4th year who have just begun their clinical rotations in Medicine and Surgery. This finding is in agreement with what was observed in similar studies.^[19-20]

In the present study, females were more likely than males to be victims of mistreatment or bullying though the association was not significant. This finding was in agreement with some studies conducted in the US^[3,19,29] but at variance with many studies which reported males being more prone to abuse compared to females.^[1,8,30] In addition, those aged more than 25 years were more likely to experience abuse amongst this study population. This may be due to the fact that the older students were more commonly seen in the clinical years.

Reporting of mistreatment was quite low in this study where only about a tenth (11.8%) of students who had recent experience

of abuse/mistreatment reported the incident or discussed with close associates. The main reason for non-reporting of mistreatment was because it was perceived as a normal occurrence by the majority of students interviewed. This reason was also observed in the southwest by almost half of final year medical students. A possible explanation for under reporting could be a lack of adequate support for those who report any form of mistreatment and possible fear of being victimized. In this study, majority were not aware of any support in place for those students who report mistreatment. The students reporting mistreatment, also asserted that the medical school did not have effective stress coping mechanisms for the students and therefore could not help them deal effectively with stress. This is a complaint which has been repeatedly mentioned and the need for better support systems has also been emphasized by earlier local and international studies.^[20,31-32]

Although this study provides useful information regarding a very sensitive area which has received little or no attention in Nigeria, there are certain limitations. Medical student's abuse/mistreatment is regarded as being subjective in nature, therefore individuals may tend to judge and categorize them according to their perceptions, this judgement may tend to differ amongst respondents. The retrospective cross-sectional nature of this study would also be subject to recall bias. Lastly, the report from one medical school cannot be generalised for all medical schools in Nigeria.

Conclusion

More than a third of undergraduate medical trainees experienced mistreatment, with verbal abuse being the most reported and medical consultants most implicated. Factors significantly associated with recent experience of mistreatment were being in the clinical level of study and aged above 25 years. However, reports of these incidents were quite low. The authors therefore recommend the provision of adequate support for students who report any form of abuse, bullying or mistreatment during the course of their training and the organization of workshops/seminars for reorientation of lecturers and consultants on possible strategies to minimize abuse encountered by the students especially verbal abuse during their undergraduate training.

Table 1: Sociodemographic characteristics (n=451)

Variable	Frequency	Percentage	Mean \pm SD
Age (years)			
≤19	80	17.7	
20-24	200	62.1	
25-29	134	29.7	23.44 \pm 4.38
≥30	37	8.2	
Gender			
Male	288	63.8	
Female	163	36.2	
Marital status			
Single	437	96.9	
Married	14	3.1	
Residence			
On campus	233	51.7	
Off campus	218	48.3	
Level of study			
Year 1	82	18.2	
Year 2	75	16.6	
Year 4	184	40.8	
Year 5	110	24.4	

SD=Standard deviation

Table 2: Reports of mistreatment experienced/perpetrators

Perpetrator mistreatment	n (%)					
	Consultants	Doctors	Lecturers	Nurses	Other students	Other staff
Verbal abuse (n=320)	84 (18.6)	78 (17.3)	65 (14.4)	46 (10.2)	32 (7.1)	15 (3.3)
Physical abuse (n=50)	4 (8.0)	9 (18.0)	5 (10.0)	3 (6.0)	25 (50.0)	4 (8.0)
Inappropriate behavior (n=136)	12 (8.8)	18 (13.2)	47 (34.6)	26 (19.1)	15 (11.1)	18 (13.2)
Written abuse (n=29)	2 (6.9)	3 (10.3)	4 (13.8)	-	18 (62.1)	2 (6.9)
Excluded/ignored (n=97)	16 (16.5)	21 (21.7)	17 (17.5)	16 (16.5)	23 (23.7)	4 (4.1)
Sexual abuse (n=13)	1 (7.6)	2 (15.4)	4 (30.8)	4 (30.8)	-	2 (15.4)

Table 3: Response to mistreatment (n=160)

Variable	n (%)
Reaction to mistreatment	
None	79 (49.4)
Reported	14 (8.8)
Discussed with family and friends	65 (40.6)
Discussed with lecturers	1 (0.6)
Discussed with local organization	1 (0.6)
To whom was reporting done (n=81)	
Close friend	35 (43.2)
Colleague	23 (28.4)
Family member	20 (24.7)
Lecturer/consultant/doctor	1 (1.2)
Student body	1 (1.2)
Others, e.g., school security	1 (1.2)
Support for reporting mistreatment (n=451)	
Yes	45 (10.0)
No/don't know	406 (90.0)

Table 4: Sociodemographic variables and recent experience of mistreatment/abuse

Variable	Recent experience of mistreatment (n %)		χ^2	P value
	Yes	No		
Age				
≤25	93 (28.8)	230 (71.2)	22.2	<0.0001*
>25	67 (52.3)	61 (47.7)		
Sex				
Male	101 (35.1)	187 (64.9)	0.06	0.81
Female	59 (36.2)	104 (63.8)		
Marital status**				
Single	156 (35.7)	281 (64.3)		0.778
Married	4 (28.6)	10 (71.4)		
Level of study				
Year 1	9 (11.0)	73 (89.0)	43.5	<0.0001*
Year 2	18 (24.0)	57 (76.0)		
Year 4	74 (40.2)	110 (59.8)		
Year 5	59 (53.6)	51 (46.4)		

*Statistically significant, **Fishers exact

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