

The attitude and future career interest in psychiatry of medical students from the University of Maiduguri, North-eastern Nigeria

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Abstract

Background

There is a paucity of psychiatrists in Nigeria, with disproportionately fewer numbers practising in the northern parts of the country. The attitude of medical students in northern Nigeria towards the specialty should serve as a reliable indicator of the likelihood of redressing this shortfall in personnel, in the near future.

Objectives

To evaluate the attitude of 5th year medical students toward psychiatry and the correlation between current attitude to psychiatry and future intentions to pursue a career in the specialty.

Method

A cross-sectional survey of 100 fifth year medical students of the University of Maiduguri, Nigeria, was conducted using the 30-item Attitudes to Psychiatry (ATP-30) Scale and a brief socio-demographic questionnaire.

Results

The students had a mean ATP- 30 score of 89.0 (s.d = 6.6, range = 76- 111). There was no gender difference in scores (♂ vs. ♀ = 88.6 vs. 90.0, $X^2 = 25.9$, $p = 0.305$) but significant association was found between the age group 26 – 30 years and positive attitude towards psychiatry ($X^2 = 17.4$, $p = 0.015$). The statement, ‘I will like to be a psychiatrist’ and ‘intention to specialise in psychiatry’ were found to be significantly correlated (Spearman’s rho = 0.56, $X^2 = 0.54$, and $p < 0.001$).

Conclusion

There is the need for proactive engagements of medical students and ensuring adequate and effective exposure to psychiatry during undergraduate training. This should help in reversing the negative attitude and stigma often associated with psychiatry. In the long term, a positive attitude towards the specialty should result in increased numbers seeking to make a career in the field of psychiatry.

Key words

Medical students, attitude, career intentions, psychiatry

Introduction

The population of Nigeria is currently estimated to be about 140 million people, but there are inadequate numbers of available medical professionals to cater to the health needs of the nation. The situation is even direr for mental health, with a Psychiatrist to population ratio of 0.09/100,000; while the ratio for the United Kingdom is about 9-25/100,000. This roughly translates to one Psychiatrist for every one million people in Nigeria. Furthermore, the majority of available Psychiatrists in the country are based in the southern parts of Nigeria¹. This situation is however, not exclusive to Nigeria but is also a common feature in most other African countries, such as Kenya, which has a ratio of one psychiatrist to 500,000 people².

The inadequate numbers of available doctors to cater to the health needs of the populace is a global problem, which accounts for the phenomenon of migration of medical professionals from the developing world to the developed world. This problem is only being partially addressed by increasing the number of medical students and schools, but this does not address the more specific shortage of psychiatrists³. Previous reports in the literature had evaluated the career choices and preferences of medical students and newly graduated doctors^{4,5,6}, including studies from the developed world^{7,8} and from Africa^{9,10} especially with respect to the attitude of medical students towards psychiatry. A positive attitude to psychiatry is unsurprisingly, reported to be associated with the likelihood of becoming a psychiatrist¹¹. Such positive attitudes among medical students tend to make them more responsive doctors to the psychological dimension of physical

illness, even when they eventually practice in other specialties other than psychiatry¹¹.

Some students may have more favourable attitudes to psychiatry a priori, even before their clinical attachment. A study in the United Kingdom found that female students had significantly more favourable attitudes at the beginning of their psychiatric attachment¹². A Nigerian study found that an extension of the time medical students spent on their psychiatric clerkship may actually improve their attitude⁹ towards psychiatry but another study reported no difference¹⁰. A family history of mental illness has also been reported to be significantly associated with the choice of psychiatry as a career¹³.

Previous studies investigating the attitudes of medical students towards psychiatry have consistently shown that they hold a number of negative views about the specialty. A study from Chile reported that psychiatrists were considered by the students to be emotionally unstable, confused and lower in competence than surgeons and physicians¹⁴.

However, despite the numerous reports in the literature on this subject, the situation among medical students in northern Nigeria is yet to be reported as the few studies from Nigeria have been conducted in the south. This study aims to evaluate the attitude of medical students in Maiduguri, North-Eastern Nigeria towards Psychiatry and their interest in pursuing a career in the specialty.

Methods

Participants

A cross sectional survey on a convenience sample of 100 fifth-year medical students of the College of Medical Sciences, University of Maiduguri, North-Eastern Nigeria was carried out during their psychiatric posting with the Federal Neuropsychiatric Hospital, Maiduguri. This was conducted via questionnaires administered by self report. The survey was voluntary. Ethical clearance was obtained from the Ethics Committee of the University of Maiduguri before the students were approached. Informed consent was obtained from the students, after the study objectives had been explained to them and confidentiality was assured by not requesting for the names of the student anywhere on the survey.

Measures

Attitudes to psychiatry were measured using the 30-item Attitudes to Psychiatry (ATP-30) Scale⁷. This instrument has been used to assess the attitudes of students toward psychiatry in Western countries⁷, and in Nigeria^{10, 11}. The scale measures attitude using a 5-point Likert scale with questions about attitude to psychiatric patients, illness and treatment, psychiatrists, psychiatric institutions, teaching, knowledge, and career choice. It generates a global score between 30 and 150, with higher scores indicating more favourable attitudes to psychiatry. Demographic data recorded were age and gender.

Career preference was measured using a 5-item rating scale³, with possible responses ranging from ‘definite intention to pursue’ to ‘definite intention not to pursue’. Students were asked about intent to pursue individual specialties and, using the same scale, about their intent to pursue a medical career.

Statistical analysis

The data obtained was analysed using statistical packages EPI info (2005) and the SPSS v. 11.0. Comparisons were made between ATP- 30 scores for all the groups using the non-parametric Kruskal- Wallis test. Spearman’s rho correlation was also calculated to identify the relationships between attitudes to psychiatry and indicated intentions to pursue different medical specialties as a future career. Statistical significance was set at 5% level, with a correlation coefficient at or above 0.20.

Results

The questionnaire was completed by 98 out of the 100 students sampled, out of which only 83 provided usable data. Forty-one (49.4%) were female and 94.8% were between the ages of 21- 30 years.

The students had a mean ATP- 30 score of 89.0 (s.d = 6.6, range = 76- 111). There was no gender difference in scores (♂ vs. ♀ = 88.6 vs. 90.0, $X^2 = 25.9$, $p = 0.305$) but the age group 26 – 30 years was found to be significantly associated with a positive attitude towards psychiatry (Pearson' $X^2 = 17.425$, $p = 0.015$). Similarly, a significant correlation was found between this age group and general knowledge of psychiatry (Pearson's $X^2 = 26.667$, $p = 0.032$). See Tables 1 and 2.

A very significant association was found between 'I will like to be a psychiatrist' and intention to specialise in psychiatry (Spearman's $\rho = 0.56$, Pearson' $X^2 = 0.54$, and $p < 0.001$). Similarly, a positive correlation between a positive attitude towards psychiatry and illness/psychiatric treatment was also found (Pearson's $X^2 = 30$, $p = 0.012$).

Students indicated that they found more than one career choice to be '*very attractive*', and therefore, the numbers add up to more than the total number of students. There was a definite intention by 5.6% to study medicine at postgraduate level. The students who had firmly decided against postgraduate specialization made up 28.4%, while the rest were undecided.

On the basis of expressed '*definite intention*' to pursue a career in a given specialty, the most popular career choice was radiology (19.3%) while the least was genito- urinary medicine (0.0%). However, utilizing the expressed intention of '*definitely not*', as an indicator of specialties strongly disapproved of, by the students, geriatric medicine was highest on the list (48.9%), with psychiatry coming as the second least disapproved specialty (14.3%).

Table 1: Attitudes of the medical students toward psychiatry

ATP- 30 Score	Number	Percentage
<90	45	54.2
90- 99	33	39.8
100- 109	4	4.8
>109	1	1.2
Total	83	100.0

Total score = 7387, mean = 89.0, range = 76- 111, s.d = 6.6, Total respondents =98, Total respondents after exclusion due to absent response = 83

Table 2: Attitudes of the medical students to specific aspects of psychiatry

Attitude	Mean scores	
	Male	Female
Psychiatric patient	7.4	7.5
Illness & treatment	16.6	16.4
Psychiatrist	16.5	16.6
Psychiatric hospital	6.1	6.1
Psychiatric training	11.6	11.3

General knowledge	33.1	34.4
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Table 3: Medical students' intention to pursue postgraduate careers in medicine and preference for individual specialities

Specialty	Definitely not	Not very attractive	Very attractive	Definitive choice	Total
Paediatrics*	14(15.2)	31(33.7)	39(42.4)	8(8.7)	92
Surgery	14(15.4)	26(28.6)	41(45.1)	10(11.0)	91
Psychiatry*	13(14.3)	29(31.9)	41(45.1)	8(8.8)	91
Internal Medicine*	14(16.1)	20(23.0)	40(46.0)	13(14.9)	87
Laboratory Medicine*	21(23.1)	31(34.1)	34(37.4)	5(5.5)	91
Pathology	13(14.9)	35(40.2)	35(40.2)	4(4.6)	87
O&G	19(21.1)	22(24.4)	37(41.1)	12(13.3)	90
Infectious Diseases*	33(36.3)	38(41.8)	18(19.8)	2(2.2)	91
Ophthalmology	29(32.6)	40(44.9)	19(21.3)	1(1.1)	89
Anaesthesia	41(47.1)	35(40.2)	10(11.5)	1(1.1)	87
Ear, Nose and Throat	33(37.9)	38(43.7)	15(17.2)	1(1.1)	87
Dermatology*	34(39.1)	35(40.2)	16(18.4)	2(2.3)	87
Radiology	6(6.8)	20(22.7)	45(51.1)	17(19.3)	88
Genitourinary Medicine*	30(34.5)	44(50.6)	13(14.9)	0(0.0)	87
Medicine for the Elderly*	44(48.9)	29(32.2)	15(16.7)	2(2.2)	90
Total	358(26.8)	473(35.4)	418(31.3)	86(6.4)	1335
Medicine as a whole	203(28.4)	257(35.9)	216(30.2)	40(5.6)	716

*Specialties under medicine

Discussion

The response rate of 83% was very good, and much better than the 58.2% response rate from a similar study in Kenya, which utilized the same instrument¹⁵. The better response in this study may be as a result of the fact that the students were given adequate time to complete and return the questionnaires, unlike the study from Kenya where the students were given the questionnaires to fill just before the start of a lecture which may have put them under some pressure.

Our finding that the fifth-year medical students have a negative attitude towards psychiatry only confirms previous reports. Their mean ATP-30 score was 89.0, a marked contrast to a previous finding in southern Nigeria¹⁰, that reported a mean ATP -30 score of 103.6 among medical students of the University of Calabar. This difference in attitude between students from Calabar and Maiduguri may be explained by the long tradition and history of psychiatry in Calabar, where the first Psychiatric Asylum in Nigeria was established in 1903¹⁶. The Federal Neuropsychiatric Hospital Maiduguri, on the other hand, is less than two decades old and the specialty still appears novel to medical students and practitioners alike, in this study setting.

Even though, psychiatry continues to be an unpopular specialty among the medical students, there appears to be a promising future resulting from a favourable change in attitude towards the specialty. There are a few pointers in this direction from our findings. Firstly, on the basis of expressing the intention '*definitely not*', to enter a particular speciality, the specialties that

were not strongly disapproved of, were radiology and psychiatry. Secondly, a positive attitude towards psychiatry correlated well with indicated likelihood of becoming a psychiatrist in the future. Finally, female students had a significantly more favourable attitude towards training in psychiatry, indicating perhaps, that we are more likely to see more females in psychiatry in the near future than males.

These glimmers of hope may be attributable to the fact that over the past 5 years, there has been a more organised and systematic undergraduate psychiatric training at the University of Maiduguri Medical School, resulting in heightened awareness of unmet need for psychiatry among the students.

However, an intervention study elsewhere had reported that there was little evidence that better undergraduate education and exposure to psychiatry, results in improved attitude to the specialty¹⁷. This is however, only one study which may need to be replicated to confirm the veracity of their findings.

The students rated their definite intention of pursuing psychiatry at a similar level to paediatrics (8.8% and 8.7%, respectively). A previous study³, had reported a definite intention of pursuing psychiatry at a similar level to general medicine (12.4% and 12.2%, respectively).

An earlier study reported that prejudice and poor information may deter people from entering psychiatry and pathology¹⁸. The influences determining the final choice of career of a medical student are complex and multi-factorial, and studies of these influences have been a major part of

research in medical education¹⁹. The importance of the medical school curriculum itself in influencing the choice of specialty has been debated by researchers²⁰, but many studies have emphasised the importance of clinical influences at medical school, in particular the psychiatric clerkship or ‘firm’. Factors cited most frequently in positively influencing the choice of psychiatry include the psychiatrist-patient relationship, emphasis on treating the ‘whole person’, amount of patient interaction, and positive experiences with members of the psychiatric faculty or department²¹.

Another finding from this study, with important implications was that the fifth-year medical students were not clear on what they intend to do after undergraduate training. Only 6.4% were able to state a definite intention to go into a specific speciality while also finding another five specialities including psychiatry very attractive. The implication of this finding is the need for career guidance and counselling about the various specialties, their requirements and the prospects therein, for medical students. This should help to guide their subsequent decision making processes. Specifically too, adequate exposure to psychiatry during their rotation may also help to improve their attitude towards the specialty.

In conclusion, medical schools need to be proactive in providing information, career advice and positive role models as part of undergraduate education. This may counteract negative impressions and stigma associated with specialties like psychiatry.

A larger study involving a number of medical schools in the region or nationwide may produce further interesting results. The findings from this study indicate that while there might be a current shortage of psychiatrists in

the country and specifically in the northern parts, there is hope that this situation will gradually be reversed in the near future.

The limitations of this study were the small sample size, the fact that only 5th year students were included and subjects were not selected using probability methods. The study findings may therefore not be truly reflective of the attitudes of all the medical students in the University of Maiduguri.

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