FACTORS THAT COULD INFLUENCE MEDICAL STUDENTS' CHOICE OF PSYCHIATRY AS A CAREER: A POTENTIAL OPPORTUNITY FOR IMPROVING MENTAL HEALTH CARE ACCESS IN NIGERIA.

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ABSTRACT

Background: Mental disorders are quite prevalent and cause significant burden and disabilities. The access of much of the world's population, especially in low and middle- income countries (LMICs), to mental health services is inadequate despite the enormous needs for those services. There is a potential opportunity in recruiting medical students to take up psychiatry as a career to ensure the future of mental health services delivery in Nigeria. This study examines the factors that determine the choice of specialty, especially psychiatry, with the aim of improving mental health care delivery. **Materials And Methods**: A cross-sectional study of medical students from the University of Maiduguri to determine factors that affect their career choices with special emphasis on psychiatry. **Results**: Participants in the study were 117 students mean age of 26years ± 2.9 SD. Majority were males (66.7%). Most were fifth year students (83.8%). All participants said they would specialize and some of the factors they would consider were "sheer interest" and clinical man-hours required in 41.9% and 23.1% respectively. Obstetrics and gynecology (O&G) had the highest number of prospective specialists followed by Surgery, Internal medicine, and Pediatrics in 27.4%, 22.2%, 15.4%, and 12.8% respectively. Laboratory medicine and Psychiatry, respectively, trailed with 6.0% and 5.1%. Most (54.7%) would consider Psychiatry as a second option while 45.3% wouldn't. "Longer duration of Psychiatric clinical posting" as well as "more mentoring" will make them consider psychiatry (60.6% and 68.3% respectively). Only 29.1% of the respondents were discouraged by Stigma from considering Psychiatry. There was association between potential specialty and sex of the students (χ^2 =23, p=0.028). There was also significant association between being Muslim and considering psychiatry as second option (χ^2= 6.2, p= 0.013) with odds ratio of 2.74 and (95% CI, 1.23- 6.12). **Conclusion**: Medical students could be encouraged to take up psychiatry as a specialty by paying attention to the factors that determine how they choose a specialty and the factors that may encourage or dissuade them from taking up psychiatry. This will have far reaching positive consequences towards improving the population access to mental health services.

KEYWORDS: Medical students, Career, Choice, Factors, Access, Mental health

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INTRODUCTION

Mental disorders are quite prevalent with significant burden contributing more than 10% of the global burden of disease[1]. This dismal picture would only worsen as mental disorders are projected to become one of the leading causes of disability by 2030[2]. Most people with mental disorders, however, do not receive treatment for the illnesses they suffer from. This has resulted in the adoption of the mental health global action programme (mhGAP)[3] by the world health organization (WHO) in order to close the wide gulf that exists between the persons with mental

disorders who receive treatment and those who do not, and the actions needed to close the gap. The discrepancy is even wider in LMICs. In Nigeria, for instance, only about 8% of patients with mental disorders get treatment. Up to 80% of people with serious common mental disorders in Nigeria did not get treatment in the preceding 12 months and even those that received treatment it was sub-optimal in quality[5].

The world health organization (WHO) in response to the wide treatment gap has championed the mental health global action programme(mhGAP) which is essentially a number of initiatives that aim to ultimately close the gap in mental health especially in LMICs of the world[3]. One of those initiatives includes integrating mental health into primary health care. This has the potential promise of bringing mental health services to most people who live with mental disorders. This is necessary given the relative dearth of mental health professionals in sub-Saharan Africa[6,7]. The northeastern part of Nigeria with a population of over 18 million has only one mental health hospital, the neuropsychiatric hospital Maiduguri[8].

The effort by the WHO of integrating mental health into primary health care (PHC), while very necessary and timely at the moment considering the dearth of mental health professionals especially in low and middle income countries, should at best be considered an interim measure in the ultimate quest for providing equitable, readily available and accessible mental health services to the whole population of the globe. There is therefore the need to look for longer lasting solutions to the problem. This is very urgently needed considering the fact that even when mental health is successfully integrated into primary health care, it would take professionals to oversee the success of the whole process regardless of the integration model employed whether linkage or enhancement. Psychiatrists would be needed to educate the PHC workers or to treat those patients that they refer to tertiary centers for more expert management[9].

This study examined factors that determine medical students' choice of psychiatry as a career. The world psychiatric association (WPA)[10], as part of its 2008-2011 action plan, had indeed issued a call for research into the factors that facilitate or hamper the choice of psychiatry as a career by medical students. It is sad no note that as yet not much has been done towards achieving that goal. Most of the studies concerning medical students and psychiatry in Nigeria have been centered on medical attitudes towards mental illness[11-13].

MATERIALS AND METHODS

The study is cross-sectional in design and surveyed medical students of the University of Maiduguri medical school. Informed consent was obtained for all participants. None of the study participants was referred to by any identifying names or codes and same was explained to them. The study uses a questionnaire designed by the first author (YMM) which captured demographic information as well as information on potential field of specialization, whether they would consider psychiatry as a career and whether factors like: duration of psychiatric clinical rotation; improved mentoring; stigma etc would facilitate or hamper their choice of psychiatry as a career. Each of the factors had a Likert scale-like responses that ranged from "strongly disagree" through "neither agree nor disagree" to "strongly agree".

The data were analyzed using the statistical package for social science (SPSS) version 20.0. Categorical data were summarized using frequencies and percentages while mean and standard deviation was used for continuous data. Chi-square (χ^2) was used to test for statistically significant differences or lack thereof between categorical data. The study protocol was approved by the Research ethics committee of the Federal Neuro-psychiatric Hospital Maiduguri.

RESULTS

In all, 117 medical students took part in the study with mean age of 26 years (SD =2.9). Males made up 78 (66.7%) of the sample while Muslims constituted 80 (68.4%) and the remaining 31.6% were Christians. An overwhelming majority (83.8%) of the students were in their fifth year while the rest were in first, fourth and sixth years in medical school as depicted in table 1

Table 1: Socio-demographic characteristics

Socio-demographic characteristics		Frequency (N)	Percentage
Gender	Male	78	66.7
	Female	39	33.3
Religion	Islam	80	68.4
	Christianity	37	31.6
Tribe	Hausa	22	18.8
	Kanuri	22	18.8
	Fulani	21	17.9
	Babur	13	11.1
	Yoruba	5	4.3
	Igbo	5	4.3
	Others	12	10.3
Level of study	First Year	4	3.4
	Fourth Year	11	9.4
	Fifth Year	98	83.8
	Sixth Year	4	3.4

One hundred percent of the participants invariably reported that they would undertake Postgraduate studies to specialize, what varies is their choice of specialty. The most popular specialty was Obstetrics and Gynecology (O&G) followed by Surgery, Internal medicine and Pediatrics making up respectively 27.4%, 22.2%, 15.4%, and 12.8%. Only 5.1% would consider psychiatry as a potential field of specialization but when asked whether they would consider specializing in psychiatry as a second option majority (54.7%) said yes.

Table 2: Distribution by intended fields of specialization

Specialty of choice	Frequency(n)	Percentage (%)
Internal Medicine	18	15.4
Surgery	26	22.2
Pediatrics	15	12.8
Obstetrics and Gynecology	32	27.4
Ophthalmology	2	1.7
Laboratory Medicine	7	6.0
Psychiatry	6	5.1
Anesthesiology	1	0.9
Community Medicine	1	0.9
Family Medicine	3	2.6
Other	2	1.7
Radiology	3	2.6
Nuclear Medicine	1	0.9
Total	117	100

Table 3 shows the factors that will influence choice of field of specialization by participants and these include: "sheer interest" (42.9%) and "clinical man-hour requirements" (23.1%). Other factors considered were perceived "prestige" of the specialty (17.9%), whether the specialty was perceived as being a "rare specialty" (12.0%).

Table 3: Factors that determine choice of specialty

Factors	Frequency (n)	Percentage (%)
Perceived prestige	21	17.9
clinical man-hour requirements	27	23.1
Rare specialty	14	12.0
Sheer interest	49	41.9
Other	6	5.1

Fifty three (45.3%) of the students reported that they were not at all likely to do psychiatry. There was only one (0.9%) student who was extremely likely to choose psychiatry as a career. The rest of the participants are slightly likely 19 (16.2%), moderately likely 29 (24.8%), and considerably 15 (12.8%) likely to take up psychiatry as career choices.

Improved mentoring was agreed to be important in choosing psychiatry by 53.8% and strongly agreed by 14.5% of the students. More than half of the students (53.8%) agreed that when exclusive allowances were given to psychiatrists it would make them consider psychiatry, 21.4% neither agreed nor disagreed. The rest of the students disagreed that exclusive allowance would encourage them to consider psychiatry as a career option. Stigma was also reported to be a factor that students would consider in choosing psychiatry as a career and 29.1% of the students would be discouraged from taking up psychiatry, 53.9% disagreed and 17.1% neither agreed nor disagreed.

Table 4: Factors that may determine the choice of psychiatry as career

Factors		Frequency (n)	Percentage (%)
Duration of psychiatry rotations	Don't know	13	11.1
	Strongly disagree	10	8.5
	Disagree	23	19.7
	Agree	50	42.7
	Strongly agree	21	17.9
Improved Mentoring	Don't know	14	12.0
	Strongly disagree	8	6.8
	Disagree	15	12.8
	Agree	63	53.8
	Strongly disagree	17	14.5
Exclusive allowances	Don't know	25	21.4
	Strongly disagree	15	12.8
	Disagree	42	35.9
	Agree	21	17.9
	Strongly agree	14	12.0
Stigma in psychiatry	Don't know	20	17.1
	Strongly disagree	16	13.7
	Disagree	47	40.2
	Agree	25	21.4
	Strongly agree	9	7.7

Table 5 shows the attitudes of the medical students towards the role of psychiatrists in management of mental illness.

Table 5: students' attitude towards psychiatric treatment

Factors		Frequency (n)	Percentage (%)
Mentally ill do not need doctors to treat mentally ill patients	Don't know	1	0.9
	Strongly disagree	59	50.4
	Disagree	53	45.3
	Agree	3	2.6
	Strongly agree	1	0.9
Mental disorders are best treated by traditional or religious healers	Don't know	15	12.8
	Strongly disagree	43	36.8
	Disagree	53	45.3
	Agree	4	3.4
	Strongly agree	2	1.7

Socio-demographic correlates of the factors involved in choosing psychiatry

Gender was significantly associated with the factors that are considered in the choice of psychiatry (χ^2= 10.6, *df* = 4, *p*= 0.031). There was no statistically significant association between gender and whether medical student would ever consider psychiatry as second choice (χ^2= 0.017, p= 0.896). There was no gender difference in considering whether the longer duration of psychiatry clinical rotation was important in making them choose psychiatry as a career (χ2= 3.7, p= 0.454), nor was different age groups associated with considering longer duration of clinical rotation (χ^2 = 4.7, p= 0.321). Being a Muslim was found to be significantly associated with whether students would consider psychiatry as a second career option (χ^2= 6.2, p= 0.013) with odds ratio of 2.74 and (95% CI, 1.23- 6.12).

DISCUSSION

In this study, all participants indicated intention and interest in postgraduate training to specialize in different chosen fields of medicine. This is important considering the relative dearth of specialists especially in fields like psychiatry in Nigeria. In the north-eastern part of the country there is only one specialist mental health hospital with less than 10 psychiatrists that cater for mental health needs of close to 19 million people[8].

Despite this increased interest in postgraduate training among medical students, mental health did not form one of the three most chosen specialties. The top three specialties of choice for the students were: Obstetrics and gynecology (O&G), Surgery and Internal medicine in that order. These three most chosen specialties together with Pediatrics form the four major specialties and minimum requirement for internship in Medicine and subsequent full registration as a medical practitioner in Nigeria. This may explain the reason why they were the most commonly preferred. The choice of psychiatry as a career option was indicated by only 5.1% of the participants. Indeed a survey of UK medical school graduates showed that 4-5% of the students chose psychiatry and trend didn't change much more than two decades later[14]. Similar results were reported of psychiatry[15] being one of the least popular clinical specialty with associated misperceptions about psychiatry. This would appear discouraging considering the current dearth of psychiatrists and the disproportionately high prevalence of mental disorders globally and in Nigeria.

The most commonly reported factor considered in the choice of a career was the interest that they had in the specialty. Time commitment as well as perceived prestige was also an important factor. It appears therefore that psychiatry would be considered by more students if it was made to be interesting as well as made to appear prestigious. Medical students in Australia reported that the least attractive part of psychiatry was its low prestige among the medical community[16]. It is rather paradoxical that while students considered clinical man-hour requirements in a particular field as important if they were to choose the specialty were also considering O &G as the most frequent field of choice. This probably suggests that the students may likely consider psychiatry as a career option in place of those specialties that require a lot of time commitment such as surgery or O&G during their compulsory one year houseman-ship when they would be exposed to the rigors and realities of their earlier career choices.

More students agreed that longer duration of exposure to clinical psychiatry would be important in helping them consider psychiatry. This perhaps would play the dual roles of affording the medical students more knowledge of mental disorders which would engender positive attitude towards psychiatry, as well as making the specialty interesting therefore improving their overall positive rating of psychiatry. This suggestion is at variance with a study that found no statistically significant effect of psychiatry

clerkship on medical students' attitude towards psychiatry[17]. Other studies however showed a positive impact of psychiatry clinical rotations on attitude towards mental illness and psychiatry among medical students[18]. This may have implication in the design or revision of the medical students' curriculum to allow for optimal exposure to behavioral sciences generally.

Improved mentoring was identified as important factor as most of the students agreed that better mentoring in psychiatry would make it more likely for them to choose to specialize in psychiatry. Improved mentorship would no doubt play a vital role in the career of medical students and young doctors. Indeed evidence suggests that optimal mentorship improves personal development, career guidance as well as career choice of young doctors and medical students[19].

Stigma has been an issue in the field of psychiatry where people in the community are readily willing to stigmatize against the mentally ill[20-23]. This stigma however does not stop on the mentally ill alone as people including doctors tend to stigmatize against psychiatrists[24-26], perhaps, due to poor knowledge of behavioral sciences. The students in this study were also affected by this factor, but luckily less than a third of them agreed that they could be hampered by stigma from taking up psychiatry. Medical students were particularly negatively influenced by the 'anti-psychiatry' views of non-psychiatric doctors and peers in a study in America[27].

It is impressive to note that less than 5% of the study sample agreed or were undecided to the statement: 'mentally ill persons do not need doctors to treat them'. Considering some of the study participants were first year medical students who have had no contact with clinical medicine generally let alone clinical psychiatry, this proportion is, therefore, likely to be even lower if all the students have had contact with psychiatry.

What is rather discouraging is the fact that some of the respondents, slightly above 5%, believed that mental illnesses are better treated by traditional or religious healers than by psychiatrists. This may also be amenable to change with better exposure to clinical psychiatry.

An interesting finding was the association between religion and likelihood of choosing psychiatry as a second option. This finding is as interesting as it is unusual. There were no other socio-demographic associations with the studied factors.

The factors that determine the choice of psychiatry among medical students such as the influence of stigma, effect of mentoring, duration of clinical psychiatry rotations should be considered with a view to improving the number of students taking up psychiatry as a career option. Medical students could be encouraged to take up psychiatry as a specialty by paying attention to the factors that determine how they choose a specialty and the factors that may encourage or dissuade them from taking up psychiatry. This could have far reaching positive consequences towards improving the population access to mental health services.

LIMITATIONS OF THE STUDY

1. The study uses convenience non-random sampling of the study participants. This may have introduced some selection bias as most of the participants were in their fifth year after having completed their psychiatry clinical rotations.
2. Other factors may be important in deciding which career option to take after medical school which may not have been considered in a study like this.

RECOMMENDATIONS

1. A more randomized study of the factors that influence career choices and importantly the choice of psychiatry would be relevant.

2. A qualitative inquiry in the form of focused-group discussions or key informant interviews would be more revealing of other factors that may have been overlooked. Young doctors especially house officers should also be considered in a study like this as they may be preparing for specialization.
3. The factors identified as important in determining the choice of psychiatry should be paid attention to in order to improve the number of doctors going in to psychiatry with the ultimate aim of closing the mental health care gap, most of which may be attributed to paucity of mental health workforce.

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