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Impacts of clinical psychiatric posting experience on specialization intention and associated factors among Nursing Science students

Stanley Njaka^{1,3}, Intan Idiana Binti Hassan^{1*}, Aaron Beryl Nwedu³, Raishan Shafini Binti Bakar² and Kueh Yee Cheng²

Abstract

Background Globally, there is increasingly high prevalence of mental disorders across all age groups and social classes with more being projected by 2030, but without commensurate resources for mental health care delivery especially in developing countries.

Purpose This study examined the impacts of clinical psychiatric posting on career choice in psychiatry among nursing students in Ebonyi state, Nigeria.

Methods A prospective cohort research design was used and data were collected using attitude towards psychiatry (ATP), mental illness clinician attitude scale (MICA-4) and researcher developed questionnaires on career choice in pre and post clinical posting approach. This study was conducted between November, 2023 to May 2024. A sample size of 400 students (with data collected before posting and after posting) were involved in the study. Data were coded, cleaned and analyzed using SPSS version 26. McNemar Test was used to determine effects of clinical posting on career choices in psychiatry. Simple and multiple logistic regressions were used to analyze data on determinants of career choices in psychiatry. The hypotheses (Null and alternative hypotheses) were tested at p-value < 0.05.

Results Psychiatric and mental health nursing was one of the least preferred specialty, 21(6%) respondents showed interest before clinical posting and 25(7.1%) after the posting. Commonly preferred specialty was pediatric nursing (20.5%), community health nursing (17.1%) and midwifery (17.7%). McNemer test showed no statistically significant differences in choice of psychiatry before and after clinical posting. Key determinants of career choices were interest in psychiatry (AOR = 16.06(95% Cl = 1.10, 14.96) P = 0.009), interest in community services (AOR = 4.01(95% Cl = 1.32, 12.20)P = 0.014), family influence(AOR = 13.76(95% Cl = 1.74, 108.57)p = 0.013) and job satisfaction(AOR = 0.10(95% Cl = 0.03, 0.26)P < 0.001).

Conclusion The researcher therefore concluded that clinical psychiatric posting has no significant impacts on career choices in psychiatry among nursing students in Nigeria. Interest of the students, family influence and job satisfaction were significantly associated with career choices among the respondents.

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Keywords Psychiatry, Career choice, Associated factors, Mental illness, Nursing students

Background

Globally, prevalence of mental disorders are on the increase across all age group and social class with more being projected by 2030, but without commensurate measures or resources for mental health care delivery [1, 2]. Mental disorders are very common in developing countries like Nigeria where there are poor access to mental healthcare due to lack of resources, lack of funding and other inhibitory factors [3-6]. In Nigeria, about 20% of over 200 million people living in the country suffer mental disorders [5]. More recent studies showed increasingly higher incidence of the disorders in Nigeria but without commensurate human resources for mental health care delivery [2, 7]. Despite alarming rate of mental disorders among the people, over 2/3 of patients with mental disorders globally do not have access to mental healthcare from healthcare workers due to lack of mental healthcare professionals, discriminatory attitudes and stigma [8]. In Nigeria, less than 0.6% of people with mental disorders receive care from mental health professionals due to lack of mental health professionals and poor funding of mental healthcare [9, 10]. In sub-Saharan African Countries, there is less than one mental health professional per one million people [5]. As reported by world health organization, there is no traceable record of available mental health professionals in Nigeria and there is poor research output on the status of mental healthcare delivery including human resources, nationwide prevalence of mental disorders and mental health funding in Nigeria [11]. More recently, evidence showed gross shortage of mental health professionals in Nigera [12]. This is a threat to the wellbeing of the citizens of the most populous country in Africa. This calls for research studies as to provide reliable evidence for policy advocacy and formulation.

Psychiatry and mental health is rarely an area favoured by healthcare providers, including medical and health sciences students thereby threatening future availability of human resources for mental health services delivery [13]. According to empirical evidence, nursing students are unwilling to specialize in psychiatric and mental health nursing as their career pathway, and only few nursing students chose psychiatric nursing as likely area of expertise when compared to other fields of nursing [14–18]. Globally, health sciences students have reported preference of children, emergency and intensive units over psychiatry as possible areas of career pursuit [13]. This lack of interest in this important aspect of healthcare could constitute a serious challenge to universal healthcare coverage of United Nations because it would exert negative influence on the healthcare delivery. This was attributed to some educational and personal factors such as knowledge of psychiatry, poor funding, family influence, clinical experience and public image of psychiatry among others [18]. Though other studies have been done on the concept in other countries [18–20], due to cultural diversity and country specific peculiarities in Nigeria as discussed above and the fact that there is paucity of literature on the concept in Nigeria need exist for this study.

Knowing that nurses play crucial roles in mental healthcare delivery like in other aspects of health and that nursing students are the future human resources for mental health services, there is need to assess their career preferences and determining factors. This will help to inform basis for policy formulation and interventions as to prevent projected healthcare workforce shortage of 10–15 million by 2030 [21–23]. There is also paucity of literature on the career preferences of nursing students from Nigeria. Secondly no existing research study has examined effects of psychiatric posting, an essential component of nursing training on students' career preference. It is therefore important to examine the training modality (psychiatric clinical posting) used in training the students to know if need exist for improvement as to enhance equitable distribution of human resources for healthcare delivery.

Aim of the study

This study Assessed impacts of clinical posting on choice of career in psychiatry among nursing students in four training institutions in Nigeria.

Study objectives

- 1. To determine the impacts of psychiatric clinical posting on choice of career in psychiatry among nursing students in Nigeria.
- To determine the factors associated with choice of career in psychiatry among nursing students in Nigeria.

Hypotheses

Hypothesis 1 Clinical psychiatric posting has no effects on choice of career in psychiatry.

Hypothesis 2 there are personal and professional factors associated with choice of psychiatry as career.

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Methods

Design

This study utilized non-experimental prospective cohort design to investigate changes in career choices following clinical psychiatric posting among nursing students from four institutions, where nurses are trained in Ebonyi state Nigeria. This study was conducted between November 2023 and May 2024. The questionnaires were adminitered twice in pre-test and post-test approach: before the students embarked on the clinical posting and immidiately after the conclusion of the posting (last day of the posting).

Participants

The respondents in this study were nursing students due for clinical psychiatric posting as at the time of the study. They were a total of 800 students in all the schools due for psychiatric posting in each year.

Inclusion criteria

The following criteria formed the basis for inclusion in this study.

- 1. The person must be a Nursing student within the area of this study.
- 2. The student must be due for psychiatric posting at the time of this study.

Exclusion criteria

- 1. Those nursing students who have had previous psychiatric experience (those doing degree in nursing after school of nursing, those students who are repeating the experience).
- 2. Those students who could not complete the period of posting for one reason or another.

Instruments for data collection

Data for this study were collected using standardized questionnaires which include attitudes towards psychiatry (ATP-18) questionnaire for data on attitudes towards psychiatry [33, 34]; mental illness clinician attitudes for nurses (MICA-4) was used for attitudes towards mental illness [35]. While data on career choice were collected using pre-tested questionnaire on career choices and determining factors based on existing literature. The experts in the field of psychiatry and nursing education who has experiences in scale development scrutinized the scale and their inputs used to modify the instrument. Pilot study was done to determine the suitability of the scale for the study purpose using other students outside the study group.

Sample size determination

Sample size for this study was determined according to the objectives of the study using power software. Objective 2: To determine the factors associated with career choices in psychiatry among Nursing students.

Below are the parameters used

Gender: female (control) and male (case)

Proportion in control (p⁰) (female)=55.8% (Economou et al., 2017).

Proportion in case (p [1]) (Male)=44.2% (expert opinion).

Significance level (α) = 0.05.

Power $(1-\beta) = 0.8 (80\%)$.

Dropout rate=20%.

Sample size=364.

Based on the calculations on each of the objectives, Objective 2 had the highest sample size under the gender (364). 10% drop out rate=36. Therefore, the overall sample size for this study was approximately 400. Therefore, 400 respondents were recruited for both pre and post clinical posting phases of the study.

Data collection

Data for this study were collected from the respondents before and after the posting using the questionnaires. One hundred students were sampled from each school using systematic random sampling. SPSS was used to randomly pick number two with which the sampling was done. The purpose of the study was explained to the respondents and consent form signed by those willing to participate. The sample frame (class list) was used to select every second person on the list as potential participants considering the inclusion and exclusion criteria. Following the sampling, the questionnaires were administered before the commencement of the posting and finally on the last day of the posting. The data collection was done from November 2023 to May 2024. Four hundred copies of questionnaires were administered before clinical posting and another 400 after clinical posting.

Statistical analysis

The data were entered into, cleansed and analysed using SPSS version 26. Descriptive statistics was applied to analyze the demographic variables and the career choices among the respondents. McNamar statistical analysis was conducted to determine the effects of psychiatric clinical posting on choice of psychiatry as career among nursing students. Simple and Multiple logistic regressions were utilized to assess the factors associated with choice of career in psychiatry among nursing students. P value < 0.05 was accepted as denoting statistically significant association. All the assumptions of the statistical tests were met.

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Results

Socio-demographic characteristics of the respondents

Table 1 presented the socio-demographic features of the respondents to this study. A total of 400 respondents

Table 1 Socio-demographic characteristics of the respondents (N=350)

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No 333 95.1	Yes		17	4.9
	No		333	95.1

were involved in this study (400 pre-posting and 400 after posting). Out of the 400 respondents, 350 returned completely filled and analyzable questionnaires making response rate of 87.5%. The mean age of the respondents was 23.96 with standard deviation (SD) 3.30. Nursing department of EBSU had 28.6%, being the highest followed by School of Nursing Uburu with 25.7% while Mater and FETHA had equal percentage of the respondents. Females dominated among the respondents with 72.6% while males had 27.4%. About 28.6% of the respondents had lectures in psychiatry before the posting while 33.1% had mentors in school. Majority of the respondents were not single (94.3%), belong to mental health club (0.6%), have had psychiatric experience before (4.9%).

Additionally, the highest family income among the respondents was 110,000-150,000 naira per month (28.9%). Most of the schools were located in urban (45.1%) and semi-urban area (46.6%). Occupationally, most of the parents of the respondents were civil servants (34.7%) followed closely by business (31.7%) and the least were healthcare workers (4.0%). (Insert Table 1 here).

Career choices before and after psychiatric clinical posting by respondents

As regards the choice of career among the respondents shown in Table 2below, in the pre-posting phase, pediatric nursing was the most preferred specialty area (20.5%), 17.7% chose midwifery while 17.1% preferred community health nursing. Peri-operative had 8.7% choice while Psychiatry had only 21(6.0%) respondents who chose it as career preference among the respondents.

Moreover, after the clinical psychiatric posting, the choice changed drastically with community health and intensive nursing being the most preferred specialty while psychiatry had a slight increase in the number of preference from 6 to 7.1%. However, preoperative nursing recorded a decline from 8.7 to 2.9% but remained the least preferred specialty area among the respondents.

Further statistical analysis using McNemar test to determine effects of clinical psychiatric posting on choice of psychiatry as career pathway did not show any statistically significant difference (p-value=0.653). (Insert Table 2 here).

Factors associated with choice of career in psychiatry (N=350)

As presented in the Table 3 below, simple logistic regression revealed that the following variables showed significant association with choice of career at p-value < 0.25: residence (p=0.126), level of study (p=0.194), lectures (p=0.194), mental health club (p=0.070), training duration (p=0.066), family income (p=0.093). while the following variables had significant association with choice of career at p-value < 0.05: school (p=0.044), interest

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Table 2 Career choices before and after Psychiatric Clinical posting by respondents (N=350)

	Before psychiatric clinical posting		After psychiatric clinical posting	
Specialty area	Frequency	Percentages	Frequency	Percentages
Psychiatric nursing	21	6.0	25	7.1
Midwifery	62	17.7	56	16.0
Pediatric nursing	82	20.5	67	19.1
Community health nursing	70	17.1	72	20.6
Intensive care nursing	50	14.3	72	20.6
Medical surgical nursing	55	15.7	48	13.7
Peri-operative nursing	30	8.7	10	2.9
Total	350	100	350	100
Changes in Proportional Choice of P	sychiatry as Specialty after psy	chiatric clinical posting.		
Test			P-value	
McNemar Test			0.653	

in community (p=0.017), family influence (p=0.005), interest in psychiatry (p=0.008), public prestige (0.044), influence of friends in psychiatry (p=0.015) and job satisfaction (p<0.001) while Other variables did not show any association with the choice of career in psychiatry.

These factors were entered into the multiple logistic regressions to determine the final model using forward and backward approach. Following analysis, the researcher selected the forward regression model as the fit model. From the final model, the following four factors remained significantly associated with choice of psychiatry as career: job satisfaction (p<0.001), Interest in psychiatry (p=0.044), family influence (p=0.013) and interest in community services (p=0.014). (Insert Table 3here).

Discussion

In line with literature on career choices among health sciences students [18, 24, 25], this study showed that career choices among nursing students in Ebonyi state, Nigeria favoured medical specialties and community health nursing while psychiatry was least preferred among nursing students in the various institutions with only 6% of the respondents considering psychiatry as a likely career choice. This has serious implication on the teaming population of people living with mental disorders in the country and globally. This implies that in nearby future the shortage of mental health care professionals might be more severe if nothing is done to change the situation and ensure equitable health workforce distribution across specialties. This finding further confirmed the projected shortage of human resources for healthcare delivery by 2030 21. To improve on this situation requires frantic efforts from educators and policy makers as to ensure universal healthcare covering all aspects of health as no aspect is less important than the others. This report is more threatening than the report of a similar study in India which showed 13% choice of career in psychiatry [26] but similar to the findings of a study in Singapore on career choices in psychiatry among Singapore students which reported 5% choice of psychiatry [25]. It also further confirmed the report of a review paper which stated that there was a gross shortage of mental health professionals in Nigeria [12]. The differences across studies and countries could be explained by the status of psychiatry, supports given to it, level of publicity among the society, level of exposure of the students and the overall national perception of the specialty [27]. Though there was an increase in the percentage of students willing to specialize in psychiatry after clinical psychiatric placement, the change was not statistically significant. This could be due to the short duration of the posting and the experiences of the students during the posting. Improving the duration of posting and their experiences may bring more significant increase in choice of psychiatry.

Findings revealed numerous determinants at preliminary stage but four key independent variables remained statistically significant in final model as determinants of career choices in psychiatry among the respondents. Interest in psychiatry (AOR=16.06 (95% CI1.10, 14.96) p-value=0.009) among the respondents determined to a great extent the likelihood of career choice in psychiatry and mental health nursing. Those respondents who had interest in psychiatry or who saw psychiatry as interesting were 16 times more likely to choose career in psychiatry than others. This implies that any effort geared at arousing the interest of the potential health professionals in this all important specialty will yield an increase in the choice of psychiatry as career and possibly the future availability of mental health professionals across countries. This is because evidence showed that the degree of efforts, supports and publicity given to any specialty is a key determinant of its status and choice among potential healthcare givers [28]. This result is in line with similar studies among health sciences students in other countries [25, 29].

Another important influencing factor of career choice in psychiatry revealed by this study was family influence Njaka *et al. BMC Nursing* (2024) 23:630 Page 6 of 10

Table 3 Factors associated with choice of career in psychiatry (N = 350)

Variables	Simple logistic regression			Multiple logistic regression		
	Crude OR (95%CI)	Wald	P-value	Adj.OR (95%CI)	P-value	
Age	1.06(0.94,1.19)	1.01	0.316			
School						
EBSU	1					
FETHA	1.44(0.58, 3.57)	0.60	0.44			
UBURU	0.21(0.04, 0.96)	4.05	0.044**			
AFIKPO	0.23(0.05, 1.09)	3.45	0.063*			
Gender						
Yes	1					
No	1.27(0.53, 3.04)	0.28	0.596			
Residence						
Urban	1					
Semiurban	0.49(0.19, 1.22)	2.34	0.126*			
Rural	0.30(0.04, 2.37)	1.30	0.255			
Parents' occupation						
Civil servants	1					
Farming	1.84(0.59, 5.69)	1.12	0.291			
Business	2.11(0.75, 5.91)	2.01	0.156*			
Health workers	< 0.001(< 0.001)	< 0.00	0.999			
Others	0.83(0.09, 7.25)	0.03	0.869			
Level of Study						
400 level	1					
200 level	0.57(0.25, 1.33)	1.69	0.194*			
School Location						
Urban	1					
Semi-urban	0.67(0.29, 1.56)	0.85	0.356			
Rural	0.37(0.05, 2.91)	0.90	0.343			
Lectures						
Yes	1					
No	0.57(0.25, 1.33)	1.69	0.194*			
Mentor						
Yes	1					
No	1.30(0.53, 3.20)	0.32	0.572			
Mental health club						
Yes	1					
No	1	3.29	0.070*			
	3.88(0.89, 16.82)					
Marital Status						
Single	1					
Married	1.48(0.32, 6.78)	0.26	0.612			
Psychiatric experience						
Yes	1					
No	1.07(0.35, 3.24)	0.01	0.905			
Interest in Comm. Serv.						
Likely	1					
Unlikely	0.29(0.11, 0.81)	5.67	0.017**	4.01(1.32, 12.20)	0.014**	
Training Duration				,		
Likely	1					
Unlikely	0.39(0.14, 1.07)	3.38	0.066*			
Family Income (Naira)	0.55(0.17, 1.07)	5.50	0.000			
10,000–50,000	1					
		0.22	0.564			
60,000-100,000 110,000-150,000	0.69(0.19, 2.44) 0.46(0.14, 1.56)	0.33 1.55	0.564 0.213*			
160,000-150,000	0.46(0.14, 1.56)	1.55 2.71	0.100*			
Above 200,000	0.28(0.06, 1.24)	2.83	0.093*			

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Table 3 (continued)

Variables	Simple logistic regression	on		Multiple logistic regression	
	Crude OR (95%CI)	Wald	P-value	Adj.OR (95%CI)	P-value
Family influence				•	
Likely	1				
Unlikely	0.06(0.01, 0.41)	7.97	0.005**	13.76(1.74, 12.02)	0.013**
Opportunity for practice					
Likely	1				
Unlikely	< 0.001(< 0.001)	0.00	0.995		
Interest in Psychiatry	, ,				
Likely	1				
Unlikely	0.07(0.01, 0.49)	7.09	0.008**	16.06(1.10, 14.96)	0.009**
Public Prestige					
Likely	1				
Unlikely	0.43(0.19, 0.98)	4.05	0.044**		
Influence of friends(psy.)					
Likely	1				
Unlikely	0.16(0.04, 0.70)	5.90	0.015**		
Perception of Nurses					
Likely	1				
Unlikely	0.20(0.05, 0.88)	4.52	0.034**		
Employment opportunity					
Likely	1				
Unlikely	1.11(0.43, 2.88)	0.05	0.831		
Working hours					
Likely	1				
Unlikely	0.79(0.33, 1.89)	0.27	0.602		
Salary					
Likely	1				
Unlikely	0.94(0.31, 2.83)	0.01	0.905		
Status of psychiatry					
Likely	1				
Unlikely	< 0.001(< 0.001)	0.00	0.995		
Skills related to area					
Likely	1				
Unlikely	0.99(0.39, 2.44)	0.00	0.974		
Academic opportunity					
Likely	1				
Unlikely	0.66(0.19, 2.26)	0.45	0.504		
Job satisfaction					
Likely	1				
Unlikely	6.93(2.80, 17.15)	17.50	< 0.001	0.10(0.03, 0.26)	< 0.001
Work-life balance					
Likely	1				
Unlikely	0.86(0.31, 2.38)	0.08	0.996		
Intellectual contents	, ,				
Likely	1				
Unlikely	1.24(0.48, 3.23)	0.19	0.660		
ATP Score	. , -,	1.04(1.00. 1.08)	4.05	0.044	
MICA Score		0.99(0.96, 1.03)	0.79	0.78	

^{** (}p-value < 0.05), *(p-value < 0.25). No multicollinearity, Hosmer Lemeshow test showed p=0.405 which is > 0.05, overall percentage classification is 92.9% which is above 80% required. Area under the curve=0.882. All the assumptions of multiple logistic regression are met

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(AOR=13.76(1.74, 12.02) p=0.013). Those students who were allowed to choose which specialty they desired as career area were 13.7 times more likely to choose career in psychiatric and mental health nursing when compared to those students whose career choices were influenced by their family members. This finding implies that the family members' view and perception about psychiatry go a long way to determining the choice of psychiatry among prospective healthcare professionals. Therefore every necessary effort must be put in place to address this situation as to improve human resources for mental healthcare delivery. This finding is in line with similar study in china which showed that the family members played key roles in the students' choice of career areas [30]. Though the result is similar, the situation is worst in developing nations like Nigeria where parents and other family members decide for students what to study or not to study. The result is in contrary to the result of same concept in Singapore which did not report family influence as determinant of students' career choices [31]. This difference among the studies could be accounted for by the differences in level of stigma and negative view attached to psychiatry across countries which has been reported to play key role in the perception of psychiatry and choice as career [25].

Additionally, interest community in services (AOR=4.01(95% CI=1.32, 12.20) P=0.014) showed statistically significant association with choice of career in psychiatry. Those students who had interest in community services were 4.01 times more likely to specialize in psychiatry than others. This therefore calls for urgent implementation of community based mental health services in developing countries where mental health services are still institutionalized. This would promote the acceptance of psychiatry among future healthcare professionals and even by the society. Locally drafted policy on community mental health services delivery is encouraged by this finding as this would promote public acceptance of the specialty [12]. This finding agreed with that of similar study by Ibrahim [32] which reported desire to help as a motivating factor to choice of career among health science students.

Job satisfaction (AOR=0.10(0.03, 0.26)p<0.001) showed a statistically significant association with choice of career in psychiatry. The students considered their satisfaction with the area of specialization is one of the factors to consider in deciding which area to major. Those who considered level of satisfaction with the works associated with a given aspect of nursing were 0.10 more likely to choice psychiatry if they envisage being satisfied with the roles and functions of the psychiatric nurses when compared to others. Though the adjusted odd ratio of job satisfaction was not much, it is a very important area of work people most times do not joke with. It is

therefore imperative that all aspects of nursing or healthcare should be made equally attractive as to enhance recruitment and retention in the areas. In Nigeria, there is undue emphasis placed on physical aspect of health to the detriment of psychological aspect [12]. This finding therefore, calls on policy makers and healthcare administrators to ensure equity in healthcare setting in terms of funding, remunerations and placement to ensure acceptance among future professionals.

Limitation

This study had some key limitations. Firstly, the study was conducted among nursing schools in Ebonyi state, Nigeria, therefore the result should be cautiously handled especially when referring to other states to avoid undue generalization.

Secondly, the study involved students in their final year, some of which may decide to change their decision regarding career choice in nearby future.

Relevance to clinical practice

The result of this study provided empirical evidence upon which policy on human resources for healthcare distribution could be made as to ensure equity in healthcare delivery. It is a call for healthcare administrators and policy makers to look inward into the welfare packages for various specialties in healthcare system especially in developing countries to ensure that whichever area one chooses, resources and other things required to ensure job satisfaction which promotes efficiency in care delivery are put in place. This implies that psychiatry should be made attractive to health science students just like other areas of health. More incentives may be considered for psychiatry as to enhance future professionals in it.

Interest in psychiatry was reported in this study as one of the key determinants of career choices among the students, therefore nurses and other mental health professionals should implement measures that would enhance the interest of the students in psychiatry as this would promote acceptance. When the students are on clinical posting, the available professionals should endeavour to get them involved in patients care and make their experiences worthwhile as this would make the area a preferred choice. Considering the fact that the training modality (clinical posting) for nursing students has no significant effect on their intention to specialize in psychiatry, there is a need for improved curriculum and training modalities as to stimulate the interest of the students in this all important area of health.

Conclusion

Psychiatry was not a common choice of career among nursing students in Ebonyi state Nigeria. Clinical psychiatric posting showed no significant impact on the Njaka et al. BMC Nursing (2024) 23:630 Page 9 of 10

choice of psychiatry as career among nursing students. This study revealed key determinants of career choices in psychiatry among nursing students to include interest in psychiatry, interest in community services, job satisfaction and family influence. Therefore, these factors would be vital in policy formulation and interventions aimed at improving acceptability of psychiatry to the prospective healthcare professionals.

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Author contributions

NS and IIBH conceived and designed the study. NS and ABN collected the data, cleanse and entered the data. KYC and RSB provided statistical support and verification. IIBH and NS wrote the initial draft of the manuscript. KYC and ABN critic the initial draft and modified it. NS and RSB reviewed and revised the main manuscript. All others review the manuscript.

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Data availability

Data is available for request but will soon be deposited in public domain.

Declarations

Ethical approval

Approval for this study was granted by the Universiti Sains Malaysia ethical committee (Jepem) with approval number (USM/JEPeM/KK/23030275) and Directorate of research ethical committee of Ebonyi state university with approval number (EBSU/DRIC/2023/10987).

Consent to participate

All the participants in this study gave an informed consent to participant in the study following description of the purpose and design of the study to them by the researchers.

Consent for publication

Not applicable to the manuscript.

Competing interests

The authors declare no competing interests.

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