

Research Article

Knowledge, Attitude, and Perceived Need for Mental Health Support System Among Medical Students: A Case Study of the University of Port Harcourt, Nigeria

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Abstract

Background: Medical students in Nigerian Universities often must handle excessive academic loads, which puts a strain on them emotionally. The available support systems on most campuses fail to meet the specific needs of this population and therefore remain underutilized by them. While previous studies conducted among Nigerian medical students focused on prevalence of mental health issues such as anxiety, depression, and stress, there remains a paucity of data regarding the perceived need for a mental health support system specific to the needs of medical students. **Objective:** The study evaluated the knowledge, attitude, and perceptions of needs regarding a mental health support system for medical students, and identified factors linked to the effective use of such services if developed. **Methods:** A descriptive cross-sectional survey was employed. A total of 320 students were recruited into the study through stratified random sampling. Data were collected using a validated, semi-structured interviewer-administered instrument via the Open Data Kit (ODK) platform. The instrument had high internal reliability (Cronbach's Alpha = 0.85). Data obtained were analyzed using IBM Statistical Product for the Service Solution (SPSS) version 29. **Results:** The majority of the participants were mostly male 168(52.5%), were aged between 21-25 years (mean age as 21.0±3.0 years), were primarily in their clinical years, and lived off campus 225(70.3%). The survey results showed that only 105(32.8%) students demonstrated strong knowledge about mental health issues. However, the majority of the total number of students 267(83.4%) expressed willingness to seek help for mental health issues if the need arose. Awareness of mental health signs ($p=0.004$) and confidence in the quality of service ($p=0.006$) were significant factors that influenced students' use of future services. Stigma was noticed to be a concern among the students as only 142(44.4%) agreed or strongly agreed that no associated stigma with seeking mental health services. **Conclusion:** Medical students want a support system that will focus on their specific needs, which will lead to better student well-being and academic performance. The findings from the study also suggest a need for interventions such as delivery of structured mental health education for these students with emphasizes on de-stigmatizing mental health issues and its services.

Keywords

Mental Health, Medical Students, University of Port Harcourt, Support System, Perceived Need

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1. Introduction

Globally, medical students have been recognized as one of the most susceptible groups to mental health issues. In a study conducted by The Lancet Psychiatry, medical students worldwide were said to have a significantly higher depression and anxiety rate compared to the general population [1]. The World Health Organization (WHO) defines Mental health as more than just the absence of mental health issues, but rather an integral part of health which encompasses emotional, psychological, and social well-being, influencing how individuals think, feel, and act [2]. Good mental health is crucial for coping with life's challenges, which include day-to-day effective functioning and maintaining relationships. Unfortunately, in most underdeveloped societies, of which Nigeria is an example, mental health issues are discounted and most times stigmatized [3].

Medical students face unique and intense stressors, including academic pressure, long study hours due to the demands of the medical curriculum, and exposure to emotionally challenging clinical scenarios [4-6]. These stressors increase their vulnerability to mental health issues such as anxiety, depression, mood disorders, and burnout [4, 6] a pattern of emotional exhaustion and reduced personal accomplishment that is very common in medical students in diverse nations [7]. The rising prevalence is a growing problem and has become a public health burden in Nigeria [7].

Mental health support systems are essential in every university community because of the vital role they play in addressing some mental health issues, particularly among students [8, 9]. Shalaby and Agyapong [9] described a mental health support system as a methodical framework meant to offer help, tools, and answers to anyone with mental health issues or concerns [10]. This support system is aimed at assisting students with mental health issues through psychosocial and therapeutic interventions [9]. Nonetheless, the efficacy of a mental health support system depends not only on the availability of the services but also on the Knowledge of the students of their supposed need for them and their eventual usage of the services [11, 12]. Studies from all over the world such as in the middle East, Europe, North and South America, parts of Africa, including Nigeria suggest that mental health issues are common among medical students globally. For example, a review of 69 studies from various regions reported that about one-third of the medical students who participated in these studies had reported anxiety. In the same vein, another African review also conducted among medical students stated that one-third of them had reported depression [13, 14]. Studies likewise carried out among Nigerian medical students in different parts of the country observed a considerable burden of stress, depression, anxiety, and other mental health issues amongst the students [15-18]. The consistency and prevalence of these results strongly imply that mental health problems are somewhat widespread among medical students pursuing careers as medical professionals globally.

The University of Port Harcourt (UNIPORT) has an established counselling center where students and staff of the University seek professional help for mental health issues related to emotional, psychological, as well as educational stress. This center is manned by guidance and educational psychologists who may not understand the peculiar training plus rigours that medical students have to undergo to become professionals. The evident demand for specialized mental health services for medical students has been neglected, thereby hindering institutions from establishing appropriate measures needed to assist these students [4]. Dealing with these problems is essential for the well-being and success of upcoming medical professionals as the demands of medical school increase.

This gap in the expected service results in diminished academic performance, impaired relationships, and enduring mental health repercussions for affected students [4, 5].

Studies from African settings have shown that a considerable knowledge of mental health issues and a positive attitude towards them does not always translate into a willingness to seek professional help for such issues if the need ever arose. Such studies include that carried out by Kihumuro et al. [30] on medical students in Uganda. The study reported a high knowledge level of mental health illness, however there were negative attitudes and perceptions, implying that knowledge in itself may not be enough to improve mental health-related behaviour among these students. This observation was further highlighted by Anosike et al. [21] in Nigeria, who reported a high burden of anxiety as well as depression among health science (pharmacy, nursing, and medicine) students in their first year of study. Despite this high burden, only a few expressed any willingness to seek professional help if needed. Common barriers to medical students seeking professional mental health care may include stigma, shame, lack of the time to access the services, and fear of breach of confidence [41].

These findings, therefore, justify the need to examine the medical students' knowledge, attitudes, perceived barriers to accessing such services, and the perceived need for a mental health support system specific to meeting their needs as medical students. Other studies carried out amongst UNIPORT students focused on the knowledge, prevalence of depression, factors associated with depressive illness, and suicidality [18, 43, 44], but our study, however, extended further to assess the perceived need for a mental health support service specific to the peculiar needs of medical students. The outcome of this study will, therefore, supply policy-ready inputs for a medical-school-specific support system.

This study, thus, assessed the Knowledge of mental illnesses, attitudes and the perceived need for mental health support services among medical students at UNIPORT.

Approval of the study was obtained from the Ethics and Research Committee of the University of Port Harcourt Teaching

Hospital. The ethical clearance certificate had protocol number UPTH/ADM/90/S.11/VOL.XI/1838. All necessary information regarding the study such as its purpose, benefits, and the procedure were explained to the intended participants. A signed informed consent was obtained from each participant before participation, and participation was strictly voluntary. They were informed they could pull out of the study at any time. The respondents' anonymity was ensured by assigning codes rather than using their names. The data were kept secured by ensuring that they were stored using a password known only to the researchers.

2. Materials and Methods

2.1. Study Design

The study adopted a descriptive cross-sectional study design.

2.2. Study Settings

The university of Port Harcourt (UNIPORT) is a public tertiary institution which was established by the Federal Government of Nigeria in 1975. It is located in Choba, in Obio-Akpor Local Government Area (LGA), Rivers State, Nigeria [19].

Rivers State is one of the oil rich State in the Niger Delta region of the country. Due to its location, it has attracted collaborations and partnerships that have made it grow over the years in size, academic strength, with national and international relevance. The university comprises of two colleges (namely college of health sciences and the college of continuing education), various schools, centers, and eighteen (18) faculties. Being one of the notable institutions in the South-South region of the country, its student population is large and diverse, making it a suitable choice for this study [19].

2.3. Study Participants

The study was carried out among 320 medical students from levels 200 to 600 at UNIPORT, Nigeria, totaling 967 students, as of March to June 2025, when this study was carried out. Students in the 100-level were excluded from the study because it is believed that at this stage of medical education, they are yet to be introduced to the academic rigours of the medical training in the university. The pre-clinical phase of medical education starts from the second year of study.

2.4. Sample Size

The minimum sample size was calculated using the Cochran [20] formula as shown below:

$$n = (Z^2 * p * (1-p)) / e^2$$

Where:

n= Sample size

Z-score: Represents the confidence level = 1.96

e = margin of error (5%)

P = Estimated Proportion (p) = 24.9%, which represented participants' willingness to seek professional psychological help (21).

$$n = 3.8416 \times 0.249 \times 0.751 / .0025$$

$$n = 0.7183753584 / .0025$$

$$n = 287.35$$

Adjustment for 10% non-response

$$= \frac{n}{1 - \text{Non-response}} \text{ sample size; non-response is 10\% (0.10)}$$

$$= \frac{287.35}{1 - 0.10}$$

$$= \frac{287.35}{0.90}$$

$$= 319.277$$

which was rounded up to 320

Therefore, the minimum sample size for this study was 320 medical students.

2.5. Sampling Technique

A stratified random sampling technique was employed to ensure representation across various levels of the study. Strata were categorized by the level of study from 200 Level to 600 Level. The lists of registered students for each academic year were obtained from the different class representatives. Participants were then randomly picked from the lists via a simple random process with the assistance of computer-generated random numbers via Microsoft Excel. Each student was assigned a unique number. This approach guaranteed proportional representation for each stratum in the final sample. The identification of each participant was kept anonymous. To get the number of participants per class, a proportionate to size calculation was done.

2.6. Study Instrument

The data collection tool used in this study was a semi-structured questionnaire, titled *Knowledge, Attitude and Perceived Need for Mental Health Support Among Medical Students: A Case Study of University of Port Harcourt (KAPNMMSQ)*, which the researchers adapted from the following validated questionnaires: Generalized Anxiety Disorder 7-item (GAD-7) [22], Patient Health Questionnaire-9 (PHQ-9) [23], Attitudes Toward Seeking Professional Psychological Help scale short form (ATSPPHS-SF) [24], Mental Health Continuum - Short Form (MHC-SF) [25], and Stigma Scale for Receiving Mental Health Care (SSMHC) [26].

The questionnaire consisted of sections A to E. Section A was used to elicit the personal data of the respondents; Section B was used to generate responses on the Knowledge of Mental Health Issues; Section C was on the Attitudes towards Seeking help for Mental Health issues which had attitude items categorized using a 5-point Lickert scale of Strongly agree(5), Agree(4), Neutral(3), Disagree(2), and Strongly Disagree(1);

Section D: Perceived Need For Mental Health Support Services and Section E: Factors Associated with attitude towards future Mental Health Services use.

The internal consistency of the questionnaire was assessed using Cronbach's Alpha coefficient. After pilot testing the questionnaire with a sample size of 35 (representing a figure slightly higher than 10% of the calculated sample size) with respondents who were not part of the study population (pharmacy students), the collected data were analyzed, and a Cronbach's Alpha value of 0.85 was obtained.

2.7. Data Analysis

A total of 320 respondents filled the questionnaire via the data collection software, Open Data Kit (ODK) representing a 100% response rate. The entries were cross-checked, and the data were entered and cleaned using a Microsoft Excel spreadsheet. The cleaned information was uploaded into SPSS version 29 for analysis. Descriptive statistics, or frequency, percentage, mean and standard deviation, were applied to describe demographic traits and responses to questionnaire items. Associations between categorical variables (like, education level, gender, Knowledge, attitude) were examined using the chi-squared test (χ^2). The level of significance of $p < 0.05$ was used for all the inferential statistical tests.

The composite scoring for knowledge of mental issues was obtained using the following (Table 1):

Table 1. Composite scoring for knowledge of mental issues.

Total Score	Category
0 to 2	Poor Knowledge
3	Fair knowledge
4 to 5	Good knowledge

The scoring categorization for attitude was done as follows (Table 2):

Strongly agree (5), Agree (4), Neutral (3), Disagree (2), and strongly disagree (1)

The total attitude score, therefore, was from 5 to 25

Table 2. Scoring of attitudes towards mental health issues.

Total Attitude Score	Category
5 to 14	Negative attitude
15	Neutral attitude

Total Attitude Score	Category
16 to 25	Positive attitude

2.8. Study Duration

The study was conducted between March to June 2025.

3. Results

Table 3. Social Demographic Characteristics of respondents.

Variable	Frequency n=320	Percent (%)
Sex		
Male	168	52.5
Female	152	47.5
Age group(years)		
<20	112	35
20-25	181	56.6
26-30	27	8.4
Mean \pm SD	21.0 \pm 3.0	
Marital status		
Married	10	3.1
Single	310	96.9
Level		
200	84	26.3
300	81	25.3
400	71	22.2
500	32	10.0
600	52	16.3
Residence		
On campus	225	70.3
Off campus	95	29.7

A total of 320 respondents participated in the study, giving a response rate of 100%. Of the total respondents, 169(52.5%) were males, 181(56.6%) were between the age of 20-25 years, 310(96.9%) were single, 84(26.3%) were in 200 level and 225(70.3%) resided in the campus. The mean age of the respondents was 21.0 \pm 3.0 years (Table 3).

Table 4. Knowledge of Mental Health Issues (how respondents answered each question)

Variable	Frequency n=320	Percent (%)
I am familiar with common signs and symptoms of mental health issues		
True	257	80.3
False	63	19.7
I understand the impact of mental health problems on academic performance		
True	300	93.8
False	20	6.31
There are no mental health services specifically for medical students on campus		
True	161	50.3
False	159	49.7
I can identify a professional/Institution that supports students' mental health		
True	139	43.4
False	181	56.6
I have received information and training to support anyone with mental health challenges		
True	131	40.9
False	189	59.1

Majority of the respondents 257(80.3%) were familiar with common signs and symptoms of mental health issues, 300(93.8%) understood the impact of mental health problems on academic performance, 161(50.3%) reported that there

were no mental health services specifically for medical students, 139(43.4%) reported that they could identify professional/institutions that supports mental health and 131(40.9%) had received information and training to support mental health challenges (Table 4).

Table 5. Overall level of Knowledge of Mental Health Issues.

Variable	Frequency n=320	Percent
Poor	81	25.3
Fair	134	41.9
Good	105	32.8

From Table 5 the result shows that only 105(32.8%) of the students exhibited good knowledge of mental health issues, whereas 139(41.9%) of them had a fair knowledge, and 81(25.3%) had poor knowledge. This result therefore implies

that though the students showed some level of knowledge of mental health issues, they seemed to lack an in-depth understanding of what they entailed.

Table 6. Attitude Towards Seeking Mental Health Services (Individual responses of each of the attitude item).

Variable	Frequency n=320	Percent (%)
Seeking mental health services sign of strength		

Variable	Frequency n=320	Percent (%)
Strongly agree	145	45.3
Agree	128	40
Neutral	34	10.6
Disagree	8	2.5
Strongly disagree	5	1.6
I am comfortable discussion of mental health challenges with professionals		
Strongly agree	43	13.4
Agree	142	44.4
Neutral	77	24.1
Disagree	46	14.4
Strongly disagree	12	3.8
I would seek professional mental health services during psychological difficulties		
Strongly agree	54	16.9
Agree	132	41.3
Neutral	89	27.8
Disagree	33	10.3
Strongly disagree	12	3.8
Mental health services are effective in addressing students' psychological challenges		
Strongly agree	92	28.7
Agree	189	59.1
Neutral	34	10.6
Disagree	3	0.9
Strongly disagree	2	0.6
I feel there is no stigma associated with seeking mental health services		
Strongly agree	30	9.4
Agree	112	35.0
Neutral	95	29.7
Disagree	69	21.6
Strongly disagree	14	4.4

Table 6 shows that most of the students had responded favourably towards attitudes in seeking mental health services. For instance, a total of 145(45.3%) strongly agreed and 128(40.0%) agreed that it was a sign of strength to seek mental health services if the need arose. In addition, 189(59.1%)

agreed that students' psychological challenges can be effectively taken care of by mental health services. Despite these responses, only a lower proportion of the students agreed that there was no associated stigma with seeking mental health services. This may suggest that stigma is still an important concern among these students.

Table 7. Overall attitude of respondents towards Seeking Mental Health Services.

Variable	Frequency n=320	Percent
Negative	25	7.8
Neutral	28	8.8
Positive	267	83.4

However, despite this perceived stigma by the students, the overall attitude score in [Table 7](#) showed that 267(83.4%) had a positive attitude towards seeking mental health services, while only 25(7.8%) had a negative attitude.

Table 8. Perceived Need for Mental Health Support Services.

Variable	Frequency n=320	Percent
A specialized mental health support system is essential for addressing the psychological challenges faced by medical students		
Strongly agree	113	35.3
Agree	175	54.7
Neutral	24	7.5
Disagree	4	1.3
Strongly disagree	4	1.3
Medical students would benefit from easily accessible and affordable mental health support services on campus		
Strongly agree	113	35.3
Agree	179	55.9
Neutral	24	7.5
Disagree	3	0.9
Strongly disagree	1	0.3
Establishing a specialized mental health support system would improve the academic performance of medical students		
Strongly agree	124	38.8
Agree	165	51.6
Neutral	25	7.8
Disagree	6	1.9
There is a gap in mental health resources available to medical students		
Strongly agree	92	28.7
Agree	147	45.9
Neutral	63	19.7
Disagree	13	4.1
Strongly disagree	5	1.6
A mental health support system is necessary to create a supportive campus environment for medical students		
Strongly agree	106	33.1

Variable	Frequency n=320	Percent
Agree	180	56.3
Neutral	31	9.7
Disagree	2	0.6
Strongly disagree	1	0.3

A total of 175(54.7%) of the respondents agreed that a dedicated mental health support system is essential for addressing the psychological challenges faced by medicals students, 179(55.9%) agreed that medicals students would benefit from easily accessible and affordable mental health support services on campus, 124(38.8%) strongly agreed that establishing a mental health support system would improve academic

performance of medical students, 147(45.9%) agreed that there is a gap in mental health resources available to medical students and 180(56.3%) agreed that mental health support system is necessary to create a supportive campus environmental for medical students (Table 8).

Table 9. Factors Associated with attitude towards future Mental Health Services use.

Variable	Attitude		X ² (P-value)
	Negative	Positive	
Sex			
Male	28(16.7)	140(83.3)	0.003(0.958)
Female	25(16.4)	127(83.6)	
Age group			
≤25	50(17.1)	243(82.9)	0.634(0.426)
>25	3(11.1)	24(88.9)	
Marital status			
Married	2(20.0)	8(80.0)	0.088(0.766)
Single	51(16.5)	259(83.5)	
Level			
≤300	26(15.8)	139(84.2)	0.160(0.689)
>300	27(17.4)	128(82.6)	
Residence			
On campus	39(17.3)	186(82.7)	0.326(0.568)
Off campus	14(14.7)	81(85.3)	
Aware of signs that indicate the need for mental health support			
Yes	34(13.5)	218(86.5)	8.090(0.004)*
No	19(27.9)	49(72.1)	
Friends' opinion influences future decisions to seek help for mental health issues			
Yes	25(18.2)	112(81.8)	0.493(0.483)
No	28(15.3)	155(84.7)	

Variable	Attitude		X ² (P-value)
	Negative	Positive	
Confident, established mental health services will be tailored to the specific needs of medical students			
Yes	20(11.4)	156(88.6)	7.649(0.006)*
No	33(22.9)	111(77.1)	
Cultural beliefs support seeking help for mental health issues			
Yes	25(16.8)	124(83.2)	0.009(0.923)
No	28(16.4)	143(83.6)	
Concerned about being judged by others for seeking mental health support			
Yes	23(20.7)	88(79.3)	2.126(0.145)
No	30(14.4)	179(85.6)	
Financial constraints would prevent me from accessing mental health services			
Yes	27(14.7)	157(85.3)	1.1117(0.290)
No	26(19.1)	110(80.9)	

*p < 0.05 indicates statistical significance.

Two factors were notably associated with attitude toward future mental health services use (Table 9):

Respondents who were aware of signs had a significantly more positive attitude (86.5%) compared to those who were unaware (72.1%), with p = 0.004.

Respondents who were confident that the established mental health services would be tailored to the specific needs of medical students were more likely to have a positive attitude (88.6%) compared to those who lacked confidence (77.1%). This association was statistically significant (p = 0.006).

4. Discussion

This study examined the Knowledge, Attitude, and Perceived Need for Mental Health Support Among Medical Students: a case study of the University of Port Harcourt, Nigeria.

The findings are discussed extensively under subsequent subheadings below:

Socio-Demographic Information of Participants

The findings on the socio-demographic data showed that most participants were male, aged 20–25, single, and in the 200 level, with the majority living on campus. This young, campus-based student population likely experiences transitional stress as they learn to live alone, far away from their parents, coupled with the pressure of academic exercises in school. This is also supported by Shim, et al. [27] who posited that these characteristics suggest a young, academically engaged population likely facing transitional and academic

stressors. Understanding these demographics is essential for tailoring mental health interventions, as campus-based and age-appropriate strategies may enhance Knowledge, shape attitudes, and address perceived support needs effectively [28, 29].

The level of knowledge of mental health issues among medical students at the UNIPORT

The findings on the level of knowledge regarding mental health issues among medical students at the University of Port Harcourt, show that majority of medical students at the University of Port Harcourt, have high awareness on the symptoms, signs of mental health as well as its impact on academics, however, only 32.8% demonstrated in-depth knowledge of mental health. More so, over half of the participants believed no specific mental health support services existed for them on campus. This finding aligns with previous research conducted by Kihumuro et al. [30] in Uganda, where medical students showed a high awareness level of mental health. However, it is important to add that the level of awareness does not always translate to in-depth or practical knowledge. The authors' study, while confirming a general awareness among their study population, does not necessarily explore the depth or clinical correctness of the students' level of knowledge or understanding.

Similarly, Alqassim et al. [31] found that Saudi university students had adequate knowledge of mental health illness; however, their study reported a persistent misconception and stigma surrounding mental health illness, which suggests gaps

in deeper understanding or knowledge. In Nigeria, Udam et al. [32] reported that over half of the University of Calabar students who were part of a study on mental health understood the fundamentals of mental health issues, suggesting that awareness may be relatively widespread in Nigerian universities. The high awareness or knowledge recorded in most of the studies among medical students may be because they may have been taught about mental health at some point or the other in their curricula. However, just as in the current study, this does not equate to in-depth knowledge, which is essential for future healthcare professionals. This could be as a result of gaps that exist in the curricula for teaching these students. The training they get may be more focused on exposing them to mental health concepts and clinical diagnosis rather than on personal health seeking-behaviour, reduction of stigma as well as peer support. Knowledge of practical mental health is important for identifying mental health issues promptly, seeking help timely, and being able to refer accordingly.

It is pertinent to stress that students' Knowledge and awareness of mental health issues are critical components in addressing the current challenges of mental health within the university environment.

Therefore, the need for structured mental health education for medical students at all levels is advised.

The attitudes of UNIPORT Medical students toward seeking treatment for mental health issues

The findings on the attitudes of medical students at UNIPORT toward seeking treatment for mental health issues showed that the majority of medical students at the University of Port Harcourt have a generally positive attitude toward seeking mental health support services, with over three-quarter of them expressing their willingness to engage with such support systems. Many of the participating students believed that help-seeking behaviours are a sign of strength; as such, they feel comfortable consulting specialists. Most of them also believed in the effectiveness of mental health services; however, only a small portion of them believed that the stigma associated with mental health is not a significant barrier. In all, the findings showed that while medical students' attitudes are encouraging, there are still lingering concerns and problems about the stigma associated with mental health issues, trust, and accessibility to such a support system. This aligns with the findings of Kihumuro et al. [30], who studied medical students in Uganda and reported generally positive attitudes but still insisted that underlying discrimination and stigmatization persisted as a major barrier. Similarly, Alqassim et al. [31] observed that while 52.2% of university students in Saudi Arabia had a positive attitude towards mental illness, stigma continued to influence attitudes and behaviour.

The resemblances seen in the mentioned studies regarding attitude may be because the medical training all over the world has some similarities in its curriculum, like receiving education about mental health, as compared to the general populace. This sort of knowledge is likely to lead to a positive attitude among the students but may not impact the associated stigma.

These results, however, were in contrast to the findings of Qiu et al. [33] who found out in their study on attitudes of students of a medical College in China that they exhibited a negative attitude towards mental health. The results from this present study also differ from an earlier work by Rees et al. [34] where the attitudes of Medical students at Imperial College London and Nanyang Technological University, Singapore, were assessed. The outcome showed that the students had exhibited a negative attitude towards mental health issues. One possible explanation for these differences may lie in the fact that in the UK and China, despite advances in their health care system, mental health stigma still persists. In China, it is associated with being weak and regarded as shameful, thus making families and individuals not seek help. In the UK, despite the awareness, stigma exists among professionals and in some communities. This is unlike in Uganda, Saudi Arabia, and Nigeria, which practice collective cultures and have communal values. The mentally ill are viewed in these countries from a social context, rather than as individuals who have failed. In addition, these three countries also have religious values which may emphasize caring for the mentally ill. This may have translated to the positive attitude exhibited by the medical students in these countries. Again, the medical curriculum in these countries may emphasize community psychiatry.

The perceived needs for establishing an institutional mental health support system specific to medical students

The findings from Table 8 showed that most of the medical students acknowledged the gaps in mental health support currently and believe that establishing a support system tailored to their specific needs will improve their welfare and academic performance. These findings agreed with Khurshid et al. [35], where participants who were also medical students in Pakistan expressed the need for an accessible, stigma-free mental health service that was tailored to their needs.

Likewise, another study by Hawsawi et al. [36] indicated that the participants who were medical students from the University of Nottingham, UK, expressed the desire for a mental health support system unique to their needs. The findings of this study also tallied with those of Philip et al. [37]. The respondents in the study who were also medical students in an Indian University reported that, though there were high levels of burnout and mental issues amongst them, they felt the existing institutional mental health support system was generic and not tailored to their needs. They called out for a better system, which would be designed and delivered to meet their unique needs. In the same vein, the findings from the study by Alsalman et al. [38] also reported that 42.5% of the students had expressed a perceived need for mental health services.

The similarities seen in the expression of medical students for mental health support services in the various studies could be attributed to the fact that universally, medical students have the same curricula where they must cope with long hours of lectures, intense academic pressure and demanding deadlines. Thus, making them all perceive that the best way to cope with the associated stress of being in the medical school was to

have an adequately functional mental health support system to aid them in their journey through their trainings.

Factors Associated with attitude towards future Mental Health Services use

Findings from the study showed that the attitude towards future use of any established support system for the medical students would depend on their being aware of signs that would indicate the need for mental health support service, $p=0.004$, and the confidence that the established mental health services would take care of their specialized needs ($p=0.006$). It may be inferred from this result that believing that services tailored to the specific needs of the medical students would encourage students to develop a positive attitude toward utilizing them. These results reflect a similar finding by Yang et al. [39], who observed that mental health literacy significantly correlated positively with their help-seeking behaviours of some sample medical students in China.

4.1. Limitations of the Study

The limitations of the study include:

Firstly, the study employed a descriptive cross-sectional study design implying that data collected from the population were at a single point in time. Hence, causal relationship could not be established between the variables in the study. Secondly, the knowledge section of the questionnaire had a limited number of true or false statements which may not have been sufficient to test the knowledge of mental health among the respondents. Thirdly, considering the study relied on the data given by the respondents and that the topic is a sensitive one, there may have been the possibility of the respondents providing socially desirable responses. Fourthly, the study findings may not be generalized to medical students in other universities because the study was conducted only among medical students in UNIPORT.

4.2. Implications of the Findings of the Study

The findings generated from this study have some important implications with regards to the welfare of the medical students in the institution. Seeing, that only about one-third of the respondents had good knowledge of mental health issues, may suggest that their knowledge may be sub-optimal. Even though, many of them were aware of the common signs and effects of mental health issues, only few could correctly identify professional support sources or had had any training on how to provide support to anyone needing it. This may suggest that though the students had better general awareness of mental health issues and services, than they did on the practical aspects. A complete mental health literacy should be inclusive of the ability to recognize mental health problems, knowledge of where to get help, and how to provide support if needed [40]. The institution's medical school should strengthen the practical knowledge of mental health among the students as early in the programme as possible.

Though a positive attitude was recorded in the study, there seemed to be a persistence of stigma among the students that could imply that positive attitude may not necessarily translate to actual help-seeking behaviour when it comes to mental health issues. Yes, they may believe that the services are important but still would avoid them for various reasons such as fear of judgement, shame, and concerns about confidentiality as shown from the study. Such barriers were also reported in studies with similar settings [41]. The institution should have intermittent mental health intervention programmes that would not only create awareness if mental health issues but also help to reduce stigma associated with it, assure students of confidentiality, and make seeking help for it feel normal and acceptable.

The strong perceived need expressed by the students for a mental health support system is a call to the institution for action. The findings support either the strengthening of the already existing support system or the establishment of one which will be tailored to taking care of the unique demands of medical training. Universities have a pivotal role to play in ensuring students' well being which include mental health [42].

5. Conclusion

In conclusion, the study's findings suggest that it is important to increase the use of mental health support services by medical students. Universities are therefore encouraged to adopt a comprehensive approach to addressing the identified barriers to the use of these services by the students.

Abbreviations

WHO	World Health Organization
UNIPORT	University of Port Harcourt
LGA	Local Government Area
SPSS	IBM Statistical Product for the Service Solution
ODK	Open Data Kit
UK	United Kingdom

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Author Contributions

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Conflicts of Interest

The authors hereby declare that there are no conflicts of interest.

References

- [1] Lasheras I, Gracia-García P, Lipnicki DM, Bueno-Notivol J, López-Antón R, de La Cámara C, et al. Prevalence of anxiety in medical students during the COVID-19 pandemic: a rapid systematic review with meta-analysis. *International journal of environmental research and public health*. 2020; 17(18): 6603. <https://www.mdpi.com/1660-4601/17/18/6603#>
- [2] World Health Organization. *Mental health*. Geneva: WHO; 2025.
- [3] Owolabi BO, Lawrence OU, Falade AJ, Ikeokwu KO, Aderounmu AE, Kelechi SC. The Role of Media Influencers in Using their Platforms to Sensitize Nigerian Students on Mental Health. *International Journal of Research and Innovation in Social Science*. 2024; 8(8): 3883-92. <https://dx.doi.org/10.47772/IJRIS.2024.8080290>
- [4] Chu T, Liu X, Takayanagi S, Matsushita T, Kishimoto H. Association between mental health and academic performance among university undergraduates: The interacting role of lifestyle behaviors. *International journal of methods in psychiatric research*. 2023; 32(1): e1938. <https://doi.org/10.1002/mpr.1938>
- [5] Dupéré V, Dion E, Nault-Brière F, Archambault I, Leventhal T, Lesage A. Revisiting the link between depression symptoms and high school dropout: Timing of exposure matters. *Journal of Adolescent Health*. 2018; 62(2): 205-11. <https://doi.org/10.1016/j.jadohealth.2017.09.024>
- [6] McCurdy AL, Fletcher AC, Alligood BN. Financial, resource, and psychological impacts of COVID-19 on US College students: Who is impacted and what are the implications for adjustment and well-being? *Children and Youth Services Review*. 2023; 149: 106932. <https://doi.org/10.1016/j.childyouth.2023.106932>
- [7] Al Mujahid A, Alam KK, Razzaque SA, Khan MKA, Hoque MM, Moon UT. Influence of Discipline Related Factors on Career Choice of Medical Students, Intern Doctors and Recent Graduates in Bangladesh. *Bangladesh Journal of Medical Education*. 2024; 15(2): 27-35. <https://banglajol.info/index.php/BJME/article/view/75130>
- [8] Ingraham S, Mason L. *Mental Health and Well-Being in International Education: Reflections on Providing Support for Students and Administrators*. Global Education Research Reports. Institute of International Education. 2023. <https://eric.ed.gov/?id=ED661456>
- [9] Shalaby RAH, Agyapong VI. Peer support in mental health: literature review. *JMIR mental health*. 2020; 7(6): e15572. <https://mental.jmir.org/2020/6/e15572/>
- [10] Ramos-Monsivais CL, Rodríguez-Cano S, Lema-Moreira E, Delgado-Benito V. Relationship between mental health and students' academic performance through a literature review. *Discover Psychology*. 2024; 4(1): 119. <https://link.springer.com/article/10.1007/s44202-024-00240-4>
- [11] Jeffries V, Salzer MS. Mental health symptoms and academic achievement factors. *Journal of American College Health*. 2022; 70(8): 2262-5. <https://www.tandfonline.com/doi/abs/10.1080/07448481.2020.1865377>
- [12] Lee JE, Goh ML, Yeo SF. Mental health awareness of secondary schools' students: Mediating roles of knowledge on mental health, knowledge on professional help, and attitude towards mental health. *Heliyon*. 2023; 9(3). [https://www.cell.com/heliyon/fulltext/S2405-8440\(23\)01719-X](https://www.cell.com/heliyon/fulltext/S2405-8440(23)01719-X)
- [13] Tian-Ci Quek T, Wai-San Tam W, X. Tran B, Zhang M, Zhang Z, Su-Hui Ho C, et al. The global prevalence of anxiety among medical students: a meta-analysis. *International journal of environmental research and public health*. 2019; 16(15): 2735. <https://www.mdpi.com/1660-4601/16/15/2735>
- [14] Mekonnen CK, Abate HK, Beko ZW, Zegeye AF, Azagew AW. Prevalence of depression among medical students in Africa: Systematic review and meta-analysis. *Plos one*. 2024; 19(12): e0312281. <https://doi.org/10.1371/journal.pone.0312281>
- [15] Farrau U, Tanko Y, Dawud FA, Isa AS, Danjuma NM, Yusha'u Y, et al. Prevalence and Correlates of Academic Stress, Anxiety and Depression Among Medical Students in Ahmadu Bello University, Zaria-Nigeria. 2024. <https://doi.org/10.21203/rs.3.rs-4965923/v1>
- [16] Nwachukwu CE, Olufunmilayo EO, Otor VO, Yakubu AO, Akingbade AE, Odefemi OF, et al. Common mental health problems and associated factors among medical students of University of Ibadan, Nigeria. *Journal of Mental Health*. 2021; 30(3): 315-22. <https://www.tandfonline.com/doi/abs/10.1080/09638237.2021.1875404>
- [17] Oku A, Oku O, Owoaje E, Monjok E. An Assessment of Mental Health Status of Undergraduate Medical Trainees in the University of Calabar, Nigeria: A Cross-Sectional Study. *OA Maced J Med Sci*. 2015 Jun 15; 3 (2): 356-362. 2015. <https://doi.org/10.3889/oamjms.2015.068>
- [18] Asuquo E, Nkporbu A, Okechukwu C, Onoh I, Okafor N. Socio-demographic characteristics and other factors associated with depressive illness among medical students at the University of Port Harcourt. *Insights on the Depression and Anxiety*. 2020; 4(1): 040-8. <https://doi.org/10.29328/journal.ida.1001018>

- [19] University of Port Harcourt. Celebrating University of Port Harcourt at 50. 2025. <https://www.uniport.edu.ng/latest-info/celebrating-50-years-of-excellence-1975-2025/>
- [20] Cochran WG. Sampling techniques: john wiley & sons; 1977. https://www.academia.edu/download/68847310/COCHRAN_W_Sampling_techniques_compressed.pdf
- [21] Anosike C, Anene-Okeke CG, Ayogu EE, Oshigbo MC. Prevalence of depression and anxiety, and attitudes toward seeking help among first-year pharmacy, medical, and nursing students at a Nigerian university. *Currents in Pharmacy Teaching and Learning*. 2022; 14(6): 720-8. <https://doi.org/10.1016/j.cptl.2022.06.002>
- [22] Zhang C, Wang T, Zeng P, Zhao M, Zhang G, Zhai S, et al. Reliability, validity, and measurement invariance of the general anxiety disorder scale among Chinese medical university students. *Frontiers in psychiatry*. 2021; 12: 648755. <https://doi.org/10.3389/fpsy.2021.648755>
- [23] Cheung RY. Patient health questionnaire-9 (PHQ-9). *Handbook of assessment in mindfulness research*: Springer; 2024. p. 1-12. https://doi.org/10.1007/978-3-030-77644-2_63-2
- [24] Kılınç ND, Kendirikiran G. Determining the mental health literacy level of university students and examining their attitudes towards seeking psychological help. *International Journal of Mental Health Nursing*. 2025; 34(1): e13506. <https://doi.org/10.1111/inm.13506>
- [25] Petrillo G, Capone V, Caso D, Keyes CL. The Mental Health Continuum–Short Form (MHC–SF) as a measure of well-being in the Italian context. *Social indicators research*. 2015; 121(1): 291-312. <https://doi.org/10.1007/s11205-014-0629-3>
- [26] Pinto MD, Hickman RL, Thomas TL. Stigma scale for receiving psychological help (SSRPH) an examination among adolescent girls. *Western Journal of Nursing Research*. 2015; 37(12): 1644-61. <https://doi.org/10.1177/0193945914543954>
- [27] Shim YR, Eaker R, Park J. Mental health education, awareness and stigma regarding mental illness among college students. *Journal of Mental Health & Clinical Psychology*. 2022; 6(2): 6-15. <https://doi.org/10.29245/2578-2959/2022/2.1258>
- [28] Abdel-Hady D, Baklola M, Terra M, El-Gilany A-H. Patterns and barriers of mental health service utilization among medical students: a cross-sectional study. *Middle East Current Psychiatry*. 2022; 29(1): 98. <https://doi.org/10.1186/s43045-022-00267-0>
- [29] Bani M, Ardenghi S, Zorzi F, Russo S, Corrias D, Strepparava MG. Pattern of access, early predictors of use, and treatment effectiveness of a psychological counselling service for medical students: an Italian longitudinal study. *Counselling Psychology Quarterly*. 2024; 37(2): 232-46. <https://doi.org/10.1080/09515070.2023.2204420>
- [30] Kihumuro RB, Kaggwa MM, Kintu TM, Nakandi RM, Muwanga DR, Muganzi DJ, et al. Knowledge, attitude and perceptions of medical students towards mental health in a university in Uganda. *BMC Medical Education*. 2022; 22(1): 730. <https://doi.org/10.1186/s12909-022-03774-0>
- [31] Alqassim A, Makeen A, Ahmed A, Alqarny A, Alrabae A, Aboalqasim A, et al. Exploring awareness, attitude, and practices toward mental illnesses: A cross-sectional survey among university students in Saudi Arabia. *Journal of family medicine and primary care*. 2022; 11(8): 4568-75. https://doi.org/10.4103/jfmpe.jfmpe_2023_21
- [32] Udam T, Salibi G, Tzenios N. Awareness and practice of mental health promotion among students at the University of Calabar, Nigeria. *Special Journal of the Medical Academy and other Life Sciences*. 2024; 2(9). <https://doi.org/10.58676/sjmas.v2i9.93>
- [33] Qiu L, Xu H, Li Y, Zhao Y, Yang Q. Gender differences in attitudes towards psychological help-seeking among Chinese medical students: A comparative analysis. *BMC public health*. 2024; 24(1): 1314. <https://doi.org/10.1186/s12889-024-18826-x>
- [34] Rees A, Cuthbert C, Shah V, Rong L, Peh D, Baptista A, et al. Medical student perceptions of mental illness: a cross-sectional transnational study in two medical schools. *BMC Medical Education*. 2023; 23(1): 981. <https://doi.org/10.1186/s12909-023-04962-2>
- [35] Khurshid S, Khurshid S, Toor HK. Burnout as a mental health challenge among medical students in Pakistan: a qualitative study of its triggers, impacts, and support needs. *BMC Medical Education*. 2025; 25(1): 1190. <https://doi.org/10.1186/s12909-025-07762-y>
- [36] Hawsawi AA, Nixon N, Stewart E, Nixon E. Exploring access to support services for medical students: recommendations for enhancing wellbeing support. *BMC Medical Education*. 2024; 24(1): 671. <https://doi.org/10.1186/s12909-024-05492-1>
- [37] Philip S, Molodynski A, Barklie L, Bhugra D, Chaturvedi SK. Psychological well-being and burnout amongst medical students in India: a report from a nationally accessible survey. *Middle East Current Psychiatry*. 2021; 28(1): 54. <https://doi.org/10.1186/s43045-021-00129-1>
- [38] Als Salman Z, Shafey MM, Al-Khofi A, Alessa J, Bukhamsin R, Bokhuwah M, et al. Barriers to mental health service utilization among medical students in Saudi Arabia. *Frontiers in Public Health*. 2024; 12: 1371628. <https://doi.org/10.3389/fpubh.2024.1371628>
- [39] Yang X, Hu J, Zhang B, Ding H, Hu D, Li H. The relationship between mental health literacy and professional psychological help-seeking behavior among Chinese college students: mediating roles of perceived social support and psychological help-seeking stigma. *Frontiers in psychology*. 2024; 15: 1356435. <https://doi.org/10.3389/fpsyg.2024.1356435>
- [40] Jorm AF. Mental health literacy: Public knowledge and beliefs about mental disorders. *The British Journal of Psychiatry*. 2000; 177(5): 396-401. <https://doi.org/10.1192/bjp.177.5.396>
- [41] Berliant M, Rahman N, Mattice C, Bhatt C, Haykal K-A. Barriers faced by medical students in seeking mental healthcare: A scoping review [version 1; peer review: 2. 2022. <https://doi.org/10.12688/mep.19115.1>

- [42] Li Q, Li J, Fan Y. Addressing mental health in university students: a call for action. *Frontiers in Public Health*. 2025; 13: 1614999. <https://doi.org/10.3389/fpubh.2025.1614999>
- [43] Nkporbu AK, Asuquo EO, Okechukwu C, Onoh I, Okefor T. Prevalence and Knowledge of Depression among Medical Students at The University of Port Harcourt, Nigeria. *International Journal of Contemporary Applied Researches*. 2019; 6(7): 1-7.
- [44] David LK, Paul JN, Hart JS, Ibeachu CP. Cross-Sectional Study of Depression and Suicidality Among College Students in University of Port Harcourt, Nigeria. *Sch J App Med Sci*. 2022 Nov; 11: 1851-62. <https://doi.org/10.36347/sjams.2022.v10i11.005>