

## Research Article

# Nursing Students' Knowledge and Attitude Toward People with Mental Illness in the United Arab Emirates

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### Background

Society often holds stigmas and negative attitudes toward people with mental illness (PMI), potentially affecting the quality of care provided by nursing students. However, there is a piecemeal of research to examine the attitude of nursing students toward PMI in the United Arab Emirates (UAE).

### Objective

The study aims to explore UAE nursing students' knowledge and attitudes regarding PMI.

### Methods

A descriptive, cross-sectional, correlational survey design was employed to assess their knowledge and attitudes of nursing students ( $n = 310$ ) toward PMI. Data were collected using the Mental Health Knowledge Schedule and Community Attitudes Toward the Mentally Ill questionnaire, which includes four subscales: authoritarianism, benevolence, social restrictiveness, and community mental health ideology (CMHI).

### Results

Nursing students possessed a moderate level of knowledge on PMI (mean  $[M] = 21.7$ , standard deviation  $[SD] = 3.9$ ), high levels of authoritarianism ( $M = 13.7$ ,  $SD = 3.5$ ), and benevolence ( $M = 13.2$ ,  $SD = 4.8$ ). A significant correlation was found between the number of academic years and both authoritarianism ( $p = 0.017$ ) and benevolence ( $p = 0.006$ ), indicating that students' attitudes evolve as they progress through their nursing education. In addition, elevated scores were reported for social restrictiveness ( $M = 18.0$ ,  $SD = 3.4$ ) and CMHI ( $M = 15.7$ ,  $SD = 4.2$ ), reflecting mixed perceptions regarding the social integration of PMI.

### Conclusion

The study highlights the importance of implementing targeted educational and clinical interventions to address stigmatizing attitudes toward PMI among nursing students in the UAE. Clinical placements in mental health settings are valuable to provide students with direct exposure to PMI, addressing negative stereotypes and encouraging more positive attitudes.

## 1. INTRODUCTION

The World Health Organization has identified mental health as a crucial aspect of global development priority.<sup>1</sup> In the United Arab Emirates (UAE), however, comprehensive data in

this aspect remains limited.<sup>2</sup> Available research reveals that depression affects around 4% of the population, with approximately 15% experiencing mild depressive symptoms.<sup>3</sup> In addition, anxiety, depression, and post-traumatic disorders were identified as the most common mental disorders in the UAE.<sup>3</sup>

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People with mental illness (PMI) remain society's most vulnerable group. Although there has been an improved awareness and understanding of mental health conditions in recent years, they often experience negative attitudes. Moreover, there is still a stigma or sense of shame attached to having a mental illness. This discrimination is evident not only in public perceptions but also in interactions with healthcare providers.<sup>4,5</sup> Stigma and negative attitudes have been reported to influence PMI, causing influences such as increased levels of depressive symptoms,<sup>6</sup> intense self-criticism, and high sensitivity to potential mistreatment.<sup>7</sup> Furthermore, stigma undermines social relationships, distorts self-image, lowers self-esteem,<sup>8,9</sup> and diminishes quality of life.<sup>10</sup> One of the most concerning stigmas' detrimental impacts on treatment outcome is the prejudicial attitude among healthcare professionals that lead to PMI receiving inadequate support and worsening their health outcomes.<sup>11</sup>

Stigma surrounding mental illness profoundly influences nursing students' career choices, shaping nursing students' career aspirations, particularly increasing reluctance to pursue psychiatric nursing as a preferred specialty.<sup>12</sup> To recruit more young nursing students into mental health nursing, there is a critical need for reducing stigma initiatives and fostering a positive attitude toward PMI. While empirical data regarding Emirati nursing students' perception of PMI remain scarce, studies from other countries have demonstrated variability in these attitudes. For example, a study in India conducted at a tertiary psychiatric care institute assessed the attitudes of 100 nursing students toward mental illness and individuals with various psychiatric, physical, and social conditions, revealing some concerning trends.<sup>13</sup> The findings revealed prevalent negative stereotypes, with participants frequently characterizing psychiatric patients as exhibiting distinctly abnormal behaviors and diminished cognitive capacities. Participants in the study held stereotypical views of PMI, perceiving them as easily distinguishable by strange behavior and low intellectual abilities.

Similarly, a recent study has revealed important insights into the development of nursing students' attitudes toward mental illness.<sup>14</sup> The study involved 148 undergraduate nursing students, assessing their attitudes toward mental illness using the attitude scale for mental illness. The findings revealed that students exhibited significantly positive attitudes in the domains of restrictiveness, benevolence, and stigmatization, indicating a tendency to view PMI as deserving of kindness and support. More comprehensive findings emerged from a large mixed-methods study involving 359 Spanish nursing students, which assessed their attitudes toward mental illness and identified factors influencing stigma.<sup>15</sup> The study found that stigma levels decreased as students progressed through their nursing program, with third- and fourth-year students exhibiting lower levels of stigma compared to 1<sup>st</sup>-year students. This improvement was potentially linked to specialized mental health training, particularly the psychiatric nursing curriculum introduced in the third year. The study also identified that personal connections to mental illness served as an independent factor in reducing stigma, as students who had a family member with a mental health condition reported lower stigma levels. Despite these findings, some students' perceptions of PMI were maintained as potentially dangerous. The findings emphasize the need for more evidence-based approaches in nursing education.

The attitudes of nursing students toward mental illness were also assessed in a different country with the same religion and culture as the UAE. A Saudi Arabian study

conducted at Hail University assessed the attitudes and stigma toward mental illness among 315 nursing students.<sup>16</sup> The findings indicated that while students exhibited favorable attitudes in areas such as social relationships, expressing willingness to work with, live near, and befriend PMI, they simultaneously held concerning stereotypes. Many participants maintained pessimistic beliefs about recovery outcomes and endorsed generalized negative assumptions about psychiatric patients. In the UAE, a study involving 70 Emirati female college students was conducted.<sup>17</sup> Participants demonstrated limited knowledge about psychiatric conditions, available treatments, and support services. Despite these knowledge deficiencies, a promising finding was that students generally were willing to seek professional mental health assistance when needed. These studies highlight the complexity of attitudes toward mental illness among nursing students in the region. While there is a readiness to engage socially with PMI, negative stereotypes and a lack of knowledge persist. Addressing these issues through comprehensive education and awareness programs is crucial to fostering a more informed and empathetic approach to mental health care.

Mental health stigma continues to significantly influence nursing education and practices, potentially compromising patient care quality.<sup>18</sup> To enhance the care of PMI, this study addressed the following research questions: (i) what are the prevailing attitudes toward PMI among UAE nursing students? (ii) to what extent do these students possess adequate mental health knowledge for competent PMI care? and (iii) how strongly does mental health knowledge correlate with student attitudes toward PMI?

Existing research has shown that education and clinical exposure can positively influence nursing students' attitudes toward PMI. However, the precise relationship between knowledge acquisition and attitudinal change remains poorly understood, particularly in the UAE's unique educational context. This study proposes to test three specific hypotheses:

- (i) A positive relationship exists between nursing students' knowledge of mental illness and their attitudes toward PMI
- (ii) Nursing students who have completed psychiatric clinical rotations will demonstrate more positive attitudes than those who have not
- (iii) Nursing students who have received formal mental health education will exhibit more positive attitudes toward PMI than those who do not.

As the first study of its kind in the UAE, this study aimed to evaluate undergraduate nursing students' knowledge and attitudes toward PMI and to investigate whether increased educational and clinical knowledge is linked to more positive attitudes.

## 2. METHODS

A descriptive, cross-sectional, correlational survey design was employed at Fatima College of Health Sciences (FCHS), the largest nursing college in the UAE, with four campuses located across the country. A convenient sample of nursing students fulfilling the following inclusion criteria was eligible to participate: (i) enrolled as a student in FCHS, (ii) registered in the nursing program, and (iii) currently in their 1<sup>st</sup>, 2<sup>nd</sup>, 3<sup>rd</sup>, or 4<sup>th</sup> year of study. Exclusion criteria were students registered in programs other than nursing.

## 2.1. INSTRUMENTS

Knowledge of PMI was measured using the Mental Health Knowledge Schedule (MAKS) questionnaire. The MAKS assesses stigma-related knowledge about mental health and consists of 12 items. The first six items evaluate general mental health knowledge related to stigma, such as help-seeking, treatment, recovery, and employment, while the remaining six assess recognition of specific mental health conditions, such as depression and schizophrenia. Each item is rated on a 5-point Likert scale ranging from “strongly disagree (1)” to “strongly agree (5).” The total score is calculated by adding the points obtained across the 12 items, with higher scores corresponding to greater knowledge.<sup>19</sup> The Cronbach’s alpha for the MAKS in our sample was 0.787, indicating a good level of internal consistency for the scale.

Attitudes toward PMI were measured using the Community Attitude Toward The Mentally Ill (CAMI) questionnaire.<sup>20</sup> The CAMI is a self-reporting scale designed to assess public perceptions of PMI. The scale contains 40 items divided into four subscales: authoritarianism, reflecting the belief that PMI are inferior and require control; benevolence, representing a caring and compassionate attitude; social restrictiveness, viewing PMI as a danger to society; and community mental health ideology (CMHI), supporting integrating PMI into the community. Each item is rated on a 5-point Likert scale ranging from “strongly disagree (1)” to “strongly agree (5).” Overall stigma is computed by summing the scores across all subscales, with higher scores indicating less stigmatizing attitudes against PMI. The CAMI demonstrated excellent reliability, with a Cronbach’s alpha of 0.913, suggesting that the items are highly correlated and consistently measure the same underlying construct.

## 2.2. DATA COLLECTION

Data were collected using SurveyMonkey (SurveyMonkey Inc., USA) and included the MAKS, CAMI questionnaires, and sociodemographic variables. Nursing students received an email with the survey link, clear information about the study, and a copy of the study information leaflet. The consent form was on the first page of the online survey.

## 2.3. STATISTICAL ANALYSIS

The outcome variables of the MAKS and CAMI, along with their respective subscales, were assessed to determine whether they met the underlying assumptions of the statistical analyses. Although the skewness and kurtosis of the continuous variables appeared to be normally distributed, both the Kolmogorov–Smirnov and Shapiro–Wilk normality tests yielded highly significant results ( $p$ -values ranging from 0.003 to <0.001), rejecting the null hypothesis of normality. Consequently, it was concluded that none of the continuous variables followed a normal distribution, prompting the use of nonparametric analyses. Participant characteristics were described using frequencies and percentages. For group comparisons, independent sample tests, including the Mann–Whitney  $U$  test and the Kruskal–Wallis  $H$  test, were employed. In addition, the nonparametric Spearman correlation coefficient was utilized to examine the relationships between knowledge and attitude scores, as well as their subscales. Low, medium, and high levels of knowledge were decided based on the 25<sup>th</sup>, 50<sup>th</sup>, and 75<sup>th</sup> percentiles.

The Statistical Package for the Social Sciences version 29 (IBM, US) was used for all analyses. A significant level was set at a  $p$ -value of 0.05.

## 3. RESULTS

A total of 310 nursing students participated in the study. All were female, most of whom were in their first or second academic year (33.2% and 25.8%, respectively), had no family history of mental illness (85.2%), and had no contact with PMI (64.8%). The vast majority of the participating students reported having an interest in mental health nursing (64.6%; Table 1).

### 3.1. KNOWLEDGE ABOUT MENTAL HEALTH ILLNESS

The participants’ mean total knowledge score was 21.7 (SD = 3.9), indicating a moderate level of knowledge, as these values lie within the 50<sup>th</sup> percentile. The total knowledge score was not significantly associated with prior contact with a person with mental illness ( $p=0.095$ , Table 2).

### 3.2. ATTITUDES TOWARD PEOPLE WITH MENTAL HEALTH ILLNESS

#### 3.2.1. AUTHORITARIANISM

According to the CAMI results (Table 3), the majority of participants (63.6%) disagreed/strongly disagreed that PMI should not be treated as outcasts of society. In addition, 58.8% disagreed/strongly disagreed that mental illness is an illness like any other, and 56.4% disagreed/strongly disagreed that virtually anyone can become mentally ill. Furthermore, 42.9% disagreed/strongly disagreed that less emphasis should be placed on protecting the public from PMI, and 40.7% disagreed/strongly disagreed that mental hospitals are an outdated means of treating PMI. Overall, the results showed a high level of authoritarianism toward PMI (mean [M] = 13.7, SD = 4.8; Table 4. Meanwhile, there was a significant correlation between the number of academic years and authoritarianism ( $p=0.017$ ).

**Table 1. Characteristics of the participants (N=310)**

Variable	n (%)
Academic year	
First	103 (33.2)
Second	80 (25.8)
Third	58 (18.7)
Fourth	69 (22.3)
Family history of mental illness	
Yes	46 (14.8)
No	264 (85.2)
Contact with a person with mental illness	
Yes	109 (35.2)
No	201 (64.8)
Interest in mental health nursing <sup>a</sup>	
Yes	197 (64.6)
No	70 (23.0)
Maybe	38 (12.4)

Note: <sup>a</sup>Five missing cases.

**Table 2. Mean scores and standard deviations of the MAKs by sociodemographic data**

Instrument	Min–Max		M (SD)				p-value	
			Academic year	Family history of mental illness	Contact with a person with mental illness	Interest in mental health nursing		
MAKS								
Knowledge score	9–30	21.7 (3.9)	0.735	0.446	0.095	0.585		

Abbreviations: MAKs: Mental health knowledge schedule; M: Mean; SD: Standard deviation.

**Table 3. Responses to the subscales of the CAMI**

CAMI subscales and items	Strongly agree	Agree	Neutral	Disagree	Strongly disagree
<b>Authoritarianism</b>					
Mental illness is an illness like any other	32 (10.3)	37 (11.9)	59 (19.0)	86 (27.7)	96 (31.1)
Less emphasis should be placed on protecting the public from the mentally ill	31 (10.0)	55 (17.7)	91 (29.4)	92 (29.7)	41 (13.2)
The mentally ill should not be treated as outcasts of society	21 (6.8)	29 (9.4)	63 (20.2)	79 (25.5)	118 (38.1)
Mental hospitals are an outdated means of treating the mentally ill	29 (9.3)	34 (11.0)	121 (39.0)	92 (29.7)	34 (11.0)
Virtually anyone can become mentally ill	10 (3.2)	32 (10.3)	93 (30.1)	107 (34.5)	68 (21.9)
<b>Benevolence</b>					
The mentally ill are a burden on society	94 (30.3)	47 (15.2)	77 (24.8)	62 (20.0)	30 (9.7)
Increased spending on mental health services is a waste of tax dollars	97 (31.3)	65 (21.0)	56 (18.0)	69 (22.3)	23 (7.4)
The best way to handle the mentally ill is to keep them behind locked doors	19 (6.1)	39 (12.6)	99 (31.9)	103 (33.3)	50 (16.1)
The mentally ill do not deserve our sympathy	122 (39.5)	46 (14.8)	54 (17.4)	64 (20.6)	24 (7.7)
It is best to avoid anyone who has mental problems	64 (20.6)	72 (23.2)	83 (26.8)	70 (22.6)	21 (6.8)
<b>Social restrictiveness</b>					
The mentally ill are far less of a danger than most people suppose	28 (9.0)	49 (15.8)	95 (30.7)	86 (27.7)	52 (16.8)
No one has the right to exclude the mentally ill from their neighborhood	14 (4.5)	15 (4.8)	67 (21.6)	97 (31.4)	117 (37.7)
Mental patients should be encouraged to assume the responsibilities of normal life	6 (1.9)	27 (8.7)	63 (20.3)	132 (42.6)	82 (26.5)
The mentally ill should not be denied their individual rights	24 (7.7)	17 (5.5)	66 (21.3)	96 (31.0)	107 (34.5)
Most women who were once patients in a mental hospital can be trusted as babysitters	13 (4.2)	67 (21.6)	104 (33.5)	91 (29.4)	35 (11.3)
<b>Community mental health ideology</b>					
Locating mental health facilities in a residential area downgrades the neighborhood	54 (17.4)	33 (10.6)	119 (38.4)	67 (21.7)	37 (11.9)
Having mental patients living within residential neighborhoods might be good therapy, but the risks to residents are too great	9 (2.9)	23 (7.4)	107 (34.5)	115 (37.1)	56 (18.1)
Local residents have good reason to resist the location of mental health services in their neighborhood	27 (8.7)	46 (14.8)	105 (33.9)	104 (33.5)	28 (9.1)
Mental health facilities should be kept out of residential neighborhoods	44 (14.2)	68 (21.9)	87 (28.1)	82 (26.5)	29 (9.3)
It is frightening to think of people with mental problems living in residential neighborhoods	51 (16.5)	52 (16.8)	103 (33.2)	69 (22.3)	35 (11.2)

Note: Data presented as *n* (%).

Abbreviation: CAMI: Community attitude toward the mentally ill.

### 3.2.2. BENEVOLENCE

The mean score for the benevolence subscale was also high ( $M = 18$ ,  $SD = 3.4$ ; Table 4). The majority of participants (52%) agreed/strongly agreed that the increased spending on mental health services is a waste of money, while 54.3% agreed/strongly agreed that PMI do not deserve our sympathy (Table 3). Moreover, 45.5% agreed/strongly agreed that

the mentally ill are a burden on society, and 43.8% agreed/strongly agreed that it is best to avoid anyone who has mental problems. In contrast, only 18.7% agreed/strongly agreed that the best way to handle PMI is to keep them behind locked doors. Among the sociodemographic data, a significant correlation was found between the benevolence subscale and the number of academic years ( $p=0.073$ ; Table 4).



**Table 4. Mean scores and standard deviations of the CAMI and subscales by sociodemographic data**

Instrument	Min–maxs	M (SD)	p-value			
			Academic year <sup>a</sup>	Family history of mental illness <sup>b</sup>	Contact with a person with mental illness <sup>b</sup>	Interest in mental health nursing <sup>a</sup>
CAMI	5–25	17.4 (3.5)	0.017	0.499	0.211	0.733
AU	5–25	13.7 (4.8)	0.006	0.515	0.040	0.065
BE	9–25	18.0 (3.4)	0.073	0.309	0.007	0.394
SR	5–25	15.7 (4.2)	0.065	0.588	0.089	0.071
CMHI	54–200	19 (3.7)	0.147	0.623	0.446	0.165
Total CAMI score	5–25	16 (3.9)	0.017	0.499	0.211	0.733

Notes: <sup>a</sup>Kruskal–Wallis *H* test; <sup>b</sup>Mann–Whitney *U* test.

Abbreviations: AU: Authoritarianism; BE: Benevolence; CMHI: Community mental health ideology; SR: Social restrictiveness; M: Mean; SD: Standard deviation.

### 3.2.3. SOCIAL RESTRICTIVENESS

Only 24.8% of participants agreed/strongly agreed that PMI are far less of a danger than most people suppose, while 9.3% agreed/strongly agreed that no one has the right to exclude PMI from their neighborhood. Furthermore, only 10.6% agreed/strongly agreed that PMI should be encouraged to assume the responsibilities of normal life, and 13.2% agreed/strongly agreed that PMI should not be denied their individual rights. However, only 25.8% of participants agreed/strongly agreed that most women who were once patients in a mental hospital can be trusted as babysitters. The mean score for this subscale was high ( $M = 15.7$ ,  $SD = 4.2$ ; Table 4). In addition, there was no statistical significance between the mean score of social restrictiveness and sociodemographic factors except for the prior contact with PMI ( $p=0.089$ ).

### 3.2.4. COMMUNITY MENTAL HEALTH IDEOLOGY

The mean score for this subscale was high ( $M = 19$ ,  $SD = 3.7$ ; Table 4), indicating that participants generally disagreed that there is a great risk to residents when PMI live within a residential neighborhood. The majority of participants (55.2%) disagreed/strongly disagreed that having PMI living within their residential neighborhoods might be good therapy, but the risks to residents are too great, while only 35.8% disagreed/strongly disagreed that mental health facilities should be kept out of residential neighborhoods. Furthermore, only 33.5% disagreed/strongly disagreed that it is frightening to think of PMI living in residential neighborhoods, whereas merely 33.6% disagreed/strongly disagreed that locating mental health facilities in a residential area downgrades the neighborhood.

The mean total score for the CAMI questionnaire was 17.4 ( $SD = 3.5$ ). In addition, the mean total scores for the CAMI subscales authoritarianism, benevolence, social restrictiveness, and CMHI were 13.7 ( $SD = 3.9$ ), 18 ( $SD = 3.4$ ), 15.7 ( $SD = 4.2$ ), and 19 ( $SD = 3.7$ ), respectively (Table 4). Notably, prior contact with PMI was one of the factors that were significantly associated with all CAMI subscales, while the number of academic years was associated with all CAMI subscales except the CMHI. Interestingly, there was no significant correlation between the total MAKs and CAMI scores (Table 5).

## 4. DISCUSSION

The study represents the first study to examine the knowledge and attitudes of nursing students toward PMI in the UAE. It investigated two knowledge domains: first, clinical knowledge about mental disorders, such as stress, schizophrenia, and depression; and second, psychological knowledge aspects related to employment, medication, help, and recovery potential for PMI. The study revealed that the knowledge score was moderate, and there was no significant correlation between the knowledge and attitudes toward PMI. These findings contrast markedly with established literature,<sup>21</sup> in which the absence of knowledge about PMI consistently predicted poor knowledge among nursing students who have no experience of mental illness or do not know someone with mental illness.

The study found a high level of authoritarianism among the participants. A significant proportion of students disagreed/strongly disagreed with statements that challenged stigmatizing views, such as treating PMI as outcasts or recognizing mental illness as an illness like any other. This indicates a prevalent authoritarian attitude, which may hinder the provision of compassionate care to PMI. The significant correlation between the number of academic years and authoritarianism suggests that as students progress through their educational years, their authoritarian attitudes may decrease, potentially due to increased exposure to mental health education and clinical experiences. However, previous studies<sup>16,20,22</sup> have highlighted the implication of authoritarian attitudes in nursing. These studies reported that nursing students' attitudes and stigma toward mental illness improved significantly following exposure to both theory and clinical courses related to psychiatry. They also noted that due to social desirability bias, nursing students might appear to have more positive views on mental health than they genuinely hold.

The benevolence subscale also showed a high mean score, indicating a lack of sympathetic attitudes toward PMI. A majority of participants agreed with statements that reflect negative views, such as considering increased spending on mental health services a waste of money and believing that PMI do not deserve sympathy. The significant correlation between the number of academic years and benevolence suggests that educational interventions may positively influence students' benevolent attitudes over time. Previous research<sup>23–25</sup>

**Table 5. Correlation between nursing students' knowledge (MAKS) and attitudes (CAMI) related to mental health**

MAKS and CAMI	MAKS		CAMI				
	Knowledge score	Total MAKS	AU	BE	SR	CMHI	Total CAMI
MAKS							
Knowledge score	1						
Total MAKS	0.838**	1					
CAMI							
AU	0.146*	0.160**	1				
B	-0.017	-0.025	0.237**	1			
SR	0.242**	0.293**	0.738**	0.045	1		
CMHI	-0.123*	-0.165**	0.103	0.594**	-0.134*	1	
Total CAMI	0.171**	0.201**	0.806**	0.503**	0.713**	0.388**	1

Notes: \*Correlation is significant at the 0.05 level (2-tailed); \*\* Correlation is significant at the 0.01 level (2-tailed).

Abbreviations: AU: Authoritarianism; BE: Benevolence; CAMI: Community attitude toward the mentally ill; CMHI: Community mental health ideology; MAKS: Mental health knowledge score; SR: Social restrictiveness.

has found that positive attitudes toward PMI can be improved by psychiatric training programs and educational interventions. However, some researchers<sup>26</sup> argue that other factors, such as personal experiences and social support, are crucial in shaping these attitudes. In Arabic cultures, such as the UAE, where stigmatizing views about mental illness are deeply ingrained, educational interventions alone may not be sufficient to change these attitudes. This highlights the need for culturally sensitive approaches to mental health education.

The social restrictiveness subscale showed that most participants did not strongly support including PMI in society. The mean score for this subscale indicates a high level of social restrictiveness. The significant correlation between prior contact with PMI and social restrictiveness highlights the importance of personal experiences in shaping attitudes. Students who had contact with PMI were less likely to hold restrictive views, suggesting that direct interaction can reduce stigma. Supporting this, researchers have found that personal contact with PMI significantly reduced the perception of danger and stigma.<sup>27</sup> In addition, studies have shown that inclusive policies and practices,<sup>28</sup> as well as community-based mental health care and the integration of PMI,<sup>29</sup> lead to improved mental health outcomes and reduced stigma.

The CMHI subscale indicates mixed attitudes toward community-based mental health care. While a majority of participants disagreed with statements that mental health facilities should be kept out of residential neighborhoods, a significant proportion still held concerns about the risks associated with having PMI living in their communities. This reflects the ongoing challenge of balancing community integration with perceived safety concerns. These findings are consistent with previous studies, which reported that while many members of the public recognize the benefits of mental health facilities in residential areas, concerns regarding safety remain prevalent.<sup>30,31</sup>

Interestingly, the number of academic years was associated with all CAMI subscales except the CMHI. This indicates that students who have been exposed to psychiatric nursing—typically during their third and fourth years in the UAE—showed more positive attitudes toward PMI. This finding is in line with previous studies, which reported that nursing students who had completed psychiatric theory and clinical courses held more favorable attitudes toward PMI.

These findings revealed that while most students exhibited generally positive attitudes, particularly those

with prior exposure to psychiatric education or clinical experience, a portion still held negative and stereotypical views, indicating the persistence of stigma. These results underscore the necessity to enhance mental health education within nursing curricula. Integrating psychiatric nursing content in a comprehensive and cross-disciplinary manner can deepen students' understanding and reduce stigma, ultimately improving the quality of care provided to PMI.

Nonetheless, the generalizability of the study's results is subject to several limitations. First, participants were selected from a single nursing college that enrolls only female students, which may limit the applicability of the findings to the wider population of nursing students across the UAE. Second, the use of a convenience sampling method may have introduced selection bias, thereby decreasing the representativeness of the sample and complicating the generalization of the results. Finally, the study relied solely on a quantitative research approach. The absence of qualitative data restricted the ability to explore the underlying factors influencing nursing students' attitudes toward PMI, highlighting the need for future research that integrates both quantitative and qualitative methodologies.

## 5. CONCLUSION

The study highlights the critical needs of implementing targeted educational and clinical interventions to address stigmatizing attitudes toward PMI among nursing students in the UAE. By fostering a more informed and empathetic perspective, future nurses will be better equipped to reduce stigma and promote inclusive, patient-centered mental health care. Clinical placements in mental health settings are particularly valuable, as they provide students with direct exposure to PMI, helping to challenge negative stereotypes and encourage more positive attitudes. Such experiential learning is essential in shaping nursing students' professional values and improving their readiness to deliver compassionate mental health care.

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#### CONFLICT OF INTEREST

The authors declared no potential conflicts of interest with respect to the research, authorship, and/or publication of this article.

#### AUTHOR CONTRIBUTIONS

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*Investigation:* Omar Melhem, Nathira Al Hmaimat

*Methodology:* Atika Khalaf

*Writing – original draft:* Omar Melhem

*Writing – review & editing:* Fares Daradkeh, Nathira Al Hmaimat

#### ETHICS APPROVAL AND CONSENT TO PARTICIPATE

The study was approved by the Fatima College of Health Sciences ethical committee, Reference Number: INTSTF015BSN20. Written informed consent to participate was obtained from all participants.

#### CONSENT FOR PUBLICATION

All participants gave their written informed consent for publication.

#### DATA AVAILABILITY STATEMENT

All data generated or analyzed during this study are included in this published article.

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