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Erratum

Correction of Author's Affiliation One of the authors requested an affiliation change due the affiliation was published incorrectly. The authors apologize for any inconvenience that it may have caused. Content of correction: 3Department of Nursing Education, College of Nursing, Qassim University, Buraydah 51452, Saudi Arabia → 3Department of Community, Psychiatric and Mental Health Nursing, College of Nursing, Qassim University, Buraidah 51452, Saudi Arabia

Undergraduate Student Nurses' Attitude Toward Mental Health Education: A Cross-sectional Analysis

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Abstract

Background: Reportedly, there has been a long-standing nursing shortage in Saudi Arabia. This study explored the attitudes of undergraduate student nurses considering them to be a factor contributing to this shortage. This study also investigated the association among gender, hospital exposures, and campus enrollment concerning mental health education.

Methods: Quantitative correlational analysis was used on 124 student nurses in mental health nursing. Using Point Binary, Spearman's rank and one-way ANOVA, significant determinants were correlated to the domains of mental health nursing.

Results: Student nurses have a positive attitude toward mental health education. Gender is significantly related to Preparedness for Mental Health (PMH) ($r = 0.193, p = 0.032$) and Course Effectiveness (CE) ($r = 0.202, p = 0.024$). Hospital exposures are significantly correlated to PMH ($r = 0.455, p = 0.000$), Knowledge on Mental Health (KMH) ($r = 0.423, p = 0.000$), Negative Stereotypes (NS) ($r = 0.514, p = 0.000$), CE ($r = 0.266, p = 0.003$), Anxiety Surrounding Mental Illness (ASMI) ($r = 0.586, p = 0.000$), and Valuable Contributions (VC) ($r = 0.488, p = 0.000$). A correlation was noted in campus enrollment between NS ($r = 0.267, p = 0.012$) and ASMI ($r = 0.337, p = 0.001$).

Conclusions: Developing a positive attitude increases the acceptance of mental health education. Gender, hospital exposure, and course introduction positively influence students' views in selecting mental health nursing as their specialization.

Keywords: attitude, mental health, nursing

INTRODUCTION

Mental health care is a significant component of global health care. Mental health problems, especially among children, increased before COVID-19 and an upsurge during the pandemic.¹ According to the United Nations, mental health is an essential aspect of humanity that enables us to enjoy our lives to the fullest.² Health is related to an individual's emotional, psychological, and social well-being, influencing how one believes, feels, and behaves. Furthermore, it affects how a person handles stress, form relationships with others, and make wise decisions. Finally, mental health is essential in all phases of life.³

Mental health nurses are critical healthcare providers who significantly promote and support individuals suffering from mental illnesses in their recovery journey. These nurses typically provide care and support to persons experiencing mental health difficulties. Smith defined mental health nursing as "a subsection of nursing practice

that involves the care of patients who have a mental health disorder to aid in their recovery and improve their quality of life."⁴ Thus, it is essential to accomplish the goal of mental health nursing through intellectual preparation and training.⁴

In Australia and Ireland, nursing students' perceptions of mental illness and mental health nursing showed differing responses, with a tendency toward more positive attitudes toward mental Health as a theory relative to Finland, Norway, and the Netherlands.⁵ A study conducted in the Midwestern U.S. demonstrated that clinical experience in a mental health facility provided a good foundation for nursing practice.⁶ However, a few students believed their exposure needed improvement to prepare them to pursue this career.⁶ Thus, additional time and content exposure may assist in attracting nurses to opt for mental health nursing as a career.⁷

In a quantitative and quasi-experimental study on the first day of clinical duty, 300 nursing students enrolled in the psychiatric nursing course in Michigan displayed a negative attitude and a moderate sense of knowledge and preparedness when interacting with mentally ill patients.⁸ However, on their last day of clinical duty, a significant improvement was recorded in the factors mentioned above.⁸ However, the nursing students continued to

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express low interest in mental health nursing as their future career choice.⁹

The health sector in the Kingdom of Saudi Arabia (KSA) is involved in a system-wide transformation concerning the corporatization of hospitals, the expansion of the healthcare system, and improvement in their efficiency, focusing on value-based healthcare.¹⁰ This movement requires a substantial increase in local nurses available to achieve Vision 2030, which aims for healthcare transformation. However, according to Aboshaiah *et al.*, the KSA's nursing workforce is still dependent on expatriates, with a significant shortage of Saudi natives, particularly women.⁷ Furthermore, this nursing shortage has been attributed to several variables, including culture, beliefs, a negative perception of the nurses, and their work conditions.⁷

According to the WHO reports, KSA ranks second globally regarding the nurse-patient ratio, after only the United Arab Emirates. However, KSA's nurse-to-patient ratio is still low compared to other countries.⁹ Nurses significantly contribute to the healthcare sector in all countries. The demand for more nurses is dramatically rising with the population and the different aging sectors. KSA's population is expected to expand at a 2.5% annual rate by 2030.¹¹ In this situation, mental illness is most likely to aggravate, as evidenced by the pandemic experience, considering that approximately 34% of Saudis meet the criteria for mental health at some point.¹² According to the 2015 the Global Burden of Disease study, drug-use disorders, depressive disorders, and anxiety disorders are the third, fourth, and sixth leading causes of disability in the KSA.¹³ The demand for nursing positions to be filled by this year is 150,000 or (0.15 million) Saudi nurses without any overseas recruitment.¹⁴

In 2017, the profile of the Saudi nursing force reflected that the majority of them were employed in the fields of medical, surgical, emergency, midwifery, and out-patient departments, with only a tiny percentage practicing in other areas such as the intensive care unit, mental Health, and pediatric care.¹⁴ One major factor contributing to this nursing shortage in mental health settings is the lack of interest, with a negative attitude toward working under these conditions and the lack of technical nursing practices, which is a part of the mental education provided by the universities.¹⁵⁻¹⁷ This observation indicated that some educational challenges such as the curricula and clinical sites significantly contribute to this low percentage of aspirants pursuing mental Health as a career in the country.

The proportion of nurses working in the KSA is within the standards when counting the expatriate nurses. However, it has been reported that there is a substantial deficit of nurses when the natives are used as a baseline, providing a ratio of 2.1 nurses/per 100,000 population in 2018.¹⁸

This shortage was identified due to factors such as the low enrollment levels in nursing courses, mainly due to the poor image of nursing relative to other professions, and workplace-related difficulties, such as shifting jobs.¹⁹ Nursing graduates remain to rank mental health nursing as their lowest preference of career choice and instead appear to be opting for positions within other specialties.²⁰ On-job training is also limited. As a result, several nurses are deployed in locations where they have been primarily trained and exposed, which is ideal for them to be for their desired assignment.¹⁸

A study conducted among 315 nursing students in Hail, Saudi Arabia, showed favorable attitudes toward people with mental illness, focusing on their willingness to work, stay, or be close friends with mentally ill patients.²¹ However, in another study conducted in Riyadh, Saudi Arabia, after clinical placement, only 13.7% of the nursing students responded to select psychiatric nursing as a career option. This past study focused on students' attitudes and intentions toward mental health nursing.²² No studies have explained the factors related to these paradoxical results. However, past evidence suggested that pre-nursing factors significantly influence students' likelihood of selecting psychiatric nursing, especially those with a positive attitude. This concern may improve recruitment and alleviate the shortages in the psychiatric nursing field.¹⁴ In addition, after enrollment in the Bachelor of Science in Nursing program, student nurses need counselling and enough information regarding mental health nursing to influence their negative perceptions and stereotypes and provide a better understanding of this particular field of nursing.¹⁹

Hence, this study aimed to investigate further the factors affecting Saudi nursing students' mental health education attitude to provide the baseline data for improving the course and motivating and inspiring students to pursue mental health nursing as a future career.

METHODS

A quantitative correlational design was adopted in this study to investigate the factors that are perceived to influence mental health education. A purposive sampling method was employed, which included 127 enrolled nursing students at Shaqra University across different campuses. A total of 124 (98%) students completed their responses. Three of them were excluded because they provided incomplete answers or refused to answer some of the items as their personal preference, which the researchers respected. The Psychiatric/Mental Health Clinical Placement Survey Pre-Placement Tool was extracted directly upon request through email from Ms. Brenda Happel.¹⁷ This tool was used to assess nursing students' attitudes toward mental health nursing education and the consumers of mental health services, as well as to evaluate the perceived value and quality of the theoretical

learning and future clinical placement from the student's perspective.

Before beginning their mental health clinical placement, the participants were asked to complete a pre-placement survey using a Google form. It was divided into two portions. Section A consisted of 24 statements designed to examine students' attitudes and experiences. Each sentence was graded on a 7-point Likert scale, with 1 = strongly disagree, 2 = very strongly disagree, 3 = disagree, 4 = neither agree nor disagree, 5 = agree, 6 = fairly strongly agree, and 7 = strongly agree. Section B included three questions to collect demographic information, The respondent's gender, number of hospital experiences, and campus enrollment. The seven subscale scores were calculated using responses to the 24 statements in Section A.

The questionnaire was previously validated and tested at Shaqra University for content. Three experts in the nursing education field served as validators. The team included the Dean of the Nursing Department of the College of Applied Medical Sciences-Quwayiyah campus and two assistant professors of the Dawadmi Campus, both faculty members of the nursing department. It was unanimously approved that all items appeared to measure and were appropriate for the intended study. After content validation, a pre-test was conducted with a minimum of 20 nursing students to assess the instrument's reliability. The reliability test yielded an alpha coefficient of 0.81, as presented in Table 1.

The Institutional Review Board of Shaqra University was approved (release date: 7 February 2022 with Ethical Review Committee reference number ERC_SU_20220005). Data collection was performed between 19 March 2022, and 29 July 2021, by respective lecturers by providing the students with the Google form at the end of their class hours with sufficient time provided to answer the questionnaire.

The responses were electronically collected and analyzed using SPSS v.21. Point-Biserial correlation, Spearman's rank correlation, and one-way ANOVA were employed to compute the correlation of gender, the number of hospital exposures, and the respective domains of mental health nursing education enrolled in, respectively.

TABLE 1. Survey subscale composition and internal consistency estimates

Subscale	Item	Cronbach's alpha
PHMF	1,4,7,10 and 22	0.90
KMI	9, 18, 19, and 23	0.88
NSs	8, 21, and 24	0.77
FC	6 and 12	0.92
CE	14, 15, 16, and 17	0.78
ASMI	3 and 5	0.69
VCs	2, 11, and 20	0.72

Data displayed on the different subscale domains as per item by Cronbach's alpha. PMHF: preparedness for the mental health field;

KMI: knowledge of mental illness; NSs: negative stereotypes; FC: future career in mental health nursing; CE: course effectiveness; ASMI: anxiety surrounding mental illness; VCs: valuable contributions.

RESULTS

The sample in the present participants encompassed undergraduate nurses (N = 124) of Shaqra University. The majority of the respondents were female (53.23%). A significant number of respondents (65.32%) had three and more times hospital exposure, several (26.61%) had zero exposure, and some (8.06%) had 1–2 times hospital exposure. Moreover, as shown in Table 2, the respondents were enrolled in the BScN program from three different campuses of Shaqra University, namely Dawadmi Campus (57.3%), Shaqra Campus (31.7%), and Quwayiyah campus (18.7%).

The results showed a mean value of 5.83, indicating a strong agreement toward mental health education which means a generally good attitude. Specifically, undergraduate students showed a positive attitude toward Preparedness for Mental Health (PMH), Knowledge about Mental Health, Negative Stereotypes (NS), Course Effectiveness (CE), Anxiety Surrounding Mental Illness (ASMI), and Valuable Contributions (VC) all having weighted means of 6.10, 6.09, 6.08, 5.50, 5.40, and 6.15, respectively.

However, as shown in Table 3, their attitude toward mental health as their future career had an overall mean of 5.08, which was interpreted as an agreement—a positive attitude—based on the Likert scale.

In Table 4, using the point Biserial formula, gender indicated a significant relationship with PMH; correlation = 0.193, $p = 0.032$) and CE (correlation = 0.202, $p = 0.024$) at 0.05 significance level. Hence, female nursing students showed higher levels of PMH and believed more in its CE than male nursing students.

TABLE 2. Characteristics of the respondents (N = 124)

Variables	N	%
Gender		
Male	58	46.77
Female	66	53.23
Number of hospital experience		
0	33	26.61
1–2	10	8.06
3 and above	81	65.32
Campus enrolled		
Shaqra Campus	37	29.84
Dawadmi Campus	64	51.61
Quwayiyah Campus	23	18.55

TABLE 3. Mental health nursing education survey criteria

Mental Health Nursing Education Survey	Mean	Interpretation
I feel well prepared for my psychiatric/mental health clinical placement.	6.13	Strongly Agree
Psychiatric/mental health nursing makes a positive contribution to people experiencing a mental health problem	6.41	Totally Agree
I am anxious about working with people experiencing a mental health problem	5.72	Strongly Agree
I have a good understanding of the role of a psychiatric/mental health nurse	6.22	Totally Agree
I am uncertain how to act toward someone with a mental illness	4.66	Agree
I will apply for a Graduate Program in psychiatric/mental health nursing	3.98	Neutral
I feel confident in my ability to care for people experiencing a mental health problem	5.77	Strongly Agree
Psychiatric/mental health nursing can assist people with a mental illness in their recovery	6.48	Totally Agree
People with mental illness are unpredictable	6.04	Strongly Agree
Mental illness is not a sign of weakness in a person	6.01	Strongly Agree
I am concerned I may be harmed by a person with a mental illness	6.03	Strongly Agree
The theoretical component of psychiatric/mental health nursing has prepared me well for my clinical placement	6.19	Totally Agree
People with mental illness are more likely to be violent	5.83	Strongly Agree
This clinical placement in psychiatric/mental health nursing will provide valuable experience for my nursing practice	6.33	Totally Agree
I intend to pursue a career in psychiatric/mental health nursing	3.97	Neutral
If I developed a mental illness, I would not tell people unless I had to	5.69	Strongly Agree
My course has prepared me to work as a graduate nurse in a medical-surgical graduate program	6.00	Strongly Agree
Mental illness can affect people from all walks of life	6.41	Totally Agree
My course has prepared me to work as a graduate nurse in a psychiatric/mental health graduate program	5.65	Strongly Agree
I am familiar with the needs of people with mental illness	5.99	Strongly Agree
Someone I know has experienced a mental health problem	5.73	Strongly Agree
When a person develops a mental illness it is not their fault	6.39	Totally Agree
Mental health services provide valuable assistance to people experiencing a mental health problem	6.26	Totally Agree
I will work in a medical-surgical setting for at least a year before considering a career in mental health nursing	6.03	Strongly Agree
Overall Mean	5.83	Strongly Agree

TABLE 4. Correlation analysis of gender, number of hospital exposures, and campus enrolled in relation to the domains of mental health education

Variables	Measurement	Domains						
		PMH	KMH	NS	FC	CE	ASMI	VC
Gender	r	0.193	0.088	0.116	-0.006	0.202	0.029	0.165
	p	0.032*	0.329	0.199	0.925	0.024*	0.752	0.067
Number of hospital exposures	r	0.455	0.423	0.514	0.073	0.266	0.586	0.488
	p	0.000*	0.000*	0.000*	0.418	0.003*	0.000*	0.000*
Campus enrolled	r	0.138	0.175	0.267	0.159	0.119	0.337	0.212
	p	0.313	0.153	0.012*	0.213	0.423	0.001*	0.062

The data are presented as the correlation (*r*) and as the *p*-value for the level of significance. *significant at 0.05 level.

PMH: Preparedness for Mental Health; KMH: Knowledge about Mental Health; NS: Negative Stereotypes; FC: Future Career; CE: Course Effectiveness; ASMI: Anxiety Surrounding Mental Illness; VC: Valuable Contribution.

Furthermore, using Spearman's rank formula, the number of hospital exposure of student nurses was found to be highly correlated to their PMH ($r = 0.455, p = 0.000$), their Knowledge of Mental Health (KMH) ($r = 0.423, p = 0.000$), NS ($r = 0.514, p = 0.000$), CE ($r = 0.266, p = 0.003$), their ASMI

($r = 0.586, p = 0.000$), and its VC ($r = 0.488, p = 0.000$). Therefore, as respondents' hospital exposure increased, so did their PMH, KMH, NS, CE, ASMI, and VC.

Finally, campus enrollment showed a strong relationship with NS ($r = 0.267, p = 0.012$) and ASMI ($r = 0.337, p = 0.001$) at the 0.05 significance level. Thus, the respondents on the Quwayiyah campus tended to have a higher level of the said dimensions (NS and ASMI).

DISCUSSION

The present study findings indicated a high level of optimism in undergraduate nurses' mental health education, perception, and experience while taking the course. The positive attitude of these nurses in terms of PMH was related to their excellent understanding of the role of a mental health nurse, which was intensified by their belief that an individual's mental illness is not their fault. Undergraduate nurses' attitudes are shaped by molding their beliefs and perceptions, typically during their theoretical classes. Classroom learning, theoretical classes, or the deductive portion of learning among undergraduate nurses significantly predicts their performances in practical experiences.²³ Moreover, implementing effective teaching strategies provides a framework for practice-based approaches that can help promote reflective and analytical learning.²⁴ Hence, the theoretical part of nursing education is the primary learning tool for undergraduate nurses to gain a positive outlook and optimism toward mental health nursing.

Undergraduate student nurses possess fundamental knowledge about mental illness. As reflected in their responses, they agree that mental illness affects different people from all walks of life. Their belief that mental illness can affect anyone regardless of age, gender, geography, income, social status, race, ethnicity, religion/spirituality, sexual orientation, background, or other aspects of cultural identity implies a good indicator that they openly accept and consider mental illness like any other medical condition. This understanding conforms to the characterization of mental illness by the American Psychiatrist Association.²⁵

NS signifies negative feelings of nurses toward mental Health, which impacts how they treat mentally ill patients. This behavior affects the healthcare efficacy and can affect patients' avoidance of therapy, as claimed by an authority in Psychology.²³ However, this study revealed that undergraduate nurses deviate from this behavior because the total agreement has the highest computed mean on the item stating that mental health nursing can assist people with a mental illness in their recovery. Nurses play a significant role in assisting individuals in assessing personal health status and assimilating health behaviors in their recovery campaigns using different assessment tools, nursing care plans, and communication techniques.²⁶

Notably, undergraduate nurses agree that the theoretical component of psychiatric/mental health nursing has

adequately prepared them for clinical placement, as reflected by their high mean score in item 12 of the questionnaire. It only implies that adequate theoretical preparation must be provided before their exposure to any clinical rotation for psychiatric nursing experience.²⁷ The degree of agreement in this domain suggests that they are interested in joining the working force in the future as mental health nurses. This aspect again indicates the importance of good classroom instruction as the foundation of good practical nursing experiences for students that they would apply in a hospital environment. Furthermore, a strong agreement on the CE domain and the consideration of the VC of mental health nursing reflects that these undergraduate students were satisfied by taking their course regarding the knowledge obtained and the orientation received on this type of nursing practice. In addition, this finding implies that they were well motivated as being taught by their respective professors and lecturers in their theoretical classes. Hence, the influence of classroom teaching during their course provides them with motivation, satisfaction, and a positive perception of the course and the profession.²⁸

Based on the results of this study, female undergraduate nurses were found to have a significantly higher level of PMH education and CE, which implies that nursing can still be considered a female-oriented profession. This profession has therefore been deemed more suitable for women because of its nature as an extension of a domestic job portrayed mainly by women. Female undergraduate students learn more independently and possess the self-regulatory learning that justifies the result of this report. This observation is also following the results presented in one of the previous studies,²⁹ wherein the number of hospital exposure—as a variable of interest—was found to be significantly related to the following domains of mental health education: PMH, KMH, NS, CE, ASMI, and VC. The clinical learning experience serves as the standard in the nursing curriculum toward strengthening all aspects of learning of students enrolled in the nursing course. It was an excellent tool for learning and teaching that could facilitate teaching-learning opportunities to advance the competencies and proficiencies of undergraduate student nurses and provide a suitable venue as they apply learnings from their classroom sessions. Moreover, clinical learning experience, as was realized through hospital exposures, facilitated positive adaptive capabilities of undergraduate student nurses to a new environment and their integration into the healthcare team and system. This experience helped them bridge the gap in their learning needs as their respective clinical instructors mentored them.³⁰ Moreover, a systematic review reported that clinical teaching is a student-centered learning approach that builds better knowledge and understanding of the concepts along with self-development among students, which brings forth improvement in their learning and competencies.³¹

Finally, the present results revealed that the campus where the students were enrolled significantly affects their negative perceptions and anxiety toward mentally ill patients. It was proven from the data that undergraduate students from the Al-Quwayiyah campus managed their NS and ASMI properly. This condition was influenced by the established environment on their respective campuses. The school environment and the practices therein affect their approach to coping and functioning, further aggravating their negative experiences toward mental health.³²

Professors and instructors of mental health nursing subjects should provide motivational support to student nurses toward preparation for mental health nursing training. The syllabus and course contents must develop a better structure focusing on enhancing optimism among undergraduate student nurses toward mental health nursing and making it a preferable career option.

This study also recognized its limitations as it was concentrated only in one university, and the total number of respondents affected the generalizability of the results. Some suggestions have been made to include other institutions and colleges in the KSA. Moreover, this study can be considered through other research methods that evoke higher analysis.

CONCLUSIONS

A positive attitude provides better perception, acceptance, and understanding of mental health nursing education, which results in a higher level of student nurses' PMH and KMH and alleviates NS and ASMI. Gender is relative to the preparedness and effectiveness of mental health education. The more hospital exposure an undergraduate student has, the higher his or her positivity in attitude toward mental health nursing. Furthermore, the campuses where they were enrolled were relative to acquiring optimism on mental health education in nursing as influenced by the school structure, curriculum implementation, and environment.

CONFLICT OF INTEREST

The author has no conflict of interest to declare.

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