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Stigma on Mental Illness among Nurses

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Abstract

A lack of knowledge about mental illness contributes to the pervasive stigma and discrimination that affects the quality of life. This study aims to determine the nurses' knowledge of mental illness and the existence of professional stigma in a teaching hospital in Selangor. The study used a quantitative cross-sectional design, with nurses selected using simple random sampling (n = 178) and utilizing the Attribution Questionnaire (AQ-27) and the Mental Health Knowledge Schedule (MAKS) (α = 0.76 & 0.62). Nurses' knowledge is high (M=44.57±4.61) and that professional stigma exists. Additionally, significant association between knowledge and stigma among nurses was found (p<0.05).

Keywords: Knowledge; Mental illness; Nurses; Stigma

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1.0 Introduction

The increased prevalence of mental illness in Malaysia makes it a significant challenge for global public health. Besides, a recent study investigating the mental health of 1556 people from communities in Selangor found that the prevalence of depression and anxiety was 10.3% and 8.2%, respectively (Leong Abdullah et al., 2021). This increasing trend is a significant public health concern impacting individuals' well-being, social interactions, and economic stability across nations. This burden is compounded by limited knowledge of mental illness, contributing to pervasive stigma and discrimination. Several types of mental health-related stigma have been identified across layers of the population, including self-stigma, public stigma, professional stigma, and institutional stigma (Hartini et al., 2018; Subu et al., 2021). Professional stigma occurs when healthcare professionals have stigmatizing attitudes towards their patients, which are frequently based on fear or misunderstandings of the causes and symptoms of mental illness, or when professionals themselves experience stigma from the public because of their work with stigmatized individuals (Subu et al., 2021). In time, individuals with mental disorders may avoid seeking treatment, which contributes to the global treatment gap and worsened outcomes in physical and mental domains (Ran et al., 2021), negatively impacting their quality of life. This study aims to determine the knowledge of mental illness and the existence of professional stigma among nurses in a teaching hospital in Selangor. The study objectives were to determine the level of knowledge and stigma about mental illness among nurses, to determine the relationship between knowledge and stigma towards mental illness across the nurses' demographic variables. By

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addressing knowledge gaps and professional stigma among nurses, the study can contribute significantly to enhancing mental health care practices in the specific hospital setting and beyond for a more compassionate and effective mental health care system.

2.0 Literature Review

The knowledge about mental illness can vary among different populations and professional groups. 33.0% of the participants had high knowledge scores regarding mental illness, and having more information about mental illness was linked to fewer stigmatizing views in the general community in Lebanon (Abi Doumit et al., 2019). To care for patients with mental illness and potentially lessen negative attitudes toward this patient group, nurses in intensive care units reported experiencing negative stereotypes and stigma towards their patients (Weare et al., 2019). They also believed that additional education and training was necessary. Sangeetha et al. (2020) found that students at a Malaysian private university understood mental health disorders well (65.3%). Similarly, a study conducted among medical students at a Canadian university revealed that the students had a basic understanding of mental diseases and could name a variety of therapies for mental diseases, including medication, counselling, social support, and dietary changes (Riffel & Chen, 2020).

Stigmatizing beliefs about people with mental illnesses are prominent in both the public and among healthcare professionals (Ihalainen-Tamlander et al., 2016; Lien et al., 2019; Ghuloum et al., 2022). Contrary to expectations, healthcare providers frequently display negative and stigmatizing attitudes and behaviour toward patients with mental illness (Fernandes et al., 2022). This negative behaviour can lead to poor patient care and management, affecting interactions and resulting in a lack of acceptance, support, and adequate care for these patients. In a study in Jordan, healthcare providers' perceived stigma correlated with greater negative attitudes, and this was associated with less knowledge among both physicians and nurses (p<0.01) (Dalky et al., 2019).

Studies proved that direct experience and contact with individuals with mental illness can potentially reduce stigmatizing attitudes among healthcare professionals. Interpersonal contact with individuals who have mental illness may contribute to the development of positive thoughts and express fewer attitudes toward stigma (Ihalainen-Tamlander et al., 2016; Oliveira et al., 2020). Stigma and work experience were also related (Ihalainen-Tamlander et al., 2016). This indicates that the level of stigma may vary based on the professional experience of healthcare workers, suggesting that more experienced professionals may exhibit different attitudes.

3.0 Methodology

3.1 Study design and setting

A quantitative study with a cross-sectional survey was conducted in a teaching hospital, Al-Sultan Abdullah Hospital, Selangor. The study setting was chosen to address the concerning issue of mental health prevalence in Selangor. Limited studies on the stigma towards people with mental illness among nurses were identified in Selangor, indicating a research gap in this specific area.

3.2 Population and Sampling

Nurses from multiple clinical settings were chosen by simple random sampling. Nurses who were available during the study period with working experience of more than three years were included in the study. The sample size was calculated using the Raosoft Sample Size Calculator with a confidence level of 95%, response distribution of 50%, and a margin error of 5 % leading to the total sample size of 212. The ethical approval was received from the Research Ethics Committee, Universiti Teknologi MARA (FERC/FSK/MR/2022/0243) and the HASA Ethics Committee (500-PJI (18/4/45)).

3.3 Instrumentation

A self-administered questionnaire form was used for collecting data. Section A comprises demographic data, including age, gender, academic qualification, working experience, family history, and experience caring for patients with mental illness. Section B consists of 12 items to measure the knowledge of mental illness; the Mental Health Knowledge Schedule (MAKS) was adopted from Thornicroft et al. (2009) with an alpha coefficient of 0.76. Section C was related to items to measure stigma towards mental illness using the Attribution Questionnaire (AQ-27) (Corrigan et al., 2003) (α =0.62).

3.4 Data Collection

Nurses who fit the inclusion criteria were approached as potential participants. They were given a brief explanation of the study before seeking their consensus to participate. All participants who provided consent were then given self-administered questionnaires. The data collection process occurred between May 1, 2023, and June 19, 2023. Strict confidentiality measures were upheld throughout the research process. Participant data was kept anonymous and stored in a computer system with restricted access, limited to the researchers only.

3.5 Data Analysis

Completed questionnaires were entered into the SPSS software, Version 27.0, for analysis. Demographic data was presented using frequency and percentage, providing an overview of participant characteristics. Knowledge of mental illness was described using frequency, percentage, mean, and standard deviation. The normality of the data was confirmed using the Shapiro-Wilk test. Pearson

Chi-square was utilized to assess the relationship between knowledge and stigma. The Kruskal-Wallis test and Mann-Whitney U test were employed to investigate differences between stigma and demographic characteristics.

4.0 Findings

178 participants responded to the study, yielding an 83.9% response rate from 212 identified samples. The demographic details of the participants are shown in Table 1. Most participants, 97(54.5%), are in the 30 to 39-year-old age range, while the least, 15(8.4%), are in the 40 to 49-year-old age group. There are 172 (96.6%) female participants and only 6 (3.4%) male participants. 85.4% of the participants had a diploma, while 24 (13.5%) had a bachelor's degree. 61(34.3%) have worked for more than nine years, while the fewest, 27(15.2%), have worked between seven and eight years. In the meantime, 164(92.1%) of the participants do not have a family member who has a mental illness. Most participants have prior experience providing patient care with mental illness, 109(61.2%).

Tahla 1	The Dem	ographic (haractaristics	of Participants
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Demographic Variables		n	%
Age	Under 30	66	37.1%
	30 to 39 years	97	54.5%
	40 to 49 years	15	8.4%
Gender	Male	6	3.4%
	Female	172	96.6%
Academic Qualification	Diploma	152	85.4%
	Bachelor's degree	24	13.5%
	Master's degree	2	1.1%
Working Experience (years)	3 to 4 years	49	27.5%
, , ,	5 to 6 years	41	23.0%
	7 to 8 years	27	15.2%
	More than 9 years	61	34.3%
Family History	Has a family member with mental illness	14	7.9%
	No family member with mental illness	164	92.1%
Having experience caring for	Yes	109	61.2%
patient with mental illness	No	69	38.8%

4.1 Knowledge of mental illness

Table 2 presents the knowledge on mental illness. A score of 1 to 20 denotes a poor level of knowledge, 21 to 40 a moderate level, and 41 to 60 a high level. The mean score was 44.57 ± 4.61 , suggesting a high degree of knowledge. Of the participants, 153 (86.0%) had a high level of knowledge, and another 25 (14.0%) had a moderate level of knowledge.

Table 2. The Level of Knowledge towards Mental Illness

Score	f (%)	Mean (SD)	Interpretation
1 to 20	0 (0%)		Low
21 to 40	25 (14.0%)		Moderate
41 to 60	153 (86.0%)		High
Average Score		44.57±4.61	High

4.2 Stigma Towards Mental Illness

A stigma is an unfavorable and typically hostile societal opinion attached to an individual or group, usually condemning them for some perceived difference or weakness in their existence. Overall, this study discovered that stigma exists among nurses and that stigma preconceptions vary. The stigma stereotype factors are shown in Table 3. The stereotypical stigma associated with "help" received the highest score, followed by "coercion" and "pity." The results indicate that 44 participants (24.7%) have a stigma associated with coercion, while 48 participants (27%) have a stigma associated with help. Twelve (6.7%) participants were stigmatized by the blame and segregation stereotypes. The stigma stereotypes of anger (2.8%) and fear (3.4%) were present in 5 and 6 participants, respectively.

Table 3. Stigma towards Mental Illness among Nurses

Stigma Stereotype	n	%	Mean (SD)
Blame	12	6.7	14.76±3.99
Anger	5	2.8	13.51±4.40
Pity	28	15.7	18.71±3.47
Help	48	27.0	19.49±4.50

Dangerousness	13	7.3	15.83±5.08
Fear	6	3.4	17.07±6.95
Avoidance	10	5.6	13.01±4.64
Segregation	12	6.7	15.93±4.43
Coercion	44	24.7	19.87±3.79

4.3 The relationship between knowledge and stigma towards mental illness

The substantial correlation between nurses' knowledge and the stigma associated with mental illness is shown in Table 4 (X2 (8, N=178) =26.87, p =.001). The participants with high levels of knowledge fit the stigma stereotypes of "Help" and "Coercion."

Table 4. The Relationship between Knowledge and Stigma towards Mental Illness

	Leve	l of Knowledge	x² (df)	p-value	
Stigma Stereotypes	Moderate f(%)	High f (%)			
Blame	6 (1.7)	6 (10.3)	26.87 (8)	<.001*	
Anger	1 (0.7)	4 (4.3)	, ,		
Pity	4 (3.9)	24 (24.1)			
Help	0 (6.7)	48 (41.3)			
Dangerousness	1 (1.8)	12 (11.2)			
Fear	2 (0.8)	4 (5.2)			
Avoidance	2 (1.4)	8 (8.6)			
Segregation	0 (1.7)	12 (10.3)			
Coercion	9 (6.2)	35 (37.8)			

Pearson Chi-square was used for the analysis, *p<0.05.

4.4 The difference(s) of stigma towards mental illness with the nurses' demographic variables

One can only assume that close relationships with people who have mental illnesses may add to a nurse's burden or sense of feeling helpless, especially if these individuals have not made the necessary progress in their recovery (Mittal et al. 2014; Ihalainen 2023). Mann-Whitney U-test was employed to evaluate the difference between stigma stereotypes and the participants' gender, family history, and experience caring for mentally ill patients. Nurses with a family history of mental illness and those with experience in caring for patients with mental illness seem to have a higher prevalence of "pity" stereotype stigma compared to other groups, and this difference is statistically significant (p<0.05) (Table 5).

Table 5. The Difference between Stigma with the Demographic Variables

Stigma Stereotype		Gender			Family Histor	у		Experience caring for patient with mental illness		
	Female (n=172)	Male (n=6)		Yes (n=14)	No (n=164)		Yes (n=109)	No (n=69)		
	Mean Rank	Mean Rank	Ζ	Mean Rank	Mean Rank	Z	Mean Rank	Mean Rank	Ζ	
Blame	91.08	89.44	-0.08	70.32	91.14	-1.46	85.83	95.29	-1.20	
Anger	77.83	89.91	-0.57	72.11	90.14	-1.32	88.98	90.32	-1.17	
Pity	89.58	89.50	-0.00	117.93	87.07	-2.16*	97.22	77.30	-2.52*	
Help	108.3	88.84	-0.91	112.1	87.57	-1.72	93.86	82.61	-1.42	
Dangerousness	63.25	90.42	-1.27	84.07	89.96	-0.41	93.25	83.58	-1.22	
Fear	58.08	90.60	-1.52	99.29	88.66	-0.74	92.12	85.36	-0.86	
Avoidance	117.08	88.54	-1.34	110.11	87.74	-1.56	87.96	91.93	-0.50	
Segregation	70.75	90.15	-0.91	66.89	91.43	-1.72	89.90	88.87	-0.13	
Coercion	106.17	88.92	-0.81	113.36	87.46	-1.81	94.84	81.06	-1.75	

Mann-Whitney U-test was used for the analysis, *p<0.05.

The Kruskal-Wallis test examined the differences in stigma stereotypes across different groups based on the age, academic qualification, and working experience of the participants. The results suggest that there are significant differences in stigma stereotypes among participants based on their working experience, particularly in the dimensions of anger, dangerousness, fear, and avoidance (p<0.05) (Table 6). These findings contribute valuable insights into how working experience may influence the perception of stigma in the context of mental illness.

Table 6. The Difference between Stigma with the Demographic Variables

Stigma	Age (years)				Academic Qualification					Working experience (years)			
Stereotype	<30 (n=66)	30-39 (n=97)	<u>></u> 40 (n=15)	p-	Diploma (n=152)	Bachelor (n=24)	Master (n=2)	p-	3-4 (n=49)	5-6 (n=41)	7-8 (n=27)	<u>></u> 9 (61)	p-
	Mean Rank	Mean Rank	Mean Rank	value	Mean Rank	Mean Rank	Mean Rank	value	Mean Rank	Mean Rank	Mean Rank	Mean Rank	value
Blame	80.68	96.18	85.13	0.16	90.17	84.48	32.25	0.24	81.71	88.99	98.57	92.08	0.55
Anger	85.19	92.93	86.27	0.62	90.17	88.60	49.25	0.53	85.89	72.29	100.70	99.01	0.04*
Pity	87.11	93.48	89.30	0.36	88.24	95.04	119.00	0.60	85.00	78.07	97.70	97.16	0.22
Help	81.36	95.07	89.30	0.25	90.79	81.38	89.25	0.71	83.80	94.00	95.59	88.36	0.72
Dangerousness	85.24	94.54	75.67	0.29	91.83	75.85	76.00	0.34	83.61	66.88	99.61	104.96	0.00*
Fear	84.72	89.80	78.57	0.10	90.21	88.04	53.25	0.59	83.55	73.48	98.33	101.14	0.04*
Avoidance	91.54	89.90	78.57	0.68	88.72	88.06	166.25	0.11	88.64	71.68	83.96	104.61	0.02*
Segregation	84.04	92.65	93.13	0.55	87.68	101.25	87.00	0.48	87.68	72.60	93.72	100.45	0.06
Coercion	82.21	94.16	91.40	0.34	91.24	73.67	147.25	80.0	84.30	84.84	82.81	99.77	0.29

Kruskal Wallis was used for the analysis, *p<0.05.

5.0 Discussion

Similar to studies conducted in South Africa and Hong Kong, respectively, by Kigozi-Male et al. (2023) and Fiona Yan-yan Wong et al. (2023), nurses in this study generally had a high level of knowledge regarding mental illness. A variation in the scores for each item indicated that nurses in this study had a stronger understanding of psychotherapy followed by medicine as an effective treatment for patients with mental illness. By interacting with patients, nurses can acquire experience and information that helps them take their medication as prescribed by physicians (Lin et al., 2022). Additionally, most participants are capable of advising a friend who is struggling with mental illness to get professional assistance. This conclusion was in line with findings from earlier studies (Abolfotouh et al., 2019; Sangeeta et al., 2020) that showed more than one-third of participants felt that most people with mental illness seek support from a healthcare practitioner. Participants in this study's increased recognition of depression, bipolar disorder, and schizophrenia as mental illnesses suggest that some mental illnesses may be better understood with education; however, there are still some complex symptoms or emotional reactions that are challenging to understand and are frequently misdiagnosed as mental illnesses (Li et al., 2019).

The results of this study demonstrate that professional stigma exists. The most prevalent stigma stereotypes were Help, Coercion, and Sympathy. This is consistent with findings from a prior study that found nursing students to have a high Help, Coercion, and Pity score and a propensity to support and care for those who have a mental illness (Fernandes et al., 2022). The high score in the "Help" stereotype suggests that the nurses in this study demonstrate a concerned readiness to assist and engage in discussions about mental health issues with individuals who are suffering from mental illnesses. On the other hand, the study indicates that nurses felt forceful measures might be necessary to improve a patient's health. This could involve interventions that are more assertive or coercive. There has long been debate concerning the morality of coercive treatment in mental health care (Baminiwatta et al., 2023). More compassionate nurses likely thought that the patient would benefit from treatment against their will because the patient's mental illness may have caused them to lose comprehension. According to earlier research, coercive therapy is often used with psychiatric patients because medical professionals view it as morally acceptable. This phenomenon is referred to as "good coercion" or "beneficial coercion" (Baminiwatta et al., 2023). Pity, which measured nurses' feelings of sympathy, compassion, and empathy for those suffering from mental illnesses, had the next-highest score is supported by some studies identified this stereotype as the most frequently recognized stigma (Ihalainen-Tamlander et al., 2016).

This study provides evidence of a significant relationship between knowledge and stigma towards mental illness among nurses. The positive associations between higher knowledge levels and helping behaviour, reduced blame and anger, and increased willingness to communicate about mental health underscore the importance of education and experience in shaping positive attitudes among healthcare professionals. Nurses are more influenced to help and talk about mental health problems with people with mental illness (Ihalainen-Tamlander et al., 2016). Participants with a high level of knowledge were reported to be more likely to help patients with mental illness than those with a moderate level of knowledge. This positive correlation between knowledge and helping behaviour aligns with similar findings in studies conducted by Kigozi-Male et al. (2023) and Baminiwatta et al. (2023). The more education, years of

experience, and patient contact that healthcare professionals have, the more positive their attitude toward mental illness will be (Ghuloum et al., 2022).

The present study demonstrates that nurses who have a family member with mental illness and experience caring for patients with mental illness exhibit a significantly higher difference in the Pity stereotype than other groups. This implies that personal experiences and professional exposure to individuals with mental disorders can influence nurses' perceptions and attitudes (Ihalainen-Tamlander et al., 2016; Oliveira et al., 2020). Nurses who lack experience, confidence, and effective management skills are more likely to experience trauma and anxiety in the provision of mental health services (Magqadiyane, 2020). This study also adds to the understanding of stigma towards mental illness among nurses, suggesting that age, gender, and academic qualification may not be significant factors in shaping stigma among nurses. Similarly, no significant difference in stigma between males and females was found in some studies (Castillejos Anguiano et al., 2019; Zamorano et al., 2023).

In contrast, a study reported that younger nurses working in primary health care centres experienced more fear and insecurity toward people with mental health problems. Nurses who had received additional mental health training increased nurses' desire to assist those with mental illnesses and made them seem less threatening (Ihalainen-Tamlander et al., 2016; Rodríguez-Almagro et al., 2019). According to the study, there are notable variations in stigma stereotypes among nurses across their working experience. This difference is observed in specific stigma stereotypes, including Anger, Dangerousness, Fear, and Avoidance. The findings are consistent with a previous study among nurses in primary healthcare centres in Finland (Ihalainen-Tamlander et al., 2016). This suggests that the relationship between stigma and working experience may transcend geographical contexts and be a consistent pattern among nurses.

6.0 Conclusion & Recommendations

The current study sheds light on the knowledge of mental illness and the presence of stigma stereotypes among nurses, emphasizing the importance of understanding and addressing these attitudes to improve the care and support provided to individuals with mental illnesses. The nuances of the identified stereotypes, such as the positive inclination to help contrasted with debates on coercive measures, add complexity to the discussion around mental health stigma in the nursing profession. The overall findings contribute to the ongoing efforts needed to improve mental health care by addressing knowledge gaps and stigma within nursing professionals. However, the study findings may be limited because they include only a single population of nurses from a teaching hospital and nurses with specialized qualifications in psychiatric nursing were not included. Expanding the scope to a larger population, especially those directly involved in the mental health care system, is a valuable step forward. A qualitative approach may enable an understanding of concepts, opinions, or experiences while comparing studies among nurses and student nurses to those of other healthcare workers related to mental health stigma in future research.

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Paper Contribution to Related Field of Study

The study findings may add to the growing body of knowledge on mental illness and the complex relationship between professional experience and stigma in healthcare settings. Understanding these dynamics can contribute to developing targeted interventions to address and reduce stigma among nurses.

References

Abi Doumit, C., Haddad, C., Sacre, H., Salameh, P., Akel, M., Obeid, S., Akiki, M., Mattar, E., Hilal, N., Hallit, S., & Soufia, M. (2019). Knowledge, attitude, and behaviors towards patients with mental illness: Results from a national Lebanese study. *Plos One, 14*(9). https://doi.org/10.1371/journal.pone.0222172

Abolfotouh, M. A., Almutairi, A., Al Mutairi, Z., Salam, M., Alhashem, A., Adlan, A., & Modayfer, O. (2019). Attitudes toward mental illness, mentally ill persons, and help-seeking among the Saudi public and sociodemographic correlates. *Psychology Research and Behavior Management, 12,* 45–54. https://doi.org/10.2147/prbm.s191676

Baminiwatta, A., Alahakoon, H., Herath, N. C., Kodithuwakku, K. M., & Nanayakkara, T. (2023). Trait Mindfulness, Compassion, and Stigma Towards Patients with Mental Illness: A Study Among Nurses in Sri Lanka. *Mindfulness*, 14(4), 979-99. https://doi.org/10.1007/s12671-023-02108-5

Castillejos Anguiano, M. C., Bordallo Aragón, A., Aguilera Fernández, D., & Moreno Küstner, B. (2019). Perceptions about mental illness among general practitioners. International Journal of Mental Health Systems, 13(27), 1-5. https://doi.org/10.1186/s13033-019-0284-9

Dalky, H. F., Abu-Hassan, H. H., Dalky, A. F., & Al-Delaimy, W. (2019). Assessment of Mental Health Stigma Components of Mental Health Knowledge, Attitudes and Behaviors Among Jordanian Healthcare Providers. Community Mental Health Journal, 56(3), 524-531. https://doi.org/10.1007/s10597-019-00509-2

Fernandes, J. B., Família, C., Castro, C., & Simões, A. (2022). Stigma towards People with Mental Illness among Portuguese Nursing Students. *Journal of Personalized Medicine*, 12(3), 326. https://doi.org/10.3390/jpm12030326

Fiona Yan-yan Wong, Keith Kin-lung Wong, Paul Chi-wai Lam, Chin, L., & Fung, C. (2023). Community knowledge and attitudes toward recovering citizenship and mental illness: a telephone survey approach. *Journal of Public Mental Health*, 22(3), 133.145. https://doi.org/10.1108/jpmh-08-2022-0086

Ghuloum, S., Mahfoud, Z. R., Al-Amin, H., Marji, T., & Kehyayan, V. (2022). Healthcare Professionals' Attitudes Toward Patients with Mental Illness: A Cross-Sectional Study in Qatar. Frontiers in Psychiatry, 13. https://doi.org/10.3389/fpsyt.2022.88494

Hartini, N., Fardana, N. A., Ariana, A. D., & Wardana, N. D. (2018). Stigma toward people with mental health problems in Indonesia. *Psychology Research and Behavior Management*, 11, 535–541. https://doi.org/10.2147/prbm.s175251

Ihalainen-Tamlander, N., Vähäniemi, A., Löyttyniemi, E., Suominen, T., & Välimäki, M. (2016). Stigmatizing attitudes in nurses towards people with mental illness: a cross-sectional study in primary settings in Finland. *J Psychiatr Ment Health Nurs*, 23. 427–437. https://psycnet.apa.org/doi/10.1111/jpm.12319

Kigozi-Male, N. G., Heunis, J. C., & Engelbrecht, M. C. (2023). Primary health care nurses' mental health knowledge and attitudes towards patients and mental health care in a South African metropolitan municipality. BMC Nursing, 22(25). https://doi.org/10.1186/s12912-023-01188-x

Leong Abdullah, M. F. I., Ahmad Yusof, H., Mohd Shariff, N., Hami, R., Nisman, N. F., & Law, K. S. (2021). Depression and anxiety in the Malaysian urban population and their association with demographic characteristics, quality of life, and the emergence of the COVID-19 pandemic. *Current Psychology, 40*(12). 6259-6270. https://doi.org/10.1007/s12144-021-01492-2

Lin, Y. Y., Yen, W. J., Hou, W. L., Liao, W. C., & Lin, M. L. (2022). Mental Health Nurses' Tacit Knowledge of Strategies for Improving Medication Adherence for Schizophrenia: A Qualitative Study. Healthcare, 10(3), 492. https://doi.org/10.3390/healthcare10030492

Lien, Y. Y., Lin, H. S., Tsai, C. H., Lien, Y. J., & Wu, T. T. (2019). Changes in attitudes toward mental illness in healthcare professionals and students. Int J Environ Res Public Health, 16(23),4655. https://doi.org/10.3390/ijerph16234655

Maggadiyane, S. (2020). Caring for mental health service users on a general ward: a phenomenological approach. *International Journal of Healthcare Sciences*, 8(1), 59-67.

Oliveira, A. M., Machado, D., Fonseca, J. B., Palha, F., Silva Moreira, P., Sousa, N., Cerqueira, J. J., & Morgado, P. (2020). Stigmatizing Attitudes Toward Patients with Psychiatric Disorders Among Medical Students and Professionals. Frontiers in Psychiatry, 11. 326. https://doi.org/10.3389/fpsyt.2020.00326

Ran, M. S., Hall, B. J., Su, T. T., Prawira, B., Breth-Petersen, M., Li, X. H., & Zhang, T. M. (2021). Stigma of mental illness and cultural factors in Pacific Rim region: a systematic review. *BMC Psychiatry*, 21(1), 8. https://doi.org/10.1186/s12888-020-02991-5

Riffel, T., & Chen, S. P. (2019). Exploring the Knowledge, Attitudes, and Behavioral Responses of Healthcare Students towards Mental Illnesses-A Qualitative Study. *Int J Environ Res Public Health*, 17(1). 25. https://doi.org/10.3390/ijerph17010025

Rodríguez-Almagro, Hernández-Martínez, Rodríguez-Almagro, Quiros-García, Solano-Ruiz, & Gómez-Salgado. (2019). Level of Stigma among Spanish Nursing Students toward Mental Illness and Associated Factors: A Mixed-Methods Study. *International Journal of Environmental Research and Public Health*, 16(23), 4870. https://doi.org/10.3390/ijerph16234870

Sangeeta Roop Kaur Despande, Irma Wati binti Ngadimon, & Nor Liana Che Yaacob. (2020). Stigma And Attitudes Towards Mental Health Disorders: A Cross Sectional Study at a Private University In Malaysia. *Malaysian Journal of Public Health Medicine*, 20(1), 40–47. https://doi.org/10.37268/mjphm/vol.20/no.1/art.558

Subu, M. A., Wati, D. F., Netrida, N., Priscilla, V., Dias, J. M., Abraham, M. S., Slewa-Younan, S., & Al-Yateem, N. (2021). Types of stigma experienced by patients with mental illness and mental health nurses in Indonesia: a qualitative content analysis. *International Journal of Mental Health Systems*, 15(1). https://doi.org/10.1186/s13033-021-00502-x

Weare, R., Green, C., Olasoji, M., & Plummer, V. (2019). ICU nurses feel unprepared to care for patients with mental illness: A survey of nurses' attitudes, knowledge, and skills. *Intensive and Critical Care Nursing*, 53, 37–42. https://doi.org/10.1016/j.iccn.2019.03.001

Zamorano, S., Sáez-Alonso, M., González-Sanguino, C., & Muñoz, M. (2023). Social Stigma Towards Mental Health Problems in Spain: A Systematic Review. Clínica Y Salud, 34(1), 23–34. https://doi.org/10.5093/clysa2023a5