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**Original Research Article**

# Attitudes of Omani Nurses toward Clients with Mental Illness in Governmental Hospitals in Oman

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**Abstract:** People living with mental illness are disproportionately affected by stigma in public environments and healthcare systems. Therefore, this quantitative correlational study aimed to explore the nurses' attitudes towards people with mental illness in Oman. It also assessed the factors that influence nurses' attitudes in providing health care in the Ministry of Health facilities. Additionally, this study examined the relationship between the demographic characteristics of nurses (age, gender, levels of education, years of nursing experience, and areas of nursing practice) and their attitudes towards people with mental illness. **Methods:** A total of 530 registered nurses, with a minimum of one year nursing experience, from Four governmental hospitals in Oman have participated in this study, and only 502 surveys were included in the study analysis. The participants were recruited via convenience and nonprobability sampling. The Opinions about Mental Illness Scale (OMI) and the Demographic Characteristics Questionnaire were used in the study. **Results**: A total of 530 registered nurses have participated in the study with a response rate of 94.7%. Demographic characteristics (age, levels of education, and years of nursing experiences) were significantly related to nurses' attitudes towards people with mental illness. The findings of this study indicated that nurses who worked in mental health areas had more positive attitudes than nurses who worked in in other areas including medical-surgical and maternal and child health areas. Conclusion: Actions should be taken to foster positive attitudes towards people with mental illness, such as evaluating ways to do this in nursing curricula as well as incorporating programs to promote knowledge of mental health among practicing nurses, particularly general nurses.
**Keywords:** Stigma of Mental Illness, Nurses, Attitudes, Mental Illness, Mental Health.

## INTRODUCTION

The stigma of mental illness is a public health issue that negatively affects the lives of people by limiting their access to opportunities such as employment, education, and housing (Seman *et al.*, 2024; Parcesepe & Cabassa, 2012). Many people with mental health problems do not seek treatment, and as a result, they fail to receive adequate care (Ghuloum, *et al.*, 2022; Subu *et al.*, 2021; Parle, 2012). Additionally, they experience a lack of access to mental health professionals (Subu *et al.*, 2021; Ross & Goldner, 2009). The stigma has a close link to discrimination and prejudice, which leads to the violation of human rights (World Health Organization, 2022). It is more noticeable than the perceived stigma by people with severe limitations in activities (Alonso *et al.*, 2008).

The stigma also affects the social, emotional, and psychological aspects as well as the familial and marital relationships of people with mental illness (Corrigan & Watson, 2002). It can also affect one's social life, educational and employment opportunities (Seman *et al.*, 2024). People with mental illness are often stigmatized because of the stereotypes that society has about them (Rusch, Angermeyer, & Corrigan, 2005). Alonso *et al.*, (2008) pointed out that stigma and discrimination against people with mental illness persist even after the symptoms have been alleviated.

Nurses may have either positive or negative attitudes towards people with mental health problems. The negative attitudes can result in several adverse consequences, including, but not limited to, feeling inadequate, incompetent, or stressed when caring for patients with mental health problems. Conversely,

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patients may feel ignored, uncared for or different treatment by their designated caregivers (Van Der Kluit & Goossens, 2011) and poor management of mental illness can lead to severe co-occurring illnesses (Kolb *et al*., 2023).

Collectively, there is general agreement that nurses with stigmatizing professional attitudes towards people with mental illness impacted negatively the access to healthcare, client care, and have an adverse effect on treatment outcomes (Ghuloum, *et al*., 2022; Ngui, Khasakhala, Ndetei, & Roberts, 2010; Shrivastava, Johnston, & Bureau, 2012b). Many studies have investigated the attitudes of health care professionals, including doctors (Adewuya & Oguntade, 2007; Challapallisri & Dempster, 2015; Imbeau, Bouchard, Terradas, & Simard, 2014), nurses and student nurses (Hauck, Harrison, & Montecalvo, 2013; James & Cowman, 2007; Linden & Kavanagh, 2012; Reed & Fitzgerald, 2005), and social workers (Moldovan, 2007; Theriot & Lodato, 2012), However, there is a lack of evidence in the literature about how the stigma of mental illness takes place within Arabic societies (Dardas & Simmons, 2015). Also, there are large gaps in knowledge on any baseline data to identify and track the population needs of this specific community (Al-Krenawi, 2005). This lack of expertise affects the ability to offer integrated mental health services in the community and hinders the development of research programs that focus on stigma and mental health while supporting patients and their families.

Link and Phelan (2001) defined social stigma as "The co-occurrence of its components-labeling, stereotyping, separation, status loss, and discrimination" (p.263). According to Goffman (1963), stigma disqualifies certain groups (e.g. disabled individuals, psychiatric patients, substance abuse patients, and patients with AIDS) from full social acceptance and the ability to conform to the normal standards of society. It also leads to cognitive ambivalence, which causes emotional conflict.

Throughout the history of mental health nursing, professional and societal perceptions and beliefs about mental illnesses have affected mental health nursing care (Boling, 2003). The stigma associated with mental illness has negatively influenced the nursing profession. For example, Halter (2008) examined the attitudes of registered nurses and licensed practical nurses towards individuals who have chosen a career in mental health nursing. Two hundred nurses were recruited using convenience sample. A total of 121 surveys were returned, which accounted for 61% of the participants. The results demonstrated that mental health nursing was the least preferred specialty of ten areas in nursing. Moreover, mental health nurses were viewed by their nursing colleagues as least logical, skilled, dynamic, and respected. This indicates that the stigma is even presented against not only people with mental illness but also the mental health specialty itself.

The stigma associated with mental illness leads to several problems, including stress and disability, which lowers the quality of life. The stigma may also have a negative effect on healthcare professionals, which may, in turn, affect the quality of care they provide (Corrigan, Druss, & Perlick, 2014). However, psychiatric nurses with years of experience exhibited positive attitudes towards persons diagnosed with bipolar disorders. These nurses were willing to pursue further training to enhance their ability to effectively deal with deliberate self-harm (Hauck, *et al*., 2013). Chambers *et al*., (2010) conducted a descriptive study to describe and compare attitudes towards mental illness across a sample of registered nurses working in mental health settings in Europe. They found that Portuguese and Irish nurses had more positive attitudes towards mental illness than other nurses. These nurses exhibited sympathy and compassionate care. They encouraged people with mental illness to be proactive in making their future decisions. These differences in nurses' attitudes were significantly associated with gender (female nurses had more positive attitudes than male nurses) and position of nurses (nurse managers had positive attitudes than staff nurses). Whereas, age and level of educations were not significant when comparing nurses' attitudes towards mental illness.

In studies conducted in Arab countries, mental disorders are diagnosed more frequently in females than males (Al-Krenawi, 2005; Hamdan, 2009; Hammoud *et al*., 2005). Hamdan (2009) stated that women in Arabic countries suffer from various mental health problems, particularly depression, somatization, eating disorders, and anxiety disorders. Women with mental disorders are stigmatized, have less access to health care and suffer from great negative social consequences due to the stigma of mental illness (Douki, S. *et al*., 2007). Cultural and contextual issues such as social life events (e.g., separation, divorce, financial problems, being widowed, and work stress), domestic violence, and war and trauma are considered potential risk factors for developing mental illness in the female population (Hamdan, 2009). Unfortunately, women seek mental health care when their health problems are worsened and difficult to manage (Hamdan, 2009).

There is limited research conducted to assess nurses' attitudes towards people with mental illness in Oman. Therefore, there is a need to expand the body of nursing research on determining whether the nurses' attitudes towards people with mental illness are stigmatized or not since nurses are the main health care providers to the population that suffers from mental illness. The perception of stigma, which nurses experience as a result of working with people with mental illness has not been adequately explored. This may be true for the nurses practicing in Oman, who might

experience stigma by association, since no previous study has examined Omani nurses' attitudes towards people with mental illness. Therefore, the purpose of this study was to explore the attitudes and any influencing factors of Omani nurses towards people with mental illnesses and determine if Omani nurses experience stigma in the Ministry of Health (MOH) institutions.

**Significance of the Study to the Nursing Profession in Oman**

In Oman, mental health disorders are prevalent and are accompanied by social stigmas similar to those observed in other countries. These stigmas are evident and pose significant barriers to the development of high-quality mental health services. The community members often attribute mental illness to supernatural influences, such as evil spirits (Al-Adawi *et al*., 2002). According to the World Health Organization (WHO, 2017), neuropsychiatric disorders in Oman accounted for approximately 12.9% of health loss and the global burden of disease. In 2024, the Ministry of Health reported a total of 54,298 visits to psychiatric clinics, (Ministry of Health: Annual Health Report, 2024). This data suggests that the number of psychiatric patients in Oman, potentially due to factors such as the stigma surrounding mental illness in both community and hospital settings, as well as patients' reluctance to seek medical care or their reliance on traditional healers (Al-Adawi *et al*., 2002; Al-Adawi, 2017).

There is an existing gap in the literature as there is little information that examines stigma in mental illness as well as a lack of literature documenting the collaboration between nurses and other health care professionals in Oman. Therefore, there is a need to formulate a collaborative partnership among multidisciplinary healthcare team to develop a plan to address mental health issues, and conduct a descriptive correlational study to determine nurses' attitudes toward mental illness. This study explored the staff nurses' attitudes towards people with mental health illnesses in Oman and the factors that influence their attitudes.

**Study Purpose**

The main purpose of this descriptive correlational study was to explore the staff nurses' attitudes towards people with mental illness in Oman. Other research study purposes were to:

- Examine the relationship between staff nurses' level of education and their attitudes towards clients with mental illness.
- Examine the relationship between age of staff nurses and their attitudes towards clients with mental illness.
- Examine the relationship between nurses' years of clinical experience and nurses' attitudes towards clients with mental illness.

**Study Questions**

1. What are the attitudes of staff nurses towards clients with mental illness in Oman?
2. What is the relationship between staff nurses' level of education and their attitudes towards clients with mental illness?
3. What is the relationship between age of staff nurses and their attitudes towards clients with mental illness?
4. What is the relationship between nurses' years of clinical experience and nurses' attitudes towards clients with mental illness?
5. Do nurses' attitudes differ by gender towards clients with mental illness?

# METHODS

## *Study Design*

The study utilized a quantitative correlational design to describe the relationship between the variables (Polit & Beck, 2004). The independent variables included level of education, years of clinical experience, type of clinical sites of practice, gender, and age of staff nurses. The dependent variable was the nurses' attitude towards clients with mental health illnesses. Additionally, no manipulation of variables occurred and no inferring causal relationships when using the quantitative correlational design (Polit & Beck, 2004).

## *Sample*

Sample size was determined through a power analysis using G*Power 31, with the α level for the ANOVA set at 0.006. This calculation reflects the use of five different subscales in the OMI. Therefore, to achieve power of 0.80 and a medium effect size (Cohen's $f$ = 0.25), a total sample size of 249 was required. The researcher approached 530 participants from four tertiary hospitals in Oman. The researcher used a convenience and nonprobability sampling method to select the participants. This sampling methods included all the Omani nurses, who met the study criteria and were readily available. The participants in this study were Omani nurses working in both psychiatric and general hospitals under the Ministry of Health in Oman. To limit the threat to the study's generalizability, the researcher decided to exclude non-Omani nurses from diverse countries with different cultural and religious backgrounds.

## *Instrument*
## *Opinions about Mental Illness Scale*

The Opinions about Mental Illness Scale (OMI) was used to assess the Omani nurses' attitudes towards people with mental illness. The OMI is widely used scale for assessing attitudes towards mental illness in various groups such as students (Imbornoni, 1996; Madianos, M. *et al*., 2005), case managers (Murray & Steffen, 1999), healthcare staffs (Arvaniti *et al*., 2009), and healthcare professions and non-healthcare professions (Todor, 2013; Tomaras *et al*., 2011). Reliability and validity of the OMI have been established over time (Thompson, 2015). This scale, developed by Cohen and Struening, is a 51-item self-response scale constructed to assess opinions and beliefs about mental illness (Cohen &

Struening, 1962). The OMI consists of five factors subscales: A. Authoritarianism represents opinions about people with mental illness as inferior to others; B. Benevolence represents whether the participants hold paternalistic views towards people with mental illness; C. Mental Hygiene reflects attitudes towards mental illness; D. Social Restrictiveness reflects the view that the mentally ill are a threat to society who should be restricted from interacting with others; E. Interpersonal Ideology measures a belief that mental illness is caused by interpersonal problems. Participants are asked to answer the questionnaire by using a 6-point Likert scale ranging from 1 = strongly agree, 2 = agree, 3 = partly

agree, 4 = partly disagree, 5 = disagree, or 6 = strongly disagree. Each subscale yields a score, where a high score indicates positive attitudes towards people with mental illnesses and a lower score indicates negative attitudes.

The internal reliability of OMI was assessed by Struening and Cohen (1963), who demonstrated the factorial stability of OMI subscales with three samples from three different hospitals. The psychometric results of the five factors were described in the following *Table 1*.

**Table 1: Opinions about Mental Illness Scale's Reliability**

| Psychometric of OMI Factors/Subscales | | The results of Alpha Reliability |
|---|---|---|
| A. | Authoritarianism | 0.77 to 0.80 |
| B. | Benevolence | 0.70 to 0.72 |
| C. | Mental illness ideology | 0.29 to 0.39 |
| D. | Social restrictiveness | 0.71 to 0.76 |
| E. | Interpersonal etiology | 0.65 to 0.66 |

The overall reliability of the OMI scale was 0.75 (Thompson, 2015). The OMI scale also was reviewed by Omani nurse experts to assess its auditability, clarity, and suitability to be used in Oman. The reliability within Omani nurses' population was tested within this study.

### Demographic Characteristics Questionnaire

The demographic characteristics questionnaire was added to this study, which included the following variables: age, gender, level of education, years of experiences, and clinical areas of practices. No participants' names nor hospital names were added to the questionnaire to protect patient and institution confidentiality and promote truthful responses.

### Ethical Consideration

Before conducting this study, the researcher obtained approval of MOH Research Committee, Oman. The participants were provided with a written consent form which explained the purpose of the study. The participants were informed that their information was kept confidential and anonymous. Additionally, the participants were instructed to sign the consent form, prior to completing the survey. The researcher explained to the nurses that their participation was voluntary and there was no penalty from not participating in the study or refusing to complete the survey. The participants were instructed to keep the completed surveys in sealed envelopes and the consent forms were put into one sealed envelope and then to hand over to the researcher or research assistants. The participants could withdraw from the study at any time without any penalty or ramifications. The completed surveys were stored in a locked cabinet to secure the data and its confidentiality and only the researcher had access to it. Later, the paper and pencil questionnaires were transferred to electronic format in the SPSS version 24.0 program.

### Data Collection Procedure

At least of one assistant was assigned from the nursing department at each hospital to help in inviting Omani nurses to participate in the study and in collecting the completed surveys in separate sealed envelopes marked questionnaire. The researcher was responsible for distributing the questionnaires to the Omani staff nurses. The researcher explained the study to the participants including specific information related to the study, its possible risks and the overall benefits of being a participant. Further, the researcher explained to the participants that their participation was voluntary and they could withdraw at any time during the study. Each participant was asked to sign the informed consent prior to participation in the study. The data collection process took place over a period of ten to fourteen days in each hospital. During this period, each participant was asked to complete the questionnaire during the same day or return it the following day. Instructions were provided at the top of each scale to guide the participants. Once the questionnaires were collected, there was no additional follow-up procedures. Both the researcher and assistant were responsible for obtaining the completed consent forms and questionnaires in the sealed envelopes and keeping them in a secured and locked file cabinet. The researcher supervised and facilitated the overall data collection process and was the person who had access to the data.

### Data Analysis

The SPSS version 24.0 was used to analyze the data. Descriptive statistics, including means, standard deviations, frequencies, and percentages were used to describe the sample and demographic variables of the study. Tables and charts were used to illustrate the findings.

The relationship between level of education and nurses' attitudes towards clients with mental illness was assessed using one-way ANOVAs followed by conducting a Tukey HSD post hoc test for any a significant ANOVA. This is to find out which groups were significantly different from one another. For assessing the relationship between the age of nurses and their attitudes towards clients with MI as well as their years of experience, the researcher used Pearson correlations since the actual age and years of experience of participants was obtained. Whereas, the researcher used t-tests for assessing if nurses' attitudes differ by gender. For a difference in staff nurses' attitudes towards clients with MI in the different clinical sites of practice: medical-surgical, mental health /psychiatric, and maternal-child, one-way ANOVA followed by a Tukey HSD post hoc test for any significant ANOVA were used

to find out which groups were significantly different from one another.

All statistical tests were two-tail tests to determine the positive or negative relationships between the independent variables (age, education, gender, years of practice, and sites of practices) and dependent variable (nurses' attitude towards people with mental illness).

# RESULTS

The questionnaire was distributed to 530 Omani nurses who were working in the ministry of health institutions. Out of the total number of questionnaires, 505 were completed and included in the study, accounting for a 95.3% response rate. The detailed analysis of demographic characteristics is shown in table 2.

**Table 2: Demographic Characteristics (N=505)**

| Variable | Frequency | Percent |
|---|---|---|
| Gender | | |
| Male | 82 | 16.2% |
| Female | 423 | 83.8% |
| Level of Education | | |
| Diploma | 332 | 65.7% |
| Post Basic | 99 | 19.6% |
| Bachelor | 70 | 13.9% |
| Masters | 4 | 0.8% |
| Area of Practice | | |
| Medical-Surgical | 270 | 53.5% |
| Mental Health | 98 | 19.4% |
| Maternal-Child | 137 | 27.1% |

*Data Analysis for Research Questions*

The attitudes of staff nurses towards clients with mental illness was answered using descriptive statistics. Mean scores and standard deviations of the dependent variable i.e., the attitudes of Omani nurses towards people with mental illness was calculated. The OMI Factor B (Benevolence) had the highest mean of 42.07 (n = 505) and standard deviation of 6.75 compared to other OMI factors. These scores appear in Table 3 below.

**Table 3: Descriptive Statistics for the scales**

| | Mean | Std. Deviation | Skewness | | Kurtosis | |
|---|---|---|---|---|---|---|
| | Statistic | Statistic | Statistic | Std. Error | Statistic | Std. Error |
| OMI Factor A | 34.3456 | 6.23723 | -.382 | .109 | .422 | .217 |
| OMI Factor B | 42.0708 | 6.74563 | -.202 | .109 | .127 | .217 |
| OMI Factor D | 25.3367 | 5.46635 | .008 | .109 | .165 | .217 |
| OMI Factor E | 18.8408 | 4.95550 | -.028 | .109 | -.322 | .217 |

The relationship between staff nurses' level of education and their attitudes towards clients with mental illness was analyzed using several Spearman correlations in the OMI different subscales. A separate one-way ANOVAS on each of the sub-categorical variables of level of education was conducted. The findings using Spearman's rho indicated that there was a positive relationship between level of education and OMI Factor B (Benevolence), which represents if the participants held paternalistic views towards people with mental illness (r = .196, n = 505, $p<.01$). In contrast, there was a negative relationship between level of education and

OMI Factor A (Authoritarianism), which captures nurses' opinions about mentally ill individuals as inferior and that they require coercive handling (r = -.091, n = 505, p = .042).

A *one-way ANOVA* was conducted between levels of education i.e., diploma in nursing (n = 332), post basic diploma (n = 99), bachelor degree (n = 70), and master's degree (n = 4) and OMI. The master's degree in nursing group was eliminated, since there were only four participants who had this degree.

The results indicated that there was a significant difference across the three levels of education with respect to OMI Factor A-Authoritarianism [$F$ (2, 498) = 4.20, p = .016], OMI Factor B-Benevolence [$F$ (2, 498) = 9.64, $p<.01$]. Whereas, no significant difference was found across the levels of education in relation to OMI Factor D-Social Restrictiveness [$F$ (2, 498) = 1.543, $p$ = .215], and OMI Factor E-Interpersonal Ideology [$F$ (2, 498) = 1.783, $p$ = .169] (Table 4).

**Table 4: One-Way ANOVAs-Summary of OMI & OMS-HC Scales by Level of Education**

| | | Sum of Squares | Df | Mean Square | F | Sig. |
|---|---|---|---|---|---|---|
| **OMI Factor A** | Between Groups | 323.619 | 2 | 161.810 | 4.200 | .016 |
| | Within Groups | 19185.122 | 498 | 38.524 | | |
| | Total | 19508.741 | 500 | | | |
| **OMI Factor B** | Between Groups | 840.677 | 2 | 420.339 | 9.640 | .000 |
| | Within Groups | 21715.538 | 498 | 43.605 | | |
| | Total | 22556.215 | 500 | | | |
| **OMI Factor D** | Between Groups | 90.473 | 2 | 45.237 | 1.543 | .215 |
| | Within Groups | 14600.201 | 498 | 29.318 | | |
| | Total | 14690.674 | 500 | | | |
| **OMI Factor E** | Between Groups | 86.920 | 2 | 43.460 | 1.783 | .169 |
| | Within Groups | 12138.253 | 498 | 24.374 | | |
| | Total | 12225.173 | 500 | | | |

To determine whether the groups differed significantly across levels of education, a post hoc test using Tukey HSD[a,b] was conducted on OMI Factor A (Authoritarianism), and OMI Factor B (Benevolence). The findings indicated that, in OMI Factor A, the bachelor's group scored significantly lower (mean = 32.39) than the diploma group (mean = 34.68) and post-basic group (mean = 34.78). Ses below Table 5.

**Table 5: Post Hoc Test (Tukey HSD[a,b]) with OMI Factor A and Levels of Education**

| Highest Level of Nursing Education | N | Subset for alpha = 0.05 | |
|---|---|---|---|
| | | 1 | 2 |
| Bachelor | 70 | 32.3864 | |
| Diploma | 332 | | 34.6786 |
| Post Basic | 99 | | 34.7796 |
| Sig. | | 1.000 | .992 |
| Means for groups in homogeneous subsets are displayed. | | | |
| a. Uses Harmonic Mean Sample Size = 109.494. | | | |
| b. The group sizes are unequal. The harmonic mean of the group sizes is used. | | | |

There was no significant difference found between the levels of education and OMI Factor B as shown in *Table 6*.

**Table 6: Post Hoc Test (Tukey HSD[a,b]) with OMI Factor B and Levels of Education**

| Highest Level of Nursing Education | N | Subset for alpha = 0.05 | |
|---|---|---|---|
| | | 1 | 2 |
| Diploma | 332 | 41.1782 | |
| Post Basic | 99 | 43.2066 | 43.2066 |
| Bachelor | 70 | | 44.6021 |
| Sig. | | .061 | .262 |
| Means for groups in homogeneous subsets are displayed. | | | |
| a. Uses Harmonic Mean Sample Size = 109.494. | | | |
| b. The group sizes are unequal. The harmonic mean of the group sizes is used. | | | |

The relationship between the age of staff nurses and their attitudes towards clients with mental illness answered by calculating a Pearson r correlation. It indicated that there were significant negative relationships between the nurses' ages and their attitudes towards clients with mental illness in the OMI Factor D-Social Restrictiveness. On the other hand, there was a significant positive relationship between the age and the OMI Factor B-Benevolence (Table 8).

**Table 7: Correlation: Age with OMI**

| | OMI Factor A | OMI Factor B | OMI Factor D | OMI Factor E |
|---|---|---|---|---|

| Age in years | Pearson Correlation | -.057 | .260** | -.181** | -.070 |
| | Sig. (2-tailed) | .199 | .000 | .000 | .116 |
| | N | 505 | 505 | 505 | 505 |
| **. Correlation is significant at the 0.01 level (2-tailed). | | | | | |

Similarly, the relationship between nurses' years of experience and nurses' attitudes towards clients with mental illness was computed using a Pearson r correlation. The findings indicated that there were statistically significant negative relationships between the nurses' years of experience and their attitudes towards clients with mental illness on the OMI Factor D-Social Restrictiveness. Also, there was a significant positive relationship between nurses' years of clinical experience and the OMI Factor B-Benevolence (Table 9).

**Table 8: Correlation: Years of Experience with OMI**

| | | OMI Factor A | OMI Factor B | OMI Factor D | OMI Factor E |
|---|---|---|---|---|---|
| How long have you been practicing nursing? | Pearson Correlation | -.066 | .280** | -.175** | -.059 |
| | Sig. (2-tailed) | .140 | .000 | .000 | .184 |
| | N | 505 | 505 | 505 | 505 |
| **. Correlation is significant at the 0.01 level (2-tailed). | | | | | |

Independent-samples t-test was used to compare the OMI Factors scores between male and female participants. Analysis of the data in table 10 indicates that there were no significant differences in OMI Factors when grouped by gender in the assessment of nurses' attitudes toward individuals with mental illness.

**Table 9: Independent t-tests of OMI by Gender**

| | | Levene's Test for Equality of Variances | | t-test for Equality of Means | | | | | | | |
| | | F | Sig. | T | df | Sig. (2-tailed) | Mean Difference | Std. Error Difference | 95% Confidence Interval of the Difference | | |
| | | | | | | | | | Lower | Upper |
|---|---|---|---|---|---|---|---|---|---|---|
| OMI Factor A | Equal variances assumed | 1.005 | .317 | -2.248 | 503 | .025 | -1.68521 | .74958 | -3.15791 | -.21251 |
| | Equal variances not assumed | | | -2.091 | 107.819 | .039 | -1.68521 | .80586 | -3.28261 | -.08782 |
| OMI Factor B | Equal variances assumed | 1.306 | .254 | -1.603 | 503 | .110 | -1.30247 | .81267 | -2.89913 | .29418 |
| | Equal variances not assumed | | | -1.525 | 109.766 | .130 | -1.30247 | .85429 | -2.99552 | .39057 |
| OMI Factor D | Equal variances assumed | .593 | .441 | -.717 | 503 | .473 | -.47341 | .65990 | -1.76990 | .82308 |
| | Equal variances not assumed | | | -.707 | 113.080 | .481 | -.47341 | .66988 | -1.80055 | .85372 |
| OMI Factor E | Equal variances assumed | .011 | .918 | -.617 | 503 | .538 | -.36895 | .59831 | -1.54444 | .80654 |
| | Equal variances not assumed | | | -.603 | 112.303 | .548 | -.36895 | .61214 | -1.58179 | .84390 |

A one-way ANOVA was conducted to assess if there is a difference of nurses' attitudes towards clients with mental illness in the different clinical areas. The results showed that there were no significant differences found across areas of clinical practice in relation to all OMI Factors (table 11).

**Table 10: One-Way ANOVAs-Summary of OMI Factors & OMS-HC Scales by Areas of Clinical Practice**

| | Sum of Squares | Df | Mean Square | F | Sig. |
|---|---|---|---|---|---|

| OMI Factor A | Between Groups | 158.574 | 2 | 79.287 | 2.047 | .130 |
|---|---|---|---|---|---|---|
| | Within Groups | 19448.547 | 502 | 38.742 | | |
| | Total | 19607.121 | 504 | | | |
| OMI Factor B | Between Groups | 150.229 | 2 | 75.115 | 1.655 | .192 |
| | Within Groups | 22783.542 | 502 | 45.386 | | |
| | Total | 22933.771 | 504 | | | |
| OMI Factor D | Between Groups | 21.380 | 2 | 10.690 | .357 | .700 |
| | Within Groups | 15038.617 | 502 | 29.957 | | |
| | Total | 15059.997 | 504 | | | |
| OMI Factor E | Between Groups | 52.026 | 2 | 26.013 | 1.060 | .347 |
| | Within Groups | 12324.694 | 502 | 24.551 | | |
| | Total | 12376.721 | 504 | | | |

# DISCUSSION

The experience of the unpleasant attitudes of healthcare professionals becomes common health concerns for individuals with mental illness during their lifetime (Putman, 2008). This type of situation may have undesirable implications for not only patients but also their families, and healthcare providers, particularly nurses. For example, nurses not only manage the problems of people with mental illness in different hospitals, but they may also have to deal with such problems in their own personal lives. As a result, the healthcare providers' stigmatizing attitudes may lead to poor quality of care for people with mental illness (Ghuloum, *et al*., 2022).

The study revealed that Omani nurses' attitudes towards people with mental illness varied from positive to negative. The mean scores of the OMI factors in this study were compared with those reported by Cohen and Struening (1962) in their original research using the fifty-one items of the OMI scale. The findings of Cohen and Struening (1962) found that each OMI factor score would stand for itself and be independent of each other and does not produce a relationship to any other factor on the instrument (Cohen & Struening, 1962). The current study used the mean scores of the OMI factors from Cohen and Struening's research with nurses to compare with those obtained in this study (see Table 14). Higher scores on the OMI factors indicate more positive attitudes towards people with mental illness.

**Table 11: Comparison of OMI Factors means to a study of Cohen and Struening (1962)**

| OMI Factors | Cohen and Struening (1962) 1st Hospital | 2nd Hospital | Current study |
|---|---|---|---|
| Factor A-Authoritarianism | 16.50 | 21.20 | 34.35 |
| Factor B-Benevolence | 45.50 | 45.10 | 42.07 |
| Factor D-Social Restrictiveness | 20.50 | 20.80 | 25.34 |
| Factor E-Interpersonal Etiology | 20.10 | 19.60 | 18.84 |

The higher means of the OMI Factor A-Authoritarianism and OMI Factor D-Social Restrictiveness of the current study than the means of the original study may show a trend over time for more favorable attitudes towards people with mental illness. The participants viewed people with mental illness as less inferior to the society. A possible explanation for this trend is the change in public attitudes, socialization, the increased community awareness of mental health illnesses, and the treatment of people with mental illness, from the 1960s to the current date. These findings are consistent with a survey by Pescosolido, *et al*., (2021) to evaluate the magnitude of mental illness stigma over 22 years in the United States. On the other hand, the mean scores of OMI Factor B-Benevolence and Factor E-Interpersonal Etiology were slightly lower than the means of these factors in the original study of Cohen and Struening (1962). These results may show that the participants are less tolerant and compassionate towards people with mental illness. They also suggest that mental illness could arise from interpersonal problems.

Omani nurses seem to endorse OMI items similar to what could be found when assessing general views of the public towards mental illness. Level of agreements with some points in the OMI may indicate labeling and stereotyping attitudes towards people with mental illness. For example, when the scores of strongly agree to partly agree are aggregated as agree as well as the scores of strongly disagree to partly disagree as disagree, a surprising result showed that 75.6% of nurses agreed with the statement "People with mental illness should never be treated in the same hospital with people with physical illness." This may reflect a myth that people with mental illness are dangerous and should not be mixed with other patients who have physical health problem. 67.3% of nurses agreed with the statement "It is easy to recognize someone who once had a serious mental illness" and 68.7% of nurses agreed with statement "There is something about mental patients that makes it easy to tell them from normal people." Therefore, people with mental illness felt shame and embarrassed and would try to hide their mental health problems and be reluctant to seek or continue treatment

(Al Alawi, *et al*., 2016). Conversely, Omani nurses have positive attitudes to certain items of OMI Scale. There are more than 78% of nurses recognized the needs for supporting people with mental illness in finding job or getting financial support from the government. Similarly, the WHO (2017) emphasized on the need to increase the financial resources for mental health services, since mental health and substance use illnesses are the leading cause of disability worldwide.

The findings indicated that the higher the nurses' levels of education, the higher stigmatized opinions about mentally ill individuals as inferior to people with no mental illness. These results align with prior studies suggesting that while education is generally assumed to decrease stigma, it may have limited or contradictory effects (Grbevski, 2009; Gur & Kucuk, 2016). Similarly, other studies found that education itself has limited or no effects in reducing stigma experiences and its consequences (Chambers *et al.*, 2010; Hauck *et al.*, 2013). However, in the literature, the levels of education corresponded mainly with decreased stigma experience of mental illness (Brunton, 1997; Mavundla & Uys, 1997; National Alliance on Mental Illness, 2015; Al-Awadhi *et al.*, 2017; Kolb *et al.*, 2023).).

In contrary, nurses' attitudes were positively correlated with OMI Factor B-benevolence, indicating that people with mental illness could succeed in life and could be treated as adults. This result corresponded with similar findings of Hamdan-Mansour (2009) and Ahmead *et al.*, (2010), where the researchers found that nurses viewed people with mental illness as adult, mature, and not as rude people.

Age is positively correlated with nurses' attitudes towards people with mental illness on OMI Factor B, the higher the score, the more negative the attitude. The findings also showed a negative relationship between the age and the nurses' attitudes towards people with mental illness on OMI Factor D-Social Restrictiveness, i.e., the lower the score, the more negative the attitude, viewing mentally ill as dangerous to society and should be restricted from interacting with others. Years of clinical practice had significant negative correlation with nurses' attitudes towards people with mental illness on OMI Factor B-Benevolence, and OMI Factor D-Social Restrictiveness. The results from OMI Factors showed that the general views of nurses were negative towards mentally ill individuals. The more years of experience the participants had, the more they perceived the mentally ill person as dangerous to society. Additionally, participants had less paternalistic views with increased years of clinical experiences, indicating that they were more tolerant towards this population. It is worth noting that the majority of the participants in this study (medical-surgical, n=270 and maternal-child, n=137) had a lack of clinical experience in the mental health settings and only 98 participants had at least one year of clinical experience with mentally ill people.

Nurses who lack of clinical experience were more likely experience negative attitudes towards people with mental illness ((Seman *et al*., 2024).

The findings of this study indicated that there was no significant difference between males' and females' attitudes towards people with mental illness in the MOH hospitals. Similarly, no significant difference in attitudes towards people with mental illness between males and females was found in some previous studies (Seman *et al*., 2024; Samuelsson *et al.,* 1997). Conversely, other studies showed that female nurses had more discriminatory attitudes patients with comorbid mental illness (Bjorkman *et al*., 2008) and those patients were aggressive and dangerous to their environment (Simicic, *et al*., 2023). Whereas, male nurses were more pessimistic than female nurses towards better prognosis for people with mental illness.

The nurses who are working in mental health care setting have more positive attitudes than those of nurses who are working in medical-surgical and maternal-child. They found to be less socially distant from people with mental illness and more willing to help them (Seman *et al*., 2024). They presented fewer negative attitudes since they had cared for people with mental illness. This conclusion was in line with findings from earlier studies (Arvaniti *et al*., 2009; Van Der Kluit & Goossens, 2011). On the other hand, general nurses have fewer positive attitudes and were more fearful, more avoidance, and less therapeutic interaction, influencing the provision of care (Minas *et al*., 2011).

**Limitations of the Study**

The survey was only distributed to four governmental hospitals in Oman, which provide secondary and tertiary levels of health care. The study findings may not be generalized to other settings as it did not include other governmental hospitals. Additionally, it is worth noting that different participants' sample in terms of gender, areas of practice, and levels of education could have influenced the results of the present study. Another limitation could be some of the OMI Factors' statements, which were created in 1962, may not reflect the new trends in current mental health care facilities (Grbevski, 2009).

**Implication of the Study**

The findings implied the necessity of enhancing the academic and professional awareness of negative attitudes towards people with mental illness. Nursing students should be educated and socialized in a positive atmosphere where mental disorders are viewed similar to physical illness. The nursing curricula should be reviewed to determine if the concept of stigmatization is well addressed. This would help raising awareness about the care of mental illness and combat its stigma. Public campaign related to mental illness is a necessity to increase awareness and acceptance of people with mental illness. Additionally, introducing continuing education

programs would help address the experiences of health care providers towards people with mental illness.

## CONCLUSION

Stigma of mental illness is a serious global health issue affecting health care providers, people with mental illness, and their families. It creates a barrier for people seeking or receiving care (Ghuloum, *et al*., 2022; Ngui *et al*., 2010; Shrivastava *et al*., 2012b). Nurses' stigmatizing attitudes still exist in various nursing specialties and with different years of experiences and levels of educations.

Many studies revealed that people with comorbid mental illness require complex and comprehensive nursing care for their medical and psychological needs (American Psychiatric Nurses Association, 2012; De Jonge, 2000; Giandinoto & Edward, 2014). However, due to nursing shortage and increased workloads, nurses often prioritize physical health problems over mental health problems, with mental health problems being the least preferred (Reed and Fitzgerald, 2005).

Omani nurses in general hospitals highlighted the need for better facilities and resources for mental health care. Totman, Mann, and Johnson (2010) suggested that establishing psychiatric beds or units in general hospitals to better address the multiple needs of comorbid health problems thus, help in altering the negative nurses' view towards people with mental illness. Totman *et al.,* (2010) recommended that these units be independent but remain a part of the general hospital. An example is the department of behavioral medicine at the Sultan Qaboos University Hospital in Oman, which offers a wide range of services addressing both physical health and mental health care needs.

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