

# Public Perception, Attitude and Awareness Toward Mental Illness in Palestine

**Sanaa Salman**

Modern University College, Palestine

**Rebhi Bsharat**

rebhi.bsharat@muc.edu.ps

Modern University College, Palestine

**Areen Abed**

Modern University College, Palestine

**Besan Karaga**

Modern University College, Palestine

**mosa khalaileh**

Modern University College, Palestine

**Bashar Behais**

Modern University College, Palestine

**Ahmed hanani**

An-najah National University Faculty of Medicine and Health Sciences

---

## Research Article

**Keywords:** Mental Health, Mental Illness, Perception, Attitude, Awareness, Stigma

**Posted Date:** April 26th, 2026

**DOI:** <https://doi.org/10.21203/rs.3.rs-9325935/v1>

**License:**   This work is licensed under a Creative Commons Attribution 4.0 International License.

[Read Full License](#)

**Additional Declarations:** No competing interests reported.

---

**Version of Record:** A version of this preprint was published at BMC Public Health on October 1st, 2026.  
See the published version at <https://doi.org/10.1186/s12889-026-28572-x>.

# Abstract

## Background

Globally, mental health conditions, services, and professionals tend to be viewed in a negative light. Mental health conditions, which the World Health Organization describes as significant disturbances in behavior, emotion, or thinking, are a public health issue across all age groups.

## Objective

This study aimed to assess public perceptions, attitudes, and awareness toward mental illness in the Palestine.

## Methodology

A cross-sectional design was utilized between October and November of 2025. The study population consisted of all Palestinians in the West Bank. The total sample size was 1,360 participants. Convenience sampling was used to collect the data. An online self-administered questionnaire, adopted from a similar study conducted in Iraq, was distributed in public places and on social media platforms.

## Results

The respondents' awareness of the etiology of mental illness is nearly evenly split, with 48.75% being aware and 51.25% not aware. The majority of participants (84.3%) have a positive perception of people with mental illness. While 80.2% of the respondents hold a positive attitude toward people with mental illness, their attitudes toward the care and treatment of people with mental illness were negative, with 66.4% expressing negative views.

## Conclusions

Our study's results demonstrate how attitudes, awareness, and perceptions of mental illness have changed in Palestine over time, indicating an increase in public knowledge and understanding. This change can be attributed to factors such as increased mental health education, global awareness campaigns, and the psychological effects of the region's ongoing political conflicts.

## Introduction

Mental illness stigma slows down the recovery of mentally ill patients. The negative responses to people with mental illnesses represent the main barrier to the development of mental health reduction programs (Do, M et al.; Stuart, 2016). In this context, it must be noted that mental illness includes depression, schizophrenia, bipolar disorder, addictive behaviors, and other related conditions (National Institutes of Health, 2020). Among these forms of mental illness, depression is a prevalent illness that adversely affects the way of feeling, thinking, and acting. The major causes of depression are a decline in the importance of leisurely activities and feelings of sadness. It may lead to diverse mood and health

problems and/or reduce effectiveness and productivity at home and college (Vahia, 2013). Anxiety is another mental health disorder. It can be defined as an emotion accompanied by tension, worried thoughts, and physical changes like increased blood pressure (Vahia, 2013). Bipolar disease is also a mental problem that leads to unusual swings in mood, energy levels, and the ability to perform routine tasks (National Institutes of Health (NIMH), 2023). Concerning their prevalence, the World Health Organization estimated that the global prevalence of mental health disorders accounts for 25% (Mansfield, et al., 2020). Globally, increasing attention has been focused on mental illness among adolescents and young people (Mansfield, et al., 2020 ; Pedrelli, et al., 2015; Al Laham, et al., 2020; Abolfotouh et al., 2019; Abi Doumit et al., 2019 ). Proper knowledge and public perception aid in the recognition of these patients as community members with specific disorders, and thus, requiring special needs. Therefore, it is necessary to assess gaps in public knowledge toward mental illnesses, risk factors, treatments, and basic needs (Abolfotouh et al., 2019; Getachew et al. 2024 ). Studies show that help-seeking behavior improves the knowledge related to mental health problems (Alexander, et al. 2020; Sanghvi & Mehrotra, 2021). It indicates that mental health remains a significant public health concern in the United States. According to the National Institute of Mental Health, approximately 22.8% of adults (about 57.8 million people) experienced a mental illness in 2022, including 5.2% with serious mental illness (NIMH, 2023). Similarly, the Centers for Disease Control and Prevention report that nearly one in five adults experience symptoms of anxiety or depression annually, while the Substance Abuse and Mental Health Services Administration indicates that about 20% of adolescents are affected by mental health disorders each year (CDC, 2023). Despite the availability of effective treatments, more than half of individuals with mental illness do not receive appropriate care, highlighting persistent gaps in access to mental health services (SAMHSA, 2023 ; Levine et al., 2021). The findings of the Global Context of Mental Health Study showed that there was stigma towards people living with mental illness in different countries of the world. This points to the need to increase knowledge about mental health using strategies like educational programs. Alsubaie et al., 2020; Njaka et al. 2023; Yin, et al., 2020).

Approximately 970 million people worldwide (one in eight) suffered from a mental illness in 2019, primarily depression and anxiety. In 2020, depression and anxiety increased by 28% and 26%, respectively, as a result of COVID-19. Despite the existence of treatments, the majority of people do not have access to care and experience discrimination, stigma, and human rights abuses. ( Shah et al. 2023; WHO, 2022). According to the World Health Organization, anxiety disorders are the most common mental illnesses. While most people recover, people with PTSD can suffer depression and anxiety for months or even years. The Palestinian people are especially at risk due to the political violence and lack of access to mental health services, education, and work. (Marie et al., 2020).

In 2023, Palestine had 2,553 cases of mental health (86.9 per 100,000), distributed among 22 health centers, including 15 in the West Bank, with males making up 54.7% (1,396 cases), while females made up 45.3% (1,157 cases). In 2014, Palestine had 2,257 cases of mental health (89.0 per 100,000), with males making 980 cases, while females made 1,277, indicating a rise in the total number of cases and the percentage of males over the years. (MOH, 2024). Many Palestinians believe mental illness to be taboo or a cause of shame. As a result, as a result, mental health issues are frequently overlooked, and

people affected may experience prejudice or marginalization from their communities (Marie et al., 2020). This study addresses limited data on mental health perceptions in Palestine and provides evidence to identify knowledge gaps, reduce stigma, and inform policies and interventions to improve mental health awareness and access to care. Therefore, the aim of this study was to assess the public perceptions, attitudes, and awareness toward mental illness in Palestine.

## Methodology

### Research design and population

A quantitative, cross-sectional design was used to assess the perception, attitude, and awareness of people toward mental illnesses in the Palestine. The study was conducted in the Palestine, during the period from 8/10/2025 to 1/11/2025. The study population consists of all Palestinians in the Palestine. According to the Palestinian Central Bureau of Statistics in 2024, the Palestinian population was about 5.6 million (PCBS, 2024).

### Sampling and sample size

The sample size was calculated by using Open EPI version 3.01 (Dean AG et al., 2013). The researcher assumed a 95% confidence level with a 5% margin of error. Furthermore, to obtain the maximum sample size we utilized an expected proportion ( $p = 0.5$ ) in the population, based on these parameters, the total sample size was calculated to be 384. A convenience sampling technique which is not a probability sampling method was used to obtain the required sample size. The participants in the current study were quite cooperative, which is why we have a large sample size (1360).

### Inclusion and Exclusion Criteria

**Inclusion Criteria:** Adults ( $\geq 18$  years) from Palestine, Individuals from diverse demographic backgrounds (age, gender, education, residence), Participants able to read and understand the questionnaire and Individuals who provide informed consent to participate. **Exclusion Criteria:** Individuals under 18 years of age, Non-residents of Palestine, Participants with incomplete or missing questionnaire responses, Individuals unable to comprehend the survey due to cognitive or language barriers and Mental health professionals

### Data collection methods and instrument

An online self-administered questionnaire was adopted from similar study conducted in Iraq, which was distributed in public places and on social media platforms (Sadik et al., 2010).

## Questionnaire Structure

The questionnaire, which was adopted to assess public perception, attitude and awareness in Palestine toward mental illness, consists of five sections: sociodemographic information, subjects' awareness of the etiology of mental illness, subjects' perception of people with mental illness, subjects' attitude toward people with mental illness, and subjects' attitude toward the care and treatment of people with mental illness. **Section I:** This section includes all the demographic data, with 7 items: age group, gender, city, place of residence (city, village or camp), marital status, monthly income, and level of education. It also includes one question about having a person with mental illness in the family. **Section II:** This section includes 6 questions that assess the level of awareness about the etiology of mental illness. These items include Genetic inheritance, Substance abuse, Bad things happening to the person, Brain disease, Personal weakness, and God's punishment. A five-point Likert scale was used to answer these questions (agree, agree somewhat, neutral, disagree somewhat and disagree). **Section III:** This section includes 6 items that assess subjects' perception of people with mental illness. These items include: whether a mentally ill person is capable of working, whether mental illness can be identified by physical appearance, whether the mentally ill person is not capable of true friendship, whether they are usually dangerous, whether they are to blame for their own condition, and whether anybody can have mental illness. A five-point Likert scale was used to answer these questions (agree, agree somewhat, neutral, disagree somewhat, and disagree). Cut off point for this section is as follows:  $<3$  poor perception,  $\geq 3$  good perception. A higher mean score indicates a good perception. **Section IV:** This section includes 12 items that assess subjects' attitudes toward people with mental illness. Cut-off point:  $<3$  negative attitude,  $\geq 3$  positive attitude. A higher mean score indicates a positive attitude. **Section V:** This section includes 9 items that assess the subjects attitude toward the care and treatment of people with mental disorders. Cut-off point:  $<3$  negative attitude,  $\geq 3$  positive attitude. A higher mean score indicates a positive attitude.

## Data collection procedures

An online self-administered questionnaire was distributed in restaurants, coffee shops, parks, public places, hospitals, bakery stores using a barcode and through social media platforms like WhatsApp, Facebook and Instagram.

## Reliability

A test was carried out by the researcher in order to examine the internal consistency of its questions. The values of Cronbach's alpha for each scale suggested that the scales are reliable for measuring these constructs in the study (Table 1).

Table 1  
Reliability Coefficients

| Dependent variables | N  | Cronbach Alpha |
|---------------------|----|----------------|
| Awareness           | 6  | 0.70           |
| Perception          | 6  | 0.71           |
| Attitude            | 21 | 0.77           |

## Validity of the tool and Pilot study

Prior to the study, the questionnaire was tested for face validity by an expert panel consisting of five faculty members. A pilot study was conducted on 10% of the calculated sample size to assess the clarity and applicability of the questionnaire, and it was excluded from the sample size.

## Data analysis

The collected data were analyzed by the Statistical Package for Social Sciences (SPSS) Version (27). Data analysis of descriptive and inferential statistics was conducted. Regarding descriptive statistics, frequency, percentages, mean score and Standard Deviation (SD) were used to describe the study variables. Regarding inferential statistics, independent t-test and One-Way ANOVA were conducted to assess the differences between variables after assessing the normality of the scores using Kolmogorov Smirnov and Shapiro-Will test ( $p \geq 0.05$ ).

## Ethical consideration

This work has been carried out in accordance with the Declaration of Helsinki (2000) of the World Medical Association. This study was approved by the IRB of Modern University College (MUC) = 031-2025), and informed consent was obtained from all participants. Each participant was given a clear explanation of the objective. The participant was informed that names were not required and that the data would only be used for scientific research. No private information was obtained and each respondent's answers were anonymized to protect their research information and privacy. These procedures uphold protections to preserve the participants' rights and wellbeing while validating the study's ethical features.

## Results

### Demographic Variables

The study sample ( $n = 1,360$ ) was mostly young adults aged 20–29 (77.6%), with 59.5% females and 40.5% males. Participants were primarily from Hebron (31.3%) and Ramallah (28.4%), living in cities (45.9%) or villages (47.8%), with 6.3% from camps. Most were single (65.4%) and earned under 2,000 NIS

monthly (40.0%), while 13.5% earned  $\geq 5,000$  NIS. Educationally, 58.7% held a Bachelor's degree, 21.4% a diploma, 8.9% primary education, and 11.0% higher education.

Table 2  
Demographic variables of the subjects (n = 1360)

| Demographic variables |                 | N    | %     |
|-----------------------|-----------------|------|-------|
| Age group             | < 20 years old  | 121  | 8.9%  |
|                       | 20–29 years old | 1056 | 77.6% |
|                       | ≥ 30 years old  | 183  | 13.5% |
| Sex                   | Male            | 551  | 40.5% |
|                       | Female          | 809  | 59.5% |
| City                  | Hebron          | 426  | 31.3% |
|                       | Ramallah        | 386  | 28.4% |
|                       | Jerusalem       | 145  | 10.7% |
|                       | Bethlehem       | 58   | 4.3%  |
|                       | Nablus          | 97   | 7.1%  |
|                       | Tulkarem        | 37   | 2.7%  |
|                       | Jericho         | 24   | 1.8%  |
|                       | Jenin           | 115  | 8.5%  |
|                       | Qalqilya        | 50   | 3.7%  |
|                       | Tubas           | 22   | 1.5%  |
| Place of residence    | City            | 624  | 45.9% |
|                       | Village         | 650  | 47.8% |
|                       | Camp            | 86   | 6.3%  |
| Marital status        | Single          | 889  | 65.4% |
|                       | Married         | 445  | 32.7% |
|                       | Divorced        | 15   | 1.1%  |
|                       | Widowed         | 11   | 0.8%  |
| Monthly Income        | < 2000 NIS      | 544  | 40.0% |
|                       | 2000–2999 NIS   | 305  | 22.4% |
|                       | 3000–3999 NIS   | 198  | 14.6% |
|                       | 4000–4999 NIS   | 129  | 9.5%  |
|                       | ≥ 5000 NIS      | 184  | 13.5% |

| Demographic variables |                   | N   | %     |
|-----------------------|-------------------|-----|-------|
| Level of education    | Primary           | 121 | 8.9%  |
|                       | Diploma           | 291 | 21.4% |
|                       | Bachelor's Degree | 798 | 58.7% |
|                       | Higher education  | 150 | 11.0% |

## Prevalence of Having a Person with a Mental Illness

The results indicate that the prevalence of individuals having a person with a mental illness in their lives is relatively low, with only 16.5% of respondents reporting "Yes," while the majority, 83.5%, indicated "No."

## awareness on the etiology of mental illness

Table 3: Participants showed mixed knowledge of mental illness causes: 58.2% recognized substance abuse, 49.3% brain disease, and 67.6% were unaware of genetics. Misconceptions were common, with 84.5% blaming "bad things happening" and 54.0% citing "personal weakness," though 85.9% rejected "God's punishment," highlighting persistent gaps in understanding.

Table 3  
*awareness on the etiology of mental illness (n = 1360)*

| Cause                                 | Aware      |               | Not Aware  |              |
|---------------------------------------|------------|---------------|------------|--------------|
|                                       | n          | %             | n          | %            |
| 1. Genetic inheritance.               | 440        | 32.4%         | 920        | 67.6%        |
| 2. Substance abuse.                   | 791        | 58.2%         | 569        | 41.8%        |
| 3. Bad things happening to the person | 1149       | 84.5%         | 211        | 15.5%        |
| 4. Brain disease.                     | 671        | 49,3%         | 689        | 50,7%        |
| 5. Personal weakness.                 | 735        | 54.0%         | 625        | 46.0%        |
| 6. God's punishment.                  | 192        | 14.1%         | 1168       | 85.9%        |
| Total mean                            | <b>663</b> | <b>48.75%</b> | <b>697</b> | <b>51.25</b> |

*Reversed item Higher mean score means aware or unaware, Cut off point as follow; <50% unaware, ≥ 50% aware*

## perceptions of people with mental illness

Table 4

participants showed generally positive views of people with mental illness (Mean = 3.30), supporting statements like “Capable of work” (3.88), though some stereotypes and negative beliefs remained, such as “Usually dangerous” (3.11) and “Blame for own condition” (2.98), indicating overall good attitudes but room to reduce stigma.

Table 4  
perceptions of people with mental illness (n = 1360)

| Item                                                                                                                    | Mean        | SD          | Status      |
|-------------------------------------------------------------------------------------------------------------------------|-------------|-------------|-------------|
| 1. Capable to work                                                                                                      | 3.88        | .845        | Good        |
| 2. Tell by physical appearance*                                                                                         | 3.01        | 1.101       | Good        |
| 3. Not capable of true friendship*                                                                                      | 2.97        | 1.115       | Poor        |
| 4. Usually dangerous*                                                                                                   | 3.11        | 1.025       | Good        |
| 5. Blame for own condition*                                                                                             | 2.98        | 1.046       | Poor        |
| 6. Anybody can have mental illness                                                                                      | 3.85        | .892        | Good        |
| Total Mean Score                                                                                                        | <b>3.30</b> | <b>.416</b> | <b>Good</b> |
| *Reversed item Higher mean score means good perception Cut off point as follow; <3 poor perception, ≥ 3 good perception |             |             |             |

## Attitude Toward People with Mental Illness

Table 5: The findings show a generally positive attitude toward people with mental illness (Mean = 3.38, SD = 0.516). Participants supported statements like “Should have same rights” (3.88) and “Could maintain friendship” (3.56), but showed reservations on “Could marry someone with mental illness” (2.53) and “Would hide own mental illness” (2.82), indicating lingering stigma despite overall positive attitudes.

Table 5  
Attitude Toward People with Mental Illness (n = 1360)

| Item                                                                                                                            | Mean        | SD          | Status      |
|---------------------------------------------------------------------------------------------------------------------------------|-------------|-------------|-------------|
| 1. Mentally ill person should be prevented from having children*                                                                | 3.28        | 1.12        | Good        |
| 2. Mentally ill person should not get married*                                                                                  | 3.27        | 1.13        | Good        |
| 3. One should avoid all contact with mentally ill*                                                                              | 3.84        | 0.92        | Good        |
| 4. Mentally ill person should not be allowed to make decisions*                                                                 | 3.53        | 1.01        | Good        |
| 5. I could maintain friendship with someone with mental illness                                                                 | 3.56        | 0.94        | Good        |
| 6. I could marry someone with mental illness                                                                                    | 2.53        | 1.02        | Poor        |
| 7. I would be afraid to have conversation with mentally ill person*                                                             | 3.43        | 1.02        | Good        |
| 8. Person with mental illness should have same rights                                                                           | 3.88        | 0.96        | Good        |
| 9. I would be upset and disturbed working on same job as mentally ill person*                                                   | 3.41        | 0.97        | Good        |
| 10. I would be ashamed if family member diagnosed with mental illness*                                                          | 3.78        | 1.01        | Good        |
| 11. I would not want people to know if suffering from mental illness*                                                           | 2.82        | 1.15        | Poor        |
| 12. People generally caring and sympathetic towards people with mental illness                                                  | 3.27        | 1.09        | Good        |
| Total Mean Score                                                                                                                | <b>3.38</b> | <b>.516</b> | <b>Good</b> |
| *Reversed item, Higher mean score means positive attitude, Cut off point as follow; <3 negative attitude, ≥ 3 positive attitude |             |             |             |

## Attitudes Towards Care and Treatment of People with Mental Illness

Table 6

*attitudes towards care and treatment of people with mental illness*

The results reveal a generally negative attitude toward mental health care (Mean = 2.82, SD = 0.295, "Poor"). Participants scored low on statements like "Mental illness can be treated outside a hospital" (2.05) and "One should hide mental illness from family" (2.73), reflecting stigma. Some positive views existed, such as recognizing PHC clinics' role in providing care (3.35–3.78), indicating awareness of support options but persistent skepticism about treatment.

Table 6  
Subjects' attitudes towards care and treatment of people with mental illness (n = 1360)

| Item                                                                                                                            | Mean | SD   | Status |
|---------------------------------------------------------------------------------------------------------------------------------|------|------|--------|
| 1. Mental illness can be treated outside a hospital                                                                             | 2.05 | 0.97 | Poor   |
| 2. Majority of people with mental illnesses recover                                                                             | 3.03 | 1.11 | Good   |
| 3. I would feel comfortable discussing a mental health issue of family member or myself with someone at PHC                     | 2.18 | 0.93 | Poor   |
| 4. One should hide mental illness from family*                                                                                  | 2.73 | 1.11 | Poor   |
| 5. Mental illness cannot be cured*                                                                                              | 2.30 | 0.86 | Poor   |
| 6. Mentally ill people should be in an institution to be under supervision and control*                                         | 2.90 | 0.94 | Poor   |
| 7. Information about mental illness is available at my PHC                                                                      | 3.35 | 0.89 | Good   |
| 8. Mental health services available in my community                                                                             | 3.13 | 0.91 | Good   |
| 9. PHC clinics can provide good care for mental illnesses                                                                       | 3.78 | 0.87 | Good   |
| Total Mean Score                                                                                                                | 2.82 | .295 | Poor   |
| *Reversed item, Higher mean score means positive attitude, Cut off point as follow; <3 negative attitude, ≥ 3 positive attitude |      |      |        |

## Differences between demographic variable of the subjects in terms of awareness sum score

**Table 7**

The analysis found significant differences in mental health awareness by age, marital status, and education. Older participants ( $\geq 30$  years) scored higher (Mean = 3.13,  $F = 6.104$ ,  $p = .002$ ), divorced individuals had the highest awareness (Mean = 3.67) compared to widowed (Mean = 1.73,  $F = 3.780$ ,  $p = .010$ ), and higher education was associated with greater awareness (Mean = 3.19,  $F = 8.347$ ,  $p < .001$ ). No other demographic factors showed significant differences.

Table 7

*Differences between demographic variable of the subjects in terms of awareness sum score (n = 1360)*

| Demographic variables |                 | n    | Mean | SD   | Statistical values     | P-value |
|-----------------------|-----------------|------|------|------|------------------------|---------|
| Age group             | < 20 years old  | 121  | 2.54 | 1.52 | F = 6.104<br>df = 2    | .002*   |
|                       | 20–29 years old |      |      |      |                        |         |
|                       | ≥ 30 years old  |      |      |      |                        |         |
| Sex                   | Male            | 1056 | 2.93 | 1.44 | t = 1.935<br>df = 1358 | .053    |
|                       | Female          |      |      |      |                        |         |
| City                  | Hebron          | 183  | 3.13 | 1.56 | F=.862<br>df = 9       | .559    |
|                       | Ramallah        |      |      |      |                        |         |
|                       | Jerusalem       |      |      |      |                        |         |
|                       | Bethlehem       |      |      |      |                        |         |
|                       | Nablus          |      |      |      |                        |         |
|                       | Tulkarem        |      |      |      |                        |         |
|                       | Jericho         |      |      |      |                        |         |
|                       | Jenin           |      |      |      |                        |         |
|                       | Qalqilya        |      |      |      |                        |         |
|                       | Tubas           |      |      |      |                        |         |
| Place of residence    | City            | 551  | 3.02 | 1.55 | F = 1.973<br>df = 2    | .139    |
|                       | Village         |      |      |      |                        |         |
|                       | Camp            |      |      |      |                        |         |
| Marital status        | Single          | 809  | 2.86 | 1.40 | F = 3.780<br>df = 3    | .010*   |
|                       | Married         |      |      |      |                        |         |
|                       | Divorced        |      |      |      |                        |         |
|                       | Widowed         |      |      |      |                        |         |
| Monthly Income        | < 2000 NIS      | 426  | 2.99 | 1.45 | F = 1.528<br>df = 4    | .192    |
|                       | 2000–2999 NIS   |      |      |      |                        |         |
|                       | 3000–3999 NIS   |      |      |      |                        |         |
|                       | 4000–4999 NIS   |      |      |      |                        |         |
|                       | ≥ 5000 NIS      |      |      |      |                        |         |

| Demographic variables |                   | n   | Mean | SD   | Statistical values  | P-value |
|-----------------------|-------------------|-----|------|------|---------------------|---------|
| Level of education    | Primary           | 386 | 2.91 | 1.48 | F = 8.347<br>df = 3 | < .001* |
|                       | Diploma           |     |      |      |                     |         |
|                       | Bachelor's Degree |     |      |      |                     |         |
|                       | Higher education  |     |      |      |                     |         |

**\*Significant at p-value < 0.05, Independent sample and One Way ANOVA tests**

## **Differences between demographic variable of the subjects in terms of perception mean score**

The analysis shows that perceptions of mental health vary by age, gender, residence, and education. Older adults ( $\geq 30$  years) and females had higher perception scores (Mean = 3.34), indicating more positive views ( $F = 3.631$ ,  $p = .027$ ;  $T = -3.571$ ,  $p < .001$ ). Geographic differences were noted, with Nablus residents scoring highest (3.43) and Jericho lowest (3.11,  $F = 2.546$ ,  $p = .007$ ). Higher education also correlated with better perceptions (Mean = 3.34,  $F = 5.314$ ,  $p < .001$ ), highlighting these factors' influence on mental health perceptions.

Table 8  
Differences between demographic variable of the subjects in terms of perception mean score (n = 1360).

| Demographic variables |                 | n    | Mean | SD   | Statistical values | P-value |
|-----------------------|-----------------|------|------|------|--------------------|---------|
| Age group             | < 20 years old  | 121  | 3.22 | 0.44 | F = 3.631          | .027*   |
|                       | 20–29 years old | 1056 | 3.31 | 0.41 | df = 2             |         |
|                       | ≥ 30 years old  | 183  | 3.34 | 0.43 |                    |         |
| Sex                   | Male            | 551  | 3.26 | 0.43 | T=-3.571           | < .001* |
|                       | Female          | 809  | 3.34 | 0.41 | df = 1358          |         |
| City                  | Hebron          | 426  | 3.28 | 0.42 | F = 2.546          | .007*   |
|                       | Ramallah        | 386  | 3.29 | 0.41 | df = 9             |         |
|                       | Jerusalem       | 145  | 3.36 | 0.40 |                    |         |
|                       | Bethlehem       | 58   | 3.25 | 0.46 |                    |         |
|                       | Nablus          | 97   | 3.43 | 0.37 |                    |         |
|                       | Tulkarem        | 37   | 3.37 | 0.42 |                    |         |
|                       | Jericho         | 24   | 3.11 | 0.52 |                    |         |
|                       | Jenin           | 115  | 3.32 | 0.40 |                    |         |
|                       | Qalqilya        | 50   | 3.35 | 0.47 |                    |         |
|                       | Tubas           | 22   | 3.42 | 0.39 |                    |         |
| Place of residence    | City            | 624  | 3.30 | 0.42 | F=.367             | .693    |
|                       | Village         | 650  | 3.31 | 0.42 | df = 2             |         |
|                       | Camp            | 86   | 3.33 | 0.40 |                    |         |
| Marital status        | Single          | 889  | 3.31 | 0.42 | F = 1.312          | .269    |
|                       | Married         | 445  | 3.30 | 0.42 | df = 3             |         |
|                       | Divorced        | 15   | 3.14 | 0.43 |                    |         |
|                       | Widowed         | 11   | 3.15 | 0.42 |                    |         |
| Monthly Income        | < 2000 NIS      | 544  | 3.31 | 0.42 | F = 2.304          | .056    |
|                       | 2000–2999 NIS   | 305  | 3.25 | 0.40 | df = 4             |         |
|                       | 3000–3999 NIS   | 198  | 3.30 | 0.41 |                    |         |
|                       | 4000–4999 NIS   | 129  | 3.37 | 0.42 |                    |         |
|                       | ≥ 5000 NIS      | 184  | 3.33 | 0.42 |                    |         |

| Demographic variables |                   | n   | Mean | SD   | Statistical values  | P-value |
|-----------------------|-------------------|-----|------|------|---------------------|---------|
| Level of education    | Primary           | 121 | 3.22 | 0.44 | F = 5.314<br>df = 3 | < .001* |
|                       | Diploma           | 291 | 3.25 | 0.42 |                     |         |
|                       | Bachelor's Degree | 798 | 3.33 | 0.41 |                     |         |
|                       | Higher education  | 150 | 3.34 | 0.42 |                     |         |

**\*Significant at p-value < 0.05, Independent sample and One Way ANOVA test**

## **Differences Between Demographic Variable of the Subjects in Terms of Attitude Mean Score**

Table 9: the analysis shows that attitudes toward mental health vary by gender, income, and education. Males had slightly higher scores than females (Mean = 3.17 vs. 3.12,  $T = 2.905$ ,  $p = .004$ ). Participants earning 3,000–4,999 NIS had the most positive attitudes (Mean = 3.19,  $F = 2.537$ ,  $p = .038$ ), and those with primary or diploma education scored highest (Mean = 3.19 and 3.17,  $F = 3.586$ ,  $p = .013$ ), indicating these factors influence attitudes toward mental health.

Table 9

*Differences between demographic variable of the subjects in terms of attitude mean score (n = 1360)*

| Demographic variables |                 | n    | Mean | SD   | Statistical values | P-value |
|-----------------------|-----------------|------|------|------|--------------------|---------|
| Age group             | < 20 years old  | 121  | 3.19 | 0.27 | F = 1.904          | .149    |
|                       | 20–29 years old | 1056 | 3.14 | 0.32 | df = 2             |         |
|                       | ≥ 30 years old  | 183  | 3.16 | 0.28 |                    |         |
| Sex                   | Male            | 551  | 3.17 | 0.28 | T = 2.905          | .004*   |
|                       | Female          | 809  | 3.12 | 0.33 | df = 1358          |         |
| City                  | Hebron          | 426  | 3.15 | 0.29 | F = 1.482          | .149    |
|                       | Ramallah        | 386  | 3.14 | 0.32 | df = 9             |         |
|                       | Jerusalem       | 145  | 3.13 | 0.29 |                    |         |
|                       | Bethlehem       | 58   | 3.19 | 0.35 |                    |         |
|                       | Nablus          | 97   | 3.11 | 0.31 |                    |         |
|                       | Tulkarem        | 37   | 3.07 | 0.30 |                    |         |
|                       | Jericho         | 24   | 3.14 | 0.21 |                    |         |
|                       | Jenin           | 115  | 3.11 | 0.32 |                    |         |
|                       | Qalqilya        | 50   | 3.23 | 0.41 |                    |         |
|                       | Tubas           | 22   | 3.27 | 0.32 |                    |         |
| Place of residence    | City            | 624  | 3.14 | 0.31 | F=.189             | .828    |
|                       | Village         | 650  | 3.14 | 0.31 | df = 2             |         |
|                       | Camp            | 86   | 3.16 | 0.30 |                    |         |
| Marital status        | Single          | 889  | 3.14 | 0.31 | F = 2.574          | .053    |
|                       | Married         | 445  | 3.17 | 0.31 | df = 3             |         |
|                       | Divorced        | 15   | 2.98 | 0.38 |                    |         |
|                       | Widowed         | 11   | 3.07 | 0.24 |                    |         |
| Monthly Income        | < 2000 NIS      | 544  | 3.13 | 0.30 | F = 2.537          | .038*   |
|                       | 2000–2999 NIS   | 305  | 3.12 | 0.31 | df = 4             |         |
|                       | 3000–3999 NIS   | 198  | 3.19 | 0.31 |                    |         |
|                       | 4000–4999 NIS   | 129  | 3.19 | 0.33 |                    |         |
|                       | ≥ 5000 NIS      | 184  | 3.15 | 0.32 |                    |         |

| Demographic variables |                   | n   | Mean | SD   | Statistical values  | P-value |
|-----------------------|-------------------|-----|------|------|---------------------|---------|
| Level of education    | Primary           | 121 | 3.19 | 0.27 | F = 3.586<br>df = 3 | .013*   |
|                       | Diploma           | 291 | 3.17 | 0.34 |                     |         |
|                       | Bachelor's Degree | 798 | 3.12 | 0.31 |                     |         |
|                       | Higher education  | 150 | 3.17 | 0.27 |                     |         |

## \*Significant at p-value < 0.05, Independent sample and One Way ANOVA tests

### Discussion

The majority were women aged between 20 and 29 years, mostly from Hebron, Ramallah, and Jerusalem, with fewer from the camps; they were mostly single, had a bachelor's degree, and earned less than 2,000 NIS. Stigma remains widespread in Palestine; the majority of the people, at 83.5%, had little personal experience with mental illness. Prejudice, marginalization, and avoidance of treatment are all driven by negative stereotypes.

### Awareness toward mental illness etiology

However, awareness of mental illness causes differs, with 46.4% in Iraq and more than half in Palestine being aware of substance abuse, although not all in these countries are aware of it. Moreover, in China, a study done in 2020 revealed low awareness of the causes, treatments, and prevention of mental illness. (Yin et al., 2020). Lack of knowledge of the genetic basis of mental illness is also low in both regions, but more in Palestine (67.6%) than in Iraq (28.6%), though more people in Palestine are aware of its hereditary role (32.4%) than in Iraq (27.8%) (Sadik et al., 2010). Belief that mental illness is divine punishment is low in both countries, with 14.1% in Palestine and 16.8% in Iraq endorsing it. Rejection is higher in Palestine (85.9%) than Iraq (42.8%), indicating stronger dismissal of this belief in Palestine. (Sadik et al., 2010). Public understanding of mental health has improved over time due to awareness campaigns, education, and reduced stigma. Younger generations are more exposed to scientific information, while cultural shifts and a declining influence of traditional beliefs also shape changing attitudes.

### Perceptions of People with Mental Illness

The study found generally positive perceptions of people with mental illness, with 84.3% of participants expressing positive views, including beliefs in their ability to work and that anyone can develop mental illness. In Palestine, this may relate to widespread exposure to psychological stressors such as conflict and displacement, increasing awareness. Similar findings were reported in Japan, where most participants recognized treatability, though some stigma persists. (Kasahara-Kiritani et al., 2018). Contrary to our findings in Palestine (84.3% positive perception), studies in Gimbie and Oman report

more negative attitudes. In Ethiopia, lower education was linked to poorer perceptions, while in Oman, stigma persists with a preference for traditional or religious treatments due to misconceptions about mental illness. (Benti et al., 2016). In addition, the second study conducted in Oman revealed that mental illness is stigmatized in Omani society and that there is a lack of accurate knowledge and understanding of it. The results showed that many people prefer traditional or religious treatment over medical treatment because they believe that mental illness is caused by a lack of moral character or religious belief (Al-Alawi et al., 2017; Amro N et al., 2020).

In Palestine, growing awareness of mental illness is supported by research institutions and international efforts, including the World Health Organization. Despite generally positive perceptions, some negative beliefs persist (e.g., inability to form friendships or self-blame), and 15.7% still show poor perceptions. Stigma remains a barrier, especially in rural areas, where limited awareness programs hinder understanding and help-seeking.

## **Attitude Toward People with Mental Illness**

In our study, the positive attitude toward mentally ill people in Palestine was at 80.2%, similar to the Chinese sample. However, negative attitudes toward mentally ill people in personal relationships and trust were evident in that 55.3% believed that people would take the mentally ill person less seriously in personal relationships, 70.6% believed that women would be reluctant to date them, and 68.2% believed that mentally ill people were inappropriate caregivers. However, the ability of the sample to accept the mentally ill person as a close friend was at 43.3%. (Yin et al., 2020). In Palestine, negative stereotypes of mentally ill persons are common, such as the belief that mental illness is caused by lack of will, or supernatural powers such as the evil eye or spirits, and can only be cured by traditional healers. There is also the belief that mentally ill persons are unfit for parenting due to hereditary concerns. However, due to political conflicts in Palestine, especially in Gaza, mental health problems are becoming common and accepted, creating empathy among Palestinians towards mentally ill persons.

## **Attitudes Towards Care and Treatment of People with Mental Illness**

In terms of attitude toward care and treatment, the majority of participants (66.4%) expressed a negative attitude toward the care and treatment of individuals with mental illnesses. This is consistent with the public perception of mental health in Iraq (Sadik et al., 2010), In Iraq, 66% of people believed that people with mental illness should be hospitalized and controlled, as stereotypes portray that people with mental illness are incapable. Furthermore, only 15% believed that primary healthcare provided sufficient care for people with mental illness, and only 14% believed that primary healthcare provided people with mental illness with sufficient information. These beliefs are due to cultural beliefs that mental illness is shameful and affects family prestige, as seen in East Asian, Latino, and African American communities (Chiu, et al., 2015). Tanaka et al. (2018) found that individuals concerned about their appearance may hide their mental illness due to fear of self-stigma, hindering help-seeking. Mak et al. (2015) noted that Austrians may experience lower self-stigma than Palestinians because of community-based

rehabilitation and public health education. Media can play a key role in reducing stigma, and stigma toward mental health professionals should also be addressed, as it affects occupational stress and patient outcomes.

Domingo et al. (2023) suggest that mental health practitioners may stigmatize their patients due to perceived challenges in connecting with them and limited societal acceptance of those with mental illnesses. Physicians working in mental health may face misunderstanding and skepticism from their families and the wider public. (Luo, et al., 2018) found that, worse still, evidence indicated that professional stigma was negatively associated with job satisfaction and the quality of treatment (Do, M et al. 2024, Walsh et al. 2024). Therefore, there is a need to create a more inclusive and supportive environment for people with mental illness and advocate for policies that promote access to mental health care and support services. It is critical to fight these negative views and promote a more optimistic and understanding perspective on mental illness. Public education about mental illness and efforts to eliminate misunderstandings should be maintained, while establishing a more welcoming and supportive atmosphere for those with mental illnesses.

## Conclusion and Recommendations

This study demonstrates a gradual improvement in public knowledge and attitudes toward mental illness in Palestine, influenced by mental health education, global awareness initiatives, and the psychological impact of ongoing political conflicts. Despite this progress, stigma, misconceptions about mental health causes, and limited access to care—especially in rural areas—remain significant challenges. Negative attitudes toward treatment highlight the need for continued public education, stigma reduction, and the expansion of mental health services. To address these issues, efforts should focus on raising awareness through education and media campaigns, conducting further research to identify factors influencing perceptions, and improving access to counseling and treatment facilities, while fostering supportive environments that ensure respect and care for individuals with mental illness.

### Limitations

- i. This study had no significant restrictions, except for financial and time constraints.
- ii. The political environment forced the researcher to collect data via an online survey.
- iii. Some people refused to fill out the questionnaire due to fear, the political atmosphere in their community, or a lack of education that prevented them from recognizing the importance of the research.

## Declarations

## Corresponding Author

Rebhi Bsharat, rebhi.bsharat@muc.edu.ps

# Competing interests

The authors declare that they have no known competing financial, personal, or professional interests that could have appeared to influence the work reported in this

# Funding

This research received no specific grant from any funding agency in the public, commercial, or not-for-profit sectors

# Author Contribution

Every author contributed significantly to the work reported, whether it was in the conception, study design, execution, data acquisition, analysis, and interpretation. all of these areas, developed the research questions and conceptualized the work, acquired the data. analyzed the data and interpreted the findings and drafted the manuscript, contributed to the interpretation of the findings and critically reviewed the manuscript.

# Data Availability

The datasets used and/or analyzed during the current study are available from the corresponding author on reasonable request.

# References

1. Abi Doumit C, Haddad C, Sacre H, Salameh P, Akel M, Obeid S, Hallit SJP. o. (2019). Knowledge, attitude and behaviors towards patients with mental illness: Results from a national Lebanese study. *14*(9), e0222172.
2. Abolfotouh MA, Almutairi AF, Almutairi Z, Salam M, Alhashem A, Adlan AA, et al. Attitudes toward mental illness, mentally ill persons, and help seeking among the Saudi public and sociodemographic correlates. *Psychol Res Behav Manag.* 2019;12:4554.
3. Al-Alawi M, Al-Sinawi H, Al-Adawi S, Jeyaseelan L, Murthi S. J. I. j. o. c., & health, m. (2017). Public perception of mental illness in Oman: a cross sectional study. *10*(4), 389–399.
4. Al Laham D, Ali E, Mousally K, Nahas N, Alameddine A, Venables EJCMHJ. (2020). Perceptions and health-seeking behaviour for mental illness among Syrian refugees and Lebanese community members in Wadi Khaled, North Lebanon: a qualitative study. *56*(5), 875–84.
5. Alexander L, Rinehart NJ, Hay M, Boyd L, Foster KJT, Nursing L. i. (2023). Nursing students' attitudes and experiences with mental illness: A cross-sectional study. *18*(1), 72–77.

6. Alsubaie S, Almathami M, Alkhalaf H, Aboulyazid A, Abuhegazy H. J. N. d., & treatment. (2020). A survey on public attitudes toward mental illness and mental health services among four cities in Saudi Arabia. 2467–2477.
7. Amro N, Abdulhamid D, Asherah AA, Bsharat R. The Prevalence of Psychological Health Impact of COVID-19 Pandemic Among Palestinian Population. A Cross-sectional Study. J Health Med Nurs. 2020.
8. Benti M, Ebrahim J, Awoke T, Yohannis Z, Bedaso AJP. j. (2016). Community perception towards mental illness among residents of Gimbi town, Western Ethiopia. 2016(1), 6740346.
9. Centers for Disease Control and Prevention. (2023). Mental health data and statistics. <https://www.cdc.gov>
10. Chiu MYL, Yang X, Wong HT, Li JH. J. R. i. d. d. (2015). The mediating effect of affective stigma between face concern and general mental health–The case of Chinese caregivers of children with intellectual disability. 36, 437–446.
11. Do M, McCleary J, Nguyen D, Winfrey K. J. C. m. h. j. (2020). Mental illness public stigma and generational differences among. Vietnamese Americans 56(5), 839–53.
12. Domingo-Espiñeira J, Varaona A, Montero M, Lara-Abelenda FJ, Gutiérrez-Rojas L, del Fernández EA, Alvarez-Mon MJF. i. p. (2024). Public perception of psychiatry, psychology and mental health professionals: a 15-year analysis. 15, 1369579.
13. Getachew D, Mesafint G, Solomon N, Yenealem K, Muche Z, Demelash SJP. o. (2024). Community perception towards mental illness and help-seeking intention in Southwest Ethiopian Peoples Regional State. 19(10), e0310512.
14. Kasahara-Kiritani M, Matoba T, Kikuzawa S, Sakano J, Sugiyama K, Yamaki C, Yamazaki. Y. J. A. j. o. p. (2018). Public perceptions toward mental illness in Japan. 35, 55–60.
15. Levine GN, Cohen BE, Commodore-Mensah Y, Fleury J, Huffman JC, Khalid U, Spatz ESJC. Psychological health, well-being, and the mind-heart-body connection: a scientific statement from the American. Heart Association. 2021;143(10):e763–83.
16. Luo A, He H, Mohamed S, Rosenheck RJC, Medicine, Psychiatry. (2018). Medical student attitudes towards people with mental illness in China: a qualitative study. 42, 535–51.
17. Mak WW, Ho CY, Wong VU, Law RW, Chan RCJD, Dependence A. (2015). Cultural model of self-stigma among Chinese with substance use problems. 155, 83–9.
18. Mansfield R, Patalay P, Humphrey N. A systematic literature review of existing conceptualisation and measurement of mental health literacy in adolescent research: Current challenges and inconsistencies. BMC Public Health. 2020;20:607.
19. Marie M, SaadAdeen S, Battat MJB. p. (2020). Anxiety disorders and PTSD in Palestine: a literature review. 20, 1–18.
20. MOH. (2024). Retrieved from palestine: <https://site.moh.ps/>
21. National Institute of Mental Health. (2023). *Mental illness statistics*. <https://www.nimh.nih.gov>

22. Njaka S, Ogbodo BA, Okpua NC, Uwa AN. J. I. J. o. A. N. S. (2023). A systematic review on prevalence and perceived impacts of associative stigma on mental health professionals. 18, 100533.
23. PCBS. (2024). the Palestinian Central Bureau of Statistics.
24. Pedrelli P, Nyer M, Yeung A, Zulauf C, Wilens T. College Students: Mental health problems and treatment considerations. Acad Psychiatry. 2015;39:50311.
25. Sadik S, Bradley M, Al-Hasoon S, Jenkins R. J. I. j. o. m. h. s. Public Percept mental health Iraq. 2010;4:1–11.
26. Sanghvi PB, Mehrotra S. Help-seeking for mental health concerns: review of Indian research and emergent insights. Journal of Health Research. Available from: <https://doi.org/10.1108/JHR-02-2020-0040>. 2021.
27. Shah BB, Nieweglowski K, Corrigan PWJ. J. o. M. H. (2022). Perceptions of difference and disdain on the self-stigma of mental illness. 31(1), 22–28.
28. Substance Abuse and Mental Health Services Administration. (2023). National Survey on Drug Use and Health (NSDUH). <https://www.samhsa.gov>
29. Stuart H. Reducing the stigma of mental illness. Glob Ment Health (Camb) 2016;3: e17 e. doi: 10.1017/gmh. 2016.11.
30. Tanaka C, Tuliao MTR, Tanaka E, Yamashita T, Matsuo HJB p. A qualitative study on the stigma experienced by people with mental. health Probl epilepsy Philippines. 2018;18:1–13.
31. Vahia VN. Diagnostic and statistical manual of mental disorders 5: A quick glance. Indian J Psychiatry. 2013;55:2203.
32. Walsh D, Foster JJB p. Understanding the public stigma of mental illness: a mixed-methods, multi-level. exploratory triangulation study. 2024;12(1):403.
33. WHO. (2024). Mental disorders. <https://www.who.int/news-room/fact-sheets/detail/mental-disorders>
34. World Health Organization. (1992).
35. Yin H, Wardenaar KJ, Xu G, Tian H, Schoevers RAJB. p. (2020). Mental health stigma and mental health knowledge in Chinese population: a cross-sectional study. 20, 1–10.

## Figures

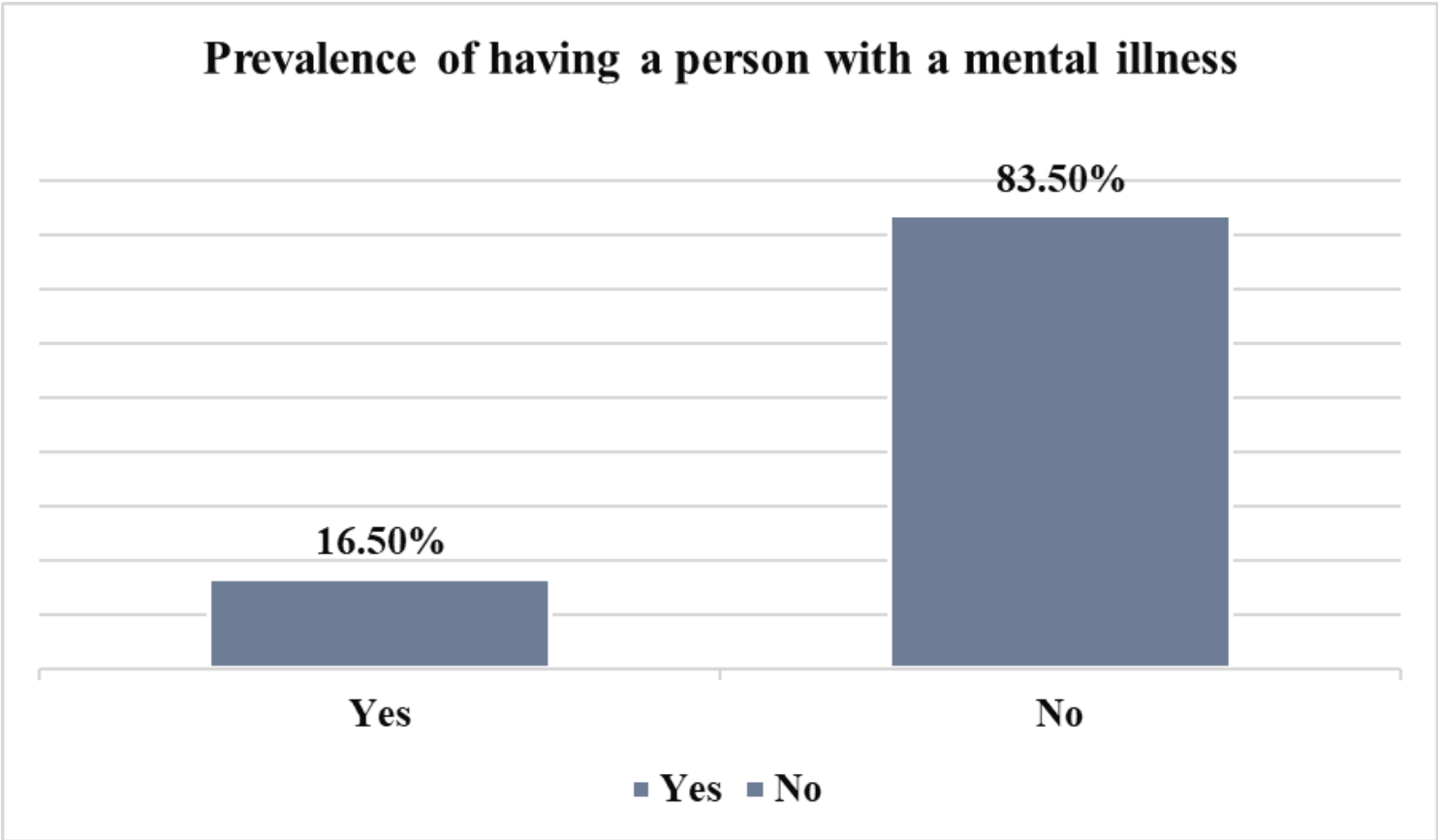


**Figure 1**

See image above for figure legend