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The stigma towards seeking help among university students: a cross-sectional study in Jordan

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Abstract

Background Mental disorders affect one in two people globally, with COVID-19 exacerbating anxiety and depression. Stigma, a major hindrance to seeking mental health services, manifests as public, perceived, and self-stigma. Cultural misconceptions contribute to public stigma. Studies show high stigmatization among university students, impacting help-seeking behavior. Arab populations exhibit varied attitudes influenced by religious beliefs. The research aims to bridge gaps in understanding stigma among university students in Jordan, focusing on the impact of post post-COVID-19 era on mental health perceptions. The study hypothesizes differences in attitudes and stigma between medical and non-medical students, investigating these aspects in Jordan.

Methods A cross-sectional study assessed attitudes and stigma related to seeking help among 1,151 university students in Jordan from June 20th to July 20th, 2023. The sample included diverse participants from Jordanian universities. Data were collected through an online survey covering sociodemographic details, psychological background, and attitudes using the Attitudes Toward Seeking Professional Psychological Help Scale (ATSPPH). Ethical considerations included approval from the University of Jordan Institutional Review Board and informed consent from participants.

Results The survey included 1151 participants. The overall mean age was 20.34 years. Among the participants, 761 (66.1%) were medical students, while 390 (33.9%) were non-medical students. The overall mean ATSPPHS score was 16.30. Medical students exhibited a significantly more positive attitude (73.3%) compared to non-medical students (26.7%). Being a medical student was associated with higher odds of having a positive attitude while being male was found to be a negative predictor.

Conclusion Findings revealed that being a medical student and having prior mental health education were linked to more favorable attitudes, whereas male students tended to hold more negative views. Incorporating mental health education into non-medical curricula could be beneficial in diminishing stigma and fostering positive attitudes toward seeking help.

Keywords ATSPPH, University students, Jordan

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Introduction

Mental health, defined as well-being for effective life coping, is crucial [1]. Worldwide, one in two people is likely to experience a mental health disorder, affecting over 970 million individuals globally, with anxiety and depression being prevalent [2, 3]. The COVID-19 pandemic increased anxiety and depression by 26 and 28%, respectively [4, 5]. In Saudi Arabia, psychiatric disorders are reported at 30 to 46% in primary healthcare centers [6, 7]. Mental disorders impose a significant global burden [8]. Our World in Data reported mental disorders rank as the third-leading burden of disease in Jordan [9].

Mental illness carries various burdens, including the stigma attached to it. Stigma is characterized by negative social attitudes toward an individual's mental, physical, or social deficiencies, leading to discrimination and exclusion [10]. Stigma associated with mental illness has been identified as a significant attitudinal factor hindering the use of mental health services [11, 12]. Stigma can manifest as public stigma, perceived public stigma, and self-stigma [13]. Public stigma represents the general population's reaction such as disseminating stereotypes about psychological issues, perceived public stigma refers to awareness, and self-stigma refers to individuals' self-prejudice and internalizes disgraceful public attitudes [8, 9, 13, 14]. Cultural misconceptions about mental illness contribute to shaping public stigma, leading people to perceive individuals with mental illness as harmful or dangerous [15].

Numerous studies highlight the stigma surrounding seeking help for mental health issues. Eisenberg et al.'s study revealed high stigmatization toward seeking help among university students, with only a few depressed individuals seeking professional therapy [11]. Singh et al. found that mental illness stigma could deter patients from seeking professional psychological help to avoid being labeled as 'mentally ill' [16].

Reluctance to seek professional psychology and counseling services stems from diverse cultural, personal, and societal factors, including cultural constraints and fear of self-disclosure [17]. Despite potential benefits, individuals facing psychological challenges often hesitate, exacerbating long-term negative effects [17]. Understanding these causes is crucial for tailoring effective solutions to improve perceptions and attitudes toward counseling [17].

In Arab populations, religious beliefs positively influence attitudes toward seeking help [18], while studies on Arab youth reveal negative attitudes [19]. Additionally, a lack of confidence in counseling benefits hinders help-seeking, particularly among university students [20]. A comprehensive understanding of these factors enables specialists to develop targeted interventions for

individuals within Arab communities, fostering a more inclusive approach to mental health support. Alrawashdeh's study further demonstrated that students with a family history of mental illness exhibited high stigma toward families of patients with mental illness and low stigma toward the patients themselves [21].

A local study by Rayan et al. emphasized the concern among healthcare providers worldwide regarding the impact of mental illness stigma on patients and their families, particularly among university students in Jordan [22]. The negative effects of stigma underscore the importance of addressing its societal antecedents [22].

Our research addresses gaps in existing literature on stigma among university students, building upon a previous study conducted before the onset of the COVID-19 pandemic. The prior study, involving a sample size of 519, provided valuable insights [22]. However, it did not account for the unique challenges posed by the global health crisis. Our study, with an increased sample size of over 1000, aims to investigate stigma and attitudes in a larger sample of Jordanian university students during the post-COVID-19 pandemic to see if there are differences compared to earlier studies from the pre-COVID era.

We hypothesized that there is a significant difference between medical and non-medical student regarding their attitude toward seeking help and whether they have a stigma toward seeking help. Consequently, our objective is to investigate attitudes and stigma toward seeking psychological help among medical and non-medical students in Jordan.

Methods

Study design and sample size

This cross-sectional study was conducted to evaluate the attitudes and stigma associated with seeking help among medical and non-medical university students in Jordan. The data collection period extended from June 20th to July 20th, 2023, encompassing students pursuing their bachelor's degrees across universities in Jordan, including both public and private institutions. The estimated total population of university students in Jordan is approximately 226,000. Participants, representing diverse governorates and both genders, were selected based on their explicit consent to participate in the study. We recruited 1500 participants for this study through email invitations or through Facebook groups to complete an online questionnaire. Of these, 1151 participants provided consent and completed the entire questionnaire, yielding a response rate of 76.7%. Among the recruited respondents, 1100 were students from public universities, while 400 were students from private universities in Jordan. The public universities included in our study were the University of Jordan, Yarmouk University, Mutah University,

Hashemite University, Al-Balqa' Applied University, and Jordan University of Science and Technology. The private universities included were the University of Petra and Princess Sumaya University for Technology. The survey, available in English, was administered online as a self-administered tool to facilitate the research investigation. Based on a 5% margin of error, a 95% confidence level, and a 50% effect size, the study determined that a sample of 377 people was required.

Data collection instrument

The survey comprised two domains, encompassing a total of twenty questions. The first domain of the questionnaire focused on sociodemographic characteristics, such as age, gender, marital status, area of residence, major, university, year of study, first-degree relatives (father, mother, siblings) passed away, previous courses about mental health and family members having mental illness.

In the second domain, attitudes toward seeking help were explored using the Attitudes Toward Seeking Professional Psychological Help Scale (ATSPPH). This 10-item scale evaluated participants' inclinations toward seeking professional help for psychological issues. Responses were rated on a 4-point Likert-type scale, ranging from 0 ("disagree") to 3 ("agree") [23]. The scale assessed two dimensions: openness to seeking professional help for emotional problems (items 1, 3, 5, 6, and 7) and the value and need for seeking professional help (items 2, 4, 8, 9, and 10), with some items scored in reverse. A higher total score (up to 30) denoted a more positive attitude toward seeking help, with a cutoff score of greater than 20 indicating a positive attitude on the scale [24].

To ensure the questionnaire's quality, a pilot test involving more than 20 participants was conducted to evaluate the readability, understandability, content validity, and reliability. The Cronbach's alpha was 0.831 for the total scale and 0.788 and 0.732 for its two subscales, consistent with earlier versions of the scale showing internal consistency ranging from 0.82 to 0.84 [23].

Statistical analysis

The information was sourced from Google Forms and then transformed into an Excel spreadsheet before being inputted into the Statistical Package for Social Sciences (SPSS) version 26. Descriptive analysis was employed to present categorical variables as percentages and frequencies, while numerical variables were depicted using mean and standard deviation to provide a quantitative evaluation of the data. Normality was assessed using the Shapiro–Wilk test. Categorical chi-square tests were utilized to determine the significance of the data. Additionally,

the Mann–Whitney U test was executed to explore potential differences in means among variables.

Multiple linear regression was performed to investigate potential predictors of having a higher ATSPPHS score. In the analysis, the model's overall fit was assessed. The correlation coefficient (R) for the model was 0.246, indicating a weak positive relationship between the predictors and the ATSPPHS score. The R^2 value was 0.060, suggesting that these predictors explain 6.0% of the variance in the ATSPPHS score. The adjusted R^2 value was 0.052. The standard error of the estimate was 4.081, reflecting the average difference between the observed and predicted scores. The Durbin-Watson statistic was 1.952, indicating that there was no significant autocorrelation present in the residuals of the model. Further, a binary logistic regression was conducted to explore potential predictors of having a positive attitude. The model has a -2 Log likelihood of 918.088, Cox and Snell R^2 of 0.050, and Nagelkerke R^2 of 0.087, suggesting a modest fit of the model to the data. Further, the Hosmer and Lemeshow test produced a chi-square statistic of 9.901 with 8 degrees of freedom and a p value of 0.272. This indicates that the model fits the data adequately. A p value below 0.05 was considered statistically significant.

Ethical considerations

This study was approved by the University of Jordan Institutional Review Board (No. 10/2023/11811) and follows the institutional and/or national research committee's ethical standards and the principles of the World Medical Association's Declaration of Helsinki. An informed consent was obtained from all participants prior to starting the questionnaire completion process. The consent form included the participants' right to anonymity, confidentiality of their data, right to leave the study, and reassurance that their participation is completely voluntary is not associated with any kind of short-term benefit or rewards, and does not affect the quality of their received care (if applicable).

Results

Demographic characteristics

The survey was completed by 1151 participants. The participants' average age was 20.34, with a standard deviation of 1.96. Among the respondents, 814 (70.7%) identified as female. A large portion of participants (95.1%) indicated being single. Additionally, roughly 60% of the participants resided in urban areas. Within the participant cohort, 761 (66.1%) were medical students, and 1,016 (88.3%) were enrolled in public universities. Further, the mean for years of study was 2.62 ± 1.24 (\pm SD).

Two hundred and sixty-one participants (22.7%) disclosed the passing of one of their first-degree relatives (father, mother, or siblings). Only 328 participants (28.5%) had received formal education about mental health through courses. Finally, 278 participants (24.2%) reported having family members who had experienced mental illness.

Mann–Whitney *U* and chi-square tests were utilized to examine potential differences in demographic characteristics between medical and non-medical students. Significant differences were found in age (*p* value=0.023), gender (*p* value<0.001), marital status (*p* value=0.001), university (*p* value<0.001), years of study (*p* value<0.001), and family history of mental illnesses

(*p* value=0.004). Table 1 shows a detailed comparison of demographic characteristics between medical and non-medical students.

Attitude Toward Seeking Professional Psychological Help Scale-Short (ATSPPHS)

The overall mean score was 16.30±4.91 (mean±SD). Specifically, concerning the subscales, the mean for openness to seeking professional help for emotional problems was 8.87±3.42, while the mean for the value and need in seeking professional help score was 7.42±3.06. Interpreting these scores, a positive attitude was reported by 176 participants (15.3%), whereas a negative attitude was observed in 975 participants (84.7%). Medical

Table 1 Demographic characteristics among medical and non-medical students (*n* = 1151)

Item	Overall (%)	Medical students (%), <i>n</i> = 761	Non-medical students (%), <i>n</i> = 390	Statistical test	Test value	<i>P</i> value
Age (mean ± SD)	20.34 ± 1.96	20.20 ± 1.70	20.63 ± 2.37	Mann–Whitney <i>U</i> test	132,571.5	0.023
Gender				Chi-square test	15.548	< 0.001
Male	337 (29.3%)	194 (57.6)	143 (42.4)			
Female	814 (70.7%)	567 (69.7)	247 (30.3)			
Marital status				Chi-square test	10.185	0.001
Single	1095 (95.1%)	735 (67.1)	360 (32.9)			
Married, or divorced, or widowed	56 (4.9%)	26 (46.4)	30 (53.6)			
Area of residence				Chi-square test	0.477	0.490
Countryside	465 (40.4%)	302 (64.9)	163 (35.1)			
Urban	686 (59.6%)	459 (66.9)	227 (33.1)			
University				Chi-square test	83.654	< 0.001
Public	1016 (88.3%)	719 (70.8)	297 (29.2)			
Private	135 (11.7%)	42 (31.1)	93 (68.9)			
Years of study (mean ± SD)	2.62 ± 1.24	2.78 ± 1.24	2.78 ± 2.62	Mann–Whitney <i>U</i> test	12,946.5	< 0.001
First-degree relatives passed away				Chi-square test	2.468	0.116
Yes	261 (22.7%)	162 (62.1)	99 (37.9)			
No	890 (77.3%)	599 (67.3)	291 (32.7)			
Previous courses about mental health ^a				Chi-square test	0.717	0.397
Yes	328 (28.5%)	223 (68.0)	105 (32.0)			
No	823 (71.5%)	538 (65.4)	285 (34.6)			
Family members having a mental illness				Chi-square test	8.302	0.004
Yes	278 (24.2%)	164 (59.0)	114 (41.0)			
No	873 (75.8%)	597 (68.4)	276 (31.6)			
The openness to seeking professional help for emotional problems subscale (mean ± SD)	8.87 ± 3.34	8.88 ± 3.30	8.86 ± 3.43	Mann–Whitney <i>U</i> test	148,258.0	0.979
The value and need in seeking professional help subscale (mean ± SD)	7.42 ± 3.06	7.55 ± 3.02	7.19 ± 3.12	Mann–Whitney <i>U</i> test	137,876.5	0.048
ATSPPHS total score (mean ± SD)	16.30 ± 4.19	16.42 ± 4.27	16.05 ± 4.02	Mann–Whitney <i>U</i> test	141,648.0	0.204
ATSPPHS total score interpretation				Chi-square test	4.780	0.029
Positive attitude	176 (15.3)	129 (73.3)	47 (26.7)			
Negative attitude	975 (84.7)	632 (64.8)	343 (35.2)			

^a Formal education within the university setting, involving hour-credit courses dedicated to the subject matter

students exhibited a significantly higher mean score in value and need in seeking professional help subscale (p value=0.048). Additionally, they displayed a significantly more positive attitude (73.3%) compared to non-medical students (26.7%) (p value=0.029). Table 1 shows a detailed comparison between the ATSPPHS and the major.

Multiple linear regression revealed that respondents who were male and experienced first-degree relatives' death were significantly negative predictors of having a higher ATSPPHS score ($\beta = -1.921, p < 0.001, 95\% \text{ CI} -2.45 \text{ to} -1.393$) and ($\beta = -0.759, p=0.011, 95\% \text{ CI} -1.346 \text{ to} -0.171$), respectively. On the other hand, respondents who live in urban areas and took previous courses about mental health were positive predictors of having a higher ATSPPHS score ($\beta=0.506, p=0.043, 95\% \text{ CI} 0.016-0.995$) and ($\beta=0.716, p=0.011, 95\% \text{ CI} 0.167-1.266$), respectively.

The binary logistic regression analysis revealed several significant predictors of having a positive attitude. Being a medical student ($\text{OR} = 1.523, p = 0.036, 95\% \text{ CI} 1.027 \text{ to} 2.258$), living in urban areas ($\text{OR} = 1.960, p < 0.001, 95\% \text{ CI} 1.354 \text{ to} 2.837$), and having previously taken courses about mental health ($\text{OR} = 1.656, p = 0.006, 95\% \text{ CI} 1.152 \text{ to} 2.380$) were positively associated with having a positive attitude. Conversely, being male ($\text{OR} = 0.516, p = 0.002,$

$95\% \text{ CI} 0.341 \text{ to} 0.780$) and having experienced the death of a first-degree relative ($\text{OR} = 0.444, p = 0.001, 95\% \text{ CI} 0.271 \text{ to} 0.729$) were negatively associated with having a positive attitude. Table 2 demonstrates a detailed summary of the predictors of higher ATSPPHS scores.

Discussion

The aim of this current study was to investigate the attitudes of medical and non-medical students toward seeking psychological help, assess the stigma hindering them from seeking support, and explore the relationship between these factors.

The study found that students who had received prior formal education about mental health were positive predictors to have higher scores and more capability to hold positive attitudes compared to those who had not. This is in line with Goh et al.'s study, which reported that prior knowledge of counseling and psychology was associated with more positive attitudes [25], emphasizing the importance of increasing mental health awareness among Jordanian university students.

Consistent with numerous previous studies [22, 24, 26–30], our findings showed that female students expressed more favorable attitudes toward seeking psychological help than male students who were negative predictors for seeking help in our study. Studies

Table 2 Predictors of having a higher ATSPPH score and a positive attitude

Variable	Higher ATSPPH score				Positive attitude			
	Beta (β)	95% CI		P value	OR	95% CI		P value
	Lower bound	Upper bound	Lower bound		Upper bound			
Age	0.001	-0.004	0.004	0.972	1.116	0.996	1.249	0.058
Gender								
Male	-1.921	-2.45	-1.393	< 0.001	0.516	0.341	0.780	0.002
Marital status								
Single	0.053	-1.092	1.198	0.928	3.313	0.929	11.814	0.065
Area of residence								
Urban	0.506	0.016	0.995	0.043	1.960	1.354	2.837	< 0.001
Major								
Medical	0.232	-0.293	0.757	0.386	1.523	1.027	2.258	0.036
University								
Public	-0.457	-1.223	0.31	0.243	0.709	0.421	1.196	0.197
Year of study	0.122	-0.077	0.302	0.231	0.962	0.812	1.139	0.652
First-degree relatives passed away								
Yes	-0.759	-1.346	-0.171	0.011	0.444	0.271	0.729	0.001
Previous courses about mental health								
Yes	0.716	0.167	1.266	0.011	1.656	1.152	2.380	0.006
Family members having mental illness								
Yes	0.293	-0.295	0.88	0.329	1.353	0.911	2.008	0.134

Reference variables were not reported in the table

by Arora et al. [28] and Al-Omari et al. [31] supported this, indicating that males tended to have more negative attitudes and higher stigma toward help-seeking. This aligns with Jordanian cultural norms where males often refrain from expressing emotions and endorse self-reliance, while females are encouraged to discuss personal issues and express emotions [22, 32]. Additionally, traditional masculinity ideologies in Jordan contribute to the perception that seeking psychological help is shameful and that issues should be resolved individually or within the family [33, 34]. Berger et al.'s study on traditional masculinity ideology further supported this, showing that adherence to traditional male gender roles correlated with higher self-stigma and public stigma associated with help-seeking [35].

Our research revealed that medical students were more likely to possess positive attitudes compared to non-medical students, possibly due to exposure to psychiatric and psychological courses. This echoes findings by Rayyan and Jaradat and Al-Natour et al. [22, 27], emphasizing the need to raise mental health awareness among non-medical students and integrate psychology into their curriculum.

This suggests that combatting stigma toward mental illness among Arab students is crucial for promoting positive attitudes toward seeking help. Anti-stigma programs on university campuses could normalize experiences with psychological professional help and encourage help-seeking among students with mental illness [22].

Our study also revealed a positive association between living in urban areas and having a positive attitude toward mental health. This finding suggests that urban settings may offer better access to mental health resources and education. To address this disparity, it is crucial to enhance the availability of such resources in rural areas. Additionally, our findings indicated that experiencing the death of a first-degree relative was negatively associated with having a positive attitude. This highlights the importance of providing tailored support services for individuals who have experienced such losses. By offering appropriate support, we can help mitigate the negative impact on mental health attitudes and promote positive coping strategies. Moreover, it is imperative to implement community-wide awareness campaigns and educational programs that focus on mental health. These initiatives can help reduce stigma, increase understanding, and encourage help-seeking behaviors. Policymakers should also consider these findings when developing mental health policies to ensure they address the specific needs of individuals in different demographic groups and regions.

Limitation and strength

This study pioneers the exploration of attitudes and stigma surrounding seeking psychological help within Jordan, encompassing a vast sample size inclusive of all medical and non-medical schools. This comprehensive approach significantly enhances the study's potential to generalize its findings and provide a robust understanding of the prevalent sentiments within the community. However, there remains a potential bias in self-rating on scales evaluating personal and public stigma associated with depression, as well as intentions to seek help. Respondents might be influenced to conform to social expectations, which could impact the accuracy of the gathered data. Additionally, we refrained from inquiring about the historical aspects of respondents' mental health, recognizing its substantial role as a contributing factor in the investigation of stigma.

Conclusion

This study examined attitudes toward seeking psychological help among medical and non-medical students. Results showed that medical students and prior education in mental health were associated with more positive attitudes, while male students and those who experienced the death of a first-degree relative tended to have more negative attitudes. Integrating mental health education into non-medical curricula could help reduce stigma and promote positive attitudes toward seeking help.

Abbreviations

ATSPPH	Attitudes Toward Seeking Professional Psychological Help Scale
CI	Confidence intervals
OR	Odds ratios
SD	Standard deviation
SPSS	Statistical Package for Social Sciences

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Authors' contributions

Each author's role in this study is as follows: AFA and JFA conducted the investigation, contributed to the original draft, managed the project, and participated in reviewing and editing. ARFA, JA, NA, RS, AMH, HIYAM, RB, and ABQ were involved in reviewing and editing the written content. RB also provided supervision throughout the process. All authors read and approved the final manuscript.

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Availability of data and materials

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

Declarations

Ethics approval and consent to participate

This study was approved by the University of Jordan Institutional Review Board (No. 10/2023/11811) and follows the institutional and/or national

research committee's ethical standards and the principles of the World Medical Association's Declaration of Helsinki. An informed consent was obtained from all participants prior to starting the questionnaire completion process. The consent form included the participants' right to anonymity, confidentiality of their data, right to leave the study, and reassurance that their participation is completely voluntary, is not associated with any kind of short-term benefit or rewards, and does not affect the quality of their received care (if applicable).

Consent for publication

This work has not been submitted for publication elsewhere and all the authors listed have approved the manuscript enclosed.

Competing interests

The authors declare that they have no conflicts of interest.

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