

The Psychological Impact Of The COVID-19 Pandemic On Syrian Refugee Students, Compared To The Jordanian Students In Jordanian Universities

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Abstract: Anxiety and depression are predominant mental disorders in youth. A disease outbreak like Coronavirus Disease 2019 (COVID-19) may exacerbate the current prevalence of these disorders. This study evaluates the level of anxiety and depression of Syrian refugee students, compared to the Jordanian students in the Jordanian universities during the COVID-19 pandemic. A cross-sectional, descriptive design was conducted in the first week of April 2021. The data collection form has consisted of questions for obtaining demographic data, GAD-7 for anxiety, and PHQ-9 for depression. Responses were received from 9512 students who completed the online survey demonstrated a high prevalence of anxiety and depression of students. The prevalence of GAD-7 (score of ≥ 10) showed an incidence of 52.40% and 50.70% in Syrian refugee students, compared to the Jordanian students, respectively. In addition, the prevalence of PHQ-9 (score of ≥ 10) showed incidence 49.40% and 58.20% in Syrian refugee

students, compared to the Jordanian students, respectively. This study also reports the trend towards anxiety and depression prevalence in students depending on gender, place of residence, steady family income, living with parents, the field of study, infected with COVID-19 previously, and having relative or acquaintance got COVID-19. The current study indicates that both Syrian refugees and Jordanian students need to adopt measures to recognize, avoid, and deal with mental health disorders among students during the COVID-19 pandemic.

Keywords: COVID-19; GAD-7; PHQ-9; mental health; Syrian refugee students; Jordanian students.

1. Introduction

The novel coronavirus (COVID-2019) has caused a pandemic of acute infectious pneumonia across Jordan and many other countries (Bao, Sun, Meng, Shi, & Lu, 2020) and was declared as a pandemic by the World Health Organization (WHO) at the beginning of March 2020. One year later, in the middle of May 2021, approximately 165 million people are infected with the virus all around the world. It was also reported that among these cases there have been more than three million deaths because of illness sourced by the virus (WorldMeter, 2021). The psychological impact of the outbreak on the general population (Alkhamees, Alrashed, Alzunaydi, Almohimeed, & Aljohani, 2020), medical workers (Kang et al., 2020), children (J. J. Liu, Bao, Huang, Shi, & Lu, 2020), patients with mental health (Guan et al., 2020), immigrants and refugees (Guadagno, 2020), patients, and physicians have been documented (Cao et al., 2020).

The continuing spread of the outbreak, rigorous isolation, and delays in start-ups, colleges, and universities across the country are anticipated to affect university students' mental health. Jordan country is one of the

affected countries by the COVID-19 pandemic, and the government has established several prevention and control strategies to reduce the virus's spread in the country (Al-Awaida et al., 2020). Jordan declared the closing of all schools and higher academic institutions during the early stages of the pandemic, with the shift to online remote learning starting in the middle of March 2020 (Al-Awaida et al., 2020).

All around the world, there is plenty of research that investigates how the mental health of university students, especially students in medical schools (Nishimura et al., 2021) and faculties of dentistry (Hakami et al., 2021), and also international students (Firang, 2020) is affected by new measures and restrictions due to COVID-19. The main problems faced by university students were reported as continuing education online, travel restrictions, economic difficulties (not being able to pay tuition fees) and risks of emotional and psychological diseases (Faisal, Jobe, Ahmed, & Sharker, 2021).

Other groups negatively affected by the pandemic and restrictions taken to prevent the spreading of the virus are refugees and immigrants. According to the Ministry of

Planning (MOP), Jordan has approximately 1.3 million Syrians, raising Jordan's population by almost 20 percent, among them approximately 656,400 as refugees. About 78 percent of Syrian refugees live outside the official camps in the north and the central region of the country (Böge, Karnouk, Hahn, Demir, & Bajbouj, 2020).

The COVID-19 pandemic directly and indirectly affected the mental health of refugees and immigrants. The main challenges of refugees emerged during the pandemic were language barrier, socio-cultural differences, risk of being marginalized, and difficulties for accessing health and mental health services, basic needs, labor, shelter, and information (Bodomo, Liem, Lin, & Hall, 2020). Moreover, (Rees & Fisher, 2020) draw attention to being under a quarantine situation. They stated that it could trigger severe distress of refugees with prior experience of detention or forced imprisonment. These challenges increase the risk of mental health disorders particularly depression and anxiety disorders.

Considering these and more challenges of refugees and immigrants WHO published a report that stated that migrants are among risky groups in many aspects such as health, mental health, and providing livelihoods during the COVID-19 outbreak (WHO, 2020). This risk is derived from pandemic itself, virus-related diseases, and the restriction decisions taken to prevent the spreading of the virus.

In the studies conducted since the beginning of the pandemic, the GAD-7 and PHQ-9 scales were used together or separately by researchers who are trying to understand how the mental health of different sample groups are affected by the pandemic (Amerio et al., 2020; Zhu et al., 2020). GAD-7 is a module of the 'Patient Health Questionnaire' and is one of the most used tools for the diagnosis and screening of anxiety disorders (Esser et al., 2018). Currently, GAD-7 is the most used indicator of anxiety in clinical practice and research due to its diagnostic accuracy and feasibility (Johnson, Ulvenes, Øktedalen, & Hoffart, 2019). We applied a cut-off of 10 originally suggested by Kroenke et al. (Kroenke, Spitzer, Williams, Monahan, & Löwe, 2007), with a specificity of 82% and a sensitivity of 89% for GAD-7. PHQ-9 is a widely used screening tool for detecting depressive disorder based on diagnostic parameters from the fourth version of the Diagnostic and Statistical Manual of Mental Disorders (DSM-IV) (Kocalevent, Hinz, & Brähler, 2013). The typical cut-off score for detecting major depressive disorder is 10 or higher (Kroenke, Spitzer, & Williams, 2001; Levis, Benedetti, & Thombs, 2019).

Universities have an urgent challenge in directing students to control their emotions efficiently and appropriately during outbreaks of diseases and prevent losses caused by crisis events. Consequently, we examined and evaluated the mental health

status of Syrian refugee students, compared to the Jordanian students during the outbreak, to establish a theoretical basis for university students' therapeutic interventions. Moreover, to establish a framework of national and government policy promulgation.

2. Materials and Methods

2.1. Study population

The study will take place in Jordan from 1/4-7/4 -2021 through the online questionnaire. To ensure data security and reliability, the questionnaires were made anonymous. The Google Form questionnaire will be published via various websites and social media. Finally, the final analysis included 9512 respondents who completed the questionnaires.

2.2. Rating instruments

The study instrument comprised a structured questionnaire packet that inquired demographic information, including gender, place of residence, steady family income, the field of study, Relatives infected with COVID-19, and living with parents. The psychological impact of the COVID-19 pandemic was investigated with GAD-7 and PHQ-9. The GAD-7 contains seven elements based upon the seven core signs and inquires the frequency at which the students have been suffering from these symptoms over the past two weeks (Toussaint et al., 2020). Symptoms were assessed by using a 4-item Likert rating scale which ranged from 0 (not at all) to 3 (almost every day), such that the total score ranges from 0 to 21

(Toussaint et al., 2020). The prevalence of anxiety is defined as a total score of ≥ 10 in the GAD-7 (J. Liu et al., 2020). The GAD-7 is an excellent validated screening tool, and it has shown good internal consistency (Cronbach's $\alpha = .89$). The PHQ-9 consists of nine items matching the DSM-IV criteria for major depression (Kocalevent et al., 2013). Symptoms were assessed by using a 4-item Likert rating scale which ranged from 0 (not at all) to 3 (almost every day), such that the total score ranges from 0 to 27. The typical cut-off score for detecting major depressive disorder is 10 or higher (Kroenke et al., 2001; Levis et al., 2019). The PHQ-9 is an excellent validated screening tool, and it has shown good internal consistency (Cronbach's $\alpha = .88$).

2.3. Statistical analysis

A statistical test (chi-square test) was used to analyze categorical data at a significant scale GAD-7 and PHQ-9 between undergraduates' Syrian and Jordanian students at $p < 0.05$.

This section may be divided by subheadings. It should provide a concise and precise description of the experimental results, their interpretation, as well as the experimental conclusions that can be drawn.

3. Results

3.1. Demographic data

We received responses from 9512 students, including 8745 students from Jordanian students and 767 from Syrian refugee students. Table 1 shows the demographic and selected characteristics of the study population

Table 1: Characteristics of Syrian refugee students, compared to the Jordanian students in Jordanian universities who responded to the survey.

	Syrian refugee students N=767		Jordanian students N = 8745	
	No	%	No	%
Gender				
Male	333	43%	2823	32%
Female	434	57%	5922	68%
Place of residence				
Village	97	13%	1174	13%
Refugees' camp	67	9%	128	2%
City	603	78%	7443	85%
Steady family income				
Yes	357	47%	6266	72%
No	410	53%	2479	28%
Field of study				
Social sciences and humanities	119	15%	1957	23%
Health sciences	313	41%	2745	31%
Basic sciences	335	44%	4043	46%
Live with parents				
Yes	606	79%	7406	85%
No	161	21%	1339	15%
Infected with COVID-19 previously				
Yes	198	26%	2985	34%
No	569	74%	5760	66%
Relative or acquaintance got COVID-19				
Yes	481	63%	7935	91%
No	286	37%	810	9%

3.2. Prevalence of anxiety among Syrian refugee students, compared to the Jordanian students in Jordanian

universities who responded to the survey.

The GAD-7 scale was used to measure anxiety symptoms. Participants with symptom scores of ≥ 10 , which is indicative of moderate to severe anxiety. However, students had a GAD-7 score of < 10 , which is indicative of mild to minimal anxiety. The prevalence of GAD-7 generally showed that the prevalence of Syrian refugee students (52.40%) had a GAD-7 score of ≥ 10 higher than Jordanian students (50.70%), which is indicative of moderate to severe anxiety. According to Table 2, a prevalence of male Syrian refugee students (49.55%) had a GAD-7 score of ≥ 10 significantly higher than male Jordanian students (47.93%) ($p < 0.05$), which is indicative more of moderate to severe anxiety in male Syrian refugee than Jordanian students. Female Jordanian students (50.05%) showed a high significance of mild to minimal anxiety than Syrian refugee students (45.39) (Table 2).

Anxiety was significantly associated with place of residence, according to our results, Jordanian students (50.78%) had a significantly higher prevalence of moderate to severe than Syrian refugee students who lived in the refugees' camp (44.78%) (Table 2). In terms of steady family income, our results showed that Syrian refugee students (56.58%) who had a steady family income had a highly significant prevalence of moderate to severe anxiety than Jordanian students (48.63%) (Table 2). On the other hand, Jordanian students (50.99%) who had a variable family income had a highly

significant prevalence of moderate to severe anxiety than Syrian refugee students (48.78%) (Table 2). The living with parent's results showed that a highly significant prevalence of Syrian refugee students (56.11%) who lived with parents with moderate to severe anxiety than Jordanian students (48.95%) (Table 2). On the other hand, a highly significant of Jordanian students (51.05%) who lived with parents had mild to minimal anxiety (GAD-7 score of < 10) than Syrian refugee students (43.89%) (Table 2).

The results of the student's distribution in the colleges according to the field of the study revealed that Jordanian students (50.59%) had studied social sciences and humanities significantly had a high prevalence of moderate to severe anxiety compared with Syrian refugee students (43.70%) (Table 2). Jordanian students (48.97%) who had studied health sciences significantly had a lower prevalence of moderate to severe anxiety compared with Syrian refugee students (52.08%) (Table 2). Regarding the issue of being infected with COVID-19 previously, our results showed that Syrian refugee students (53.95%) who were not infected with COVID-19 previously had a highly significant prevalence of moderate to extreme anxiety than Jordanian students (49.55%) (Table 2). On the other hand, Jordanian students (48.81%) who were infected with COVID-19 previously had a highly significant prevalence of moderate to severe anxiety than Syrian refugee

students (47.98%) (Table 2). In respect of having a relative or acquaintance got COVID-19, our results showed that Syrian refugee students (62.59%) who do not have relative or acquaintance got COVID-19 had a highly significant prevalence of moderate to severe anxiety than Jordanian students

(48.52%) (Table 2). On the other hand, Jordanian students (49.38%) who have relative or acquaintance got COVID-19 had a highly significant prevalence of moderate to severe anxiety than Syrian refugee students (46.36%) (Table 2).

Table 2: Prevalence of anxiety among Syrian refugee students, compared to the Jordanian students in Jordanian universities who responded to the survey.

Characteristic	Syrian refugee students N=767		Jordanian students N = 8745		p-value	Chi-Square
	N	%	N	%		
Prevalence of GAD-7						
<10	365	47.60%	4311	49.30%	0.2442	1.3812
≥10	402	52.40%	4434	50.70%	0.2399	1.3564
Gender						
Male						
<10	168	50.45%	1470	52.07%	0.0011	10.6254
≥10	165	49.55%	1353	47.93%	*<.0001	16.1234
Female						
<10	197	45.39%	2964	50.05%	*0.0002	14.2998
≥10	237	54.61%	2958	49.95%	0.1801	1.7967
Place of residence						
Village						
<10	55	56.70%	594	50.60%	0.7005	0.1479
≥10	42	43.30%	580	49.40%	0.2298	1.4423
Refugees' Camp						
<10	37	55.22%	63	49.22%	*<.0001	112.9485

≥ 10	30	44.78%	65	50.78%	* $<.0001$	70.8628
City						
<10	273	45.27%	3777	50.75%	* 0.0020	9.5588
≥ 10	330	54.73%	3666	49.25%	0.6511	0.2045
Steady family income						
Yes						
<10	155	43.42%	3219	51.37%	* $<.0001$	54.7872
≥ 10	202	56.58%	3047	48.63%	* 0.0001	14.9381
No						
<10	210	51.22%	1215	49.01 %	* $<.0001$	85.6032
≥ 10	200	48.78%	1264	50.99 %	* $<.0001$	61.8798
Live with parents						
Yes						
<10	266	43.89%	3781	51.05%	* 0.0005	12.1316
≥ 10	340	56.11%	3625	48.95%	0.2368	1.3995
No						
<10	99	61.49%	653	48.77%	* $<.0001$	26.3988
≥ 10	62	38.51%	686	51.23%	0.8210	0.0512
Field of study						
Social sciences and humanities						
<10	67	56.30%	967	49.41%	0.0614	3.4988
≥ 10	52	43.70%	990	50.59%	* 0.0003	13.2742
Health sciences						
<10	150	47.92%	1409	51.33%	0.0239	5.1050
≥ 10	163	52.08%	1336	48.67%	* $<.0001$	15.9710
Basic sciences						
<10	148	44.18%	2058	50.90%	* 0.0195	5.4597
≥ 10	187	55.82%	1985	49.10%	0.3499	0.8737

**Infected with
COVID-19
previously**

Yes						
<10	103	52.02%	1528	51.19%	*0.0095	6.7252
≥10	95	47.98%	1457	48.81%	*0.0049	7.8985
No						
<10	262	46.05%	2906	50.45%	0.6692	0.1826
≥10	307	53.95%	2854	49.55%	*0.0007	11.5892

**Relative or ac-
quaintance
got COVID-
19**

Yes						
<10	258	53.64%	4017	50.62%	*<.0001	23.7267
≥10	223	46.36%	3918	49.38%	*<.0001	40.0702
No						
<10	107	37.41%	417	51.48%	*<.0001	107.9195
≥10	179	62.59%	393	48.52%	*<.0001	416.3807

* p-value less than 0.05 ($p < 0.05$) is statistically significant.

3.3. Prevalence of depression among Syrian refugee students, compared to the Jordanian students in Jordanian universities who responded to the survey.

The PHQ-9 scale was used to measure depression symptoms. Participants with symptom scores of ≥ 10 , which is indicative of moderate or severe symptoms of depression. However, students had a PHQ-9 score of < 10 , which is indicative of mild to minimal depression. The prevalence of PHQ-9 generally showed that the prevalence of Jordanian students (58.20%) had a PHQ-9

score of ≥ 10 higher than Syrian refugee students (49.40%),..According to Table 3, a prevalence of male (57.70%) and female (58.44%) of Jordanian students had a PHQ-9 score of ≥ 10 significantly higher than male (50.75%) and female (48.39%) Syrian refugee students, respectively. Generally, our results indicated more moderate to severe depression in male and female Jordanian students than male and female Syrian refugee students (Table 3).

Depression was significantly associated with place of residence, according to our results, Jordanian students live in Camp

(56.25%) and city (58.23%) had a significantly higher prevalence of moderate to severe depression than Syrian refugee students who lived in camp (47.89%) and city (50.17%) (44.78%), respectively (Table 3). Results showed that living with parents causes a highly significant prevalence of moderate to severe depression for Jordanian students (58.17%) than Syrian refugee students (50.50%) (Table 3). Results for the students 'field of the study revealed that Jordanian students who had studied in social sciences and humanities (59.53%), health sciences (56.90%), and basic sciences (58.45%) significantly had a high prevalence of moderate to severe depression compared to Syrian refugee students who had studied in social sciences and humanities (44.53%), health sciences (55.01%), and basic sciences (44.83%), respectively (Table 3).

As it can be followed in Table 3, our results showed that Jordanian students (59.70%) who infected with COVID-19 previously had a highly significant prevalence of moderate to severe depression than Syrian refugee students (49.3%). When the result of having a relative or acquaintance got COVID-19 is examined, Jordanian students (58.32%) who have a relative or acquaintance got COVID-19 had a highly significant prevalence of moderate to severe depression than Syrian refugee students (47.90%). On the other hand, Jordanian students (57.04%) who do not have relative or acquaintance got COVID-19 had a highly significant prevalence of moderate to severe depression than Syrian refugee students (52.67%) ($p < 0.05$).

Table 3: Prevalence of depression among Syrian refugee students, compared to the Jordanian students in Jordanian universities who responded to the survey.

Characteristic	Syrian refugee students		Jordanian students		p-value	Chi-Square
	N	%	N	%		
Prevalence of PHQ-9						
<10	388	50.60%	3655	41.80%	*0.0003	12.8223
≥10	379	49.40%	5090	58.20%	*0.0021	9.4790
Gender						
Male						
<10	164	49.25%	1194	42.30%	*<.0001	29.5015

≥ 10	169	50.75%	1629	57.70%	*0.0375	4.3279
Female						
<10	224	51.61%	2461	41.56%	*0.5952	0.2822
≥ 10	210	48.39%	3461	58.44%	<.0001	27.184
Place of residence						
Village						
<10	51	52.04%	490	41.74%	0.2441	1.3567
≥ 10	47	47.96%	684	58.26%	0.1047	2.6326
Refugees' Camp						
<10	37	52.11%	56	43.75%	*<.0001	126.2343
≥ 10	34	47.89%	72	56.25%	*<.0001	82.4423
City						
<10	300	50.17%	3109	41.77%	0.1141	2.496
≥ 10	298	49.83%	4334	58.23%	*<.0001	16.6008
Steady family income						
Yes						
<10	175	53.52%	2637	42.08%	0.0003	12.8446
≥ 10	152	46.48%	3629	57.92%	*<.0001	83.3851
No						
<10	213	48.41%	1018	41.06%	*<.0001	141.7568
≥ 10	227	51.59%	1461	58.94%	(66.0131
Live with parents						
Yes						
<10	296	49.50%	3098	41.83%	0.1593	1.9809
≥ 10	302	50.50%	4308	58.17%	*0.0002	14.2264
No						
<10	92	54.44%	557	41.60%	*<.0001	32.7056
≥ 10	77	45.56%	782	58.40%	0.3324	0.9394
Field of study						
Social sciences and humanities						
<10	71	55.47%	792	40.47%	0.8599	0.0312
≥ 10	57	44.53%	1165	59.53%	*<.0001	19.0443
Health sciences						

<10	157	44.99%	1183	43.10%	*<.0001	24.1198
≥10	192	55.01%	1562	56.90%	*<.0001	19.6644
Basic sciences						
<10	160	55.17%	1680	41.55%	0.3193	0.9919
≥10	130	44.83%	2363	58.45%	*<.0001	27.2939
Infected with COVID-19						
previously						
Yes						
<10	109	50.7%	1203	40.30%	0.7451	0.1057
≥10	106	49.3%	1782	59.70%	*<.0001	15.2757
No						
<10	279	50.54%	2452	42.57%	*<.0001	17.0691
≥10	273	49.46%	3308	57.43%	0.3336	0.9349
Relative or acquaintance got						
COVID-19						
Yes						
<10	273	52.10%	3307	41.68%	0.336	0.9256
≥10	251	47.90%	4628	58.32%	*<.0001	56.0775
No						
<10	115	47.33%	348	42.96%	*<.0001	175.7395
≥10	128	52.67%	462	57.04%	*<.0001	147.8844

* p-value less than 0.05 ($p < 0.05$) is statistically significant.

4. Discussion

Public health incidents, according to studies, may have a range of psychological impacts on college students, including anxiety, depression, and fear, among other things (Batra, Sharma, Batra, Singh, & Schvaneveldt, 2021). According to many studies, the growing number of patients and deaths reported, and also the growing number of regions and affected countries by the outbreak has increased public concern about being infected in the outbreak, leading to an increased rate of anxiety and

depression (Bao et al., 2020; Choi, Hui, & Wan, 2020). Anxiety and depression have also been amplified by a significant shortage of medications and vaccinations, as well as frequent and negative news headlines and inaccurate news reports (Ayittey, Ayittey, Chiwero, Kamasah, & Dzuvoor, 2020).

It is reported that moderated or severe symptoms of anxiety are recorded for half of the students and moderate or severe symptoms of depression are recorded for more than half of the students who attended the

surveys (Faisal et al., 2021). On the other hand, the data obtained by Alkhamees et al (Alkhamees et al., 2020) from the general population of Saudi Arabia show that the prevalence of depression, anxiety, and stress symptoms is between 20% and 30%. Anxiety and depression scores of all participants

The GAD-7 scale was used to measure anxiety symptoms. students with symptom scores of ≥ 10 , which is indicative of moderate to severe anxiety (Kroenke et al., 2007). Our result showed that a significant increase in the prevalence of GAD-7 score of ≥ 10 in Syrian refugee students compared to the Jordanian students depending on the following characteristics male gender, steady family income, studied health sciences, no infected with COVID-19 previously, and having any relative or acquaintance got COVID-19.

In addition, our results showed that the significant increase in the prevalence of GAD-7 score of ≥ 10 in Jordanian students compared with Syrian refugee students regarding living in refugees' camp, variable family income, studied in social sciences and humanities, infected with COVID-19 previously, and having relative or acquaintance got COVID-19. Odriozola-González et al Found similar results for study fields of students. Higher scores related to mental health disorders were obtained for students from Arts & Humanities and Social Sciences & Law concerning students from

Engineering & Architecture (Odriozola-González, Planchuelo-Gómez, Irurtia, & de Luis-García, 2020). In addition, in several studies, financial concerns and loss of income also were reported as risks for anxiety and depression among other challenges such as fear of getting the infection, academic performance concerns, limited physical activities, dysfunctional family, and social isolation (X. Liu, Zhang, & He, 2020).

The PHQ-9 scale was used to measure depression symptoms. Students with symptom scores of ≥ 10 , which is indicative of moderate to severe depression (Kroenke et al., 2001). Our result showed that the significant increase in the prevalence of PHQ-9 score of ≥ 10 in Jordanian students compared to the Syrian refugee students depending on gender, place of residence (refugees' camp or city), steady and variable family income, living with parents, all fields of study, infected or not infected with COVID-19 previously, and having relative or acquaintance got or did not get COVID-19. In addition, the prevalence of PHQ-9 scores of ≥ 10 showed the incidence of 49.40% and 58.20% in Syrian refugee students, compared to the Jordanian students.

The findings of this research indicated university student's anxiety and depression regarding the pandemic was associated along with their gender, place of residence, steady family income, living with parents, the field of study, infected with COVID-19 previously, and having relative or acquaintance

got COVID-19. The results of this study indicated, there is a significant gender difference was indicated in both the anxiety and depression scale, which is comparable to earlier findings (Moreno et al., 2019). This difference suggests that male students suffered more stress and negative emotions because of the pandemic.

In different studies, it is reported that negative and risks posed by the pandemic on anxiety level as well as protective factors such as living in urban areas, living with parents, and family income stability for students (Cao et al., 2020; Hakami et al., 2021).

COVID-19-related stressors, such as economic stressors, effects on regular activities, and educational delays, were positively correlated with anxiety and depressive symptoms of Jordanian college students during the outbreak. According to similar studies, the outbreak would have a negative effect on the country's economy and individuals, in addition to the existing health situation. Some parents will lose their source of income as a result of the outbreak, and students will be worried about paying their tuition fees (Figus, 2020).

In Jordan, the government has taken measures, including partial quarantine, prohibitions of travel, and extending the public holidays to control the outbreak, which inexorably interrupted regular life and resulted in anxiety and depression (Al-Awaida et al., 2020). All universities in

Jordan were locked, and students were forced to learn by remote/online learning methods. These actions clearly have a negative psychological impact on students.

It is found that the prevalence of anxiety and depression is higher in Jordanian students than Syrian refugee students, which is a result of provided support such as regular financial aid, food aid, and psychological assistance to Syrian refugee students from international organizations. In addition, Syrian refugee students received a scholarship from different international organizations, unlike Jordanian students who do not receive any aid or scholarship and have a decline of the family income due to pandemic, and Jordanian students might feel anxious about paying their tuition fees (Peng et al., 2012).

In our study, we evaluated the mental health status of university Syrian refugee students, compared to the Jordanian students during the outbreak, to establish a theoretical basis for university students' therapeutic interventions moreover, to establish a framework of national and government policy promulgation.

5. Conclusions

Our research displays that COVID-19 increased the prevalence of anxiety and depression is higher in Jordanian students than Syrian refugee students. Anxiety and depression regarding the COVID-19 pandemic were associated with gender, place of residence, steady family income, living

with parents, the field of study, infected with COVID-19 previously, and having relative or acquaintance got COVID-19. When faced with outbreaks of diseases, university students' mental health suffers significantly, and they need the support, guidance, and assistance of family, communities and universities.

Funding: This work was supported by the Peoples' Friendship University of Russia (RUDN University) Strategic Academic Leadership Program.

Institutional Review Board Statement: The procedures of this research fulfilled the provisions of the Declaration of Helsinki regarding research on human participants. Authorization was obtained from the Research Ethics Committee at the American University of Madaba (H21001), dated March 20, 2021.

Informed Consent Statement: Informed consent was obtained from all subjects involved in the study

Data Availability Statement: Data available within the article.

Conflicts of Interest: The authors declare no conflict of interest”.

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