

**Knowledge and attitudes of young people toward mental illness: A cross sectional study**

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**Abstract****Objective:**

To investigate young Jordanians' knowledge and attitudes toward people who have a mental illness.

**Methods:**

A cross sectional design was utilised. A convenient sample of 858 participants aged between 15-24 years old completed a survey. Participants under 19 years were accessed through their schools and those 19 years and above were accessed through universities.

**Results:**

Although the majority of university and school students' responses were generally consistent, they disagreed on 11 items on the survey; for example, 186 (39.3 %) of university students agreed that mental illness has a biological origin compared with only 119 (30%) of school students. The majority of young people 737 (85.9 %) were willing to learn and 792 (92.3%) felt that they have to help people with mental illness, which make them willing to learn.

**Conclusion:**

The findings provide insights for decision makers and researchers in Jordan about young peoples' knowledge and attitudes towards mental illness. Increasing young adults' literacy through introducing educational programs such as mental health first aid courses will enrich their knowledge; help change attitudes and reduce stigma towards people living with mental illness.

**Keywords:** adolescents; literacy and mental health

## **Introduction**

Currently, worldwide almost 450 million people are diagnosed with a mental illness and one in four people will receive a diagnosis at some stage of their life (WHO, 2018). The rate of mental illness in the Jordanian population is similar to Western countries. However, only three percent of the Jordanian health care budget is allocated to the treatment of mental illness and 90% of this is directed towards inpatient hospital care (Alsarayrah, 2015), leaving just 10% for preventative or early interventions programs in primary care settings. However, early intervention and preventative programs are important to ensure early diagnosis and treatment of mental illness, to educate the population, decrease stigma and negative attitudes towards mental illness (Winkler et al., 2016).

The general population is reported to hold negative attitudes towards people with a mental illness which include beliefs that they are dangerous, incompetent, unpredictable, weak and unable to complete assigned tasks (Aggarwal, 2012; Kaushik, Kostaki, & Kyriakopoulos, 2016). These attitudes, beliefs and resulting stigma and discrimination alienate, isolate and exclude people with mental illness from the greater community. Young people, aged between 15 and 24 years are reported to hold similar attitudes to adults towards people with mental illness (Hinshaw, 2005; Wahl, Susin, Lax, Kaplan, & Zatina, 2012). A recent systematic review showed that stigma and discrimination towards children and adolescents with a mental illness was a worldwide problem regardless of culture and ethnic background (Kaushik, Kostaki, & Kyriakopoulos, 2016).

The negative attitudes toward people with mental illness also impacts on their help-seeking behaviours (Wynaden et al., 2014). People with a mental illness also self-stigmatise and alienate themselves from others because they feel inferior, different or ashamed. They do not seek to establish relationships; apply for jobs or engage in further educational

opportunities (Lasalvia et al., 2013). Consequently, their quality of life and ability to make valuable contributions to society is compromised (Ayenalem, Tiruye, & Muhammed, 2017).

Jordanians hold the same negative attitudes towards people with mental illness as their counterparts in other countries (Gearing, et al., 2014; Hamdan-Mansour & Wardam, 2009; Hasan & Musleh, 2017). Many of these negative attitudes are based on myths about mental illness; for example, that mental illness is caused by the person being possessed by evil spirits or as a result of black magic (Sehr), or the evil eye (Hasad). Many Jordanians believe that when you envy (evil eye) someone a negative power can transfer to the person and cause them to experience a mental illness (Fadlalla, 2005; Weatherhead & Daiches, 2010). Due to these beliefs, adolescents and their families often seek help of a Sheikh (religious Islamic leader or scholar) rather than present to mental health care services. As a result, when they do seek health care intervention the adolescent's symptoms may be well developed and severe (Gilat, Ezer & Sagee, 2010). The adolescent's treatment and outcome may be further compromised by the shortage of Jordanian mental health services and access to care. Currently there are only 560 mental health beds available to Jordanians and expatriates (Dardas, & Simmons, 2015; Gearing et al., 2014). Accordingly, the World Health Organisation (WHO) has put Jordan as the priority country to implement WHO's mental health action programme (mhGAP). The aim of the program is to improve mental health service for low- and middle-income countries. This program asserts that when countries offer the right access to mental health and psychosocial care, with the assistance of medication and proper support the prevalence of mental illness will decrease dramatically (WHO, 2019).

The attitudes of young Jordanians towards mental illness remains relatively unexplored and more research in this area is recommended as a first step in formulating an effective strategy to decrease stigma towards mental illness and promote early interventions that are sensitive to community and cultural needs. This paper reports on research that

bridged this knowledge gap and investigated young Jordanians' knowledge and attitudes toward people with mental illness.

### **Method**

A cross sectional design was utilised for this research as this methodology is able to provide a general perspective about the phenomena under study (Kesmodel, 2018).

### **Ethical approval**

Ethical approval was obtained from Nursing Ethics Committee at Jerash University and from the Jordanian Ministry of Education. Participation was voluntary and participants were asked to sign consent forms after reading the information sheet. Participants who were younger than 18 years old were asked to also obtain their parent's consent before participating in the study.

### **Sample and setting**

A convenience sampling technique was used to recruit young Jordanians to participate in the research. Participants included in this study were aged between 15-24 years and were able to read and speak Arabic. They were excluded from participating if they had an illness that impacted on their ability to give informed consent or complete the self-report survey. Schools and universities from different Jordanian regions were recruited. School administrators assisted research assistants (RAs) to inform students about the study, obtain consent from students and parents and administer and collect completed surveys. Participants older than 18 were recruited and consented directly by RAs.

For statistical purposes the Jordanian Department of Statistics (2017) group young people into 15-19 year olds and 20-24 years old. In 2017, the number of Jordanians aged between 15 and 19 years was 999,660 and 997,710 were aged between 20 and 24 years (Jordanian Department of Statistics; 2017). The researchers used this to calculate the sample size and to differentiate between participants' responses in the analysis. The Sloven's formula

was used to calculate the sample size  $n = N / (1 + (N e^2))$ , where  $n$  = Number of samples,  $N$  = Total population and  $e$  = margin of error, (0.05). Therefore, 858 participants would be enough to draw statistically valid conclusions.

### **Instrument**

The “knowledge and attitudes toward mental illness survey” was developed by Wahl; Susin, Lax and Kaplan (2012). Permission was obtained from the authors to use the survey in this research. The survey consisted of two parts. Part one focused on beliefs about mental illness, and comprised 34 items on the knowledge and attitude domain (17 items for each domain). The second part of the survey was the “Activity Preference Scale” and was composed of eight items. Participants were required to report their responses to all items using a five-point Likert Scale with: 1 = “strongly disagree” and 5 = “strongly agree”.

However, to make the results more meaningful, “strongly agree” and “agree” were combined as one item and “strongly disagree” and “disagree” were also combined as recommended by Wahl et al., (2012). Test re-test reliability for overall scores for knowledge was (0.49), attitude (0.74), and social distance (0.89). Cronbach’s alpha was for knowledge (0.63), attitude (0.83), and social distance (0.91); displaying an acceptable level of internal consistency.

The translation of the survey to Arabic language and back translation to English was based on WHO guidelines (WHO, 2018b) and the researchers were assisted by professional translators. The Arabic version was then piloted with 20 young people. Based on the pilot feedback it was confirmed that no change to the conceptual meaning of the survey had occurred during translation to Arabic. Cronbach’s alpha after translation to Arabic language was 0.76, displaying an acceptable level of internal consistency.

### **Results**

Eight hundred and fifty-eight young Jordanians completed the survey. This consisted of 385 (44.9%) school students aged 19 years or younger and 473 (55.1%) university students

19 years or older. More females 504 (58.7%) participated in the study than males. The mean age of participants was 18.6 years. Other participant demographics are presented in Table 1.

**Insert table 1 here**

Descriptive statistics as frequencies were used and inferential statistics in particular Chi square test was used to determine if there was a significant difference in the scores between the two age groups. The results were considered significant if the P value was less than .05. Statistically significant differences between school and university students' responses were noted between groups on 11 items. Therefore, all responses are presented together except the 11 items where differences were reported between groups. For example, 186 (39.3 %) of university students agreed the mental illness had a biological origin compared with 119 (30%) of school students. Table 2 details the items, which have different responses between universities and school students.

**Insert table 2 here**

As outlined in Table 3, 666 participants (77.6%) agreed that people with mental illness are hurt when somebody uses slang words toward them like “psycho” and “maniac” and 554 (64.6%) disagreed with using these words. Participants lacked knowledge regarding the symptoms related to the different types of mental illness. For example, 410 participants (47.8 %) were not sure, and 167 (19.5%) disagreed that a person with bipolar disorder is, in general, active and 252 (29.4 %) were not sure. Similarly, 397 (46.3%) participants agreed that schizophrenia involves multiple personalities. For more information, see Table 3

**Insert table 3 here**

In general, participants held positive attitudes towards people with a mental illness. That is, 648 participants (75.5%) believed people with a mental illness are worthy of respect. However, 381 participants (44.4%) were not sure whether meeting a person with a mental illness would be a comfortable experience and only 218 participants (25.4 %) would be

scared if they were contacted by a person with a mental illness. For more information, see Table 4

**Insert table 4 here**

As shown in table 5, which presents the activity preference scale, 351 participants (41%) showed their willingness to make friends with a person with mental illness. Only 289 participants (33.7%) were willing to have neighbours with a mental illness and 302 (35.2%) were willing to invite the person with mental illness to their home. For more information, see Table 5.

**Insert table 5 here**

## **Discussion**

The aim of this research was to investigate young Jordanians' knowledge and attitudes toward people with a mental illness. Previous research found that there was a general improvement in public knowledge about mental illness (Schomerus et al., 2012; Wahl et al., 2012). This is in line with the findings of the current study which showed that participants had some knowledge regarding mental illness. The current study was unable to detect the precise level of knowledge improvement among young adults as no previous research has been conducted among this age group in Jordan. However, the findings of the current study and previous research show many areas that need further improvements. For example, some Arabs related mental illness to supernatural powers like evil spirits; black magic (Sehr), and the evil eye (Hasad) (Fadlalla, 2005; Weatherhead & Daiches, 2010). Furthermore, participants in the current study still believe the media is portraying negative images of people with mental illness. There is a need to introduce topics related to mental illness into schools and universities to increase students' mental health literacy, which will reflect more positively on their attitudes and assist in eliminating stigma directed towards



people with a mental illness (Dardas & Simmons, 2015). Mental health first aid courses are useful to students in schools and universities as it provides participants with necessary information about pathophysiology, risk factors, and how to provide initial help to someone experience mental distress. That is, the course provides education to participants about the signs and symptoms of specific illnesses like anxiety, depression, schizophrenia, bipolar disorder, and addictions which assists in early detection and intervention (National Council for Behavioral Health, 2019). Mental Health First Aid courses increase knowledge and may change the attitude of young adults towards people with a mental illness (Hadlaczky et al., 2014; Jorm et al., 2010). Such courses are important in the Jordanian context as most of the participants in the current study felt they have to help and support people with a mental illness and they showed their willingness to learn more about how to achieve this.

Participants answers on the survey were influenced by their gender, level of education, literacy, having a relative with a mental illness and/or socio-economic status (Reavley, McCann, & Jorm, 2012). Previous research found females had more knowledge and a more positive attitude toward a person with mental illness compared with males (Gibbons, Thorsteinsson, & Loi, 2015). Another study showed higher education female students born in Australia, were more literate and had more positive attitudes toward mental illness compared with male, younger, lower education individuals born outside Australia (Reavley, McCann, & Jorm, 2012). The current research did not explore the previous factors and hence future research is needed to investigate in more depth these factors more fully in Jordan. This will assist health care planners and policy makers when they develop health promotion and education programmes.

Regardless of a more positive empathetic view, young adults were cautious at the social level regarding people with a mental illness as they generally were not willing to interact with the person. One possible reason for this response is the impact of mass media

which presents people with a mental illness as being dangerous and violent (McGinty, Webster, & Barry, 2013). New rules and regulations should take place to prevent mass media from portraying people with a mental illness as dangerous people.

This study has limitations related to the design of the study as it was cross sectional. It takes participants views at single point of time, which limits the causality between variables in the study.

In conclusion, the majority of young people in this current study were willing to learn and felt that they have to help people with mental illness. This willingness to learn about mental illness will facilitate the launching of the mental first aid courses. The findings of the current study will contribute to the knowledge in this area of mental health in the Arab region. This will enable educators and decision makers to develop interventions to enhance young people knowledge and attitudes toward people with a mental illness.

#### **Disclosure of interest & Funding**

The authors report no conflict of interest and funding

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Table 1. Participants' demographics

<b>Item</b>		<b>n (%)</b>
<b>Age</b>	(M= 18.60; SD=2.216 )	
<b>Gender</b>		
	Female	504(58.7)
	Male	352(41)
<b>Participants level of education</b>		
	Schools	385 (44.9)
	University	473 (55.1)
<b>Fathers' level of education</b>		
	Primary	100(11.7)
	Secondary	402(46.9)
	Diploma	104(12.1)
	BSc	218 (25.4)
	MSc	10(1.2)
	PhD	5 (0.6)
<b>Mothers' level of education</b>		
	Primary	364(42.4)
	Secondary	299(34.8)
	Diploma	7(.8)
	BSc	188 (21.9)
<b>Having any relative with mental health</b>		
	Yes	20 (2.3)
	No	837(97.6)

**Table 2. Items that have a significant difference between university and school students**

Item	Variable	Age group			Total	X <sup>2</sup>	df	Sig
		19 and younger	Older than 19					
I would be comfortable meeting a person with a mental illness	Disagree	139	219	358	9.606	2	.008	
	Unsure	184	197	381				
	Agree	62	57	119				
Parents are usually to blame for a child's mental illness	Disagree	129	115	244	17.82	2	.000	
	Unsure	91	87	178				
	Agree	165	271	436				
People with mental illness tend to be violent and dangerous	Disagree	116	169	285	7.16	2	.028	
	Unsure	124	166	290				
	Agree	145	138	283				
Jokes about mental illness are hurtful	Disagree	75	61	136	14.6	2	.001	
	Unsure	72	62	134				
	Agree	238	350	588				
People with mental illness are more likely to lie than other people	Disagree	86	96	182	6.80	2	.003	
	Unsure	171	179	350				
	Agree	128	198	326				
Mental illness is caused by something biological	Disagree	59	87	146	11.30	2	.004	
	Unsure	207	200	407				
	Agree	119	186	305				
People who have had mental illness include astronauts, presidents, and famous	Disagree	119	111	230	8.68	2	.013	
	Unsure	163	197	360				
	Agree	103	164	267				
Sit next to someone with a mental illness.	Disagree	176	174	350	12.47	2	.002	
	Unsure	90	98	188				
	Agree	119	201	320				
Talk to someone with a mental illness	Disagree	106	97	858	8.35	2	.015	
	Unsure	72	77	149				
	Agree	207	299	506				
Make friends with someone with a mental illness	Disagree	138	131	269	6.70	2	0.035	
	Unsure	100	137	237				
	Agree	146	205	351				
Go on a date with someone with a mental illness	Disagree	191	202	393	14.98	2	.001	
	Unsure	117	121	238				
	Agree	77	150	227				



Table 3: Knowledge about mental illnesses among 858 young adults

	<b>School students</b>						<b>University Students</b>						<b>Total</b>					
	<b>Disagree</b>		<b>Unsure</b>		<b>Agree</b>		<b>Disagree</b>		<b>Unsure</b>		<b>Agree</b>		<b>Disagree</b>		<b>Unsure</b>		<b>Agree</b>	
	<b>N</b>	<b>%</b>	<b>N</b>	<b>%</b>	<b>N</b>	<b>%</b>	<b>N</b>	<b>%</b>	<b>N</b>	<b>%</b>	<b>N</b>	<b>%</b>	<b>N</b>	<b>%</b>	<b>N</b>	<b>%</b>	<b>N</b>	<b>%</b>
People with mental illness are hurt when others use slang words for their disorders.	52	13.5	41	10.6	292	75.8	44	9.3	55	11.6	374	79	96	11.2	96	11.2	666	77.6
Parents are usually to blame for a child's mental illness.	129	33.5	91	23.6	165	42.9	115	24.3	87	18.4	271	57.3	244	28.4	178	20.7	436	50.8
People with mental illness tend to be violent and dangerous.	116	30.2	124	32.2	145	37.6	169	35.7	166	35.1	138	29.2	285	33.2	290	33.8	283	33
Mental illness is often confused with the effects of drug abuse.	82	21.3	130	33.8	173	44.9	88	18.7	146	30.9	239	50.6	170	19.8	276	32.2	412	48
People with mental illness are more likely to lie than other people.	86	22.3	171	44.4	128	33.3	96	20.3	179	37.8	198	41.9	182	21.2	350	40.8	326	38
Most people with severe forms of mental illness do not get better, even with treatment.	157	40.8	143	37.1	85	22.1	189	40	165	34.9	119	25.1	346	40.3	308	35.9	204	23.8
People with mental illness are often treated unfairly.	126	32.7	115	29.9	143	37.2	133	28.1	130	27.5	210	44.4	259	30.2	245	28.6	353	41.1
"Psycho" and "maniac" are okay terms for mental illness.	260	67.5	54	14	71	18.4	294	62.2	60	12.7	119	25.1	554	64.6	114	13.3	190	22.1
Mental illnesses are often shown in negative ways on TV and in movies.	118	30.6	76	19.7	191	49.6	135	28.5	81	17.1	257	54.3	253	29.5	157	18.3	448	52.2
Mental illnesses are caused by something biological.	59	15.3	207	53.8	119	30.9	87	18.4	200	42.3	186	39.3	146	17	407	47.4	305	35.5
Giving medicine is a useful way to treat mental illness.	97	25.2	131	34	157	40.8	108	22.8	133	28.1	232	49	205	23.9	264	30.8	389	45.3

Mental illnesses is <u>not</u> a very serious problem.	143	37.1	122	31.7	120	31.1	185	39.1	129	27.3	159	33.6	328	38.2	251	29.3	279	32.5
Mental retardation and mental illness are the same things.	196	50.9	112	29.1	77	20	250	52.8	120	25.4	103	21.8	446	52	232	27	180	21
Schizophrenia is mental illness that involves multiple personalities.	78	20.3	131	34	176	45.7	131	27.1	121	25.6	221	46.7	209	24.4	252	29.4	397	46.3
A person with bipolar (manic-depressive) disorder acts overly energetic.	70	18.2	198	51.4	117	30.4	97	20.5	212	44.8	164	34.7	167	19.5	410	47.8	281	32.8
Psychological therapy (for example, talking to a psychologist or counsellor) is a useful way to treat mental illness.	67	17.4	79	20.5	239	62.1	85	18	94	19.9	294	62.2	152	17.7	173	20.2	533	62.1
People who have had mental illnesses include astronauts, presidents, and famous baseball players.	119	30.9	163	42.3	103	26.7	111	23.5	197	41.6	164	34.7	230	26.8	360	42	267	31.1

**Table 4. Attitudes about mental illnesses among 858 young adults**

	<u>School students</u>						<u>University Students</u>						<u>Total</u>					
	<u>Disagree</u>		<u>Unsure</u>		<u>Agree</u>		<u>Disagree</u>		<u>Unsure</u>		<u>Agree</u>		<u>Disagree</u>		<u>Unsure</u>		<u>Agree</u>	
	N	%	N	%	N	%	N	%	N	%	N	%	N	%	N	%	N	%
People with mental illness deserve respect.	51	13.2	44	11.4	290	75.3	51	10.8	63	13.3	356	75.7	102	11.9	107	12.5	648	75.5
We should do more to help people with mental illness get better	13	3.4	10	2.6	362	94	30	6.3	13	2.7	430	90.9	43	5	23	2.7	792	92.3
Jokes about mental illness are hurtful.	75	19.5	72	18.7	238	61.9	61	12.9	62	13.1	350	74	136	15.9	134	15.6	588	68.5
It is important to learn about mental illness	35	9.1	28	7.3	322	83.6	31	6.5	27	5.7	415	87.7	66	7.7	55	6.4	737	85.9
A person with a mental illness is able to be a good friend	71	18.4	153	39.7	161	41.8	85	18	172	36.4	216	45.8	156	18.2	325	37.9	377	43.9
It is a good idea to avoid people who have mental illness.	227	59	74	19.2	84	16.1	275	58.1	97	20.5	101	21.4	502	58.5	171	19.9	185	21.6
I would be comfortable meeting a person with mental illness.	139	36.1	184	47.8	62	16.1	219	46.3	197	41.6	57	12	358	41.7	381	44.4	119	13.9
People with mental illness are able to help others.	70	18.2	150	39	165	42.9	87	18.4	152	32.1	232	49	157	18.3	302	35.2	397	46.3
If I had mental illnesses, I would not tell any of my friends.	144	37.4	116	30.1	125	32.5	163	34.5	156	33	154	32.6	307	35.8	272	31.7	279	32.5
If any friends of mine had mental illness, I would tell them NOT to tell anyone else about it.	144	37.4	99	25.7	142	36.9	166	35.1	109	23	198	41.8	310	36.1	208	24.2	340	39.6
Keeping people with mental illness in the hospital makes the community a safer place.	141	36.7	100	26	143	37.2	198	41.9	126	26.6	148	31.3	339	39.5	226	26.3	291	33.9
Only people who are weak and overly sensitive let mental illness affect them.	144	29.6	99	25.7	172	44.7	123	26	134	28.3	216	45.6	237	27.6	233	27.2	388	45.2
It would be embarrassing to have mental illness.	166	43.2	90	23.4	129	33.5	174	36.8	103	21.8	196	41.4	340	39.6	193	22.5	325	37.9
Students with mental illnesses need special programs to learn in school.	40	10.4	124	32.2	221	57.4	40	8.5	124	26.2	309	65.3	80	9.3	248	28.9	530	61.8
I have little in common with people who have mental illness.	232	60.4	78	20.3	74	19.3	254	53.7	109	23	110	23.3	486	56.6	187	21.8	184	21.4
Students with mental illness shouldn't be in regular classes.	167	43.4	103	26.8	115	29.9	211	44.6	128	27.1	134	28.4	378	44.1	231	26.9	249	29
I would be frightened if approached by a person with a mental illness.	171	44.4	107	27.8	107	27.8	233	49.3	129	27.3	111	23.5	404	47.1	236	27.5	218	25.4

**Table 5. Willingness to interact with someone with a mental illness among 858 young adults**

	<b>School students</b>						<b>University Students</b>						<b>Total</b>					
	unwilling		Neither willing nor unwilling		Willing		unwilling		Neither willing nor unwilling		Willing		unwilling		Neither willing nor unwilling		Willing	
	N	%	N	%	N	%	N	%	N	%	N	%	N	%	N	%	N	%
Have someone with mental illness as a neighbour.	159	41.3	113	29.4	113	29.4	177	37.4	120	25.4	176	37.2	336	39.2	233	27.2	289	33.7
Have someone with mental illness in a class with me.	161	41.8	94	24.4	130	33.8	185	39.1	94	19.9	194	41	346	40.3	188	21.9	324	37.8
Sit next to someone with mental illness.	176	45.7	90	23.4	119	30.9	174	36.8	98	20.7	201	41.5	350	40.8	188	21.9	320	37.3
Talk to someone with a mental illness.	106	27.5	72	18.7	207	53.8	97	20.5	77	16.3	299	63.2	203	23.7	149	17.4	506	59
Work on a class project with someone with mental illness.	118	30.6	93	24.2	174	45.2	152	32.2	118	24.9	203	42.9	270	31.5	211	24.6	377	43.9
Make friends with someone with mental illness.	138	35.9	100	26	146	37.9	131	27.7	137	29	205	43.3	269	31.4	237	27.6	351	40.9
Invite someone with mental illnesses to my home.	146	37.9	113	29.4	126	32.7	154	32.6	143	30.2	176	37.2	300	35	256	29.8	302	35.2
Go on a date with someone with mental illness.	191	49.6	117	30.4	77	20	202	42.7	121	25.6	150	31.7	393	45.8	238	27.7	227	26.5