

Mental health literacy among secondary school female students in Abha, Saudi Arabia

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ABSTRACT

Background: Worldwide, mental health is a big problem and Saudi Arabia is not far behind in observing this. It seems that progress in the field of mental health is slow. Interventions in mental health education have resulted in positive results. Participation by family members, sensitization to care and social integration include some of methods believed to target understanding and counter stigma surrounding mental illness. **Aim:** To assess mental health literacy among female students of secondary schools in Abha city, Kingdom of Saudi Arabia. **Methodology:** A descriptive cross-sectional study from May 2019 to 2020 was conducted at the female governmental secondary schools in Abha sector. A total sample of 350 female students from a total of 5000 students were included. Sampled students were selected from secondary schools using probability proportionate to size using two stage cluster sample technique. Data were collected from students directly using pre-structured questionnaire. The researchers created the study questionnaire after extensive literature review and expert consultation. **Results:** Almost half (48.9%) study participants had good awareness of the signs and indications of anxiety and depression. Loss of confidence and poor self-esteem were identified as signs of depression by 81%, sleep disturbance by 77% and disturbed appetite by 76.2% participants. Parent's education level and occupation, participant's educational performance and family living arrangement were significantly related with their awareness in univariate analysis. Father's education level ($OR_A = 1.45$), maternal engagement with occupation ($OR_A = 4.18$) and participant living with parents ($OR_A = 5.4$) were identified as predictors of mental health awareness. Social media was reported as the most common source of awareness. The approach towards individuals with mental illness were helpful. **Conclusions and recommendations:** In conclusion, the study revealed that secondary school students had satisfactory awareness level regarding mental health and its impact. They exhibited positive attitude towards friendship with person having mental illness.

Keywords: Attitude, awareness, females, literacy, mental health, students, wellbeing

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Background

The level of psychological well-being or an lack of mental illness is recognised as mental health, mental health is very much

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associated with the family care, if mankind is in the peace of mind they will contribute better to the society and somehow it's a responsibility of primary physicians to provide satisfactions and treatment of mental health. It can be define as that it is the situation of somebody who "working at a reasonably acceptable level of emotional and social life"^[1]

Mental wellbeing can include, from the perspective of positive psychology or holism, the ability of a person to enjoy life and to maintain a balance between life activities and efforts to achieve psychological resilience.^[2] Mental wellbeing encompasses 'subjective well-being, perceived self-efficacy, autonomy, integrity, dependency, and self-respect and wish of recognitions is one's rational and demonstrative abilities, among others, As per World Health Organization (WHO)^[3,4] There are about 450 million people with psychiatric illnesses and more with mental health issues, according to the World Health Organisation (WHO). Mental illnesses comprise 13% of the global disease burden, with an upward increase in prevalence.^[5]

Mental health problems were firstly noted among youths or young adults and affect almost more than one in four adolescents, worldwide.^[6-8] the term mental health learning (MHL) appeared for the first time in 1997 by Jorm and defined as "information and views about mental disorders which aid their recognition, management".^[9] This concept centered on the terms of MHL and its position in identifying mental health issues and recommendations for Youth and persons close to them, e.g., family fellows, instructors, and friends, to request support and prevention. MHL investigation to date has shown that many young people do not seek help or avoid seeking help because of numerous individual and operational difficulties, such as horror of stigma and prejudice associated with unhappiness; inability to recognize indications of the problems; absence of knowledge about the convenience of help; lack of suitable responses from Youth and adults both.^[10,11] The current study intended to assess rational health literacy among female students of secondary schools in Abha city, Kingdom of Saudi Arabia.

Methodology

A descriptive cross-sectional study from May 2019 to 2020 was conducted at the female governmental secondary schools in Abha sector, which is the capital of Aseer region, southern of Saudi Arabia. There were about 30 governmental schools having about 5000 female students in the secondary stage in Abha city. Student with clinically diagnosed psychological disorders were excluded. A total sample of 350 female students from a total of 5000 students were required to detect average MHL rate of 90%^[12] with precision of 3% at 95% confidence level. The sample size was calculated using PASS software. Sampled students were selected from secondary schools using probability proportionate to size using two stage cluster sample technique. At first stage, schools were distributed according to the geographical areas of Abha City. The largest governmental schools were selected randomly from the different geographical

areas. Within selected schools, students in the different grades were invited to participate in this study after explaining the objectives of the research and confirming confidentiality of data. Students within each grade who accepted to participate included systematically until required sample size fulfilled. After having permission from Institutional ethics committee (from REC of King Khalid University), data were collected from students directly using pre-structured questionnaire. The study survey was established by the researchers after series of meetings with panel of experts including Doctors, researchers, teachers of psychiatry course. The developed questionnaire included student's socio-demographic data like age, grade, family data, residence, parents' education. Medical and family psychological history for mental disorders. Mental health literacy was assessed using the Arabic version of the Depression questionnaire which was validated for applicability and clarity using pilot study sample. The items were reviewed independently by a panel of 3 experts for content validity. Tool reliability was assessed using α -Cronbach's coefficient which was 0.83. Ethical approval was obtained from Research Ethical Committee (REC) of the King Khalid University on 02-01-2020.

Data analysis

Data were entered in the SPSS ver. 20 software for analysis. The patient who scored less than 60% will consider as poor awareness patient while patients who scored more than 60% will consider as a good awareness patients. Descriptive and inferential statistics was obtained. For inferential statistics Chi-square test at 5% level of significance was used , further liner regression methods was also used to analyze the data.

Results

Table 1 demonstrates that 67.3% of the students aged 17-18 years old and they were nearly equally selected from the different grades. Last year grade was 95%-100% for 63.3% of the students. Exact of 50.4% of students' fathers were university graduated and also 46.3% of their mothers. Fathers were working for 77.7% of the students and 34.4% of their mothers. Family size ranged from 6-8 persons for 55.7% of the students while parents were separated among 6.1% of them. About 93% of the student were living with their parents and 46.4% of those who did not were living with mothers.

With regard to students awareness [Table 2], 81% of the students reported that lack of self-assurance and poor self-confidence may be indications of depression, 77% agreed on that Sleeping too much or too little may be a sign of depression, 76.2% said that Excessive eating or loss of desire for food may be a sign of depression, and 70.6% reported that many famous people have experienced depression. Depressed persons my incorrectly feel guilty was reported by 47.3% of the students and Advice is as an operative as cognitive social therapy for depression was described in 54.9% of the students. In total, 48.9% of the female students had good awareness level regarding depression.

Table 1: Socio-demographic data of female secondary school students in Abha sector, Saudi Arabia			
Socio-demographic data		No	%
Age in years	15-16	54	13.7%
	17-18	266	67.3%
	19-20	75	19.0%
Grade	First year	109	27.6%
	Second year	134	33.9%
	Third year	152	38.5%
Last year grade	<90%	72	18.2%
	90%-94%	73	18.5%
	95%-100%	250	63.3%
Father educational level	Basic education	60	15.2%
	Secondary	136	34.4%
	University	199	50.4%
Mother educational level	Basic education	121	30.6%
	Secondary	91	23.0%
	University	183	46.3%
Father is working	Yes	307	77.7%
	No	88	22.3%
Mother is working	Yes	136	34.4%
	No	259	65.6%
Family size	3-5	77	19.5%
	6-8	220	55.7%
	9+	98	24.8%
Parents are separated	Yes	24	6.1%
	No	371	93.9%
Live with parents	Yes	367	92.9%
	No	28	7.1%
If no, with who you live	Mother	13	46.4%
	Brothers and sisters	3	10.7%
	Grandparents	5	17.9%
	Family	1	3.6%
	Husband	6	21.4%

Table 3 depicted that 34.4% of the respondents will not be eager to marry a person identified with bipolar complaints. Also, 13.2% of the students will not be willing to maintain friendship with someone with bipolar disorder. In contrast, 29.1% of the student see that an individual with bipolar complaints can do their job efficiently.

Considering source of information regarding depression, Figure 1 demonstrates that social media was the most recorded source (52.7%) followed by parents and relatives (45.8%), and hospital and medical staff (1.5%).

Table 4 shows the distribution of secondary school female students' awareness regarding psychological health according to their personal data. Exact of 53.6% of students who had GPA of 59%-100% had good awareness level compared to 38.9% of those who had GPA less than 90% (P = 0.043). Also, good awareness level was recorded for 59.8% of students with highly educated fathers compared to 25% of those whose father have lower education (P = 0.001). The same for mother's education (61.7% vs. 33.1%, respectively). Also, good awareness level was recorded for 55% of those who had working father

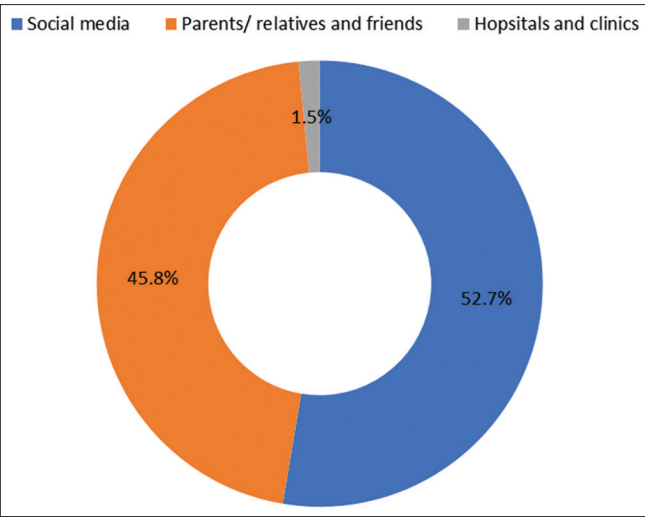


Figure 1: Source of information regarding psychological health recorded among secondary school female students in Abha sector, Saudi Arabia

compared to 27.3% of those who didn't (P = 0.001) and also the same for working mothers (70.6% vs. 37.5%, respectively). High awareness level was significantly higher among students who live with their parents (P = .016).

Logistic regression analysis for predictors of students' awareness level [Table 5] showed that students with highly educated father recorded 1.5 times higher awareness than others with low educated fathers (OR_{Adjusted} = 1.45). Also, students of working mother had 4 times higher awareness compared to others (OR_{Adjusted} = 4.18). Students who live with their parents recorded 5 times higher awareness (OR_{Adjusted} = 5.4).

Discussion

Mental conditions are now more common than heart disease, diabetes, or cancer. More than 26% of all American nationals having age more than 18 meet the necessities for mental illness.^[13] A WHO study stated that the world-wide cost of psychological illness in 2010 was about \$2.5 tons (two-thirds of indirect costs), with a prediction rise to more than \$6 trillion by 2030.^[5] To live a long and safe life, preserving good mental health is important. Good mental health can enhance one's life, while poor mental health can prevent someone from living an enriching life. There is growing evidence that is showing emotional abilities are associated with pro-social behaviors such as stress management and physical health.^[14] Young students are hyperactive and at serious life phase who face new world with new requirements and roles with increased academic and life responsibilities, many conflicts may appear pushing them to contradicting thoughts and behavior limited by social and cultural barriers. All these may affect students' mental health wellbeing. Improving their awareness regarding all types of stressors and how to cope with is a vital role for community and experts.

Table 2: Awareness regarding depression among secondary school female students in Abha sector, Saudi Arabia

Awareness items	Correct		Incorrect		Don't know	
	No	%	No	%	No	%
Depressed persons usually talk by unclear and inconsistent method	190	48.1%	74	18.7%	131	33.2%
Depressed persons may incorrectly feel guilty	187	47.3%	76	19.2%	132	33.4%
Reckless and reckless behavior is a symptom of depression	138	34.9%	154	39.0%	103	26.1%
Loss of confidence and poor self-esteem may be symptoms of depression	320	81.0%	33	8.4%	42	10.6%
Fear of walking on cracks in the sidewalk may be a sign of depression	63	15.9%	141	35.7%	191	48.4%
People with depression often hear non-real sounds	193	48.9%	62	15.7%	140	35.4%
Sleeping too much or too little may be a sign of depression	304	77.0%	42	10.6%	49	12.4%
Excessive eating or loss of desire for food may be a sign of depression	301	76.2%	43	10.9%	51	12.9%
Depression does not affect your memory and concentration	47	11.9%	285	72.2%	63	15.9%
Multiple and different personalities in a person may be a sign of depression	149	37.7%	110	27.8%	136	34.4%
Depressed person may move more slowly or become excited	245	62.0%	35	8.9%	115	29.1%
Clinical psychotherapists may prescribe antidepressants	176	44.6%	38	9.6%	181	45.8%
Moderate depression disrupts a person's life as much as multiple sclerosis or deafness	118	29.9%	64	16.2%	213	53.9%
Most people who suffer from depression need hospitalization	55	13.9%	227	57.5%	113	28.6%
Many famous people have experienced depression	279	70.6%	9	2.3%	107	27.1%
Many methods of treating depression are more effective than antidepressants	265	67.1%	36	9.1%	94	23.8%
Advice is as effective as cognitive behavioral therapy for depression	217	54.9%	13	3.3%	165	41.8%
Cognitive behavioral therapy is as effective as antidepressants in mild to moderate depressions	212	53.7%	9	2.3%	174	44.1%
Among all alternative and lifestyle treatments, vitamins are more likely to be used to treat depression	134	33.9%	110	27.8%	151	38.2%
People who suffer from depression should stop taking antidepressants as soon as they feel better	147	37.2%	148	37.5%	100	25.3%
Antidepressants are addictive	259	65.6%	18	4.6%	118	29.9%
The effect of antidepressant medications usually appears immediately	55	13.9%	151	38.2%	189	47.8%
Overall awareness level	202 (51.1%)		193 (48.9%)			

Table 3: Attitude of secondary school female students regarding bipolar patients in Abha sector, Saudi Arabia

Attitude items	Yes		No		Not sure	
	No	%	No	%	No	%
A person with bipolar disorder can do their job effectively	115	29.1%	67	17.0%	213	53.9%
It is a shame to mention that someone in the family has bipolar disorder	31	7.8%	307	77.7%	57	14.4%
You will not be willing to maintain friendship with someone with bipolar disorder	52	13.2%	243	61.5%	100	25.3%
You will not be willing to marry a person diagnosed with bipolar disorder	136	34.4%	141	35.7%	118	29.9%

The current study aimed to assess the magnitude of mental health literacy among secondary school female students in Abha city, Southern of Saudi Arabia. Also, the study aimed to assess students' factors affecting their mental health literacy besides their source of information regarding mental health. The study revealed that nearly half of the students were knowledgeable regarding mental health issue. The most field they were aware about was initial signs and symptoms for depression and mood disturbance. Also, students surprisingly reported satisfactory awareness and idea regarding antidepressant secondary role in treating depressed persons as many students reported that depressed persons need other supportive factors besides medication to be effective. Parents and social media were the main source of students' information regarding mental health. Health care providers and school were not considered as a source of information which mean defect in their role regarding this vital topic. High social level (high education and income) with being with parents, were the most significant determinants of high student's awareness level.

Despite student's good awareness level regarding mental health issue, they had unclear attitude towards persons with mental and psychological disorder. More than half of the students were unsure regarding the ability of persons with bipolar disorder to do their job effectively. Also, nearly 35% showed their lack of willing to marry a person diagnosed with bipolar disorder. On the other side, more than three quarters disagreed on that its shame to mention that someone in the family has bipolar disorder and two thirds showed their willing to maintain friendship with someone with bipolar disorder.

Pinfold *et al.* evaluated the understanding of mental wellbeing among school students in Canada and the UK and evaluated the effect of the intervention program to enhance the awareness of students.^[15] The study found that 35% more Canadian students were conscious that persons with schizophrenia may not have a split personality. Compared to UK students' awareness of the prevalence of mental health issues in general, 34 percent more were aware of the frequency of schizophrenia, and 36 percent more were aware that people with schizophrenia (or mental

Table 4: Distribution of secondary school female students' awareness regarding psychological health according to their personal data

Personal data	Groups/categories	Awareness level				P
		Poor		Good		
		No	%	No	%	
Age in years	15-16	28	51.9%	26	48.1%	0.323
	17-18	130	48.9%	136	51.1%	
	19-20	44	58.7%	31	41.3%	
Grade	First year	53	48.6%	56	51.4%	0.224
	Second year	63	47.0%	71	53.0%	
	Third year	86	56.6%	66	43.4%	
Last year grade	<90%	44	61.1%	28	38.9%	0.043*
	90%-94%	42	57.5%	31	42.5%	
	95%-100%	116	46.4%	134	53.6%	
Father educational level	Basic education	45	75.0%	15	25.0%	0.001*
	Secondary	77	56.6%	59	43.4%	
	University	80	40.2%	119	59.8%	
Mother educational level	Basic education	81	66.9%	40	33.1%	0.001*
	Secondary	51	56.0%	40	44.0%	
	University	70	38.3%	113	61.7%	
Father is working	Yes	138	45.0%	169	55.0%	0.001*
	No	64	72.7%	24	27.3%	
Mother is working	Yes	40	29.4%	96	70.6%	0.001*
	No	162	62.5%	97	37.5%	
Family size	3-5	36	46.8%	41	53.2%	0.113
	6-8	107	48.6%	113	51.4%	
	9+	59	60.2%	39	39.8%	
Live with parents	Yes	178	48.5%	189	51.5%	0.001*
	No	24	85.7%	4	14.3%	
Source of information	Social media	100	48.1%	108	51.9%	0.427
	Parents/relatives and friends	99	54.7%	82	45.3%	
	Hospitals and clinics	3	50.0%	3	50.0%	

P: Pearson χ^2 test

Table 5: Multiple stepwise logistic regression model for predictors of female student's awareness level regarding psychological health

Factor	B	S.E.	Sig.	OR _A	95% C.I for OR	
					Lower	Upper
High father education	0.37	0.12	0.002*	1.45	1.14	1.83
Working mothers	1.43	0.24	0.001*	4.18	2.59	6.75
Live with parents	1.96	0.61	0.005*	5.41	1.65	17.79
Constant	3.56	1.03	0.001	35.23		

B: regression coefficient; SE: standard error; OR_A: Adjusted odds ratio

health problems) are not prone to abuse. Both initiatives had a substantial effect on the factual recall of students and recorded attitudes on all items; however for all items, the overall percentage change was lower in Canada. In India,^[16] one study found that mental health literacy among adolescents was very low, i.e., 29 percent recognized depression and only 1.31 percent reported schizophrenia/psychosis. In help-seeking, stigma has been noted to be present. Hyun *et al.*^[17] performed a cross-sectional analysis in the USA, including all registered graduate students who received an e-mail invitation to participate in a web survey in the Spring 2004 semester. 551 completed surveys were from foreign graduate students out of 3,121 completed surveys.

Almost 44% of foreign graduate students indicated that in the past year they had an emotional or stress-related issue that significantly affected their well-being or academic performance. In the past year, foreign students who reported a more functional relationship with their advisors were less reported with emotional or stress-related disorders and used therapy services. It was also less likely for foreign students who reported greater financial trust to use counselling services. Literacy in mental health among university students was evaluated by Furnham *et al.*^[18] Participants learned about almost one-third of the different diseases. They were considered to have more proven causes and to be more curable by those who rated the conditions as more common. Open-to-experience, emotionally intelligent women who had studied relevant academic subjects appeared to be better educated. The age and personality of the individual, as well as whether they had studied clinical psychology, were linked to their comprehension. In Shanghai, Wang *et al.* assessed mental health literacy among residents.^[19] Correct answer rates for the 20 MHKQ items ranged from 26 to 98%, with a mean rate of 72%. A study to assess psychological health literateness among student students of a Saudi tertiary institution was directed in Saudi Arabia by Mahfouz *et al.*^[18-19] A whole of 557 learners from various university colleges in Jazan is included. Most students

have intermediate mental health awareness (90.3 percent). Regarding the etiology of mental illness, students indicated that the key causes of mental illness are hereditary inheritance (45.8 percent), reduced value of life (65 percent) of respondents stated vulnerability in social relationships (73.1 percent). (The majority believed that people with mental illness (52.5 percent) should not have true friendships and that anyone could suffer from a mental illness (49.4 percent). Students' views towards psychiatric patients were mixed, with 68.7 percent reporting that they could maintain a relationship with a mentally ill person and that mentally ill people should have the same rights as everyone else (82.5 percent).

Conclusion

In conclusion, the study revealed that secondary school students had satisfactory awareness level regarding mental health and its impact. their attitude was not clear but more related to positivity as they agreed on friendship and relations with person having bipolar disorders. These findings reinforce the need to improve awareness of mental health.

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Conflicts of interest

There are no conflicts of interest.

References

- Mahfouz MS, Aqeeli A, Makeen AM, Hakami RM, Najmi HH, Mobarki AT, *et al.* Mental health literacy among undergraduate students of a Saudi tertiary institution: A cross-sectional study. *Ment Illn* 2016;8:6806.
- Mental health. Word Net Search. Princeton University. Retrieved 4 May 2014.
- Snyder, C R, Shane J. Lopez, and Jennifer T. Pedrotti. *Positive Psychology: The Scientific and Practical Explorations of Human Strengths.*, 2015. Print.
- The world health report 2001 - Mental Health: New Understanding, New Hope" (PDF). WHO. Retrieved 4 May 2014.
- Mental health: Strengthening our response". World Health Organization. August 2014. Retrieved 4 May 2014.
- Reavley NJ, McCann TV, Jorm AF. Mental health literacy among higher education students. *Early Interv Psychiatry* 2012;6:45-52.
- Campos L, Dias P, Palha F. Finding space to mental health—promoting mental health in adolescents: Pilot study. *Educ Health* 2014;32:23-9.
- Kelly CM, Jorm AF, Wright A. Improving mental health literacy as a strategy to facilitate early intervention for mental disorders. *Med J Aust* 2007;187(S7):S26-30.
- Make a difference in the lives of people with mental disorders. http://www.who.int/mental_health/mental_health_flyer_2012.pdf?ua=1. [Last accessed 2019 May 18].
- Jorm AF. Mental health literacy: Public knowledge and beliefs about mental disorders. *Br J Psychiatry* 2000;177:396-401.
- Loureiro LM, Jorm AF, Mendes AC, Santos JC, Ferreira RO, Pedreiro A. Mental health literacy about depression: A survey of Portuguese youth. *BMC Psychiatry* 2013;13:129.
- Klineberg E, Biddle L, Donovan J, Gunnell D. Symptom recognition and help seeking for depression in young adults: A vignette study. *Soc Psychiatry Psychiatr Epidemiol* 2011;46:495-505.
- Storrie K, Ahern K, Tuckett A. A systematic review: Students with mental health problems--a growing problem. *Int J Nurs Pract* 2010;16:1-6.
- Richards KC, Campania C, Muse-Burke JL. Self-care and well-being in mental health professionals: The mediating effects of self-awareness and mindfulness. *J Ment Health Couns* 2010;32:247-64.
- Pinfold V, Stuart HE, Thornicroft GR, Arboleda-Flórez J. Working with young people: The impact of mental health awareness programmes in schools in the UK and Canada. *World Psychiatr* 2005;4:48-52.
- Ogorchukwu JM, Sekaran VC, Nair S, Ashok L. Mental health literacy among late adolescents in South India: What they know and what attitudes drive them. *Indian J Psychol Med* 2016;38:234-41.
- Hyun J, Quinn B, Madon T, Lustig S. Mental health need, awareness, and use of counseling services among international graduate students. *J Am Coll Health* 2007;56:109-18.
- Furnham A, Cook R, Martin N, Batey M. Mental health literacy among university students. *J Public Ment Health* 2011;10:198-210.
- Wang J, He Y, Jiang Q, Cai J, Wang W, Zeng Q, *et al.* Mental health literacy among residents in Shanghai. *Shanghai Arch Psychiatry* 2013;25:224-35.