



Research Paper

Level of awareness of students towards mental illness

Accepted 1st August, 2017

ABSTRACT

Stigmatization of people with mental illness is a significant public health issue. Their perspective towards mental illnesses has not been fully understood. This study aims to assess the level of awareness and knowledge of mental illnesses among the undergraduates in a XXX University. Self-report questionnaires which gathered information on basic demographic details, awareness, knowledge and social distance towards mental illnesses were administered to 106 undergraduate students in XXX University. Students demonstrated gaps of knowledge in areas such as the causes and treatment of mental illnesses. However, there is still unwillingness and uncertainty of students to mingle with peers with mental illness. There is a strong need for education. The importance of early intervention should be emphasized. Understanding the students' perspective helps to develop services that might bridge the identified gaps.

Keywords: Mental health, students, knowledge, awareness.

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INTRODUCTION

Mental health is an important aspect of general health. According to World Health Organization (WHO, 2011), mental health is defined as a mode of successful accomplishment of mental function, bringing about fruitful ventures, fulfilling relationships with others and capacity to adjust to different conditions or situations and mishaps. Mental illnesses are associated with changes in cognition, emotion, mood and behaviour that are related to distress or impaired functioning (National Institute of Mental Health, 2014).

According to the Singapore Burden of Disease Study, mental illnesses result in 11% of the burden of chronic illnesses (Phua et al., 2009). In 2011, the rate of persons treated in mental health outpatient facilities in Singapore was 543.45 per 100,000 populations (Mental Health and Substance Abuse, WHO, 2011). In a study on the prevalence rates of mental illnesses in Singapore in 2012, the lifetime prevalence of mental illnesses was 12.0% and the majority of mental illnesses were not treated (Chong et al., 2012). Poor mental health affects our ability to adapt to

major life changes and to engage positively in life (Health Service Executive [HSE], 2007).

The problem that comes with mental illness is stigma, which is the undesirable 'deeply discrediting' attributes that 'disqualifies one from full social acceptance' and motivates efforts by the stigmatized individual to hide the mark when possible. It creates a barrier preventing people from getting help and thus causes a considerable burden to the mentally ill in Singapore (Tan et al., 2012). Those who avoid seeking help might only come into contact with the psychiatric services at the juncture of mental health crisis, resulting in possibility of requirement for emergency services or involuntary hospitalization (Primm et al., 2010). The individuals with mental illnesses not only have to endure their psychological symptoms, but also the stigma due to the misconceptions of the society about mental illnesses. Some may even stigmatize themselves, leading to more psychological consequences. Thus, there is a great need to reduce stigma in the society. Individuals with mental illnesses can reintegrate into the community

only if the community is supportive and tolerant (Siu et al., 2012).

BACKGROUND

A research on awareness, attitude and help-seeking inclination in Malaysia found that most respondents had insufficient knowledge on mental health issues and were indifferent towards them (Yeap and Low, 2009). To the best of our knowledge, there are very few studies that focused on the undergraduate students' awareness of mental health issues towards them. This study aims to assess the level of awareness, knowledge of mental illnesses among the undergraduate students in a XXX University. We hope that this study is able to improve the students' awareness and understanding of mental health issues. We also hope that the findings of this study will assist in the development of interventions to improve student's perception on mental illnesses.

MATERIALS AND METHODS

This study adopted an online survey design. The questionnaire which measured the level of awareness and knowledge of mental illnesses was created using the Google Forms online, with reference to previous studies which had evaluated similar measures (HSE, 2007; Rethink Mental Illness and MIND, 2013; Wahl et al., 2012). The link to the questionnaire was sent to the students' e-mails through the school administrator. The survey was conducted for two months. Responses were completely anonymous and recorded in the Microsoft Excel spread sheet. Permission to use the questionnaire was granted by the author and informed of non-copy right issue.

Participants

Inclusion criteria for this study included full time male or female undergraduate students in two schools who consented to disseminate the survey link, students who regularly checked e-mails and consented to participate in the study. Students in schools who did not consent to disseminate survey link and students who do not access their e-mails or failed to consent to participate were excluded from the study.

Procedure

Study with online survey was ethically approved by the school ethic committee. Informed consent was obtained at the beginning of the study prior to online activation to participate. E-mails were posted to all 3,707

undergraduate students of the respective schools to invite response and consent to survey. Responses were completely anonymous and 106 undergraduate students responded.

Measurement tools

The self-report questionnaire comprises of demographic profile and twenty questions in four different parts which included demographics, awareness and experiences of mental illnesses, attitudes towards mental health and intervention and approaches to enhance mental health awareness.

Demographics profile

Information on gender, race, age group, year of study, school and any prior information in mental health related electives in the university were obtained. Table 1 shows a summary of the demographic profile.

Awareness and experiences of mental illnesses

The students were enquired about the sources of information about mental illnesses, personal experience or exposure to mental health problems, what they would do if they have a mental illness, if the person has undergone treatment, awareness and identification of mental health organizations. They were then instructed to rate their level of knowledge on the six common mental illnesses on a scale of 0 (I have totally no idea about it) to 4 (I know it very well). There are listed as schizophrenia, depression, bipolar disorder, GAD, OCD and ADHD, as validated in the questionnaire. They were asked to name any other mental illness that they know of. They were also told to rate their level of stress and happiness on a scale of 1 (not stressed) to 10 (very stressed), and 0 (very unhappy) to 10 (very happy) respectively. Open-ended questions about their perceived cause(s) of mental illnesses and ways to maintain good mental health were queried. Students were also asked to state their agreement on 26 statements about knowledge on mental illnesses on a five-point Likert scale (Strongly disagree/ Disagree/ Neither agree nor disagree/ Agree/ Strongly Agree). These statements were randomly displayed on the self-reporting survey.

Enhance mental health awareness

Students were queried on their opinions on the presence of stigma in mental health and were asked to suggest some measures to reduce stigma. They were also asked about their feelings if someone tells them about his/her mental

illness and how they would help him/her.

Statistical analysis

Data was analyzed using Statistical Analysis System (SAS) version 9.2 (SAS Institute, Cary, North Carolina). For continuous variables, mean and standard deviation were calculated; whereas for categorical variables, frequencies and percentages were calculated. Normality of continuous data was checked using the Kolmogorov-Smirnov Test and the Shapiro-Wilk Test. Independent sample t-test was used to compare the mean differences between groups. Multiple linear regression analysis was performed to explore significant factors associated with knowledge, and awareness scores. Several socio-demographic (that is, age, gender, ethnicity and years of study) were included as predictors in the regression models. Statistical significance was set at $P < 0.05$.

RESULTS

The questionnaire was completed by 106 students. The response rate was 2.85%, assuming the e-mail was sent to all 3,707 undergraduate students of the respective schools. As shown by the socio-demographic profile in Table 1, the sample included nearly equal proportion of respondents by year of study and almost half (49.1%) of respondents were from School of Biological Sciences.

Analyses comparing age, gender, ethnicity and year of study with awareness total scores showed no consistent differences. Those aged 21 and above significantly have higher score of knowledge compared to those aged 20 and below ($P=0.032$). For interpretation of results, percentages of “strongly agree” and “agree” responses were combined to demonstrate agreement, whereas “strongly disagree” and “disagree” responses were combined to illustrate disagreement. For social distance and disclosure items, both “definitely unwilling” and “probably unwilling” were combined to show unwillingness, “definitely willing” and “probably willing” combined indicating willingness.

Awareness and experience of mental illness

About 60% of respondents know of someone with mental illness, of which more than half of those individuals were said to be receiving treatment for the mental condition. Majority of respondents (85.8%) work on the internet to obtain information about mental illness; 55.7% received information through their own personal experience, through self or family members or friends with mental illness. Respondents were more likely to talk to someone close at first when they suspect they are suffering from a mental illness. Similarly, 34% of respondents will find out

more information on the internet first, only a small percentage who would choose to seek professional help as their first choice. Institute of Mental Health (IMH) was the most recognized organization out of the five listed as organization that assists individuals with mental health issues. Most respondents (95.3%) cannot name any other organization other than those listed. The evaluation of the respondents on knowledge of the various common mental illnesses 78.3% of respondents indicated they have some idea or know depression very well and 60.4% indicated likewise for obsessive-compulsive disorder (OCD). Approximately, one-third of respondents had totally no idea about generalized anxiety disorder (GAD) and only about one-third (38.7%) could name other mental illness. Personality disorders, eating disorders, autism and post-traumatic stress disorder (PTSD) were among the mental illnesses that were named as illnesses that respondents knew of.

Table 2 shows respondents' agreement and disagreement towards 26 statements about mental illness awareness. The first five statements in Table 2 are related to biology or treatment of mental illness. 74.5% agree that psychotherapy is effective as a treatment option.

Two-third of respondents disagreed that most people seek professional help for their illness. Most respondents (92.5%) disagree that a person cannot recover from mental illness. When asked in an open-ended question about causes of mental illness, majority of respondents (94.3%) attributed it to environmental factors such as lifestyle and stresses in life, only 42.3% attributed it to biological causes such as genetics or chemical imbalance in the brain. About 40% of respondents were unsure whether mental illness is caused by something biological and whether giving medicine is helpful in treating mental illness (Table 2). Statement numbers 6 to 15 in Table 2 are myths and facts about the symptoms of common mental illnesses. 88.7% of respondents were sure that mental retardation and mental illness are not the same. Nearly half of the respondents believed that schizophrenia involves multiple personalities, only 27.4% were sure that it does not involve multiple personalities. Then, half of the respondents were unsure if bipolar disorder involves overly energetic behaviour.

About one in five (21.7%) is certain that overly energetic behaviour is a symptom of bipolar disorder. This is in consistent with the results where 37.7% have some idea or know very well about schizophrenia and 32.1% for bipolar disorder respectively.

Three-quarter of respondents disagreed to “mental illness is something a person can choose.” Statements 16 to 23 in Table 2 are general awareness statements. A large number of respondents (93.4%) agreed that it is important to learn about mental illness. Two-thirds of respondents agreed that people with mental illnesses were treated unfairly. 84.9% disagreed and nobody agreed to “A student showing signs of stress has a mental illness. There was a

Table 1: Social-demographic characteristics of 106 undergraduate students surveyed.

Characteristics	Variable	Study population		Singapore population (%)
		N	%	49
Gender	Male	33	31	51
	Female	73	68	-
Race	Chinese	92	86.8	74.1
	Malay	7	6.6	13.4
	Indian	3	2.8	9.2
	Others	4	3.8	3.3
Age group (Years)	<20	27	25.5	-
	21-25	78	73.6	-
	26-30	1	0.9	-
Year of study	1	22	20.8	-
	2	28	26.4	-
	3	28	26.4	-
	4	28	26.4	-
School	School of Civil and Environmental Engineering	12	11.3	-
	School of Materials Science and Engineering	19	17.9	-
	Wee Kim Wee School of Communication And Information	20	18.9	-
	School of Biological Sciences	52	49.1	-
	Lee Kong Chian School of Medicine	3	2.8	-

Source: Singapore Department of Statistics, Census of Population 2010 Statistical Release 1: Demographic characteristics, education, language and religion.

Table 2: Respondents' responses to the 26 statements on awareness towards mental illness.

Awareness statement	Strongly disagree		Disagree		Neither agree nor disagree		Agree		Strongly agree	
	N	%	N	%	N	%	N	%	N	%
Giving medicine is a useful way to treat mental illness	11	10.4	23	21.7	42	39.6	28	26.4	2	1.9
Once a person have a mental illness, they cannot recover	44	41.5	54	50.9	8	7.5	0	0	0	0

Table 2: Confs. Respondents' responses to the 26 statements on awareness towards mental illness.

Awareness statement	Strongly disagree		Disagree		Neither agree nor disagree		Agree		Strongly agree	
	N	%	N	%	N	%	N	%	N	%
Mental illness is caused by something biological	4	3.8	15	14.2	46	43.4	36	34	5	4.7
Psychotherapy (e.g counselling) can be effective for people with mental health problems.	0	0	4	3.8	23	21.7	66	62.3	13	12.3
Most people with mental health problems go to a healthcare professional to get help.	15	14.2	55	51.9	18	17	16	15.1	2	1.9
Schizophrenia is a mental illness that involves multiple personalities	9	8.5	20	18.9	28	26.4	45	42.5	4	3.8
Mental retardation and mental illness are the same things.	52	49.1	42	39.6	8	7.5	3	2.8	1	0.9
Depression is a character flaw and people should just 'snap out of it.	53	50	38	35.8	12	11.3	3	2.8	0	0
Anorexia nervosa and bulimia are some forms of mental illness	0	0	6	5.7	19	17.9	69	65.1	12	11.3
A person with bipolar (manic depressive) disorder behaves overly energetic	5	4.7	26	24.5	52	49.1	20	18.9	3	2.8
Depression is temporary and will go away by itself.	33	31.1	46	43.4	22	20.8	5	4.7	0	0
OCD is all about cleanliness	43	40.6	49	46.2	11	10.4	3	2.8	0	0
ADHD is caused by bad parenting. All the child requires is good discipline	47	44.3	43	40.6	13	12.3	3	2.8	0	0
Bipolar disorder is just another name for mood swings.	33	31.1	39	36.8	21	19.8	13	12.3	0	0
If you have an anxiety disorder, it is important to avoid stress and situations that make you feel "stressed'.	3	2.8	21	19.8	27	25.5	48	45.3	7	6.6
Mental illness is something that a person can choose.	40	37.7	39	36.8	19	17.9	5	4.7	3	2.8
A student showing signs of stress has a mental illness.	28	26.4	62	58.5	16	15.1	0	0	0	0
I can handle my own mental health problems and if I can't, I'm weak.	28	26.4	45	42.5	18	17	12	11.3	3	2.8
Sudden dropping out of class or frequent tardiness or absences are signs of a mental illness.	17	16	43	40.6	35	33	11	10.4	0	0
People who have high stress jobs will have some form of mental illness.	7	6.6	42	39.6	43	40.6	12	11.3	2	1.9
People with mental illness are often treated unfairly.	4	3.8	2	1.9	31	29.2	49	46.2	20	18.9
Mental illness is an illness like any other.	7	6.6	17	16	22	20.8	50	47.2	10	9.4

Table 2: Confs. Respondents' responses to the 26 statements on awareness towards mental illness.

Awareness statement	Strongly disagree		Disagree		Neither agree nor disagree		Agree		Strongly agree	
	N	%	N	%	N	%	N	%	N	%
It is important to learn about mental illnesses	1	0.9	0	0	6	5.7	59	55.7	40	37.7
People with mental illness tend to be violent and dangerous	22	20.8	48	45.3	28	26.4	8	7.5	0	0
People with mental illness are more likely to lie than other people	16	15.1	42	39.6	38	35.8	6	5.7	4	3.8
People with mental illnesses are usually poor and less intelligent.	50	47.2	41	38.7	14	13.2	1	0.9	0	0

significant difference in the scores for male ($M=1.70$, $SD=0.585$.) and female ($M=1.97$, $SD=0.645$) gender; $t(104)=-2.095$, $p=0.039$ ". Two-fifths of respondents were uncertain if "people with high stress jobs will have mental illness." Regarding stereotypes of mental illness in the last three statements in Table 2, more than half disagreed that people with mental illness are violent (66%) or are more likely to lie (54.7%). Majority (85.8%) expressed disagreement to the stereotype that people with mental illnesses are poor and less intelligent.

In matters related to mental health and well-being of respondents, more than half (55%) mentioned doing things they enjoy for maintaining good mental health; approximately, one-third of respondents indicated keeping active and talking and confiding to someone as alternative ways.

Enhance mental health awareness

88.7% of respondents think there is presence of stigma relating to people with mental illness in Singapore. 92.5% think that there is insufficient awareness of mental health issues in Singapore. Reasons for the presence of stigma given by

respondents were the representation of mental illness, low awareness and mental illness being a sensitive issue. Respondents think that stigma and discrimination relating to mental health can be reduced by increasing awareness through effort from government bodies or public education. Additionally, respondents suggested increasing interaction with person to have a better understanding of their situations, or a change of portrayal of mental illness through success stories in the media. Respondents gave reasons such as insufficient publicity and initiatives not well received for insufficient awareness of mental health issues in Singapore.

DISCUSSION

Knowledge and experience of mental illness

Analyses comparing age, gender, ethnicity and year of study with awareness total scores showed no consistent differences. Those aged 21 and above significantly have higher score of knowledge compared to those aged 20 and below ($P=0.032$). This may be due to over-representation of respondents aged 21 and above, or older

respondents have more experience and thus more knowledge. 60% of respondents knowing someone with mental illness, with 56.3% believed to be receiving treatment for the mental conditions suggest that mental illness is common and that many are not receiving treatment.

IMH has the most respondents recognized as helping those with mental health issues. It is not surprising to observe this since IMH is the only tertiary psychiatric care institution in Singapore. However, there are still 5% of respondents who do not recognize IMH. Also, voluntary welfare organizations such as silver ribbon and SAMH were less known. The psychiatric care units of government hospitals were not mentioned by any respondent when asked for names of other organizations. There are limited mental health resources in Singapore and many of the organizations were not known to respondents, showing a gap in knowledge of the availability of such resources. There is a need for publicity of the organizations.

Depression, alcohol abuse and OCD are the top three mental disorders in Singapore. Higher percentages of respondents showing better knowledge of depression and OCD may be due to the higher prevalence of the disorder affecting one

in 17 and one in 33 people respectively (Chong et al., 2012). However, despite GAD also being a common anxiety disorder like OCD, one third of respondents have totally no idea about this disorder. With 85.8% disagreeing that depression is a character flaw and 86.8% disagreeing that OCD is all about cleanliness shows respondents more informed of the depression and OCD. 5.7% disagreeing that anorexia and bulimia were some forms of mental illness and 12.3% believing that “bipolar disorder is just another name for mood swings”; with only one in five respondents certain that overly energetic behaviour is a symptom of bipolar disorder, and only a quarter was sure that schizophrenia does not involve multiple personalities (Table 2) and suggests that respondents have limited knowledge in the symptoms of particular mental illnesses.

Most respondents (93.4%) also agreed that “it is important to learn about mental illness” and more than half (62.2%) agreed they have inadequate knowledge about mental illness. Thus, there is a need to educate students about the symptoms of particular disorders as well as, help resources available. This will in turn assist them in distinguishing and understanding the symptoms of the mental disorders and respond better to their own mental illnesses or that of others.

Majority of respondents attributing causes of mental illness to environmental factors like stresses in life and half of the respondents attributed it to biological factors. There was no mention of supernatural causes in this study which may be due to the respondents being more educated. 40% of the respondents showed uncertainty to whether mental illness is caused by something biological and whether giving medicine is helpful in treating mental illness (Table 2). This implicates a lack of knowledge of the usefulness and effectiveness of medication in treatment of mental illness.

Internet, personal experience and media are the main channels where respondents obtained information about mental illness from. Only a quarter of respondents obtained information through formal education. Respondents would talk to someone close at first or search for information on the internet when they suspect they are suffering from a mental illness, demonstrating individuals’ failure to recognize mental illness as a real biological condition and thus not seeking professional help in early stages. The uncertainty of helpfulness of treatment, stigma, cost and confidentiality issues may be involved with delay in professional help seeking.

LIMITATIONS AND RECOMMENDATION

A limitation of the study is that the response rate was relatively low. This may be due to online survey being sent during the semester break, students might not access their e-mails during that period and no further reminder e-mails were sent out. Some parts of survey like the awareness

and attitudes statements (Table 2) might be lengthy or not mobile-friendly; thus, some respondents might give up halfway. There was no record of responses if respondents did not complete the survey. Moreover, there might be possibility of presence of stigma due to the topic of questionnaire focusing on mental illness. A study of mental health literacy of university students by Lauber et al. (2005) also demonstrated low response rate of 19.6%. With 60% of respondents knowing someone with mental illness and 55% obtained mental illness experience through personal experience, it is more likely these respondents with some experience were more accepting to participate in mental health survey. Non-respondents may be more likely to stigmatize than respondents.

Additionally, participants are only undergraduates recruited from only certain schools in XXX University. Results from the convenience sample may not be generalized to the undergraduate population in Singapore or the general Singapore population. Then, there is probability for social desirable responses using the five-point Likert scale despite anonymous nature of the survey. Respondents might be more inclined to choose neutral responses, or responded based on attitudes that appeared more positive or tolerant, which might be different from their actual opinions.

Due to time constraint, only analyses comparing age, gender, ethnicity and year of study with awareness and knowledge total scores were done. Results presented in this study so far could only be taken as it is. Further grouping of responses in various areas were not carried out. For instance, whether having prior experience of mental illness affects the knowledge and attitudes of respondents; the differences between biology major and non-biology major students’ responses were not studied. Additionally, whether the stress or happiness level of respondents will affect their responses in knowledge, awareness and attitudes were also not studied. Differences in whether grouping responses into “strongly agree/agree” with “strongly disagree/disagree” and “neither agree/disagree” will affect analysis of awareness and attitudes were also not studied.

The current study focuses on descriptive recording of the attitudes and awareness towards mental illness. In future, further statistical analysis of differences in responses by grouping various factors as earlier mentioned could be implemented. A study with incorporation of more respondents with better response rate could be conducted. Studies focusing on knowledge and attitudes of participants towards specific disorders could also be studied. Also, more sophisticated approach such as trend analyses demonstrated by Rethink Mental Illness (2012) could be considered.

CONCLUSIONS

In this study, respondents generally have gaps of

knowledge in areas such as symptoms of common mental disorders, mental health resources and effectiveness of treatment options. There is a strong need of education in these areas. Internet might be helpful in dissemination of accurate information since most respondents take to internet for mental illness information. Respondents were generally tolerant and accepting towards mental health issues. There is still the presence of unwillingness and uncertainty of respondents to mingle with peers with mental illness. Thus, more optimistic and tolerant attitudes need to be instilled. Furthermore, importance of early help seeking needs to be emphasized. More vigorous effort and time is required to overcome stigma and discrimination in the community towards people with mental illness.

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Cite this article as:

Hui PM, Huang TC, Sharon, Hariram J, bin E (2017). Level of awareness of students towards mental illness. Acad. J. Educ. Res. 5(10): 384-391.

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