Mental Health Literacy among Psychiatric Patients' Family

Caregivers

Maha Abdel Hady Fahmy Salem, Demonstrator

Psychiatric and Mental Health Nursing, Faculty of Nursing, Damanhur University

Elham Mohamed Abdel Kader Fayad, Professor

Psychiatric and Mental Health Nursing, Faculty of Nursing, Alexandria University

Mahmoud Abdel Wahab Khedr, Lecturer

Psychiatric and Mental Health Nursing, Faculty of Nursing, Alexandria University

Abstract

Background: Lack of MHL is thought to be a major contributor to the rise in morbidity and mortality rates among individuals with mental illnesses. If the community merely had more understanding about mental health issues, the ability to recognize such conditions, and the search for appropriate and timely treatment (Tay et al., 2018), a significant number of additional lives could be spared. Aim: To assess the level of mental health literacy among psychiatric patients' family caregivers. Settings: It was conducted at El-Maamoura Hospital for Psychiatric Medicine's outpatient clinic. Egypt. Subjects: composed of 270 family caregivers of patients with psychiatric disorders. Tools: two tools were developed and used by researcher to collect the necessary data: Tool one: Patients and Structured Interview Schedule for Family Carers' Socio-Demographic and Clinical Data. Tool two: Mental Health Literacy Scale. **Results:** Majority of Patients' family caregivers demonstrated moderate level of MHL and only 19.6% had a high MHL level. The high MHL level was statistically significant associated with their socio-demographic characteristics including their gender, old age, higher educational level, work status, marital status and their patient's insight.

Keywords: mental health literacy, psychiatric patients' family caregivers.

Introduction

The World Health Organization (WHO, 2001) define Mental health as "a state of well-being in which each individual realizes his or her own potential, can handle life's typical stresses, can work efficiently and effectively, and is able to contribute to her or his community." Mental health is a resource, just like physical health is. It enables people to carry on, manage stress, do worthwhile work, and give back to society. According to Gorczynski et al., (2020), mental disorders are types of suffering and dysfunction that can have an effect on a person's cognitions, emotions, behaviors, and social interactions.

According to the World Health Organization (WHO, 2017), 586 million people worldwide (8% of the population) suffer from mental diseases. All countries now face an urgent need for immediate action due to the chronic nature, high prevalence, and long-term negative effects of mental disorders. One such strategy in particular is mental health literacy (MHL) (Mohammadi et al., 2019), which involves ongoing population mental health monitoring as well as the design and implementation of effective control strategies.

The idea of mental health literacy (MHL), is top-down and stems from the opinions of specialists. It was first put up by **Jorm (2000)** the Australian psychiatrist and was based on the idea of

Health Literacy (HL), which is a set of abilities that help individuals to work efficiently in the healthcare sector. According to **Skea et al. (2017),** MHL was defined as the attitudes and knowledge regarding mental disease that support its identification, treatment, and prevention.

Furthermore, he clarified that There are seven elements to mental health literacy, including the capacity to recognize particular disorders, knowledge of how to seek information about mental health, awareness of risk factors for mental illness, understanding of its awareness of self-treatments, causes. awareness of the professional assistance that is available, as well as attitudes that encourage recognizing and seeking the proper help (Jorm, 2000). The three categories of recognition, knowledge about mental health, and beliefs and attitudes about mental diseases are then generally used to group these seven components (O'Connor et al., 2014; Skea et al., 2017).

Lack of MHL is thought to be a major contributor to the rise in morbidity and mortality rates among individuals with mental illnesses. If the community merely had more understanding about mental health issues, the ability to recognize such conditions, and the search for appropriate and timely treatment (**Tay et al., 2018**), a significant number of additional lives could be spared.

Few studies on MHL focused on the caregivers of patients with mental problems; the majority of MHL investigations were conducted among the general community (Ediriweera et al., 2012). The caregivers must monitor the patient's mental state, oversee the patient's compliance with medication, recognizing the early symptoms of illness, offer emotional support, and assist the patient in reaching services in addition to providing fundamental services including

financial aid and long-term housing assistance (Hsiao & Van Riper, 2010). It seems sense that caregivers'' levels of MHL could impact the patient's improvement in mental status and rehabilitation given the range of duties they are expected to play (Li et al., 2018).

Raising the mental health literacy level among the family of psychiatric patients might improve the rehabilitation process, which focuses on helping the patients reintegrate into society and live independently despite having a mental disease. The National Mental Health Strategy Approach (NMHSA) endorsed the transition of mental health care from an institutional to a community-based model, stating that services should be provided "least in the restrictive environment" and that clients should have the "opportunity to live, work, and participate in the community to the fullest extent of their capabilities without discrimination" (Bland, Drake, & Drayton, 2021).

The general public's ignorance of mental disorders and its insufficient level of mental health literacy could impede healing. Years of high quality of life for persons suffering from mental health issues are lost due to inadequate recognition of these disorders and frequent delays in treatment. However, with increased levels of mental health awareness in the society, these can be stopped and even reversed (Tay et al., **2018).** Elevated MHL can improve wellbeing, happiness, and mental health on a global scale. As a result, it's critical to look at public MHL levels (Tay et al., 2018).

Aims of the Study

The study aims to assess the levels of mental health literacy among psychiatric patients' family caregivers.

Research questions:

What are the levels of mental health literacy among psychiatric patients' family caregivers?

Materials and Method

Materials

<u>Research design</u>: A To achieve the goal of the current study, a descriptive research design was used.

Settings: The study will be conducted in the El-Maamoura Hospital for Psychiatric Medicine's outpatient clinic wholly owned by the Ministry of Health and Population. Three governorates-Alexandria, Matrouh, and El-Beheira—are served by the hospital. All patients with mental illnesses and drug addiction are eligible for free treatment at the psychiatric outpatient clinic. It operates from 9 am until 1 pm, six days a week (Saturday through Thursday). The outpatient clinic offers medical evaluation, diagnosis, prescription of essential medications, and, when necessary, referral to inpatient departments, among other services. Another crucial service for anticipating or seeing early indicators of relapses is the follow-up of inpatients who have already been released.

Subjects: The sample size was calculated using the Epi info program with the following parameters: 5% acceptable error, 95% confidence coefficient, 50% expected frequency, and population size of 900. A minimal sample size of 250 people with psychiatric disorders was found by the program. As a result, it was considered that 270 family carers of patients with psychiatric problems would make a practical sample for the current study.

Inclusion criteria: -

Family caregivers were included in the study according to the following criteria: 1. Adult family caregivers of psychiatric patients (not including those diagnosed with substance use disorders).2. Living with the patient in the same household.3. The main caregiver who is currently providing this patient with physical, financial, and/or emotional care.

<u>Tools</u>: Two tools were utilized to gather the data required for the study:

<u>Tool one</u>: Patients and Family Caregivers Socio-Demographic and Clinical Data Structured Interview Schedule:

This interview schedule was developed by the researcher after reviewing of related literature to gather information on the overall socio-demographic traits of both patients and family caregivers. It included two parts:

Part I: This part covered patient's sociodemographic and clinical data such as age, sex, educational level, marital status, employment, residence, diagnosis, duration of illness, age of onset of illness, number of prior inpatient mental stays and current medication regimen.

Part II: This part covered patient's family caregiver's socio-demographic data such as age, kinship to the patient, educational level, sex, marital status, employment, residence, and duration of caregiving role.

Tool Two: The Mental Health Literacy Scale (MHLS): It was created for the first time by O'Connor & Casey, (2015). The scale (MHLS) is a 35- items distributed in six attributes which include; ability to recognize disorders (8 items), knowledge of where to seek information (4 items), knowledge of risk factors and causes (2 items), knowledge of selftreatment (2 items), knowledge of professional help available (3 items), and attitudes that promote recognition or appropriate help-seeking behavior (16 items).

The first 15 items are scored on a 1-4 likert scale. Items 16-35 are scored on a 1-5 likert scale. The sum of all the components yields the final score. Questions with a 4-point Likert scale are rated from 1 (very unlikely/unhelpful) to 4 (very likely). Questions with a 5-point Likert scale are rated from 1 (strongly disagree/definitely unwilling) to 5 (strongly agree/definitely willing). The total score is produced by summing all items, it ranges from 35 to 160, with a higher score indicates greater mental health literacy. (O'Connor & Casey, 2015).

With a Cronbach's alpha of.873, which indicates good internal consistency, the MHLS has been determined to be a psychometrically strong test. Also, testretest results for the scale indicated good reliability (r=0.797, p<0.001) (O'Connor & Casey, 2015). The MHLS was translated, assessed for validity and reliability after being back translated and culturally suited to Arabic by **Alshehri** (2019) using Cronbach's alpha (0.814). (**Alshehri, 2019**). It was also test for internal consistency in the current study (Cronbach alpha .801).

The **total** family caregivers score was calculated and transferred to percentage reflecting the levels of MHL as follows:

- "Less than 33.3%" was considered "low MHL level"

- "From 33.3 % to less than 66.6" reflected "moderate MHL level"

- "More than 66.6%" denoted "high MHL level"

Method

The following steps were used to complete the study:

Administrative steps:

- Alexandria University's Faculty of Nursing's Research Ethics Committee gave its clearance.

- The responsible authority at Alexandria University's Faculty of Nursing gave their written consent for the study to be conducted.

- The director of El-Maamoura Hospital for Psychiatric Medicine and the General Secretariat of Mental Health both provided official approval for the study to be conducted.

Tools preparation:

- The researcher created Tool I (A Socio-Demographic and Clinical Data Structured Interview Schedule).

- Tool II was adapted to the Egyptian Culture and evaluated for content validity by a panel of five subject-matter specialists.

- Tool II reliability was tested using the Cronbach's alpha method. (Cronbach's alpha= 0.801).

- A pilot study was conducted on 27 family caregivers of those coming to the outpatient clinic and meet the criteria of the study sample to assess the clarity, applicability and the time needed to complete the study tools. Necessary modifications will be done accordingly. These family caregivers were not included in the actual study subjects.

Actual study

- In the outpatient clinic, A convenience sampling technique was used to collect a representative sample of family caregivers come with their psychiatric patient.

- To find patients who fit the predetermined criteria for inclusion, all patient medical documents were checked.

- Patients who fit the predetermined criteria his family were enlisted as participants.

- After establishing rapport and explaining the purpose of the study, each caregiver was individually questioned to ensure confidentiality and maintain patient's privacy.

- Each interview took approximately from 30 to 45 minutes according to Participant's attention and concentration.

- The researcher visited the El-Maamoura Hospital for Psychiatric Medicine's outpatient clinic) for 4 days a week specifically at the end of May 2022 to the beginning of August 2022.

- Finally, total number of caregivers recruited from El-Maamoura Hospital for

Psychiatric Medicine's outpatient clinic were 270.

Ethical considerations:

- Informed written consent was taken from the patients who were recruited or their accompanying family members/relatives after explaining the aim of the study.

- Data privacy was guaranteed and protected.

- The caregiver's privacy and anonymity were respected through setting in a private place or corner in the abovementioned settings.

- Additionally, both the right to voluntarily participate and the choice to decline were also assured.

Statistical Analysis

The IBM SPSS software package, version 20.0, was used to analyze the collected data (Chi-square test, Fisher's Exact or Monte Carlo correction) to assess family caregiver level of MHL.

Results

Table (1) shows distribution of the studied Patient's family caregiver's according to Patient's family caregiver's socio-demographic data (n = 270)

The table indicates that more than half (59.6%) of the studied patients' caregivers were female. Regarding the age, 61.1% of studied patients' caregivers were aged more than 45 years. As regards the marital status, the majority of them (71.9%) were married. As regards to the educational level 33.7% were illiterate. It appears that more than half of studied patients' caregiver (65.6%) were the only persons who were responsible about their patients. Finally, it appears that more than half (54.4%) of patients had

no insight from their caregivers' point of view.

Figure 1: shows the scores of Mental Health Literacy Scale. It was found that the mean score of overall MHLS was 60%. Regarding the subscales of mental health literacy, the mean score of the studied patients' family caregivers' ability to recognize disorders was 69.4%. The mean score of knowledge of where to seek information was 60.8%. The mean score of the studied patients' family caregiver's knowledge of risk factors and causes was 84.9%. The mean score of knowledge of self-treatment was 38.8%. The mean score of available knowledge of professional help was 54.4%. Finally, the mean score of helpseeking behavior was 57.4%.

Table 2: shows levels of Mental Health Literacy Scale. It was revealed that the majority of studied patients' family caregivers (80.4%) had a moderate level of MHL. Also, 73% of studied patients' family care givers had high level of ability to recognize disorder. More than half (58.1%) of the studied patients' family caregivers had a moderate level of knowledge of where to seek information. In addition, it was found that majority (98.5%) of the studied patients' family caregivers had a high level of knowledge of risk factors and causes. Moreover, the table showed that the majority of studied patients' family care givers (67.8%) had a moderate level of knowledge of self-treatment. More than one third (41.1%) of the studied patients' family high caregivers had level of knowledge of available professional help available. More than three quarter (78.1%) of studied patients' family care givers had a moderate level of help seeking behavior.

Discussion

Lack of MHL is thought to be a major contributor to the rise in morbidity and mortality rates among individuals with mental illnesses. If the community merely had more understanding about mental health issues, the ability to recognize such conditions, and the search for appropriate and timely treatment, a significant number of additional lives could be spared (**Tay et al., 2018**).

Regarding the levels of mental health literacy, the current study showed that more than three quarter (80%) of caregivers had overall moderate MHL level (mean 110.0 \pm 9.87%). This may be due to that more than half of patients (53.3%) had a duration of illness for more than 10 years, and this long period of time helped the caregivers to acquire some knowledge and information about mental health and mental illness. The fact that most caregivers were illiterate and housewives could also affect the level of high mental health literacy.

This result is supported by the result of **Degan, T. J., et al. (2019)** who found that 18.3% of participants having higher levels of HL and 20.4% of the sample falling into the lower HL group, the bulk of the sample (61.3%) met the "moderate health literacy profile."

Regarding the subscales of MHL, the current results revealed that almost three quarter (73%) of caregivers had a high ability to recognize disorders. This may due to that the majority of patients (95.9%) were complain of psychotic disorders with apparent psychotic symptoms which is easily recognized by the caregivers. The finding of our study was not consistent with **Huang, D., et al., 2019 and Wang, J., et al 2013**) who conducted studies about mental health literacy level in China, and found that Participants' capacity to recognize the disorders was not very high.

Our study showed that more than half (58.1%) of care givers had a moderate Knowledge of where to seek information (mean $11.29 \pm 1.58\%$). This may be due to that more than two third of patients (71.8%)had a duration of illness for more than 5 years, so caregivers had a long period for caregiving for their client from the beginning of illness. This helped them to seek more information from different resources. Also, the current results revealed that only 41% of caregivers had high levels of knowledge of where to seek information. This could be related to that more than nearly one third (33.7%) of them were illiterate and housewives.

Supporting the current result, **Jafari.**, et al 2021 and Reavley, N. J., et al 2012 who reported that People learn about mental health from a variety of sources, some of which may not be trustworthy. The finest sources of information about mental health are psychologists, psychiatrists, and medical professionals. From these sources, people should get accurate information that will influence their knowledge of where to look for information.

This study revealed that majority of caregivers (98.5%) had a high Knowledge of risk factors and causes (mean $7.10 \pm 0.58\%$). This may due to the fear of caregivers about causes and risk factors of MI, especially the genetic and hereditary factors which predispose spreading of MI among other family members.

Our study found that more than half (67.8%) of caregivers had a moderate Knowledge of self-treatment (mean $4.71 \pm 1.34\%$). This may be attributed to that there are differences between the treatment of psychotic and organic disorder, which is easily to be known and described. Also, the level of education of caregivers affects this area, as proven by the current results (illiterate caregivers constituted 33.7%). In the same line Nguyen Thai, Q. C., & Nguyen, T. H. 2018 revealed that a person is more likely to seek mental health care if

they have more awareness about the subject. According to the findings of a study by Jorm et al. on Australians, a variety of mental health services, such as assistance mental health professionals, from and psychiatric psychotherapy, drugs, hospitalizations, were more likely to be used by those who could identify schizophrenia and depression more easily. (Jorm, A. F. 2006).

This study revealed that two fifth (41.1%) of care givers had a high Knowledge of professional help available. Consistent with the current results, **Gulliver., et al (2010)** concluded that because of the social stigma and humiliation associated with mental illnesses, many people typically decline to consult a psychologist or psychiatrist or get medical attention.

Regarding the help seeking behaviors" help-seeking for mental health issues is described by Rickwood and Thomas (2012) as "An adaptive coping process that is the attempt to obtain external assistance to deal with mental health concerns." is how you should characterize asking for help with mental health issues. This includes both informal (like friends and relatives) and institutional (like health services) sources of help. Oksanen, A, et al., 2017). The current study demonestrated that more than three quarter (78.1%) of caregivers had a moderate Help-seeking behavior (mean $52.71 \pm 7.05\%$). This may be attributed to that there are a number of obstacles to helpseeking among emerging adults, including stigmatization anti-help-seeking fears, views, a propensity for independence, and a lack of awareness of mental health decline. (Gulliver et al., 2010).

In the same line with **Almanasef**, **M. (2021)** he demonstrated that around a quarter of the students in his study have a fear of asking for help when they are experiencing personal or emotional issues.

Conclusion

The study's findings led to the conclusion that. Majority of Patients' family caregivers demonstrated moderate level of MHL and only 19.6% had a high MHL level. Their high MHL level was statistically significant associated with their socio-demographic characteristics like their gender, old age, higher educational level, work status, marital status and their patient's insight.

Recommendations:

I- Recommendations geared toward psychiatric nurses:

- Psychiatric nurses should assess the level of MHL of caregivers periodically and participate in conducting educational workshops related to it. Also, factors enhancing positive mental health.
- Psychiatric nurses should create a positive educational environment through Which caregivers can get accurate knowledge and information they need.
 II- Recommendations for patients with mental disorders and their caregivers:
- Increasing patients` awareness about their disorder and how to increase their mental health.
- Psycho- educational interventions should be provided for the patients and their families to help them gain knowledge about recovery process and develop skills on how to increase their relapse resistance.

III- Recommendations for future research:

- Future empirical research will examine the impact of particular therapeutic interventions. on mental health literacy levels among psychiatric patients' family caregivers.
- Studies should be conducted to examine the challenges in seeking MHL related information among caregivers, especially in rural areas.
- understanding about factors affecting mental health literacy among caregivers.

Patient's family caregiver's socio-demographic data	No.	%	
Gender			
Male	109	40.4	
Female	161	59.6	
Age (years)			
18–<25	8	3.0	
25-<34	36	13.3	
34<45	61	22.6	
>45 year	165	61.1	
Marital status			
Single	25	9.3	
Married	194	71.9	
Widow	11	4.1	
Divorce	40	14.8	
Educational level			
Illiterate	91	33.7	
Read and write	21	7.8	
Basic education	37	13.7	
Secondary education	80	29.6	
University education	41	15.2	
Caregiving responsibility			
Only one caregiver	177	65.6	
More than one caregiver	93	34.4	
Patient's insight from caregivers point of view			
Has insight Has no insight	123 147	45.6 54.4	

Table (1):Distribution of the studied Patient's family caregiver's according to Patient's
family caregiver's socio-demographic data (n = 270)

SD: Standard deviation

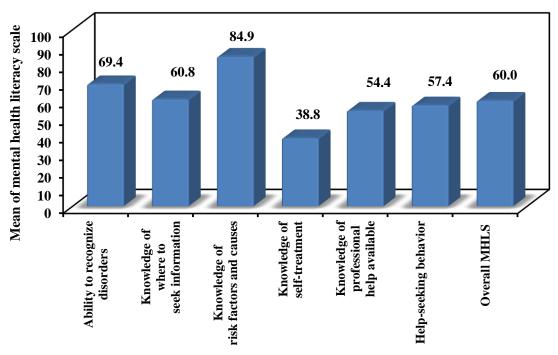


Figure (1): Mean percent scores of Mental Health Literacy Scale.

Table (2):	Level of Mental Health Literacy Scale (n = 270)
	$E \in \mathcal{E} \cap \mathcal{E}$ for the formula for the formula $E = 270$

Mental Health Literacy Scale	Low (<33.3%)		Moderate (33.33- 66.6)		High (≥66.67)	
	No.	%	No.	%	No.	%
Over all MHLS	0	0.0	217	80.4	53	19.6
Ability to recognize disorders	0	0.0	73	27.0	197	73.0
Knowledge of where to seek information	1	0.4	157	58.1	112	41.5
Knowledge of risk factors and causes	0	0.0	4	1.5	266	98.5
Knowledge of self-treatment	76	28.1	183	67.8	11	4.1
Knowledge of professional help available	53	19.6	106	39.3	111	41.1
Help-seeking behavior	6	2.2	211	78.1	53	19.6

References

- Almanasef, M. (2021). Mental health literacy and help-seeking behaviours among undergraduate pharmacy students in Abha, Saudi Arabia. *Risk management and healthcare policy*, 1281-1286.
- Alshehri, E. A. R., (2019). Assessment of Mental Health Literacy in relation to Mental Well-being among Female Health Science Students, Published Master thesis; Saudi Arabia. College Of Nursing: *King Saud University*.
- Degan, T. J., Kelly, P. J., Robinson, L. D., Deane, F. P., Wolstencroft, K., Turut, S., & Meldrum, R. (2019). Health literacy in people living with mental illness: A latent profile analysis. *Psychiatry Research*, 280, 112499.
- Ediriweera, H. W., Fernando, S. M., & Pai, N. B. (2012). Mental health literacy survey among Sri Lankan cares of patients with schizophrenia and depression. *Asian journal of Psychiatry*, 5(3), 246-250.
- Gorczynski, P., Gibson, K., Clarke, N., Mensah, T., & Summers, R. (2020). Examining mental health literacy, helpseeking behaviours, distress, and wellbeing in UK coaches. *European Physical Education Review*, 26(3), 713-726.
- Gulliver, A., Griffiths, K. M., & Christensen, H. (2010). Perceived barriers and facilitators to mental health help-seeking in young people: a systematic review. *BMC psychiatry*, *10*(1), 1-9.
- Hsiao, C. Y., & Van Riper, M. (2010). Research on caregiving in Chinese families living with mental illness: a critical review. *Journal of Family Nursing*, *16*(1), 68- 100
- Huang, D., Yang, L. H., & Pescosolido, B. A. (2019). Understanding the public's profile of mental health literacy in China: a nationwide study. *BMC psychiatry*, *19*(1), 1-12.
- Jafari, A., Nejatian, M., Momeniyan, V., Barsalani, F. R., & Tehrani, H. (2021). Mental health literacy and quality of life in Iran: a cross-sectional study. *BMC psychiatry*, 21, 1-11.

- Jorm, A. F. (2000). Mental health literacy: Public knowledge and beliefs about mental disorders. *The British Journal of Psychiatry*, 177(5), 396-401. <u>http://dx.doi.org/10.1192/</u> <u>bjp.177.5.396</u>
- Jorm, A. F., Christensen, H., & Griffiths, K. M. (2006). The public's ability to recognize mental disorders and their beliefs about treatment: changes in Australia over 8 years. *Australian & New Zealand Journal of Psychiatry*, 40(1), 36-41.
- Li, J., Zhang, M. M., Zhao, L., Li, W. Q., Mu, J. L., & Zhang, Z. H. (2018). Evaluation of attitudes and knowledge toward mental disorders in a sample of the Chinese population using a web-based approach. *BMC psychiatry*, *18*(1), 1-8.
- Mohammadi, M. R., Ahmadi, N., Khaleghi, A., Mostafavi, S. A., Kamali, K., Rahgozar, M., ... & Fombonne, E. (2019). Prevalence and correlates of psychiatric disorders in a national survey of Iranian children and adolescents. *Iranian journal of psychiatry*, 14(1), 1.
- Nguyen Thai, Q. C., & Nguyen, T. H. (2018). Mental health literacy: knowledge of depression among undergraduate students in Hanoi, Vietnam. *International journal of mental health systems*, *12*(1), 1-8.
- O'Connor, M., & Casey, L. (2015). The Mental Health Literacy Scale (MHLS): A new scale-based measure of mental health literacy. *Psychiatry research*, 229(1-2), 511-516.
- O'Connor, M., Casey, L., & Clough, B. (2014). Measuring mental health literacy–a review of scale-based measures. *Journal of mental health*, 23(4), 197-204.
- Oksanen, A., Laimi, K., Björklund, K., Löyttyniemi, E., & Kunttu, K. (2017). A 12year trend of psychological distress: national study of Finnish university students. *Central European journal of public health*, 25(2), 113-119.
- Reavley, N. J., Mackinnon, A. J., Morgan, A. J., Alvarez-Jimenez, M., Hetrick, S. E., Killackey, E., ... & Jorm, A. F. (2012). Quality of information sources about mental

ASNJ Vol.25 No.2, June 2023

disorders: a comparison of Wikipedia with centrally controlled web and printed sources. Psychological medicine, 42(8), 1753-1762.

- Rickwood, D., & Thomas, K. (2012). Conceptual measurement framework for help-seeking for mental health problems. *Psychology research and behavior management*, 173-183.
- Skea, Z. C., Treweek, S., & Gillies, K. (2017). 'It's trying to manage the work': a qualitative evaluation of recruitment processes within a UK multicenter trial. *BMJ open*, 7(8), e016475.
- Tay, J. L., Tay, Y. F., & Klainin-Yobas, P. (2018). Mental health literacy levels. Archives of psychiatric nursing, 32(5), 757-763.
- Wang, J., He, Y., Jiang, Q., Cai, J., Wang, W., Zeng, Q., ... & Zhang, M. (2013). Mental health literacy among residents in Shanghai. Shanghai archives of psychiatry, 25(4), 224.
- World Health Organization. Strengthening mental health promotion, Fact sheet, 2001; 20. Journal of N orth K horasan University of M edical sciences 2017; 9 (2): 231, 241.
- W. H. O. (2017). Other common mental disorders: global health estimates. *Geneva: World Health Organization*, 1-24..