MENTAL HEALTH LITERACY LEVELS AMONG STUDENTS GLOBALLY- A REVIEW

Community Medicine

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ABSTRACT

INTRODUCTION- Mental health literacy is defined as knowledge& beliefs about mental disorders which aid their recognition, management and prevention. The cause for disability has been attributed chiefly to Depression. In the age group of 15-29 years old, suicide is the second most leading cause for death. 20% children and adults are known to have mental health condition worldwide. **METHOD-** Databases like PubMed and Google Scholar were used for retrieving studies from the year 2005-2020 and based on the objective of our study, a total of 13 studies were selected. **RESULTS-** Depression as a mental health condition was most widely recognised amongst other mental health conditions. Few studies highlighted the presence of stigmatization and discrimination encountered by mentally ill individuals. Through our review, Mental health literacy is seen as a powerful predictor and mediator of all health-promoting behaviours. **CONCLUSION-** Our review emphasized on the low level of MHL. Students do not have adequate knowledge in areas such as identification of risk factors, aetiology, stigmatization and discrimination which calls for change in educational reforms globally that mainly focuses on identification of mental health disorders so that early intervention can be taken. Education as a tool should be used to emphasise on stigmatization and discrimination associated with mental illnesses.

KEYWORDS

Mental Health Literacy, Vignette Based Interview, Depression, Students

INTRODUCTION

In recent years, there has been growing acknowledgement of the important role mental health plays in achieving global development goals, as illustrated by the inclusion of mental health in the SDGs. Depression is known to be foremost cause for disability. Suicide is the 2nd leading cause of death among 15-29 year-aged. Premature death is associated with severe mental health issues – as much as two decades early and due to preventable physical conditions, which are preventable. Mental health conditions now cause 1 in 5 years lived with disability. Globally, 20% children and adolescents have a mental health condition[1].

Initially, Mental Health Literacy (MHL) was theorized as "knowledge and beliefs about mental disorders which aid their recognition, management or prevention", later definition was refined to include knowledge that benefits the mental health of a person or others including: knowledge of how to prevent a mental disorder; recognition of disorders when developing; knowledge of effective self-help strategies for mild-to-moderate problems; and first aid skills to help others. Lately, informed by previous definitions of MHL and current definitions of Health Literacy, MHL has been defined as: understanding how to obtain and maintain positive mental health; understanding mental disorders and their treatments; decreasing stigma related to mental disorders; and, enhancing help-seeking efficacy (knowledge about when and where to seek help &developing skills designed to improve one's mental health care and self-management skills)[2].

In 1997, Jorm et.al. developed an interview schedule ('Vignette Interview') to assess MHL. The Vignette Interview presents a vignette that labels an individual with a mental health difficulty and asks a series of questions concerning participant's understanding of what is 'wrong' with the individual in the vignette. The Vignette Interview has been used extensively as one of the few measures of MHL. The limitation with this approach is that it is not designed to produce a subscale or entire MHL[3]. On average, compared to non-Western populations, Western ones show better medical knowledge of mental disorders and lesser stigma toward mental illness according to cross-cultural studies. There is an increased stigmatization of mentally ill individuals, also culturally, individuals with a mental disorder are often rejected by their community in India[4].

Although 80% of population globally reside in low- and middle-income countries, more than 90% of the mental health resources are located in high-income countries. An estimated 76% and 85% of people in Low-Middle income countries with severe mental disorders receive no treatment for their mental health conditions which is known as the "treatment gap" (TG), i.e., the difference between the number of people with mental health disorders and the number of those people who are able to access appropriate services for the same[5]. Awareness and Health literacy are two sides of the same coin. Ignorance coupled with misinformation leads to negative consequences- Stigma and Discrimination. Inadequate resources happen to be the main reason for a wide treatment gap. In India, inadequacy exists in infrastructure as well as in human resources. India contributes disproportionately to the global burden of disease despite enhancements in various health indicators. Our health indicators provide an unfavourable comparison with other middle-income countries and India's regional neighbours. A high out-of-pocket, health-care expenditures makes large population impoverished and it suffers the adverse consequences of the poor quality of care.[6] Mental health being a critical public health issue globally, common to both mental health promotion and positive psychology is a focus on "positive mental health," an empowering resource, largely inclusive of psychological assets and services essential to human fulfilment and well-being. Activities and programs fostering positive mental health also helps to prevent mental illness, stressing the benefits of mental health promotion to overall population health.[7]

For students, poor mental health outcomes are preventable by introducing universal mental health interventions early into their lives. Universal interventions focus on entire populations with the aim of reducing risk factors and/or enhancing protective ones, for example for implementation of universal mental health interventions targeting students, schools are an obvious-settings.[8] Various interventional ways can be incorporated, like social media as being a predominant element where students are involved as it is increasingly emerging as a powerful tool in spreading awareness and education currently about wide socially relevant concepts, like mental health.[9] Research on mental health is disproportionate to the burden of mental disorder, this imbalance is further more for low and middle-income countries.

The situation is more disappointing in respect of research relating to mental disorder prevention, also research being the only means that can pave the way for us to obtain new knowledge and refine old knowledge thereof and moreover it would, in turn, strengthen information systems, evidence, research, and would be instrumental for Mental Emotional and Behavioural prevention, thus bringing forward MHL among students Itself[10]. As mental health is everybody's business and is imperative in every phase of life, it indeed is an issue of shared responsibility. With that we aim, to bring forward an understanding of students towards MHL levels found globally.

METHODOLOGY

An extensive search of qualitative literature published from 2005 to 2020 was conducted in electronic databases of PubMed and Google scholar with the following keywords: (Mental health Or Mental status) AND (Depression or Schizophrenia) AND (Awareness or Knowledge or Literacy or Education) AND (School students Or University students). All English language studies which included information on knowledge and awareness levels of mental health among students globally were retrieved. Gray literature and additional articles were also hand searched using the reference lists of different articles, along with forward citation searches.

Primary objective was to seek information on knowledge about Signs & Symptoms, and different Causes of mental health disorders and also understanding of students on differentiation of different mental disorders like depression, schizophrenia etc. Some studies have also discussed the attitudes of students towards people who are suffering towards different mental disorders.

From these primary and secondary references, the studies included in the paper met the following criteria: first, the paper was written in English and published in peer reviewed journals with full text available online. Second, articles were published in last 15 years. Third, the focussed population were university and school students globally. Fourth, the study design targeted on was cross sectional study design. All the articles were screened properly for any irrelevant study which did not follow the inclusion criteria and duplicate articles were also removed.

The above search strategy yielded various articles, however they also included various articles which were repeatedly showed in the search after different keywords were entered while searching database. All the studies were checked for relevancy and duplicity according to required inclusion criteria. Finally,13 studies which matched the inclusion criteria were included in the review.

RESULT

Based on our study's objective, 13 studies were finally chosen for conducting the review. A sample size of 9638 were included. All the studies focused on university and school going students. Of all the studies two of them were based on vignette-based interview had been used for recording student's responses[13,16]. It was observed that mentally ill individuals were subjected to discrimination and stigmatization[12,13,23]. Depression as a mental health condition[12,13,14,16,18,19] was most often recognised as compared to other mental health conditions like Schizophrenia, Sleep disorders, Anxiety etc. (TABLE-1).

DISCUSSION

Table 1- Characteristics of studies included for the review

Serial No.	Title & Year of the Study	Authors (Ref)	Demographic characteristics	Study Findings
1.	Mental health literacy in a diverse sample of undergraduate students: demographic, psychological, and academic correlates (2020)	Rona Miles, Laura Rabin, Anjali Krishnan, Evan Grandoit and Kamil Kloskowski.[11]	• Total participants: 1213 • College students • Region: United States Gender • Females: 60% (n=752) • Males: 37.5% (n=455) • Others: 0.5% (n=6) Experience with psychological disorders • Some: 61.1% (n= 741) • None: 31.6% (n= 383) • More: 7.3% (n= 89) Diagnosed/ Treated • Yes: 14.2% (n=170) • No: 86% (n=1043) Academic year • First & Second: 39.3% (n=477) • Third: 31.1% (n=377) • Fourth +: 29.6% (n=359)	• Discriminant Correspondence Analysis (DiCA), which is a versatile technique for analysing multiple variables within a single model was used in this study. • Health literacy scores were categorised into high, mid & low -level performers. The main contributor to difference in score was due to having taken a course in psychology. • Another contributor was difference in course i.e. STEM field vs. others. • Males from STEM field major had lower health literacy than students from non-STEM fields. • With age MHL increased. • White students scored high on literacy about depression than non-white. • As academic year increased students had more MHL.
2.	A study on community attitudes towards the mentally ill among youth in Gujarat (2016)	Bhavesh Lakdawala and Dr. G.K. Vankar[12]	• Total population: 1231 • College students • Region: India Gender • Female: 48.4% (n=596) • Males: 51.6% (n=635) Academic Year • First: 39.6% (n=488) • Second: 29.6% (n=368) • Third: 25.3% (n=312) • Fifth: 5.1% (n=63)	• First Indian study to use National Health Survey questionnaire. • Students showed willingness to live with, work with, living as neighbour and for having close friendship with mentally ill people. • According to students, people suffering from Depression, Schizophrenia, Bipolar disorder, Drug addiction, Stress and Grief were perceived as conditions of mental illness. • It was also observed that medicines and psychotherapy were considered as different types of treatment & faculty for mental illness. • A major portion of participants agreed that people with mental illness face stigmatization & discrimination.
3.	Cross-sectional survey of mental health literacy among undergraduate students of the University of Nigeria. (2019)	Deborah Oyine Aluh, Matthew Jegbefume Okonta, & Valentine Uche Odili[13]	• Total population: 389 • College students • Region: Nigeria Gender • Females: 64.9%(n=252) • Males: 35.1% (n=136)	• A vignette-based questionnaire was used. • The most common substitute label for schizophrenia was mental illness. Schizophrenia was also mislabelled as Depression. • Very few students had correctly labelled the condition as schizophrenia and more than 10th of participants used stigmatizing labels like crazy/mad.

No.	Title	Authors	Population	Findings
				• More males correctly identified and labelled the schizophrenia vignette. Also, higher no. of females recommended a psychiatrist for the vignette character. • Strong association was observed between faculty of study & ability to correctly identify and label schizophrenia vignette and towards use of stigmatizing labels. • Age of participants had no significant association with MHL.
4.	Moderating Role of Health Literacy on the Association between Alexithymia and Depressive Symptoms in Middle School Students (2020)	Xianbing Song, Danlin Li, Jie Hu Rong Yang, Yuhui Wan, Jun Fang & Shichen Zhang[14]	• Total population: 1062 • School students • Region: China Gender • Females: 45.7%(n=486) • Males: 54.2% (576) Grade of school • Junior school 35.2% (n=374) • Senior high school: 64.8% (n= 688) Health Literacy • Low: 24.2% (n=257) • Medium: 49.3% (n=524) • High: 26.5% (n=281) Alexithymia • Yes: 17.9% (n=190) • No: 82.1% (n=872)	• In this study, Health literacy was assessed by the Chinese Adolescent Interactive Health Literacy Questionnaire (CAIHLQ), which includes 6 domains (physical activities, interpersonal relationships, stress management, self-actualization, health awareness, and dietary behaviour). • The Toronto Alexithymia Scale-20 (TAS-20) used to assess Alexithymia. • This study established pertinent conclusions that alexithymia and low levels of health literacy can increase the risk of the prevalence of depressive symptoms in adolescents independently. • No corelation was observed between depressive symptoms and demographic character. • This study also showed that there is prevalence of depression among school-going students.
5.	The correlations of mental health literacy with psychological aspects of general health among Iranian female students (2018)	Mohammad Amin Bahrami, Donya Bahrami & Kefayat Chaman-Ara[15]	• Total population: 65 • High-school students • Region: Iran Grade of school: 7th, 8th & 9th	• Data were collected using 2 valid questionnaires, Goldberg and Hillier's version of the General Health Questionnaire (GHQ-28), to quantify psychological quality of life, & the Depression Literacy Questionnaire (D-Lit). • This study observed that that MHL is a powerful predictor and mediator of all health-promoting behaviours. • In this study, the literacy of participants about the symptoms & therapeutic aspects of depression was evaluated as poor, also, depression literacy was weak in some aspects. • Findings about the health outcomes of MHL did not specify a correlation between MHL & general health.
6.	Recognition of mental disorders: findings from a cross-sectional study among medical students in Singapore (2017)	Louisa Picco, Esmond Seow, Boon Yiang Chua, Rathi Mahendran, Swapna Verma, Siow Ann Chong, Mythily Subramaniam[16]	• Total population: 502 • Medical college students • Region: Singapore Gender • Females: 58.8%(n=295) • Males: 41.2% (n=207) Academic year • First: 26.3% (n=132) • Second: 23.1% (n=116) • Third :14.1% (n=71) • Fourth: 17.3 (n=87) • Fifth: 19.1% (n=96)	• A vignette-based method was adopted to evaluate recognition relating to alcohol abuse, dementia, depression, OCD & schizophrenia. • Depression was most well recognised followed by alcohol abuse then OCD then dementia and schizophrenia being most poorly recognised. • Females recognised the mental health disorders as compared to males, also correct recognition of condition were significantly higher among final year students. • Dementia & schizophrenia were most likely to be mislabelled in comparison to Depression.
7.	Help-seeking beliefs for mental disorders among medical and nursing students (2019)	Louisa Picco, Esmond Seow, Boon Yiang Chua, Rathi Mahendran, Swapna Verma, Huiting Xia, Jia Wang, Siow Ann Chong and Mythily Subramaniam.[17]	• Total population: 1002 • Medical & Nursing college students • Region: Singapore Gender • Females: 71.1% (n=712) • Males: 28.9% (n=290)	• Participants responded seeking help from a psychiatrist is most helpful intervention & was also most common source of help reported for mental health illnesses. • Participants more likely recommended seeking informal help for depression, dementia and alcohol abuse (vs schizophrenia), while medical help was more likely to be suggested for dementia, than for alcohol abuse and OCD. • For dementia, participants showed preference to seek medical help, particularly from a doctor or GP.

#	Title	Authors	Population	Findings
			•	• Medical and nursing students also frequently recognized the helpfulness of antidepressants for those with depression antianxiety medication for those with OCD & antipsychotics for schizophrenia.
8.	Mental health literacy and mental health status in adolescents: A population-based survey (2014)	Lawrence T Ham[18]	• Total Population: 1678 • High school students • Region: China Gender • Females: 50.2%(n=842) • Males: 49.8% (n= 836)	• Questions were adopted from Australian National MHL and Stigma Youth Survey and DASS scale was used to assess. • Majority of participants had inadequate level of Mental health literacy. • Recognition of disorder was more for depression than schizophrenia, psychosis and other mental disorders and majority of students identified symptoms as just emotional problems.
9.	Mental health literacy in an educational elite – an online survey among university students. (2005)	Christoph Lauber, Vladeta Ajdacic-Gross, Nadja Fritschi, Niklaus Stulz and Wulf Rössler[19]	• Total Population: 225 • College students • Region: Switzerland Gender • Females: 52.7% (n=119) • Males: 47.3% (n=106)	• Depressed mood was well recognised as a symptom of depression whereas Sleep problems, Distress and Agitation were only recognised as additional disorder. • Schizophrenia was not well recognised in comparison to Depression • Based on the study, medical & psychology students scored highest on true symptoms score.
10.	Mental Health Literacy Among Late Adolescents in South India: What They Know and What Attitudes Drive Them (2016)	Judith Miti Ogorchukwu, Varalakshmi Chandra Sekaran, Sreekumaran Nair, and Lena Ashok[20]	• Total Population: 916 • Pre university college students • India Gender • Females: 45.85% (n=420) • Males: 54.15% (n=496) Courses • Law: 16.4% (n=150) • Economics: 20.4% (n=187) • Medical school: 6.7% (n=61) • Natural science: 8% (n=73) • Philosophy/Arts: 36% (n=330) • Psychology: 12.4% (n=115)	• Questions were designed based on the National Survey of Mental Health Literacy and Stigma Youth Boost Survey V5. • MHL assessed through the vignettes was very low with less than a third of the adolescents clearly identifying depression & identification of schizophrenia was extremely low. • For both Depression and Schizophrenia, Psychologists were rated higher for suggesting to others while for self, was comparatively lesser. • Mental health conditions were not perceived as "real medical illnesses" by most of the male respondents.
11.	Mental health literacy towards depression among non-medical students at a Malaysian university. (2010)	Tahir M Khan, Syed A Sulaiman, Mohamed A Hassali[21]	• Total Population: 500 • College students • Region: Malaysia Gender • Females: 75.4% (n=377) • Males: 24.6% (n=123) Ethnicity • Malay: 50.0% (n=250) • Chinese: 44.0% (n=220) • Indians (6.0% (n=30)	• Some of the respondents had never heard of the disease depression, while some reported having had personal experience of depression. • Chinese students had significantly better knowledge about symptoms of depression in comparison to Malaysians & Indians. • For type of depression, the majority ranked Tension as the main type, followed by sadness, change in behaviour and madness. • Most of the respondents cited familial &educational issues as the key possible causes of depression. • Female respondents were more inclined to link depression to family-related problems. Slightly over half, ranked death of a loved one as a cause of depression, followed by relationship problems and home and family disharmony. • Majority mentioned the use of antidepressants as the first drug of choice, followed by herbs, vitamins, diazepam. • Professional help-seeking responses were found to be associated with gender & a majority would prefer to consult a psychiatrist.
12.	Mental health literacy among undergraduate students of a Saudi tertiary institution: a cross-sectional study. (2016)	Mohamed S. Mahfouz, Abdulwahab Aqeeli, Anwar M. Makeen, Ramzi M. Hakami, Hatim H. Najmi, Abdullkarim	• Total Population: 531 • College students • Region: Saudi Arabia Gender • Females: 52% (n= 276) • Males: 48% (n=255)	• The level of MHL among students is intermediate with no difference between medical & non-medical students. • No significant difference was found between mental health literacy of the study participants according to gender or college type

		T. Mobarki, Mohammad H. Haroobi, Saeed M. Almalki, Mohammad A. Mahnashi, Osayd A. Ageel [22]	Courses • Medical students- 22.2% (n=118) • Non-medical students- 77.8% (n=413)	• Regarding the aetiology of mental illness, majority of students responded social relationship weakness followed by substance abuse, evil-eye/magic/ demonic possession & genetic inheritance. • Attitudes towards Mental health were found positive in this study.
13.	Assessing Mental health literacy: What medical sciences student's know about Depression (2015).	Azadeh Sayarifard, Laleh Ghadirian, Ahmad Mohit, Mehrdad Eftekhar, Mahnaz Badpa, Fatemeh Rajabi [23]	• Total Population: 324 • College students • Region: Iran Gender • Females: 58.1% (n=188) • Males: 41.9% (n=136) Courses • Medicine:31.8% (n=103) • Nursing Midwifery:18.8% (n=61) • Paramedics:14.8% (n=48) • Pharmacy: 14.5% (n=47) • Dentistry: 12.3% (n=40) • Rehabilitation: 7.7% (n=25)	• Majority of respondents diagnosed depression as emotional problems and below 40% of students were able to diagnose Depression • Majority of participants believed negative attitudes towards one's self had a significant impact towards mental disorders followed by Stressful situations, No regular contact with the family or friends, Poverty. • Attitude of students towards stigma was seen to be very positive. But most respondents maintained that depression is not a real disease.

Our review aimed at assessing the MHL levels among students globally and revealed that there is an inadequate MHL levels. Through this review, it was seen that MHL is a powerful predictor and mediator of all health-promoting behaviours.[24]

Most of the studies included showed that MHL level is significantly associated with moderate to severe level of Depression. Similar results were observed in a study conducted by Luis M Loureiro et al in Portugal, which showed that Depression was the most common answer by many of the participants (61.1%)[25]. Another study conducted in Indonesia by Helen Brooks[26] revealed similar results when compared to our review that inadequate MHL in adolescents, significantly increases the risk of developing moderate-severe depression. As per our review, study findings showed that according to students, people who are suffering from Depression, Schizophrenia, Bipolar disorder, Drug addiction, Stress and Grief were perceived as conditions of mental illness. It was also observed from a study that Alexithymia and low levels of health literacy can increase the risk of the prevalence of depressive symptoms in adolescents independently, which is consistent with a study conducted by Frank Leweke[27] where it was shown that the increased prevalence of highly Alexithymic subjects suggests that alexithymia is associated with a higher vulnerability to mental illness. The prevalence of alexithymia was especially increased for depressive disorders. Our study findings also showed that a large number of people with mental illness had to face stigmatization & discrimination. According to the Mental Health Organisation, UK, many individual's problems are made worse by the stigma and discrimination they experience. It is observed that nearly 9 out of 10 people with mental health problems say that stigma &discrimination have a negative effect on their lives[28]. This in turn is associated with mental illness makes people prone to some consequences such as reduced job opportunities, social exclusion, loss of self-esteem & self-stigmatization[29].

Through our review, it was observed that MHL increases with age. However, this was inconsistent with a study conducted in China by Yu Yu et al which revealed participants of younger age, with higher education and higher income having better MHL. When age increases by 1 year, the MHKQ score decreases by a minor 0.02 points[30].

Through the studies included it was seen that there is a positive attitude towards mental health which in turn is a great facet to deal with mental illnesses. Healthy coping mechanisms are likely to be used by positive minded people rather than them relying on substance use/abuse or overeating to deal with setbacks. In addition to making, less susceptible to anxiety and depression, a positive attitude can help cope well with whatever difficulties come along. Optimists look for ways to make situation better: Individuals who dislike their job, for example, would less likely to feel high stress at work &instead, look for ways they can improve their environment or get a new job[31]. Mental Health is a national priority and there lies a gap between the communities and MHL levels which needs to be filled. To further increase MHL levels for students globally, initiating community based Mental health program would provide unique opportunity ensuring that they support evolving health systems, their needs and preferences of their end-users[26].

CONCLUSION & RECOMMENDATION

MHL research among students is on the way up. This review has highlighted the low level of MHL. Students do not have adequate knowledge in the areas of identification of risk factors, aetiology, stigmatization and discrimination. We suggest that, education regarding mental health should be increased irrespective of courses of students and to be given as Awareness campaigns, Workshops and Training courses to increase the literacy level[32]. Education provided to the students should emphasize more on stigmatization and discrimination associated with mental illnesses. Government should take the initiative for the enhancement of mental health budgets in the country and the barriers which obstruct the mental health practice and policy needs to be identified.

LIMITATIONS

Certain limitations to be noted are that, our review focussed on several students globally therefore the results cannot be generalised. Many relevant studies were hard to be included due to diversification. Also, the calculation of the result was done on the basis of the secondary data which could further lead to some discrepancies with the observations. However, despite these limitations, this review provides a basis for further planning for growing the MHL levels among students globally.

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