Original Article

Assessment of Mental Health Literacy (MHL) In Terms of Knowledge To Recognize Problems, Helpful Intervention and Rehabilitation In Adolescents In a Selected District of West Bengal

Sangita Panigrahi[1]✉, Mitali Adhikari[2], Kalyani Saha[1]

ABSTRACT

BACKGROUND: Current evidence shows the most of the mental health problem begin in adolescent diagnosed in later life. The trajectories of these disorder can be alter through early recognition and intervention and MHL has major implications on it. So a study to assess MHL in terms of knowledge to recognise problem, helpful intervention and rehabilitation among adolescents in Paschim Medinipur District of West Bengal was undertaken.

METHODS: A descriptive survey was conducted among.190 adolescents selected by purposive sampling. A predesigned and validated structured knowledge questionnaire was used as tool.

RESULTS: The response rate for the recognition of case vignettes as mental health problem was 59.4% for OCD, 27.89% for Depression, 25.78% for schizophrenia, 23.15% for social phobia. 'Referring to health care service' was responded to as helpful by 53.68% for Schizophrenia, 41.05% for OCD, 40.52% for alcohol abuser, 31.05% for depression, 30% for a person with suicidal ideation, 27.89% for social phobia.37.36% adolescents believe that mentally ill people able to get back his/her usual life through treatment.There was statistically significant difference in mean knowledge score within family type, Father's education. A statistically significant association was found between type of family and knowledge in recognition of mental health problems and between Father's education and knowledge in recognition of mental health problems.

CONCLUSION: There is need for immediate improvement of knowledge on mental health which suggests that programs need to be developed so that adolescents can recognise the mental health problems and take helpful intervention if needed.

Keywords: Mental health, Mental health literacy, Adolescents, Rehabilitation.

1. Medical College & Hospital, Kolkata
2. Burdwan Medical College & Hospital, Burdwan
✉ email: spanigrahi32.sp@gmail.com

Introduction:

Mental health literacy refers to knowledge and beliefs about mental disorders which assists individuals in recognizing, managing, and preventing mental disorders.[1] The ability to manage mental health symptoms comes from being able to correctly identify the kinds of symptoms one is experiencing, to correctly identify the need for treatment, and to successfully communicate the symptoms to mental health professionals, which leads to more efficient treatment.[2]

In adolescents mental health literacy has major implications for early identification and intervention of mental health issues. This early intervention can in turn, alter the developmental trajectory of mental illnesses and lead to improved outcomes.[3] One major problem that exists in Indian mental healthcare is the treatment gap, or the number of individuals (expressed as a percentage) with an illness who need treatment but do not receive it. Lack of awareness is one of the major barriers to mental health service utilization. Therefore improvement of mental health literacy is required to overcome the treatment gap.[4]

About 1.25 crore of the estimated 9.67 crore population of West Bengal are suffering from various mental health problems and are in need of immediate care. According to National Mental Health Survey(NMHS), 2016 conducted on 12 states by the Central Government, and implemented by the National Institute of Mental Health and Neuro Sciences (NIMHANS); West Bengal is the fourth worst state only after Madhya Pradesh, Manipur and Punjab, so far as mental health is concerned. According to the survey 13% of the population in West Bengal suffer from different kinds of mental problems. In age group 13-17 years prevalence of mental disorders was 7.3% and nearly equal in both genders. Prevalence of mental disorders was nearly twice (13.5%)

as much in urban areas as compared to rural (6.9%) areas.[5]

Early recognition of mental health problems offers an individual with the opportunity for better long-term outcomes at early intervention. Mental health literacy is a related concept which is progressively seen as an important measure of the awareness and knowledge of mental health disorders. Therefore this study focused on assessing MHL in terms of knowledge in adolescents with following objectives:

1. To assess MHL in terms of knowledge in adolescents in a selected district of West Bengal, to recognise

    a) mental health problems

    b) helpful intervention for the mental health problems

    c) rehabilitation of mentally ill people

2. To find out the variation in MHL in terms of knowledge to recognise mental health problems in adolescents within their selected socio demographic groups in a selected district of West Bengal.

3. To determine the association between selected socio-demographic variables and MHL in terms of knowledge to recognise mental health problems in adolescents in a selected district of West Bengal.

Materials & methods:

The study was a based on Descriptive Survey Design applicable for the study population of all the adolescents within age group 14-19 years in West Bengal. It was undertaken in Medinipur municipality and Kharagpur II, Keshiary, Narayangragh and Daspur Blocks under Paschim Medinipur District, West Bengal. Respondents were selected by Non –probability purposive sampling technique. From Medinipur Municipality 103 and from 4 blocks 87 adolescents were selected as sample. So, total participants were 190.

A structured self-reporting questionnaire was used as tool to collect information. The validity of the tool was ensured by 7 expert from the field of Nursing, Psychiatry and research. The co-efficient of internal consistency for knowledge questionnaire was calculated by adopting split half method; 'r' value was calculated by using Spearman Brown Prophecy Formula. The obtained value of 'r' was 0.875, which was positive and statistically significant. The knowledge questionnaire containing 26 multiple response questions from selected areas (recognition of problem, helpful intervention and rehabilitation) of MHL including 4 case vignettes (Schizophrenia, Depression, OCD, and Social phobia). Institutional Ethics Committee approved the study and informed consent was obtained from every participant prior to obtaining information. For describing demographic variables and MHL in terms of knowledge in the three areas i.e., recognition of mental health problems, helpful intervention and rehabilitation, mean and median of the knowledge score were used as descriptive statistics. Chi square test was computed to determine association between MHL to recognize mental health problems and selected demographic variables. One way ANOVA was done to find out significant difference in MHL in terms of mean knowledge score of adolescents to recognize mental health problems within selected socio demographic groups.

Result:

Out of total 190 participants, 68.42% are in the age group of 14-16 years, 68.42% are male,. 90.52% belong and believe in Hinduism, 56.84% borne and brought up in nuclear family, 82.09% borne and brought up in middle class family (upper middle and lower middle), and 54.21% reside at urban community. Fathers' education of maximum (24.73%) are graduation and mother's education of maximum adolescents (30%) are secondary (Table 1)

The participants have 54.58% mean knowledge score in the area of 'Recognition of problem'. Fifty five percent adolescents believe that chronic physical illness is a cause of the mental illness. The next common cause perceived by the adolescents is biochemical change in the brain (54.73%), followed by stressful job (46.31%), Head injury (44.73%), family history (33.68%), physically handicapped (33.15%), heredity (32.10%) (Table 2).

Majority of the adolescents (54.73%) recognise "See or hear things that others do not" as a danger sign of mental illness. Only 16.31% of adolescents recognise "Self-muttering or laughing alone" as a danger sign of mental illness (Table 3). Case vignette - OCD (cleaner type) was recognised by 59.47% adolescents, followed by depression (27.89%), schizophrenia (25.78%), and social phobia (23.15%). The Schizophrenia vignette has highest rate of response (38.94%) for recognition as a spiritual problem and OCD (cleaner type) has highest rate of response (48.425%) for recognition as "no problem". Most of the adolescents (89.47%) recognise 'liver disease' as a problem of alcohol abuse. Only 17.89% of adolescents believes 'Sexual problem' and 'forgetfulness as a problem of alcohol abuse. Majority of the adolescent (64.73%) recognise 'withdrawal from family and peer' as a pre suicidal symptom.

The participants have 58.30% mean knowledge score in the area of 'helpful intervention'. 65.26% adolescents believe that 'Playing outdoor game enough' is a mental health promotional activity, 48.42% believe that 'getting support from family & friends' as a helpful intervention for stress management. Majority of adolescent (61.05%) consider 'talking to the person' as a helpful intervention for case vignette – Depression (Table 4). 'Referring to health care service' was responded to as helpful by 53.68% adolescents, for case vignette – Schizophrenia followed by 41.05% for OCD vignette, 40.52% for alcohol abuser, 31.05% for depression vignette, 30%

Table 1: Distribution of subjects according to socio demographic characteristics (n=190)

Sl no	Socio demographic characteristics	Frequency	Percentage (%)
1.	**Age**		
	14-16 years	126	68.42
	17-19 years	64	31.57
2.	**Sex**		
	Male	130	66.31
	Female	60	33.68
3.	**Religion**		
	Hindu	172	90.52
	Muslim	16	8.94
	Christian	2	0.52
4.	**Family**		
	Nuclear	108	56.84
	Joint	69	36.31
	Extended	13	6.84
5.	**Area of residence**		
	Rural	87	45.78
	Urban	103	54.21
6.	**Socioeconomic class**		
	Upper	5	3.15
	Upper middle	79	41.57
	Lower middle	77	40.42
	Upper lower	17	8.42
	Lower	12	6.31
7.	**Father's education**		
	Illiterate	0	0
	Literate but no formal education	2	1.05
	Primary	25	13.15
	Secondary	40	21.05
	Higher secondary	34	17.89
	Graduate	47	24.73
	Post graduate	42	22.1
8.	**Mother's education**		
	Illiterate	2	1.05
	Literate but no formal education	14	7.37
	Primary	29	15.26
	Secondary	57	30
	Higher secondary	34	17.89
	Graduate	42	22.1
	Post graduate	12	7.36

Table 2: Frequency and percentage distribution of adolescents by their recognition of common cause and risk factors of mental illness

N=190

Sl No.	Risks& causes of mental illness	Frequency	Percentages (%)
1.	Chronic physical illness	105	55.26
2.	Biochemical changes in brain	104	54.73
3.	Stressful job	88	46.31
4.	Head injury	85	44.73
5.	Family history	64	33.68
6.	Physically handicapped	63	33.15
7.	Heredity	61	32.10

Table 3: Frequency and percentage distribution of adolescents by their response to recognise the danger sign of mental illness

N=190

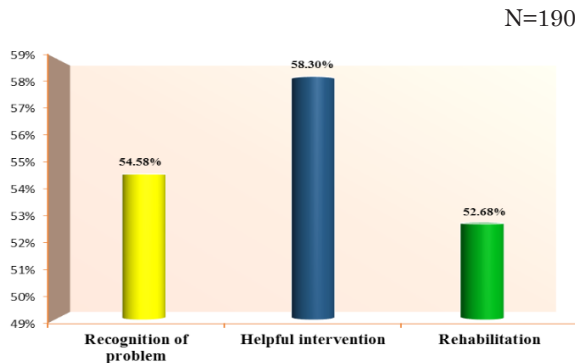| Sl no	Danger sign of mental illness	Frequency	Percentages (%)
1.	See or hear things that others do not	104	54.73
2.	Withdrawal from friends and family	71	37.36
3.	Self- muttering or laughing alone	31	16.31

Fig 1: Area wise mean knowledge score of adolescents

Fig 2: Distribution of the adolescents by their response to recognize selected specific case vignette

for a person with suicidal ideation , 27.89% for social phobia.Only 32.63% adolescent's response on 'follow prescribed medication as per doctor's advice' as a helpful intervention for relapse prevention.

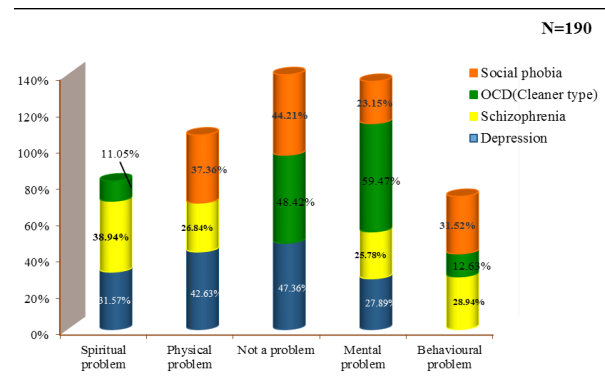Only 28.42% of adolescents believe that psychiatric rehabilitation means 'A process that facilitate to reach optimal level of independent functioning'.44.21% adolescents believe that 'mentally ill people who are undergoing treatment cannot maintain social relationship. Only 37.36% adolescents believe that mentally ill people

Table 4: Frequency and percentage distribution of adolescents by their responses to recognise mental health promotional activity.

N=190

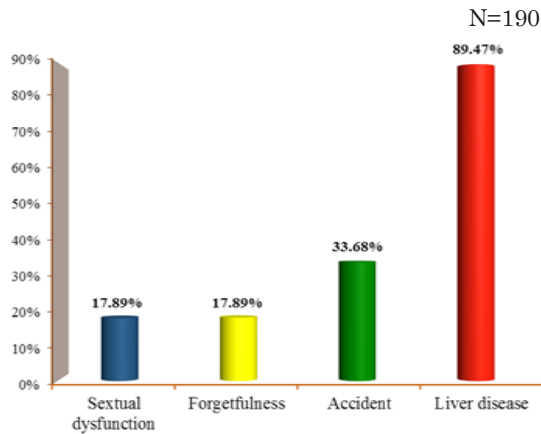| Sl.No	Mental health promotional activity	Frequency	Percentages (%)
1.	Playing out door game enough	124	65.26
2.	Regular exercise	100	52.63
3.	Good sleep,6-8 hrs./day	94	49.47
4.	Sharing problems with close one	77	40.52
5.	Taking healthy food and sufficient water	63	33.15

Fig 3: Distribution of adolescents by their responses to recognise problems of Alcohol abuse
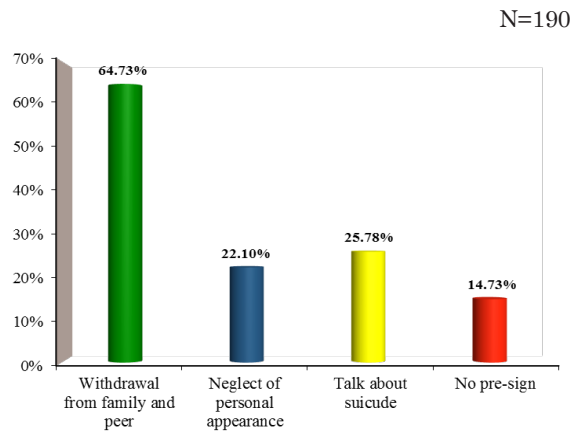

Fig 4: Distribution of adolescents by their response to recognise pre suicidal sign
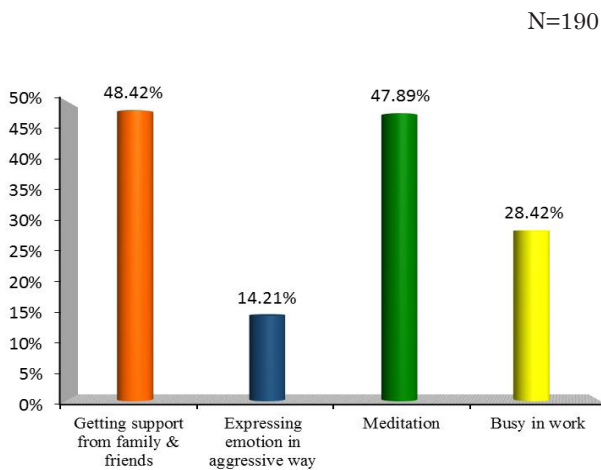

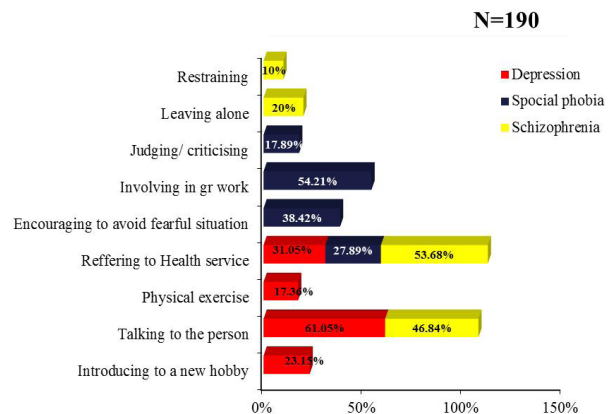**Fig 5:** Distribution of adolescents by their responses to recognise intervention for stress management

Fig 6: Distribution of adolescents by their responses to recognise helpful intervention for Depression, Social phobia and Schizophrenia
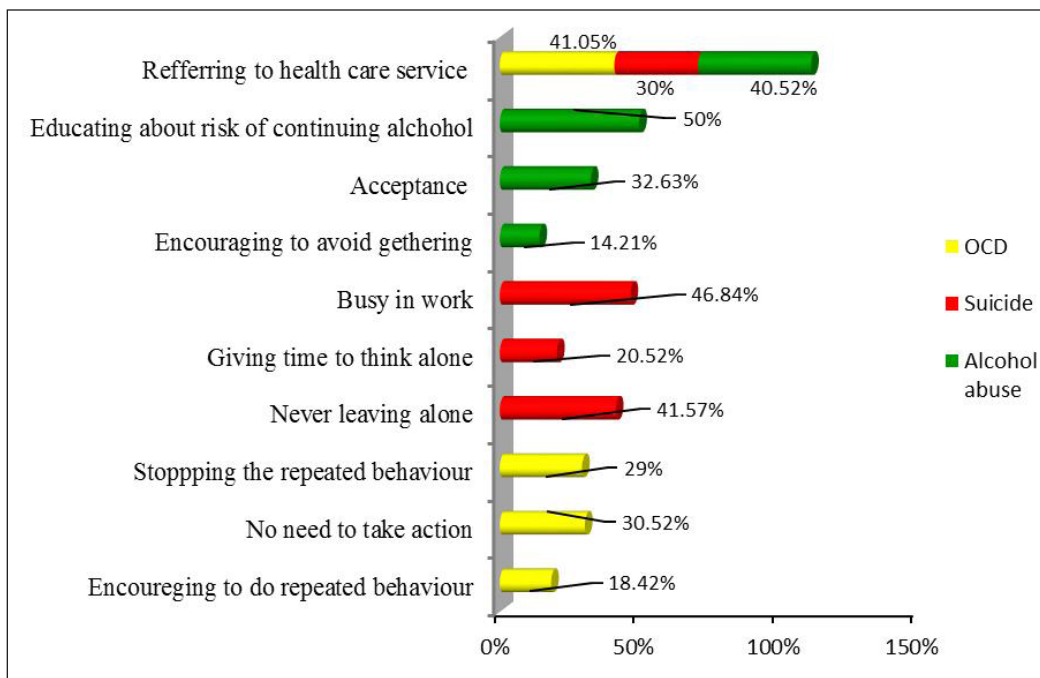
Fig 7: Distribution of adolescents by their responses to recognise helpful intervention for OCD (cleaner type), suicide, and alcohol abuse
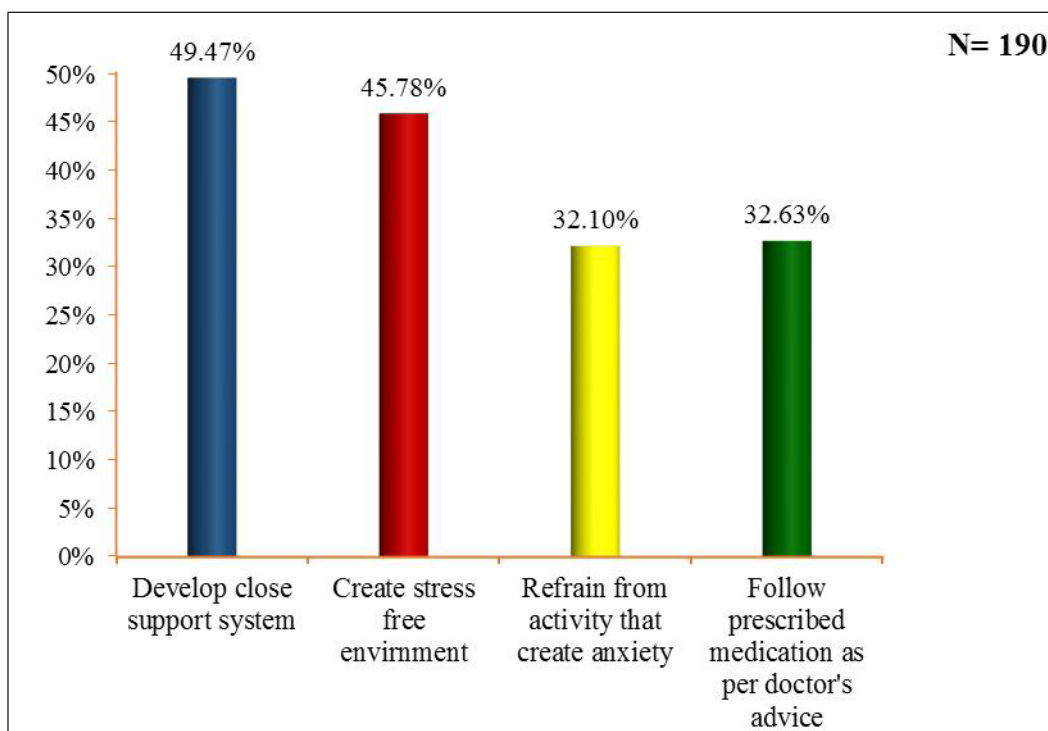

Fig 8: Distribution of adolescents by their recognition of helpful intervention for relapse prevention.

Table 4: Frequency and percentage distribution of adolescents by their responses on meaning of psychiatric rehabilitation

N=190

Sl no	Responses	Frequency	Percentage (%)
1.	A process of making friendship with mentally ill people	102	53.68
2.	A process of keeping mentally ill people in hospital	78	40.05
3.	A process that facilitate to reach optimal level of independent functioning	54	28.42
4.	A process of separating mentally ill people from society	31	16.31

Table 5: Frequency and percentage distribution of adolescents by their responses on performance ability of mentally ill people who are undergoing treatment.

N=190

Sl no	Responses	Frequency	Percentage (%)
1.	Cannot maintain social relationship	84	44.21
2.	Can take care of family members	71	37.36
3.	Able to get back his/her usual life	71	37.36
4.	Cannot perform self-care activities	33	17.36

who are undergoing treatment able to get back his/her usual life

There was statistically significant difference in mean knowledge score within family type (F =5.304, p =.006), Father's education (F=2.84, p =0.017). A significant association was found between type of family and recognition of mental health problems [χ^2 =5.29, df (1)] and between Father's education and recognition of mental health problems [χ^2 =3.97, df (1)].

Table 6: Analysis of MHL in terms of knowledge to recognise mental health problems by socio demographic variable

N=190

Category	Frequency	Mean knowledge score	F value	P value
Type of family				
Nuclear	108	26.89		
Joint	69	25.21	5.304	0.006
Extended	13	25.61		
Father's education				
Illiterate	0	0		
Literate but have no formal education	2	26		
Primary	25	25.24	2.839	0.017
Secondary	40	26.2		
Heigher secondary	34	25.79		
Graduate	47	25.53		
Post graduate	42	27.85		

Significant, [$F_{2,187}$= 3.00, p< 0.05] [F 6,183= 2.098, p< 0.05]

Table 7: Association between MHL in terms of knowledge in adolescents to recognise mental health problems and selected socio demographic variables

N=190

Variable	Knowledge score		Total	Chi square value	P value
	Below & at median	Above median			
Family type					
Nuclear	59	49	108		
				5.29*	0.021
Non-nuclear (joint+ extended)	31	51	82		
Father's education					
Below secondary	19	8	27		
				3.972*	0.046
At & above secondary	81	82	163		

*χ^2 (1)=3.84 at <0.05

Discussion:

The response rates of adolescents for recognition as a mental health problem is 27.89% for the vignette depicting

depression, 25.78% for the schizophrenia vignette, 59.47% for the OCD (clear type) vignette and 23.15% for the social phobia vignette. The percentage of recognition mental health problem is very low. These findings are supported by the study of Judith Miti Ogorchukwu et al[6] for schizophrenia and depression vignette. The Schizophrenia vignette has the highest (38.94%) rate of response of adolescents for recognition as a spiritual problem. One study showed psychosis vignette had the highest rate of response at 22.3% as a spiritual problem.[7]

In this study majority of adolescent response on 'talking to the person' as a helpful intervention for Depression was 61.05% and for schizophrenia (46.31%). The findings of one study showed that a relatively high response rate, across all the mental health related vignettes (depression with suicidal ideation, social phobia, psychosis and diabetes) was seen for "talking to the person", as a helpful intervention.[7]

Socio economic variables and mental health literacy

When parental education levels were considered, in this study the fathers' education level was significantly associated with better recognition of mental health problems which is supported by the study[7] on mental health literacy where the fathers' education level was significantly associated with better recognition of mental health problems in the depression and psychosis vignettes (P values 0.001 and 0.003).

Conclusion:

The mental health literacy of the adolescents in this study is not satisfactory. This study result reflect the immediate need to increase mental health literacy which increasing opportunities for early detection and initiation of intervention contributing to better mental health outcomes. School based mental health literacy programs should be included in school curriculum to alter the developmental trajectory of mental illnesses and lead to improved outcomes.

Acknowledgement:

References:

1. Jorm AF. Mental health literacy: Public knowledge and beliefs about mental disorders. Br J Psychiatry. 2000; 177:396-401.

2. Jorm AF, Barney JL, Christensen H, Highet JN, Kelly MC, Kitchener AB. Research on mental health literacy: What we know and what we still need to know. Aust NZ J Psychiatry. 2006; 40(1):3-5.

3. Shonkoff JP, Boyce WT, McEwen BS. Neuroscience, molecular biology, and the childhood roots of health disparities: building a new framework for health promotion and disease prevention. J Am Med Assoc. 2009;301(21):2252-9.

4. Saxena S, Thornicroft G, Knapp M, Whiteford H. Resources for Mental Health: Scarcity, Inequity, and Inefficiency. Lancet. 2007; 370: 878–89.

5. Gururaj G, Varghese M, Benegal V et al.National Mental Health Survey of India, 2015-2016 Prevalence, Patterns and Outcomes. Bengaluru,National institute of Mental Health and Neurosciences, NIMHANS publication no 129, 2016.

6. Ogorchuku MJ, Sekaran CV, 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(3): 234-41.

7. Attygalle UR, Perera H, Jayamanne BDW. Mental health literacy in adolescents: ability to recognise problems, helpful interventions and outcomes.Child Adolesc Psychiatry Ment Health. 2017; 11:38.