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MENTAL HEALTH LITERACY: A SURVEY OF THE PUBLIC'S ABILITY TO RECOGNIZE MENTAL DISORDERS AND THEIR KNOWLEDGE ABOUT THE EFFECTIVENESS OF HELPFUL INTERVENTIONS TO HELP THE VICTIMS

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Abstract

Background- Although Mental health literacy (MHL) among public has been widely studied in many countries, there are few studies on MHL in Srilanka. MHL is important as it is closely related to help seeking behavior and mental health outcomes. Poor MHL has been a major barrier on improving mental health care in Sri Lanka. The objective of this study was to describe MHL in terms of ability to recognize mental health problems, knowledge of helpful interventions and professional help available. The association between socioeconomic variables and MHL was also identified.

Methods- This descriptive cross-sectional study used a pretested questionnaire on 430 people aged between 18- 60, where MHL was assessed using four case vignettes. The vignettes represented depression with suicidal ideation, social phobia, schizophrenia, and dementia.

Results- The response rates for recognition as a mental health problem was 83.7% (n=297) for the depression vignette, 80.8% (n=287) for schizophrenia vignette, 56.6% (n= 201) for dementia vignette and 54.4% (n= 193) for social phobia vignette. Satisfactory levels for the ability to recognize professional services were 44.5% (n= 158) for both depression and schizophrenia vignettes and 37.7% (n= 134) for dementia and social phobia vignettes. Satisfactory levels in recognizing helpful interventions were 43.4% (n= 154) for social phobia vignette, 27.9% (n= 99) for schizophrenia vignette, 21.1% (n= 75) for dementia vignette and 20.3% (n= 72) for depression vignette. A statistically significant association was found among the educational level

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and the ability to recognize mental health problems, the ability to recognize professional services and knowledge of helpful interventions.
Conclusion- Though the majority was able to recognize the mental disorders as mental health problems, their knowledge of professional services and helpful interventions were relatively very low. Therefore, the MHL of the target population is inadequate comparing to the most of western countries. There is an urgent need for mental health education initiatives to improve MHL among the public considering their socioeconomic background in Sri Lanka.

Keywords: Mental Health Literacy, MHL, depression vignette, Sri Lanka

Mental health literacy (MHL) is described as "knowledge and beliefs about mental disorders which aid their recognition, management or prevention" (Jorm, 2000). Mental health literacy consists of six components, including (1) the ability to recognize specific disorders or different types of psychological distress; (2) knowledge and beliefs about risk factors and causes; (3) knowledge and beliefs about self-help interventions; (4) knowledge and beliefs about professional help available; (5) attitudes which facilitate recognition and appropriate help-seeking; and (6) knowledge of how to seek mental health information (Jorm, 2000). MHL has been recognized for helping improve health outcomes for people (Kutcher et al., 2016; Bowyer et al., 2023).

Jorm (2000) stated that assessing mental health literacy is essential among mental health professionals and the public. He believed raising mental health literacy among the public would promote mental health care in the country. Jorm and his research group conducted many studies based on Australia using large representative samples (Furnham & Hamid, 2014; Renwick et al., 2022). The further author noted that this group was most interested in depression and schizophrenia and perceived treatment pathways. In Jorm's early studies on MHL, he highlighted the need to improve mental health literacy in the Australian community (Jorm, 2000). Jorm's late studies were mainly focused on examining the variations of MHL with the age, gender, and socioeconomic status of the people (Reavley et al., 2012; Farrer et al., 2008; Griffiths et al., 2009; Wong et al., 2022). It was found that the male gender, younger age, lower level of education and being born outside Australia were associated with a lower level of MHL (Reavley et al., 2012). Moreover, Jorm stated that MHL could be improved through interventions.

Recent literature suggests that people living in developed countries tend to show a higher level of mental health literacy, like mental health professionals' perspective, compared to people in developing countries (Furnham & Hamid, 2014; Furnham & Swami, 2018; Marinucci et al., 2023). Though depression and schizophrenia are the most studied disorders in mental health literacy research, considerable effort was made to understand the mental health literacy of various

mental disorders in developed countries (Recto & Champion, 2017). It includes anxiety disorders, children's mental disorders, Post-traumatic stress disorder, Perinatal depression, and personality disorders. A study of mental health literacy and the anxiety disorders of the British adult population in 2019 showed various levels of literacy with high recognition of obsessive-compulsive disorder (64.67%) but very poor for panic disorder (1.26%), GAD (2.84%) and separation anxiety disorder (5.99%) (Furham & Lousley, 2013). Above results point towards the need for more interventions to increase Knowledge about anxiety disorders among people.

Mental health literacy among the public in developing countries is poorly understood (Furnham & Hamid, 2014). According to a recent survey, around 450 million people suffer from mental or neurological disorders (WHO, 2022). Moreover, among the affected people with mental disorders, nearly 80% life in low- and middle-income countries (Thyloth et al., 2016). Thyloth et al. (2016) pointed out that the burden of mental disorders is increasing in developing countries due to a lack of resources, low budget for mental health, underutilization of services and stigma attached to mental illnesses. Ganeshan et al. (2007) pointed out that mental health literacy is low in developing countries, and there is considerable room to improve the state of MHL. Further, he said there is a significant gap in research and that efforts should be directed to mental health literacy to address some of the disparities in mental health care in developing countries.

Cultural beliefs are firmly held in developing countries regarding mental illness (Ganeshan et al., 2007; Chen et al., 2022). A study in India in 2014 found that 74% of respondents sharing that mental illness is nothing, but an evil spirit or black magic, possibly due to sins in one's past life (Gaiha et al., 2014). Further, the same number of respondents believed that going to a traditional healer would improve the condition. Mohamad et al. 2012 found that each ethnic group in Malaysia had solid cultural beliefs about mental illness. Such beliefs may badly influence the components of mental health literacy in most developing countries.

There are few published papers on MHL in Sri Lanka. However, the Knowledge of helpful interventions and treatments could be much better. A recent study in 2017 described the MHL in adolescents (Attygalle et al., 2017). This study found that recognition of a mental disorder for the depression vignette; was 82.2%, for the psychosis vignette, 68.7% and the social phobia vignette, 62.3%. Further, this study revealed an association between several socioeconomic variables: parents' education and monthly income and mental health literacy—the level of mental health literacy among the Sri Lankan public needs to be adequately described.

Objective

Therefore, this study will describe mental health literacy among the Sri Lankan public, considering the association with socioeconomic status. As this is an undergraduate project, only 04 mental disorders have been selected (depression with

suicidal ideation, social phobia, schizophrenia, and dementia). Only three components of MHL (ability to recognize mental illness, Knowledge of helpful interventions, and professional services) were assessed. Educational level has been selected for the socioeconomic variable.

Methods

Research approach and design

The current study has two specific objectives to describe the level of MHL in terms of the ability to recognize problems, helpful interventions, and helpful referral options and to identify the association between MHL and the socioeconomic status of the target population. A self-administered questionnaire was used to collect data. A descriptive cross-sectional survey will be adopted in this study to provide the audience with a snapshot of what is happening in the selected group of the public at one time in order to establish a degree of association between variables. Therefore, the reasoning behind using cross-sectional design in this study is to provide a snapshot of its variables at a specific point in time.

Research setting

This study is a community project, and the field of this study was selected considering the organisational structure of community health service in Sri Lanka. These are commonly known as the medical officer of health (MOH) areas. Each MOH area extends from 130-150 square kilometres with an average population of approximately 60,000. There are 341 MOH areas in Sri Lanka. They are managed by a medical doctor, supported by the public health field consisting of public health nursing sister, public health inspector, supervising public health midwife and public health midwife. The public health midwife is also responsible for a sub-divided area (PHM area) and the respective population. For the current study, the research setting will be selected as the Meddepola PHM area, which belongs to the Pannala MOH area in the Kurunegala district. Sri Lanka. This area consists of three Grama Niladari divisions (three villages) Meddepola Ihala, Medddepola Pahala and Konduruwawela. This area in the Northwestern province of Sri Lanka features a tropical and hot climate throughout the year.

Population and sample

The target population of this study is all the people aged between 18-60 years who live in this Meddepola PHM area. There are 1882 people included in the target population.

This study will be used a probability sampling method of simple random sampling to select a sample. Simple random sampling is a scheme in which each subject in the population has an equal chance of getting selected for the sample. A simple random sample is an unbiased surveying technique. Furthermore, it does not need any technical knowledge. However, it may be getting more time to select the sample. The sample size was calculated using the following formula.

$$n = Z^2_{1-\propto/2} \times \frac{P(1-P)}{d^2}$$

n = required sample size

$Z^2_{1-\propto/2}$ = Z value at 95% significant level = 1.96

d = precision = 5%

P = Expected prevalence of good mental health literacy. (It will be assumed as 50%, as used in previous studies where prevalence rates were unknown)

$$N = \frac{1.96^2 \times 0.5 \times (1-0.5)}{0.05^2}$$

N = 384

Anticipated nonresponse rate – 10%

N = 422

Sample size (N) will be rounded into 430 participants

The sample size of this study was 430 people. The sample size is significant because if inadequate, it will be affected to come to a reasonable conclusion or generalize to the target population. The inclusion criteria of this study are the male or female subjects aged 18 to 60 years and those who provide valid informed consent before the study. The exclusion criteria are pregnant mothers and people with chronic mental or physical illnesses.

Ethical consideration

Ethical approval was obtained for this research from the Ethics Review Committee, National Institute of Mental Health (ERC Number 150/08/2020). A layered information leaflet describing the study, its objectives, risks and benefits were developed in Sinhalese. All the eligible participants were given the information leaflets, and adequate time was given to go through them. They were encouraged to ask questions and clarify further. Participants were made to understand that they were free to decide whether to participate or not participate in the study and had the right to withdraw from the study at any time. Suppose they wished to do so. After that, all participants obtained written informed consent before answering the questionnaire. Data collection was done confidentially using the questionnaire. Whatever data is collected will be confidential. Personal information collected in the

participant information sheet was detached from the primary data collection tool and linked with a number known only to the data collectors. The collected data sheet will be coded, and a serial number will be given manually. They were entered into a computer. Then data collection sheets were kept password protected with them. Protected files restricted access only to the principal investigator and four co-investigators.

Data Collection Method

The data contained within this study were collected using a questionnaire focusing on three areas, the ability to recognize mental illness, knowledge of helpful interventions and knowledge of professional services. All participants were given a self-administered questionnaire. The questionnaire of the present study was self-developed by the researchers considering the research objectives (Annexure 1). It was developed by reviewing the past literature. The questionnaire has two sections. Section one included demographic data, age, sex, education level and occupation. Section two consisted of four case vignettes on depression with suicidal ideation, schizophrenia, social phobia and dementia. Each of these case vignettes consisted of 03 close-ended questions. The questions required the respondents to give their opinion on (1) whether the vignette depicted a mental health-related problem, spiritual problem, social problem, physical problem or another problem and (2) what interventions could be helpful. (3) what kinds of referrals would be helpful for each vignette? Respondents were allowed multiple answers. The pilot test was done with 20 participants from another area to establish the questions' acceptability and comprehension of the vignettes and questions, to assess the completeness of returned questionnaires and participation rates and calculate the average time needed for completion. The questionnaire was initially written in English and translated into Sinhala (all the participants were Sinhalese). Some modifications were done before submitted in the questionnaire. It was expected to take 30 minutes to fill out the questionnaire.

Reliability and Validity of the Questionnaire: The content validity of the questionnaire was received by the Consultant Psychiatrist, Dr M. Ganeshan, National Institute of Mental Health, Angoda, Sri Lanka. Test-retest reliability was assessed by administering the questionnaire to the 20 pilot study participants a week later.

Data collection: March 2021. Most of the participants received the questionnaire in their own homes. The researchers believed it was comfortable for them to complete the questionnaire at home. Researchers themselves collected the data with the help of a few villagers. The Covid 19 pandemic was a significant limitation in collecting data. The researchers strictly followed the guidelines of the health ministry when collecting data. Though 430 sample was selected, some could not participate due to quarantine issues. The researchers needed help to collect their filled questionnaires. Due to this pandemic, the duration had to be extended to two months. Data collection was done at weekends as many participants were busy on

weekdays. As this was a rural village, some participants needed more education. The researchers had to avoid these people as this was a self-administered questionnaire.

Data Analysismultiple responses

Each case vignette's responses were presented using frequencies and parentages. It took much work to assess the level of the ability to recognize professional help and helpful interventions as multiple responses were given. Therefore those responses were classified into two groups, satisfactory level and not satisfactory level, by considering the responses according to expert opinions. Then the satisfactory ability to recognize professional help and helpful interventions was presented as frequencies and percentages. Then all the responses each participant gave for all four case vignettes were calculated by giving scores for each observation and presented using frequencies and percentages. Pearson correlation analysis was performed to find the associations between socio-demographic variables such as age, gender, education level and occupation, with significance set at < 0.05.

Results

Out of the 430 questionnaires that were distributed, 356 were completed and returned (83% response rate). It was 355 total responses used for the analysis, as one response was omitted during the data-cleaning process due to missing values. In this results chapter, the first demographic data of participants were presented, and then the responses for recognizing the problem, professional help and helpful interventions were presented. Finally, the factors associated with MHL were assessed.

Demographic Characteristics: Under demographic variables, age, gender, education level and occupation are identified, and all are categorical variables. Table 1 shows the age distribution of the respondents. Most of the respondents belonged to the age group 51- 60 years. A minimum number of participants was in the age category of 46- 50 years. There were mostly female participants, which is 61.7%. Most participants (156) have passed Advance Levels s, and 22 out of 355 have a degree.

Table 1 – Demographic data of the study population

Age Distribution of Respondents		
Age group (years)	Frequency(n=355)	Percentage (%)
18-24	49	13.8
25-30	48	13.5
31-35	60	16.9
36-40	58	16.3
41-45	37	10.4
46-50	29	8.2
51-60	74	20.8

Gender Distribution of Respondents			
	Female	219	61.7
	Male	136	38.3
Educational Level of Respondents			
	Grade 05	32	9
	Passed O/L	145	40.8
	Passed A/L	156	43.9
	Degree	22	6.2
Occupations of Respondents			
	Student	19	5.4
	Unemployed	97	27.3
	Cultivation	49	13.8
	Self-employed	35	9.9
	Gov. Sector,	101	28.5
	Private Sector	54	15.2

Ability to Recognize Mental Health Problems

Table 2 shows the responses to the recognition of problems for each case vignette in the questionnaire. The response rates for recognition as a mental health problem was 83.7% (*n*= 297) for the vignette depicting depression, 80.8% (*n*= 287) for the schizophrenia vignette, 56.6% (*n*=201) for the dementia vignette and 54.4% (*n*= 193) for social phobia vignette. Of the four vignettes, social phobia had the highest response rate as a social problem at 25.6% (*n*=91). The Dementia vignette had the highest response rate at 23.6% (*n*=84) as a physical problem.

Table 2 - Responses for Recognizing of Problems

	Depression		Social Phobia		Schizophrenia		Dementia	
	Frequency *N*=355	Percentage (%)	Frequency *N*=355	Percentage (%)	Frequency *N*=355	Percentage (%)	Frequency *N*=355	Percentage (%)
A Spiritual Problem	8	2.3	14	3.9	5	1.4	36	10.1
A Physical Problem	39	10.9	27	7.6	10	2.8	84	23.6
A Mental Problem	297	83.7	193	54.4	287	80.8	201	56.6
A Social Problem	5	1.4	91	25.6	20	5.6	5	1.4
A Behavioral Problem	6	1.7	30	8.4	33	9.3	29	8.1

Ability to Recognize Professional Help

Table 3 reflects the participants' responses regarding helpful, professional services for each vignette. In this question, participants were allowed to choose multiple answers. 68.7% (*n*=244) of participants rated psychiatrists as helpful for depression vignettes, followed by 54.7% (*n*=194) for psychological counsellors. In the Schizophrenia vignette, 70.7% (*n*=257) rated psychiatrists helpful. Nevertheless,

for the dementia vignette and social phobia vignette, only 46.8% (*n*=166) and 31.8% (*n*=113) rated the psychiatrist as helpful. 55.7% (n=198) said close friends as helpful, and 45.9% (*n*=163) said the clergy was helpful for the dementia vignette. These results were further categorized into two parts satisfactory level and non-satisfactory level in recognizing professional help. Satisfactory level – all the responses are chosen professional services only Non-satisfactory level – all the mixed responses with non-professional persons or services.

Table 3 - Responses for Recognizing Professional Help

	Depression		Social Phobia		Schizophrenia		Dementia	
	Frequency *N*= 355	Percentage (%)	Frequency *N*= 355	Percentage (%)	Frequency *N*= 355	Percentage (%)	Frequency *N*= 355	Percentage (%)
Help from close family friends	134	37.7	100	28.2	82	23.1	95	26.7
A typical general practitioner	59	16.6	48	13.5	39	10.9	122	34.4
A native doctor	20	5.6	5	1.4	13	3.6	17	4.8
A Psychiatrist	244	68.7	113	31.8	251	70.7	166	46.8
Help from close friends	120	33.8	198	55.7	132	37.18	46	12.9
The clergy/ a minister or priest	130	36.6	92	25.9	123	34.6	163	45.9
Telephone counselling service	28	7.8	43	12.1	31	8.7	23	6.5
An astrologer	25	7	22	6.2	29	8.2	30	8.5
A psychological counsellor	194	54.7	184	51.8	197	55,5	143	40.3
Not approach anyone for help and deal with problem alone	15	4.23	76	21.4	28	7,9	15	4

Table 4 shows the proportions of satisfactory levels for each case vignette in recognizing professional help. For depression and schizophrenia vignettes, 44.5% (n=158) of participants were satisfactory and 37.7% (n=134) for both social phobia and dementia vignettes. These results were further categorized into two parts satisfactory level and non-satisfactory level in recognizing helpful interventions (Table 4). Satisfactory level- all the responses are chosen professional interventions only Not satisfactory level – all the mixed responses with non-professional interventions.

Table 4 - Satisfactory Levels in Recognizing Professional Help

	Depression		Social Phobia		Schizophrenia		Dementia	
	Frequency (*N*=355)	Percentage (%)	Frequency (*N*=355)	Percentage (%)	Frequency (*N*=355)	Percentage (%)	Frequency (*N*=355)	Percentage (%)
Satisfactory level in recognizing professional services	158	44.5	134	37.7	158	44.5	134	37.7

Ability to Recognize Helpful Interventions

Participants allowed multiple answers to this question also. Table 5 shows the responses to helpful interventions for each case vignette. Taking medications for psychiatric illness, rated 40.8% (*n*=145) for schizophrenia vignette, 36.9% (*n*=131) for depression vignette, 21.7% (*n*=77) for dementia vignette and 14.7% (*n*=52) for social phobia vignette. Another helpful intervention of being admitted to a psychiatric ward or hospital rated as 3.4% (*n*=12) for depression and suicidal ideation vignette and 11.6% (*n*=41) for schizophrenia vignette respectfully. Meanwhile, psychotherapy was rated as helpful by 47% (*n*=167) for the depression vignette, 46.8% (*n*=166) for the social phobia vignette, 45.9% (*n*=163) for the schizophrenia vignette and 30.1% (*n*=107) for dementia vignette. These results were further categorized into two parts satisfactory level and non-satisfactory level in recognizing helpful interventions (Table 5). Satisfactory level – all the responses are chosen professional interventions only (Table 6). Not satisfactory level – all the mixed responses with non-professional interventions.

Table 5 - Response for Helpful Interventions

	Depression		Social Phobia		Schizophrenia		Dementia	
	Frequency *N*=355	Percentage %	Frequency *N*=355	Percentage %	Frequency *N*=355	Percentage %	Frequency *N*=355	Percentage %
Perform ceremonies to expel 'evil eye'	21	5.9	17	4.8	23	6.5	14	3.9
Taking vitamins and minerals	29	8.2	6	1.7	6	1.7	23	6.5
Pain relievers such as paracetamol	19	5.3	1	0.3	7	2	5	1.4
Sleeping pills	9	2.5	2	0.5	15	4	3	0.8
Medications for psychiatric illness	131	36.9	52	14.7	145	40.8	77	21.7
Becoming physically more active (Playing more sport, gardening)	176	49.5	156	43.9	164	46.8	94	26.5

	Depression		Social Phobia		Schizophrenia		Dementia	
	Frequency *N*=355	Percentage %	Frequency *N*=355	Percentage %	Frequency *N*=355	Percentage %	Frequency *N*=355	Percentage %
Reading about people with similar problems	165	46.5	240	67.6	158	44.5	78	21.9
Relaxation, stress management , meditation and yoga	208	58.6	135	38	166	46.8	257	72.4
Psychotherapy	167	47	166	46.8	163	45.9	107	30.1
Hypnosis	4	1.1	5	1.4	13	3.7	5	1.4
Perform religious activities	211	59.4	99	27.9	143	40.3	239	67.3
Being admitted to psychiatric ward or hospital	12	3.4	6	1.7	41	11.6	16	4.5
Use alcohol/ cigarettes/ drugs	0	0	0	0	2	0.5	0	0
Cut down use of alcohol/ cigarettes/ drugs	9	2.5	14	3.9	40	11.3	12	3.4

Table 6-Satisfactory Level in Recognizing Helpful Interventions

	Depression		Social Phobia		Schizophrenia		Dementia	
	Frequency *N*=355	Percentage %	Frequency *N*=355	Percentage %	Frequency *N*=355	Percentage %	Frequency *N*=355	Percentage %
Satisfactory level in recognizing helpful interventions	72	20.3	154	43.4	99	27.9	75	21.1

Considering the frequencies and percentages in every four cases, two significant observations can be seen. The participants had more than 50% ability to recognize the mental health problem correctly, but they needed more ability to (> 50%) recognize the professional services and helpful interventions.

Associated Factors of MHL

Table 7 describes the association among several socio-demographic factors, namely age, gender, education level and occupation, with the ability to recognize mental health problems, the ability to recognize professional services and the ability to recognize helpful interventions. In this study it was found a strong correlation between higher education and the ability to recognize mental disorders correctly, $r(354)=0.19$, $p<0.001$, and correctly recognizing persons/services, $r(354)=0.14$, $p<0.05$; and correctly recognizing actions/interventions $r(354)$, 0.12, $p<0.05$. Also, we found a strong relationship between good occupation and their ability to correctly

recognize mental disorders $r(354)$, 0.15, $p<0.05$, correctly recognizing persons/services dealing with mental disorder $r(354)$, 0.1, $p<0.05$ and correctly recognizing actions/interventions $r(354)$, 0.1, $p<0.05$.

Table 7 - Correlation Analysis

	Ability to correctly recognizing mental disorder (Level of A)		Ability to recognize persons and services to dealing with mental disorder (Level of B)		Ability to recognize actions/interventions to deal with mental disorder (Level of C)	
	Corelation	Significance	Corelation	Significance	Corelation	Significance
1.Age	0.034	0.518	-0.068	0.200	-0.047	0.381
2.Gender	-0.047	0.380	-0.019	0.722	-0.057	0.281
3.Education Level	0.185**	0.000	0.139**	0.009	0.116**	0.029
4.Occupation	0.146**	0.006	0.105**	0.048	0.110**	0.039

** Correlation is significant at the 0.05 level (2-tailed)

Then, we can conclude that when the person has good education background and the occupation, he/she has a little bit good mental health literacy. Validity assessment was done for the study, with the construct validity to evaluate whether the measure accurately represents the intended construct. This can involve factor analysis to determine if items load onto the expected factors.

Discussion

In this present study data, majority of participants were females. Most of respondents fell within the ages of 51-60 and 31-35 years. Most of participants have passed A/L. It means majority of participants had good educational level. This study used vignette based questionnaire which allowed participants to select more options. In this chapter the results were discussed under four topics which were related to the specific objectives of this study.

Mental health literacy refers to the knowledge and understanding that individuals have about mental health, including the ability to recognize and manage mental health problems. Here are some suggestions for designing and implementing strategies to enhance mental health literacy:

Education and training: Providing education and training on mental health can be an effective way to enhance mental health literacy. This can include workshops, seminars, and online courses that provide information on mental health, its causes, symptoms, and treatment options.

Community-based programs: Community-based programs, such as peer support groups, can help individuals with mental health issues feel less isolated and improve their understanding of their condition. These programs can also provide a

safe space for individuals to discuss their mental health concerns and learn from others.

Collaboration with mental health professionals: Collaborating with mental health professionals can help individuals gain a better understanding of mental health conditions and how to manage them. This can involve working with therapists, psychiatrists, and other mental health professionals to develop educational materials and resources.

Awareness campaigns: Awareness campaigns that aim to reduce the stigma surrounding mental health can help individuals feel more comfortable discussing their mental health concerns and seeking help. These campaigns can include public service announcements, social media campaigns, and other forms of outreach.

Access to resources: Providing access to mental health resources, such as hotlines, online support groups, and mental health apps, can help individuals with mental health concerns feel more empowered to seek help and manage their condition. This can include partnerships with mental health organizations to provide free or low-cost resources to individuals in need.

Ability to recognize mental health problems

This study's findings showed that most respondents correctly recognized Depression, Schizophrenia, Dementia and Social Phobia as mental health problems. Similar findings could be seen in another Sri Lankan study assessing MHL among adolescents (Attygalle et al., 2017). In both studies, the participants were not expected to give the correct diagnostic label for these mental disorders. In Sri Lanka, the lay terms used for many mental disorders in the local language are unfamiliar to the general public (Amarasuriya et al., 2015). It sounds pretty unusual to say "Vishadaya" for Depression. The authors believed these lay terms might confuse the participants. This difficulty was a possible reason for the low recognition of Depression among undergraduates in a study in Sri Lanka (Amarasuriya et al., 2015).

Depression (83.7%) and Schizophrenia (80.8%) were quickly recognized as mental illnesses by most respondents in this study. It seems that many participants were aware of the symptoms of these mental illnesses. Researchers believe this result reflects some improvement in mental health care services, especially at the community level. These results are also close to several western studies discussed in the literature review (Reaveley et al., 2011; Zorilla et al., 2019).

Recognition of anxiety disorders like Social Phobia was relatively low in the present study. According to the NMHS (2007), 1.9% of people suffer from anxiety disorders in Sri Lanka. However, insufficient attention is paid to improving the MHL of anxiety disorders in Sri Lanka. It is compared with the findings of an Australian study (Reavley et al., 2011). Above one-fourth of respondents believed the Social Phobia vignette was a social problem in the present study. The result indicates the need for more interventions to improve public knowledge of anxiety disorders.

The present study's findings are inconsistent with some Chinese studies (Huang et al., 2019). Only 32.6% recognized Schizophrenia and Depression, both vignettes, as mental illnesses. The authors cited several possible reasons for these findings, including a lack of public mental health education and a severe stigma of mental illness. The result of the present study on the recognition of Dementia vignettes is not satisfactory when comparing the Singapore study (Chong et al., 2016). 66.3% identified Dementia vignettes in Singapore, while 56.6% in Sri Lanka. According to the authors of that study, this resulted from substantial educational initiatives conducted in public health services to face the challenge of the fastest ageing population in Singapore. Sri Lanka is also facing this demographic shift like Singapore. It is necessary to implement educational strategies to improve knowledge of Dementia in Sri Lanka.

Ability to recognize professional services

According to the findings, the ability to recognize professional services could have been more satisfactory among respondents in this study. The majority recommended help from informal sources than traditional sources. In the Social Phobia vignette, 55.7% rated help from close friends. Research has consistently shown that Asians prefer to seek help from informal sources such as family, close friends, close relatives and clergy (Picco et al., 2016; Poreddi et al., 2019; Mohamad et al., 2012; Attygalle et al., 2017). Most people choose informal sources because of their stigma and lack of knowledge (Ganeshan et al., 2007). Seeking appropriate help from professional sources is very important for the prevention, early detection and treatment of and recovery from mental disorders (Jorm, 2000). Timely referral for these professional services is also essential. Therefore these informal sources of help should have adequate skills and knowledge to recognize mental health issues and refer for professional services when needed.

In the dementia vignette, a relatively high proportion has rated meeting a clergy as helpful in this study. This finding indicates that cultural and religious beliefs may also influence help-seeking behaviour. In Buddhist culture, many people like to take advice from the clergy. It is a common practice among most Buddhists. This is compared with the findings of another Asian country, Malaysia (Mohamad et al., 2012). In this study, most participants used religious and traditional coping mechanisms in their help-seeking process. Cultural influence on MHL is another area of future research, especially in the Asian context.

However, the findings of similar studies in western countries are incompatible with the present study (Reavley et al., 2011: Zorrilla et al., 2019). Most participants rated professional services as helpful for vignettes. It may be due to good awareness of evidence-based treatments among people and the availability of such resources in those countries.

Ability to recognize helpful interventions

Concerning the other component of MHL, the knowledge of helpful interventions of the participants was inferior for all 04 case vignettes in this study. When asked about helpful interventions for Depression with suicidal ideation vignette, most participants rated attending courses of relaxation, stress management, meditation and yoga/performing religious activities / becoming physically more active and reading about people with similar problems are helpful than using psychiatric medication and being admitted to psychiatric ward or hospital. This finding indicates that general people prefer lifestyle interventions to professional ones. Though these lifestyle interventions are helpful, they may delay the person seeking professional help (Jorm, 2000). Depression with suicidal ideation is precarious, and early treatment is essential. If not taken timely action, it may lead to suicide also. Therefore this finding is emphasized that people should be educated about professional interventions that are more likely to be effective.

Other Western studies found that participants rated these lifestyle interventions even higher (zorilla et al., 2019; Reavley et al., 2011). However, considering the participants' help-seeking behaviours, they likely practice these lifestyle interventions with professional guidance. Most Asian studies are consistent with the present findings (Wu et al., 2017; Thai et al., 2018).

One interesting finding in the present study was that a relatively higher proportion (nearly 40%) of participants rated psychotherapy/ counselling as helpful for all 04 vignettes. Though this is a positive way to deal with mental health problems, people might need help finding qualified psychologists or counsellors in their area. It is another issue that the health authorities should pay attention to give some solution for the issue.

Perform religious activities like "Bodhipooja" was rated as helpful by the majority of participants for all 04 vignettes in the present study, following Dementia (67.3%), Depression (59.4%), schizophrenia (40.28%) and Social Phobia (27.89). It indicates a religious and cultural influence in choosing interventions among people. In previous Sri Lanka study cited above rated relatively low proportions for the above intervention as Depression (29.9%), Social Phobia (21.5%) and Psychosis (31.7%). This study was done with adolescents in Sri Lanka. Therefore, choosing helpful interventions may affect the sample's age.

Socio economic variables and mental health literacy

According to the findings of this study, higher levels of education level were significantly associated with better recognition of mental health problems, helpful interventions and professional services (Table 6). This is supported by findings of many studies in the world (Reavley et al., 2012; Picco et al., 2016; Li et al., 2019; Amarasuriya et al., 2015). This could be due to acquiring some aspects of MHL

through the education system and having better access to mental health information (Picco et al., 2016). Further, the researchers believe that stigma towards mental illness can also be minimized through education. In a South Korean study, the level of education and psychology-related education were the best predictors of MHL among the public (Jeon et al., 2017). This finding also implies the importance of including psychology-related subjects in the school curriculum in Sri Lanka. Further, when planning mental health initiatives in future, socioeconomic factors like the educational level of the participants should be considered.

Mental health literacy refers to an individual's knowledge and understanding of mental health, including recognizing and managing mental health problems. It is an essential aspect of overall health and well-being, and improving mental health literacy can significantly benefit individuals and society.

One of the primary benefits of improving mental health literacy is that it can help reduce the stigma surrounding mental health. Stigma can prevent individuals from seeking help for mental health concerns, worsening symptoms and leading to adverse outcomes such as social isolation, unemployment, and even suicide. When people have a better understanding of mental health, they are more likely to seek help and support when needed, reducing the impact of stigma on their lives.

In addition, improving mental health literacy can also help individuals recognize and manage mental health problems in themselves and others. This can lead to earlier intervention, improving outcomes and reducing the long-term impact of mental health conditions. Individuals with high levels of mental health literacy can also better support their friends and family members who may be struggling with mental health issues.

Several ways to improve mental health literacy include education and training, community-based programs, collaboration with mental health professionals, awareness campaigns, and access to resources. These strategies can be implemented at the individual, community, and societal levels to improve mental health outcomes for all.

Overall, improving mental health literacy is an essential step towards reducing the burden of mental illness and promoting mental well-being. By increasing knowledge and understanding of mental health, we can create a more supportive and compassionate society that values mental health as an essential component of overall health and well-being.

Summary

The general objective of this study to assess the MHL among the general public in the Meddepola PHM area with their socioeconomic status was successfully achieved. According to the findings of the study, the MHL of the general public needed to be improved. Though the majority were able to recognize mental disorders as mental problems, their knowledge of helpful interventions and professional

services could have been more profound. The education level of the people has affected their MHL. Findings showed low educational level people possessed poor MHL. These findings reflect the reality of Sri Lankan mental health services that must be urgently addressed. Though many steps have been taken to improve mental health services in the country, people still need to learn to accept these services. Therefore more interventions need to improve the MHL of the Sri Lankan people, especially considering their different socioeconomic backgrounds. How to improve MHL is an area of future research. Limitations There are some limitations to this study. It is difficult to generalize the current study's findings to other geographical areas of Sri Lanka with different socioeconomic backgrounds. The current study used the case vignettes method to assess MHL. The responses to case vignettes may not indicate reality sometimes. Courtesy bias, as well as recall bias, may affect the responses. The self-administered questionnaire was used as a data collection tool. It was based on vignettes rather than a rating scale. Hence the MHL levels could not be scored, but such vignette-based questionnaires have been used in most studies on MHL worldwide, providing valuable results.

Implications for nursing

Nurses need to be able to provide mental health education and care with a positive attitude in the community. The community psychiatric nursing (CPN) post was introduced recently, aiming to extend mental health care beyond the hospital to the community. These specialist nurses work in collaboration with the primary health care team. They provide mental health education to the community to improve the MHL of the people. However, there are only 02 psychiatric nurses allocated to each district. Though insufficient, CPNs do a great job in the community to their best. Nurses are the most available health professionals to patients in hospitals. They should practice a holistic approach to caring for patients. Hence they can identify the mental health needs of the people and risk factors for future mental health issues.

Recommendations

It is essential to assess MHL Island-wide. National-level MHL surveys should be conducted. Hence relevant authorities could get a clear idea. Educational strategies should be planned to improve the MHL of the general public. Mental health services should be well-funded and efficiently distributed around the country. The necessary human resources should be trained and allocated to the community. Community health services should be more focused on the mental health needs of the people. Mental health education should be included in the school curriculum. It is important to disseminate accurate information through media to improve MHL and prevent the stigma of mental illnesses. Further research needs to be conducted on MHL and its affecting factors.

Authors' note

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Appendix

"Mental health literacy": a survey of the public's ability to recognize mental disorders, and their knowledge about the effectiveness of helpful interventions to help the victims

Self-administered questionnaire

Part - A

Please provide the following details about yourself.

1. Age (Years):
   - 18 - 24 ☐
   - 25 - 30 ☐
   - 31 - 35 ☐
   - 36 - 40 ☐
   - 41 - 45 ☐
   - 46 - 50 ☐
   - 51 - 60 ☐

2. Gender:
   - Male ☐
   - Female ☐

3. Ethnicity:
   - Sinhala ☐
   - Muslim ☐
   - Tamil ☐
   - Other ☐

4. Religion:
   - Buddhists ☐
   - Hindu ☐
   - Islam ☐
   - Christian ☐
   - Other ☐

5. Employment Status:

Student	☐	Gov. Sector	☐
Unemployed	☐	Private Sector	☐
Cultivation	☐	Others	☐
self-employed	☐		

Part - B

There will be four scenarios of four people describe below. please answer about your ideas and decisions regarding the questions asked about them. (You can choose more than one answer for each question).

Vignette 1

Kamala is 30 Years old and was fine until six months ago when she began to feel tired all the time. She says that she is sad and has lost interest in life. Even her children and family don't make her feel happy. She cannot sleep and she has lost the he tastes for food, which she used to love. she has lost interest in cooking because she can't concentrate. Sometimes she feels like jumping into the well to end her life.

Her Problem is,
(Tic (√) the most appropriate answer as you think)

a. A Spiritual Problem
b. A Physical Problem
c. A Mental Problem
d. A Social Problem
e. A behavior Problem
f. Other

(a) Given below are persons and services that Kamala might approach for help when dealing with this problem. Tic (√) one or more answers likely to be appropriate.

Help from close family members	
A typical general practitioner.	
A Native doctor	
A psychiatrist	
Help from close friends	
the clergy, a minister or priest	
Telephone counselling service	
An astrologer	
A Psychological Counsellor	
Not approach anyone for help and deal with problem alone	
Other (specify)……	

(b) Given below are some actions/interventions Kamala might engage in when trying to deal with this problem. Tic (√) one or more interventions likely to be helpful.

Perform ceremonies to expel the ' evil eye'	
vitamins and minerals, tonic of herbal medicines	
Pain relievers such as paracetamol	
Sleeping pills	

medications used for psychiatric illness	
Becoming physically more active, such as playing more sport or doing a lot more walking, or gardening	
Reading about people with similar problems and how they have dealt with them	
Attending courses of relaxation, stress management, meditation and yoga.	
Psychotherapy	
Hypnosis	
perform religious activities (eg: bodipooja)	
Being admitted to psychiatric ward or hospital	
Use alcohol/cigarettes/drugs	
Cut down use of alcohol/cigarettes/drugs	
Other (specify)……	

(c) If you like, please write something about the above vignette.
……
……
……

Vignette 2

Kumara is an 18 years old student. He has extreme fear of talking in the presence of others. On these Occasions he feels extremely fearful even when talking of such situation with these symptoms he has been having many difficulties in continuing his school work.

(a) His Problem is,
(Tic (√) the most appropriate answer as you think)
   a. A Spiritual Problem
   b. A Physical Problem
   c. A Mental Problem
   d. A Social Problem
   e. A behavior Problem
   f. Other

(b) Given below are persons and services that Kumara might approach for help when dealing with this problem. Tic (√) one or more answers likely to be appropriate.

Help from close family members	
A typical general practitioner.	
A Native doctor	
A psychiatrist	
Help from close friends	
The clergy, a minister or priest	

Telephone counselling service	
An astrologer	
A Psychological Counsellor	
Not approach anyone for help and deal with problem alone	
Other (specify)……	

(c) Given below are some actions/interventions Kumara might engage in when trying to deal with this problem. Tic (√) one or more interventions likely to be helpful.

Perform ceremonies to expel the ' evil eye'	
vitamins and minerals, tonic of herbal medicines	
Pain relievers such as paracetamol	
Sleeping pills	
medications used for psychiatric illness	
Becoming physically more active, such as playing more sport or doing a lot more walking, or gardening	
Reading about people with similar problems and how they have dealt with them	
Attending courses of relaxation, stress management, meditation and yoga.	
Psychotherapy	
Hypnosis	
perform religious activities (eg: bodipooja)	
Being admitted to psychiatric ward or hospital	
Use alcohol/cigarettes/drugs	
Cut down use of alcohol/cigarettes/drugs	
Other (specify)……	

(d) If you like, please write something about the above vignette.
……
……
……

Vignette 3

Piyasiri is a 30 years old bus driver. Since about a month he has been refusing to go to work. He prefers to stay at home with doors and window shut. His wife complains that he sleeps poorly at night, laughs and talks on his own. He claims he is responding to voices he hears. He does not maintain self-care and claims that he remains at home as his neighbors trouble him. He believes he has no illness.

(a) His Problem is,
(Tic (√) the most appropriate answer as you think)
a. A Spiritual Problem

b. A Physical Problem
c. A Mental Problem
d. A Social Problem
e. A behavior Problem
f. Other

(b) Given below are persons and services that Piyasiri might approach for help when dealing with this problem. Tic (√) one or more answers likely to be appropriate.

Help from close family members	
A typical general practitioner.	
A Native doctor	
A psychiatrist	
Help from close friends	
The clergy, a minister or priest	
Telephone counselling service	
An astrologer	
A Psychological Counsellor	
Not approach anyone for help and deal with problem alone	
Other (specify)……	

(c) Given below are some actions/interventions Piyasiri might engage in when trying to deal with this problem. Tic (√) one or more interventions likely to be helpful.

Perform ceremonies to expel the ' evil eye'	
Vitamins and minerals, tonic of herbal medicines	
Pain relievers such as paracetamol	
Sleeping pills	
Medications used for psychiatric illness	
Becoming physically more active, such as playing more sport or doing a lot more walking, or gardening	
Reading about people with similar problems and how they have dealt with them	
Attending courses of relaxation, stress management, meditation and yoga.	
Psychotherapy	
Hypnosis	
Perform religious activities (eg: bodipooja)	
Being admitted to psychiatric ward or hospital	
Use alcohol/cigarettes/drugs	
Cut down use of alcohol/cigarettes/drugs	
Other (specify)……	

(d) If you like, please write something about the above vignette.

Vignette 4

Rani is 75 years old and retired. Her husband noticed that she has problems remembering things that happened recently. She repeats questions which he has already answered. She misplaces her things and occasionally gets confused during their conversations sometimes. Rani and her husband quarrel as she accuses him of taking her things. She lost her way once or twice whilst going to their son's home.

(a) Her Problem is,
(Tic (√) the most appropriate answer as you think)
   a. A Spiritual Problem
   b. A Physical Problem
   c. A Mental Problem
   d. A Social Problem
   e. A behavior Problem
   f. Other

(b) Given below are persons and services that Rani might approach for help when dealing with this problem. Tic (√) one or more answers likely to be appropriate.

Help from close family members	
A typical general practitioner.	
A Native doctor	
A psychiatrist	
Help from close friends	
the clergy, a minister or priest	
Telephone counselling service	
An astrologer	
A Psychological Counsellor	
Not approach anyone for help and deal with problem alone	
Other (specify)……	

(c) Given below are some actions/interventions Rani might engage in when trying to deal with this problem. Tic (√) one or more interventions likely to be helpful.

Perform ceremonies to expel the ' evil eye'	
Vitamins and minerals, tonic of herbal medicines	
Pain relievers such as paracetamol	
Sleeping pills	
Medications used for psychiatric illness	
Becoming physically more active, such as playing more sport or doing a lot more walking, or gardening	
Reading about people with similar problems and how they have dealt with them	
Attending courses of relaxation, stress management, meditation and yoga.	
Psychotherapy	

Hypnosis	
Perform religious activities (eg: bodipooja)	
Being admitted to psychiatric ward or hospital	
Use alcohol/cigarettes/drugs	
Cut down use of alcohol/cigarettes/drugs	
Other (specify)……	

(d) If you like, please write something about the above vignette.

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