

Mental Health Literacy of Health Workers in Selected Health Facilities of Tanahun District, Nepal

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ABSTRACT

Mental health literacy involves knowledge and belief about mental disorders that support their recognition, management, and prevention. This study aimed to assess the mental health literacy among the health workers of selected health facilities. A descriptive cross-sectional study was conducted using a complete enumerative sampling technique among 141 health workers from the selected 18 health facilities. Data were collected through a self-administered questionnaire utilizing the standardized Mental Health Literacy Scale (MHLS) tool and analyzed using the Statistical Package for Social Sciences (SPSS) version 22, utilizing both descriptive and inferential statistics. Among the 141 participants, half (49.6%) hold a certificate-level qualification, and 63.1% had no formal education in mental health. Additionally, 74.5% had not received any form of in-service training related to mental health. The health workers' MHL scores ranged from 90 to 144, with an overall mean of 117 ± 10.49 ($CV=8\%$), indicating a moderate level of MHL. Among six attributes of MHLS, a greater dispersion was found in Knowledge of risk factors and causes of mental illness ($CV=21\%$) and knowledge of self-treatment ($CV=25\%$). Health workers with less than five years of work experience ($P<0.017$) and bachelor's level education ($P<0.001$) had significantly higher MHLS. There was no significant difference in mean MHLS between male and female participants, with and without formal mental health qualifications, and mental health-related in-service education. MHL of health workers was moderate, and higher academic qualifications improve the knowledge and attitude of health workers. Mental health education should be integrated into all levels of the medical curriculum, and strengthened in-service training is essential to enhance the competency of health workers.

Keywords: Attitude, Health workers, Knowledge, Mental Health Literacy

Introduction

Mental health is a major global public health concern, especially in developing countries, where mental health literacy is crucial for early recognition, prevention, and treatment. Health workers who are the first point of contact with the community should possess adequate mental health literacy (Luitel et al., 2015). Good mental health literacy levels should enable recognition of specific disorders and aid help-seeking, knowledge of causes and risk factors, self-treatments, and positive attitudes. Knowledge of risk factors and causes involves being informed about the factors that contribute to mental health issues (Jorm et al., 1997). Many lay people are unable to recognize the mental disorders and negative attitudes toward mental illness that hinder individuals from seeking professional treatment and help-seeking (Tonsing, 2018). In developing countries, few health workers have received formal education in mental health and have very low mental health literacy, resulting in poor diagnostic accuracy for common mental disorders. (Iqbal et al., 2017; Marangu et al., 2021) In Nepal, some studies

found comparatively higher mental health literacy about different aspects of mental health illness among health workers (Gortoulla et al., 2015; Mishra et al., 2023). Primary health care (PHC) providers working in rural Nepal who were not mental health professionals have limited training, a lack of knowledge and skills, leading to difficulties in delivering mental health care services (Acharya et al., 2016). A study reveals that half of the basic health care providers and health volunteers had low MHL (Shakya et al., 2025). Mental health literacy among health workers is crucial for the management of mental health. The World Health Organization (WHO) aims to ensure universal health coverage by promoting access to quality, affordable mental health care. In Nepal, these strategic efforts have supported reforms across all provinces, with a focus on revising the district care model for mental health disorders (MoHP, 2022). Improved mental health literacy is essential for effective public health interventions and reducing the mental health burden. Higher education level among PHC workers was interrelated with a greater ability to recognize mental health-related disorders (Korhonen et al., 2022). Therefore, the study aims to assess mental health literacy among health workers in public health facilities located outside the capital city of Nepal. **Methodology**

A cross-sectional descriptive study was carried out from July 16 to December 15, 2024, among 141 purposively selected health workers in Tanahun District, Nepal. The study was conducted in public health facilities of Tanahun District, including Damauli hospital, seven health posts in Myagde rural municipality, and ten health posts in Vyas Municipality. All categories of health professionals who were present on duty during data collection time and gave informed consent were selected as study participants. Ethical approval was obtained from the Institutional Review Committee of Bharatpur Hospital (Ref: 080/081-BNS 002).

A Self-developed, close-ended questionnaire was used to collect socio-demographic data, and a valid and standard Mental Health Literacy Scale (MHLS) developed by O'Connor & Casey (2015) was adopted as a study tool to assess mental health literacy (O'Connor, M., & Casey, 2015). It consists of 35 questions related to mental health literacy. The MHLS assesses six measurable attributes of recognition, knowledge, and attitudes related to mental health literacy, such as (a) ability to recognize disorders (Q1-Q8), (b) knowing how to seek information (Q16-Q19), (c) knowledge of risk factors and causes of mental illness (Q9, Q10), (d) knowledge of self-treatment (Q11-Q12), (e) knowledge of professional help available (Q13-Q15), and (f) attitudes that promote recognition or appropriate help-seeking behavior (Q20-Q35). This standard tool categorizes knowledge and belief parts, where Q1-Q19 measures knowledge and Q20-Q35 measures belief. A total score was produced by summing all items. The possible score ranged from 35 to 160 in 35 questions. Questions with a 4-point scale were rated 1 (very unlikely/unhelpful) to 4 (very likely/helpful), and for a 5-point scale, 1 (strongly disagree/definitely unwilling) to 5 (strongly agree/definitely willing). The study objective was explained, and written informed consent was obtained from each participant. The voluntary participation of the participants was ensured, and confidentiality and anonymity were maintained. A Self-administered questionnaire was distributed to participants with clear instructions and given 20-25 minutes to fill in the answers. After completion, all instruments were collected. The collected data were checked and edited, then entered and analyzed in SPSS version 22 software. The data were analyzed using descriptive statistics, including frequencies, percentages, mean, and standard deviation, and the coefficient of variance (CV) was calculated to assess the level of dispersion around mean. An Independent t-test was used to compare the dependent and independent variables, with a p-value less than 0.05 considered statistically significant.

Results and Findings

Regarding the socio-demographic characteristics of the 141 participants, more than half (51.1%) of them were less than 30 years of age, and the mean age of participants was 30.64 ± 6.62 years. The majority were female (69.5%), and 49.6% had certificate-level education. Similarly, 54.6% of participants had more and equal to five years of work experience. About one-fourth of the participants (25.5%) had in-service education on mental health, and one-third (36.9%) had a formal mental health qualification (Table 1).

Table 1: Demographic Characteristics of Participants (n=141)

Characteristics	Frequency (%)
Age in group	
<30	72(51.1)
30-39	32(22.7)
40-49	20(14.2)
≥50	17(12.1)
Mean age 30.64 ± 6.62 years	
Sex	
Female	98(69.5)
Male	43(30.5)
Level of professional education	
T- SLC	30(21.3)
Certificate	70(49.6)
Bachelor's	31(22.0)
Master's	10(7.1)
Work Experiences	
<5years	64(45.4)
≥5 years	77(54.6)
Formal Mental health education qualification	
Yes	52(36.9)
No	89(63.1)
In-service education on mental health	
Yes	36(25.5)
No	105(74.5)

The overall MHLS was calculated by summing the scores of the individual items (Appendix) and also aggregating the scores of six attributes among the participants. The 35 items in the MHLS total score ranged from 35 minimum to 160 maximum. The total MHLS obtained by participants was 90 to 144(mean117.84±10.49, CV=8%). Based on six attributes, knowledge of self-treatment (Q11-Q12) and Knowledge of risk factors and causes of mental illness (Q9-Q10) had higher relative dispersion (CVs) around the mean scores compared to other attributes and the total score of MHL (Table 2).

Table 2: The distribution of MHLS results among participants by attributes (n=141)

Attribute	Minimum	Maximum	Mean	SD	CV
The ability to recognize disorders (Q1-Q8)	17	32	25.84	2.88	11%
Knowledge of how to seek information (Q16-Q19)	4	20	16.31	3.21	19%
Knowledge of risk factors and causes of mental illness (Q9-Q10)	3	8	5.58	1.18	21%
Knowledge of self-treatment (Q11-Q12)	2	8	4.68	1.20	25%
Knowledge of professional help available (Q13-Q15)	6	12	8.90	1.44	16%
Attitudes that promote recognition or appropriate help-seeking behavior (stigma) (Q20-Q35)	36	79	56.52	7.90	14%
MHL total score (Q1-Q35): minimum=35, maximum=160	90	144	117.84	10.49	8%

Table 3. Association between socio-demographic characteristics and mean MHLS (n=141)

Characteristics	Mean	SD	p-value
Sex ^a			
Male	118.65	9.90	0.547
Female	117.48	10.77	
Work Experience ^a			0.017*
<5 years	120.14	10.55	
≥5 years	115.93	10.11	
Formal mental health qualifications ^a			0.311
Yes	119.01	10.57	
No	117.15	10.44	
Mental health-related in-service education ^a			0.65
Yes	118.52	9.28	
No	117.60	10.90	
Level of professional education ^b			0.001* (F=5.73)
T-SLC	114.23	8.36	
Diploma	116.32	10.01	
Bachelor	123.67	9.87	
Masters	117.84	14.24	

Note. a = Independent t-test, b = One-way ANOVA test, *significant <0.05

In the independent t-test analysis, a significant difference was found in the overall mean score based on participants' years of work experience. Participants with less than five years of work experience have a higher Mental Health Literacy Score compared to those with more than five years of work experience. However, no significant difference in mean scores was found between male and female participants, with and without formal mental health qualifications, and mental health-related in-service education. Furthermore, a One-way ANOVA test was applied to compare mean scores among the levels of education, where a higher mean score was found ($p=0.001$) among participants having a bachelor's level education (Table 3).

Discussion

The study assessed the health workers' Mental Health Literacy Score, which provides insight into the knowledge and attitudes of health workers about different aspects of mental health. The study reveals that half of the workers had certificate-level education and five or more years of work experience. Similarly, one-fourth had in-service education related to mental health, and one-third had a formal mental health qualification. A comparable result was found in Gartoulla et al., where a majority had passed Auxiliary Nurse Midwife and Community Medical Assistant, and a minimum of health workers had participated in government training, also felt the need for training on mental illness management (Gortoulla et al., 2015) health professionals lack adequate knowledge on mental health issues. This prevents effective management of patients with mental illness. Methods: A descriptive cross-sectional study was carried out among hundred health professionals working in government health institutions of Chitwan District in order to determine the knowledge, attitude and practices on different aspects of mental illness. Knowledge score was added for each domain and changed to categorical variable. Chi-square and fisher-exact test was done accordingly. P-value of less than 0.05 was considered as significant. Results: Age of respondents ranged from 18 to 59 years. A significant number of respondents had very little knowledge on mental health issues and its causes. Majority of them identified neurosis as types of mental illness followed by personality disorder, psychosis and substance abuse. Only a quarter had better knowledge about the treatment. Age group, being male or female, high or low income, knowledge on mental illness, knowledge on type, causes, signs and symptoms, attitudes and practices of mental illness was significantly different between four levels of health professionals namely Health Assistants (HA).

The study found that overall MHLS was 90 to 144, with a mean score (117.84 ± 10.49) being lower than PHC workers (122.32) in South Africa and Zambia (Korhonen et al., 2022). Although low MHL among primary health care workers in Kenya leads to the inability to identify common mental disorders (Marangu et al., 2021) yet there are fewer than 500 specialist mental health workers to serve Kenya's population of over 50 million. The

World Health Organization recommends the integration of mental health care into primary health care services to improve access to and equity of this care, especially in low and middle-income countries. An important step to integrating mental health care into primary health care services is to determine mental health literacy levels of the primary health care workforce. Method: A cross-sectional survey using Jorm's Mental Health Literacy Instrument (adapted for the Kenyan context). Similarly, low MHL was found among nearly half of the primary healthcare providers in Nepal (Shakya et al., 2025). In contrast with this finding, the MHL mean score was found to be high in a study among undergraduate students in Nepal (Mishra et al., 2023). This variation might be due to differences in the level of education among health workers and undergraduate students' education, as well as an updated education system. Moreover, the study illustrated significant variation in different attributes of MHLS. Despite having 4-point Likert scale statements in knowledge of self-treatment and Knowledge of risk factors and causes of mental illness, they had higher relative dispersion around the mean scores with less variation in the total score of MHL. Similarly, Korhonen et al., showed higher variation in these attributes and high variation in knowledge of professional help available with low variation in total mean score (Korhonen et al., 2022). This variation may be an outcome of including diverse health workers with different educational backgrounds, as well as an academic gap in a working environment.

The study reveals a significant difference ($p\text{-value}=0.017$) in the overall MHL mean score and participants' years of work experience. Participants with less than five years of work experience have a higher Mental Health Literacy Score compared to those with more than five years of work experience. Meanwhile, no significant differences in mean score between participants with and without formal mental health qualifications, and mental health-related in-service education. Although participants with a bachelor's level education had a significantly higher mean score ($p=0.001$). In Nepal, Acharya et al. highlight the requirement for more training during undergraduate and graduate medical education, where no mental health professionals were available (Acharya et al., 2016). However, this finding illustrates that neither in-service education nor longer work experience is significantly associated with MHL score. Therefore, the health workers' academic qualifications may increase their professional knowledge and skills in mental health services.

Conclusion

The study concludes that a moderate level of mental health literacy among health workers, according to the obtained range of scores. The greatest variability was observed in the mean score in two knowledge-related attributes, and the smallest variation was found in other attributes, including the total mean score. Health workers with a bachelor's degree and less than five years of experience demonstrated significantly higher MHL scores. These finding recommends the need to integrate mental health education across all levels of medical education and to enhance in-service education programs to improve the competency of health workers in addressing mental health services.

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APPENDIX

Appendix 1. The distribution of MHLS results by items (4-point scale) (n=141)

Item	Mean (minimum=1, Maximum= 4)	SD	CV
Q3: If someone experienced a low mood for two or more weeks, had a loss of pleasure or interest in their normal activities and experienced changes in their appetite and sleep then to what extent do you think it is likely they have Major Depressive Disorder?	3.41	0.72	21%
Q7: To what extent do you think it is likely that the diagnosis of Bipolar Disorder includes experiencing periods of elevated (i.e., high) and periods of depressed (i.e., low) mood	3.40	0.73	21%
Q8: To what extent do you think it is likely that the diagnosis of Drug Dependence includes physical and psychological tolerance of the drug (i.e., requires more of the drug to get the same effect)?	3.37	0.79	23%
Q13: To what extent do you think it is likely that “Cognitive Behavior Therapy (CBT)” is a therapy based on challenging negative thoughts and increasing helpful behaviors?	3.32	0.66	19%
Q9: To what extent do you think it is likely that in general, “women are more likely to experience a mental illness of any kind compared to men?”	3.29	0.88	26%
Q2: If someone experienced excessive worry about a number of events or activities where this level of concern was not warranted, had difficulty controlling this worry and had physical symptoms such as having tense muscles and feeling fatigued then to what extent do you think it is likely they have Generalized Anxiety Disorder ?	3.17	0.60	19%
Q4: To what extent do you think it is likely that Personality Disorders are a category of mental illness?	3.15	0.70	22%
Q1: If someone became extremely nervous or anxious in one or more situations with other people (e.g., a party) or performance situations (e.g., presenting at a meeting) in which they were afraid of being evaluated by others and that they would act in a way that was humiliating or feel embarrassed, then to what extent do you think it is likely they have Social Phobia ?	3.12	0.73	23%
Q5: To what extent do you think it is likely that Dysthymia is a disorder?	3.09	0.76	24%
Q6: To what extent do you think it is likely that the diagnosis of Agoraphobia includes anxiety about situations (e.g., open places) where escape may be difficult or embarrassing?	3.09	0.71	23%

Q14: Mental health professionals are bound by confidentiality; however, there are certain conditions under which this does not apply. To what extent do you think it is likely that the following is a condition that would allow a mental health professional to break confidentiality : If you are at immediate risk of harm to yourself or others?	3.07	0.75	24%
Q11: To what extent do you think it would be helpful for someone to improve their quality of sleep if they were having difficulties managing their emotions (e.g., becoming very anxious or depressed)?	3.01	1.04	34%
Q15: Mental health professionals are bound by confidentiality; however, there are certain conditions under which this does not apply. To what extent do you think it is likely that the following is a condition that would allow a mental health professional to break confidentiality: if your problem is not life-threatening and they want to assist others to better support you (Reversed scoring)?	2.50	0.93	37%
Q10: To what extent do you think it is likely that in general, “men are more likely to experience an anxiety disorder compared to women” (Reversed scoring)?	2.29	0.95	41%
Q12: To what extent do you think it would be helpful for someone to avoid all activities or situations that made them feel anxious if they were having difficulties managing their emotions (Reversed scoring)?	1.67	0.86	51%

Appendix 2. The distribution of MHLS results by item (5-point scale) (n=141)

Item	Mean (minimum=1, Maximum = 4)	SD	
	4.53	0.85	18%
Q27: If I had a mental illness, I would not seek help from a mental health professional (Reversed scoring)	4.46	0.97	21%
Q25: If I had a mental illness, I would not tell anyone (Reversed scoring)	4.38	0.84	19%
Q18: I am confident attending face-to-face appointments to seek information about mental illness (e.g., seeing the GP)	4.18	0.92	22%
Q24: It is best to avoid people with a mental illness so that you don't develop this problem (Reversed scoring)	4.17	0.93	22%
Q16: I am confident that I know where to seek information about mental illness	4.13	0.95	23%
Q19: I am confident I have access to resources (e.g., GP, internet, friends) that I can use to seek information about mental illness	4.09	1.02	24%
Q31: How willing would you be to make friends with someone with a mental illness?	4.05	0.89	22%
Q30: How willing would you be to spend an evening socializing with someone with a mental illness?	3.97	0.84	21%
Q17: I am confident using the computer or telephone to seek information about mental illness	3.90	1.07	27%
Q32: How willing would you be to have someone with a mental illness start working closely with you on a job?	3.83	1.00	26%
Q29: How willing would you be to move next door to someone with a mental illness?	3.70	0.95	25%
Q22: A mental illness is not a real medical illness (Reversed scoring)	3.33	1.53	46%

Q26: Seeing a mental health professional means you are not strong enough to manage your own difficulties (Reversed scoring)	3.17	1.35	42%
Q23: People with a mental illness are dangerous (Reversed scoring)	3.09	1.35	43%
Q35: How willing would you be to employ someone if you knew they had a mental illness?	3.03	1.22	40%
Q21: A mental illness is a sign of personal weakness (Reversed scoring)	2.95	1.48	50%
Q33: How willing would you be to have someone with a mental illness marry into your family?	2.63	1.11	42%
Q34: How willing would you be to vote for a politician if you knew they had suffered a mental illness?	2.59	1.18	45%
Q20: People with a mental illness could snap out if they wanted	2.58	1.29	50%