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Evaluating mental health literacy in a university hospital: A cross-sectional study

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ABSTRACT

Objective: Mental state and social condition are integrally linked to a person's physical health. The present study investigates the mental health literacy levels of patients aged 30–50 years who presented to the outpatient clinics of training and research hospital, as well as the relationship between mental health literacy and sociodemographic characteristics.

Material and Method: This cross-sectional study included 522 patients aged 30–50 years who presented to the Adult Outpatient Clinics of Karabuk University Training and Research Hospital between October and December 2021. The participants were administered a two-part, 33-item face-to-face questionnaire, in which the first part included 11 items assessing sociodemographic characteristics, and the second part included a 22-item scale comprising three (knowledge, belief, and resource-oriented) subscales for the measurement of the level of Mental Health Literacy (MHL).

Results: The mean scores of knowledge, belief and resource-oriented subscales were 8.92±0.98, 1.16±0.92 and 3.37±0.71, respectively, and the mean total MHL scale score was 13.46±1.39. The participants' education level, employment status, financial status, presence of chronic and psychiatric diseases, and psychiatric medication were significantly associated with the MHL scale scores (p=0.013, p=0.023, p=0.024, p=0.000, p=0.000 and p= 0.000, respectively).

Conclusion: As the level of MHL increases, so does the person's awareness of the symptoms of mental health disorders and the correct use of appropriate treatment resources. It is believed that training programs aimed at improving mental health literacy will improve health-related social outcomes, thereby reducing the burden of disease.

Keywords: Mental disorders, health literacy, mental health, humans

INTRODUCTION

Taking a holistic approach, health can be defined as the state of physical, mental and social well-being (1). Mental health, given a general definition, is the state of harmony and balance between oneself and others (2,3). The World Health Organization (WHO) defines mental health as the "state of well-being in which the individual realizes his or her abilities can cope with the normal stresses of life, can work productively and fruitfully, and is able to make a contribution to his or her community" (4). The concept of Mental Health Literacy (MHL) has been introduced to the domain of health literacy, supporting the protection and promotion of the health of both the individual and society (5). MHL was first conceptualized by A. F. Jorm (6) in 1997 as knowledge and beliefs knowledge and beliefs about mental disorders which aid their recognition, management, or prevention. Improving MHL supports the early recognition of mental disorders, and consequentially, the timely provision of appropriate treatment and care, and decreased stigma while enhancing professional help-seeking behaviors. When MHL is low, mental problems progress, and the use of non-adaptive coping methods such as alcohol and inappropriate medication increases to the detriment of the mental health of the person and society (7).

We consider it necessary to study this issue in our country to establish and monitor the level and to direction of knowledge, beliefs and the attitudes of society toward mental health. Accordingly, the present study assesses the mental health literacy levels and the association with sociodemographic characteristics in a specific age group by administrating the MHL scale to patients aged 30–50 who presented to the Outpatient Clinics of Karabuk University Training and Research Hospital.

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MATERIAL AND METHOD

The study was approved by the Karabük University Non-Interventional Clinical Researches Ethics Committee (Date: 18.11.2021, Decision No: 2021/715) and all procedures were carried out in accordance with the ethical rules and the principles of the Declaration of Helsinki.

This cross-sectional study was conducted with people aged 30–50 who presented to the Outpatient Clinics of Karabuk University Training and Research Hospital between October and December 2021. The selection of this specific age group was made based on the fact that this is the age group that presents to the hospital most frequently, that can express itself best, that is open to communication and that has reading comprehension.

The study population amounted to 575 people, all of whom were included in the study without sampling, although 53 were subsequently excluded due to missing or erroneous data, meaning that the study was completed with 522 people. A face-to-face survey was employed for the study using a two-part, 33-item questionnaire. The first part included 11 items seeking to garner data on such sociodemographic characteristics as age, gender and education level, while the second part included 22 items scored from the three subscales of the MHL scale. The original MHL Scale was developed by Jung et al. (7) and comprised 26 items. The Turkish validity and reliability study of the MHL Scale was conducted by Göktaş et al. (8). There are 10 items (items 1–10) in the Knowledge-Oriented MHL subscale, eight items (items 11–18) in the Beliefs-Oriented MHL subscale and four items (items 19–22) in the Resource-Oriented MHL subscale. The total score range of the scale is 0–22. In the first two subscales, 18 items are rated on a 6-point Likert scale in which the answer options are: "strongly agree, agree, neutral, disagree, strongly disagree, not sure". The four items in the resource-oriented MHL subscale are answered "yes" and "no". The responses "strongly agree", "agree" and "yes" are assigned "1 point", and other responses are assigned "0 points". Items 11–18 in the beliefs-oriented subscale are coded and scored in reverse (8). Participation in the study was voluntary and written consent was obtained from all participants before the study.

The validity and reliability study of the scale reported a Cronbach's alpha of 0.71, while the present study recorded a Cronbach's alpha of 0.74. The data were normally distributed, presented using descriptive statistics, and analyzed using an Independent Samples t-test, a one-way analysis of variance (ANOVA) and Tukey's test for further analysis. The statistical analyses were made using IBM SPSS Statistics (Version 25.0. Armonk, NY: IBM Corp). A p-value of <0.05 was considered statistically significant.

RESULTS

Of the study participants, 54.8% (n=286) were female and 45.2% (n=236) were male with mean age, respectively, of 38.59±1.99 years and 31.21±3.02 years, with an overall mean age of 39.07±7.51 years. While 60.2% of the participants were university graduates, 61.7% were married and 68.0% were employed. Financial status was moderate in 52.9%, there was no chronic disease in 72.0% and there was no psychiatric disorder in 80.8% of the participants (**Table 1**).

Table 1. Distribution of participants by sociodemographic characteristics

Variables	n	%
Gender		
Male	236	45.2
Female	286	54.8
Age		
30–35	184	35.2
36–41	148	28.4
42–50	190	36.4
Education level		
Primary school	78	14.9
High school	130	24.9
Higher education	314	60.2
Marital status		
Single	166	31.8
Married	322	61.7
Divorced/widowed	34	6.5
Employment		
Employed	356	68.2
Job-seeker	54	10.3
Student	62	11.9
Housewife	50	9.6
Financial status		
Income less than expenses	154	29.5
Income equal to expenses	276	52.9
Income more than expenses	92	17.6
Chronic disease		
Yes	146	28.0
No	376	72.0
Interest in mental health-related subjects		
Yes	202	38.7
No	320	61.3
Psychiatric disorders		
Yes	100	19.2
No	422	80.8
Psychiatric medication		
Yes	75	14.4
No	447	85.6
Knowing anyone with mental disorders		
No - no one	260	49.8
Yes - family members, relatives, friends, neighbors with psychiatric disorders	262	50.2

No significant relationship was identified between the MHL scale score and the gender of the participants (p=0.446); and no statistically significant relationship was found between age and the total MHL Scale score

(p=0.231). Education level and MHL scale scores were statistically significantly associated (p=0.013). This relationship was due to the significant association only between the resource-oriented MHL scale score and education groups (p<0.001). When the MHL scale score was calculated according to education subgroups, the score was highest among primary school graduates and lowest among high school graduates. There was no statistically significant relationship between marital status and MHL scale score (p=0.920). A statistically significant relationship was found between employment status and MHL scale score (p=0.023). This relationship was statistically significant only between the beliefs-oriented MHL scale score and employment groups (p=0.009), and this difference was highest among job seekers and lowest among employees. A statistically significant difference was noted between financial status and the MHL scale score (p=0.024). There was a statistically significant difference only in the beliefs-oriented MHL scale scores of the financial status groups (p=0.011), and this difference was highest in the group with an income equal to expenses, and lowest in the group with income less than expenses. A statistically significant relationship was found between the presence of chronic disease and MHL scale score (p<0.001). The belief- and resource-oriented scale scores were associated significantly with the presence of chronic disease (p=0.026, p<0.001). There was no statistically significant association between an interest in mental health-related subjects and the MHL scale score (p=0.097). A statistically significant relationship was found between the presence of psychiatric disorders and the MHL scale score (p<0.001). The knowledge- and resource-oriented subscale scores were significantly associated with the respondent's interest in mental health-related subjects (p=0.043, p<0.001). A statistically significant relationship was found between psychiatric medication and the MHL scale score (p<0.001) that was due to the significant association that exists between the knowledge- and resource-oriented subscale scores and an interest in mental health-related subjects (p=0.003, p= 0.028). There was no statistically significant relationship between knowing someone with a mental disorder and the MHL scale score (p=0.385). In the study, the mean total MHL scale score was 13.46±1.39 and the mean subscale scores were 8.92±0.98, 1.16±0.92 and 3.37±0.71 (for knowledge, beliefs, and resource-oriented subscales) respectively (**Table 2**).

The post-hoc Tukey's test was used in the study. The distributions of the MHL scale score according to the descriptive characteristics of the participants were analyzed by the Independent Samples t-test for two groups, and the One-Way Analysis of Variance (ANOVA) for three or more groups.

DISCUSSION

In the presedent study, the mean MHL scale total score of the participants was 13.46±1.3, the mean knowledge subscale score was 8.92±0.98, the mean beliefs subscale score was 1.16±0.92, and the mean resource subscale score was 3.37±0.71. The study by Öztaş and Aydoğan (9), which included 239 healthcare professionals not working in mental health units in training and research hospital, found the mean knowledge, beliefs, and resource subscale scores to be 8.45±1.69, 5.32±1.70 and 3.19±1.25, respectively and the total scale score to be 16.96±3.30. The study by Seki Öz (10) with 388 participants living in a city center found the mean knowledge, beliefs and resource-oriented subscale scores to be 7.20±2.39, 4.76±1.76 and 2.80±1.25, respectively, and the total scale score to be 14.76±3.67. The different mean scores found in the present study may be attributable to the size of the selected sample and the differences in sociodemographic characteristics.

A statistical relationship was also identified between education level and mental health literacy scale score in the present study. In contrast, Öztaş and Aydoğan (9) identified a relationship only between the resource subscale score and MHL according to education level. Kaneko and Motohashi (11) examined the variables affecting mental health literacy in their study of 8,163 participants, and identified a strong relationship between education level and MHL. Lee et al.'s (12) study of 732 participants in Minnesota, on the other hand, determined that people with higher education levels had higher levels of MHL. We thus concluded that the findings of the present study was consistent with those of earlier studies.

In the present study, a statistical relationship was established between employment status and the mental health literacy scale score. Similarly, Seki Öz (10) found that employment status had an effect on the MHL scale scores. This can be explained by the fact that those who are employed tend to have a wider social circle than the unemployed, and that the problems experienced in working environments have an effect on mental status, leading to greater interest and awareness.

Our study revealed a statistical relationship between the presence of chronic disease and the mental health literacy scale score. The study by Al-Yateem et al. (13) of 317 healthcare professionals in the United Arab Emirates found the mental health literacy level of children and young people with chronic diseases to be low. This difference may be because while the participants were getting information about physical diseases, it was not possible for them to get mental health information and find time to research this subject.

Table 2. The Relationship between sociodemographic characteristics, mental health literacy subscale and total scale scores

	Knowledge-Oriented MHL		Beliefs-Oriented MHL		Resource-Oriented MHL		Scale Score	
	X±SD	Test p	X±SD	Test p	X±SD	Test p	X±SD	Test p
Gender		t=0.410 0.682		t: 1.63 0.114		t=3.043 0.002		t=0.762 0.446
Women	8.91±0.92		1.21±0.87		3.30±0.69		13.42±1.33	
Men	8.94±1.07		1.08±0.99		3.49±0.71		13.52±1.49	
Age		F=2.72 0.067		F=4.96 0.007		F=0.555 0.575		F=1.46 0.231
30–35	9.04±0.05		1.17±0.94		3.33±0.70		13.55±0.35	
36–41	8.80±0.99		1.33±0.97[a]		3.36±0.67		13.51±0.45	
42-70	8.88±0.87		1.01±0.82[b]		3.41±0.75		13.31±0.37	
Total	8.92±0.98		1.16±0.92		3.37±0.71		13.46±1.39	
Education Level		F=2.26 0.105		F=1.93 0.146		F=2.26 0.000		F=4.36 0.013
Primary school	8.82±1.02		1.27±0.84		3.58±0.65[a]		13.68±1.28	
High school	9.06±.087		1.04±0.71		3.54±0.61[b]		13.66±1.33[a]	
Higher education	8.88±1.02		1.19±1.02		3.23±0.74[a],[b]		13.30±1.43[b]	
Total	8.92±0.98		1.16±0.92		3.37±0.71		13.46±1.39	
Marital Status		F=2.47 0.085		F=0.960 0.384		F=5.59 0.004		F=0.083 0.920
Single	8.80±0.97		1.22±0.91		3.47±0.62[b]		13.49±1.39	
Married	8.98±0.99		1.12±0.93		3.33±0.74[a]		13.44±1.39	
Divorced/Widowed	9.20±0.78		1.400.84		2.80±0.78[a]		13.40±1.42	
Total	8.92±0.98		1.16±0.92		3.37±0.71		13.46±1.39	
Employment		F=0.759 0.517		F=3.98 0.009		F=0.846 0 .469		F=3.19 0.023
Employed	8.90±0.98		1.07±0.94[a]		3.35±0.76		13.32±1.39[a]	
Job-seeker	8.80±1.14		1.41±0.93[b]		3.40±0.49		13.61±1.39	
Student	9.03±0.95		1.23±0.81		3.50±0.66		13.76±1.43[b]	
Housewife	9.01±0.86		1.370.83		3.34±0.64		13.74±1.24	
Total	8.92±0.98		1.16±0.92		3.37±0.71		13.46±1.39	
Financial status		F=1.27 0.280		F=4.50 0.011		F=0.624 0.536		F=3.77 0.024
Income less than expenses	8.90±1.05		1.02±0.86[a]		3.42±0.66		13.32±1.34[a]	
Income equal to expenses	8.89±0.97		1.17±0.94		3.34±0.67		13.42±1.44	
Income more than expenses	9.09±0.88		1.41±0.90[b]		3.36±0.91		13.86±1.23[b]	
Total	8.92±0.98		1.16±0.92		3.37±0.71		13.46±1.39	
Chronic diseases		t=0.414 0.679		t=2.22 0.026		t=3.63 0.000		t=3.63 0.000
Yes	8.95±0.99		1.31±0.91		3.56±0.61		13.83±1.37	
No	8.91±0.98		1.11±0.92		3.30±0.73		13.33±1.37	
Interest in mental health-related subjects		t=-0.071 0.943		t=-0.112 0.911		t=3.02 0.002		t=1.66 0.097
Yes	8.92±0.92		1.16±0.92		3.26±0.68		13.34±1.32	
No	8.92±1.02		1.17±0.92		3.45±0.72		13.55±1.39	
Total	8.92±0.98		1.16±0.92		3.37±0.71		13.46±1.39	
Psychiatric disorders		t=-2.03 0.0043		t=-1.36 0.174		t=-4.71 0.000		t=5.03 0.000
Yes	8.74±1.05		1.05±0.99		3.07±0.64		12.86±1.26	
No	8.96±0.96		1.19±0.90		3.44±0.70		13.60±1.38	
Psychiatric medication		t=-2.98 0.003		t=-1.14 0.251		t=-2.23 0.028		t=-4.19 0.000
Yes	8.61±0.99		1.05±1.01		3.21±0.66		12.88±1.29	
No	8.97±0.97		1.18±0.90		3.40±0.71		13.56±1.38	
Knowing a person with mental disorders		F=1.18 0.160		F=2.02 0.133		F=1.49 0.226		F=0.956 0.385
No - no one	8.85±0.95		1.14±0.82		3.41±0.71		13.41±1.46	
Yes, family member or relative	9.02±1.06		1.92±1.10		3.290.72		13.61±1.28	
Yes, friend or neighbor	9.00±0.95		1.060.93		3.34±0.69		13.42±1.30	
Total	8.92±0.98		1.16±0.92		3.37±0.71		13.46±1.39	

t: Independent Samples t-test, F: Multivariate post-hoc parameter.

The present study identified no relationship between gender and mental health literacy scale score, while the study by Kaneko and Motohashi (11) found a low level of mental health literacy in males compared to females. Miles et al. (14) found a higher level of MHL among female students in their study. While most studies in the literature report a relationship between gender and MHL, no such relationship was identified in our study. The differences in the reported relationships between gender and MHAL may be due to the differences in the gender distribution and the cultural characteristics of the sample groups.

In the present study, an evaluation of the participants based on age revealed a statistical difference in the MHL scale scores of the 36–41 and 42–70 age groups. Farrer et al.'s (15) study of Australian adults aged 18 and over found the participants in the 18–24 age group to have the highest MHL levels. The differences in relationships between age and MHL in literature may be due to differences in age distribution and ethnic origin, and the cultural characteristics of the sample groups.

An examination of the relationship between marital status and MHL scale scores in the present study revealed a statistical difference in the MHL scale scores between marital status groups. In a statistical assessment, Öztaş and Aydoğan (9) found a difference in the mean scale scores of those with different marital statuses, with the mean scores of those who were married being higher. It is believed that the different distributions of marital status in the study groups affect MHL awareness.

An examination of the relationship between an interest in mental health-related issues and MHL scale score in the present study revealed a statistical difference. A study by Mehrotra et al. (16) comparing the MHL levels of family members caring for people with mental disorders between 1993 and 2016 years. It was found that the level of MHL of caregiver family members significantly increased across the 23-year study period. A study by Wang and Lai (17) of 3,047 cases in Canada investigating the MHL level for depression showed that the level of MHL was higher in those who communicated with people with mental problems than those who did not. It can thus be understood that knowing a person with mental health problems compel people to study the issue, thus increasing the level of MHL.

The limitation of the study is its single-center design.

CONCLUSION

Mental health literacy (MHL) remains a developing field in health literacy. The level of MHL plays a decisive role in the mental health of the individual and society. As the level of MHL increases, so does their awareness of the symptoms of mental health disorders and the correct use of appropriate treatment resources. Increased levels of MHL improve people's knowledge and attitudes toward mental health, as well as behaviors toward people with mental health disorders, thus reducing stigma. It is believed that training programs aimed at improving mental health literacy will improve health-related social outcomes, thereby reducing the burden of disease.

ETHICAL DECLARATIONS

Ethics Committee Approval: The study was approved by the Karabük University Non-Interventional Clinical Researches Ethics Committee (Date: 18.11.2021, Decision No: 2021/715).

Informed Consent: All patients signed the free and informed consent form.

Referee Evaluation Process: Externally peer-reviewed.

Conflict of Interest Statement: The authors have no conflicts of interest to declare.

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Author Contributions: All of the authors declare that they have all participated in the design, execution, and analysis of the paper and that they have approved the final version

REFERENCES

1. World Health Organization (2006). Constitution of the World Health Organization Basic Documents. https://apps.who.int/iris/handle/10665/43432, Access date: April 21, 2022.
2. Kutcher S, Wei Y. School mental health literacy. Education Canada 2014; 54:22-6.
3. Kanj M, Mitic W. 7th Global Conference on Health Promotion, Promoting Health and Development: closing the implementation gap. Nairobi, Kenya, 26–30 October 2009. https://www.who.int/teams/health-promotion/enhanced-wellbeing/seventh-global-conference, Access date: April 20, 2022.
4. World Health Organization (2011). Mental health and substance use. https://www.who.int/mental_health/en/., Access date: April 21, 2022.
5. Mancuso J. Health literacy: A concept/dimensional analysis. Nurs Health Sci 2008; 10: 248-55.
6. Jorm AF, Korten AE, Jacomb PA, Christensen H, Rodgers B, Pollitt P. 'Mental health literacy': a survey of the public's ability to recognise mental disorders and their beliefs about the effectiveness of treatment. Med J Aust 1977; 166: 182-6.
7. Jung H, von Sternberg K, Davis K. Expanding a measure of mental health literacy: development and validation of a multicomponent mental health literacy measure. Psychiatry Res 2016; 243: 278-86.
8. Göktaş S, Işıklı B, Önsüz MF, Yenilmez Ç, Metintaş S. Evaluation of Turkish validity and reliability of the mental health literacy scale (Rsoy Scale). Konuralp Med J 2019; 11: 424-31.
9. Oztas B, Aydoğan A. Determination of mental health literacy levels of health professionals. J Psychiatr Nurs 2021; 12: 198-204.
10. Seki HÖ. Investigation of mental health literacy of individuals living in a city center. Humanistic Perspective 2021; 3: 660-75.
11. Kaneko Y, Motohashi Y. Male gender and low education with poor mental health literacy: a population-based study. J Epidemiol 2007; 17: 114-9.

12. Lee HY, Hwang J, Ball JG, Lee J, Albright DL. Is health literacy associated with mental health literacy? findings from mental health literacy scale. Perspect Psychiatr Care 2020; 56: 393-400.
13. Al-Yateem N, Rossiter R, Robb W, et al. Mental health literacy among pediatric hospital staff in the United Arab Emirates. BMC Psychiatry 2017; 17: 390.
14. Miles R, Rabin L, Krishnan A, Grandoit E, Kloskowski K. Mental health literacy in a diverse sample of undergraduate students: demographic, psychological, and academic correlates. BMC Public Health 2020; 20: 1699-712.
15. Farrer L, Leach L, Griffiths KM, Christensen H, Jorm AF. Age differences in mental health literacy. BMC Public Health 2008; 8: 125.
16. Mehrotra K, Nautiyal S, Raguram A. Mental health literacy in family caregivers: a comparative analysis. Asian Journal of Psychiatry 2018; 31: 58-62.
17. Wang J, Lai D. The relationship between mental health literacy, personal contacts and personal stigma against depression. J Affective Disord 2008; 110: 191-6.