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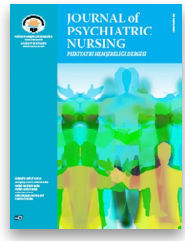

Original Article

Assessment of mental health literacy of health professionals

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Abstract

Objectives: The aim of this study was to determine the level of mental health literacy (MHL) of healthcare professionals who do not work in a mental health unit.

Methods: This was a descriptive, cross-sectional study. The study group comprised 239 health professionals (nurses, dieticians, midwives, medical assistants, biologists, social service specialist, child development specialists) who worked in departments other than the mental health unit of a training and research hospital. A sociodemographic data form and the Mental Health Literacy Scale (MHLS) were used to collect the study data. The mean, SD, minimum and maximum values, and percentage were used to describe the data after analysis using the Mann-Whitney U test and the Kruskal-Wallis test.

Results: The mean age of the participants was 29.93±8.71 years, and they had a mean of 8.9±9.04 years of professional experience. The majority of the participants were female (n=206; 86.2%), and single (n=140; 58.6%). The mean total MHL score was 16.96±3.30. The mean knowledge subscale score was 8.45±1.69, and the mean score of the belief subscale was 5.32±1.70. Age, marital status, education level, and occupation were significant; gender was not a statistically significant variable.

Conclusion: The MHL level of the health professionals participating in the study was above average, but less than optimal. Educational programs to increase the knowledge of all healthcare staff would benefit patient care and promote early intervention.

Keywords: Healthcare professional; literacy; mental health.

Mental health is more than the absence of mental illness. In a broader sense, it includes biological, psychological, and social factors that contribute to the total health of an individual.[1] The World Health Organization (WHO) defines mental health as a state of well-being in which an individual realizes their own abilities, can cope with the normal stresses of life, can work productively and fruitfully, and is able to make a contribution to their community. The WHO supports efforts to promote, preserve, and protect mental health; it estimates that almost two-thirds of people with a known mental health problem never request help from a healthcare professional and points out that stigma, discrimination, and negligence negatively affect the care and treatment of people with mental health disorders.[2] The International Council of Nursing (ICN) has noted the important role of healthcare professionals and recommends that all of society become engaged in efforts to improve policies, strategies, and legislation.[3] In order to achieve people-centered care and greater community awareness and engagement, healthcare professionals should have an adequate level of mental health literacy (MHL).[4,5]

The concept of MHL was first defined by Jorm et al.[6] in 1997. MHL includes the ability to recognize specific disorders, knowledge of how to seek mental health information, knowledge of risk factors and causes, knowledge of self-treatment, knowl-

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What is presently known on this subject?

- It is quite valuable for all healthcare employees to have a good understanding of mental health, as it can help to direct individuals to the appropriate treatment in the early stages of any problem and potentially avoid greater difficulty and cost; however, the number of the studies examining the mental health literacy of healthcare professionals is limited.

What does this article add to the existing knowledge?

- The results of this study contribute needed data regarding the mental health literacy of healthcare professionals working in departments other than mental health units. While the results indicated that the respondents had a moderate level of awareness and knowledge, improvement is both desirable and advisable.

What are the implications for practice?

- The findings indicated that healthcare professionals working in non-mental health departments had a fair level of knowledge of mental health; however, additional training to further the ability to recognize and understand mental health issues would be beneficial to patients and staff of all specialties. Early support for those with any mental health difficulty would benefit the individuals, families, and society.

edge of professional help available, and attitudes that promote recognition and appropriate help-seeking.[7,8] Kutcher et al.[9] offered a concept of MHL that comprised 4 components: understanding how to obtain and maintain good mental health, understanding mental disorders and their treatments, decreasing stigma related to mental disorders, and enhancing help-seeking (knowing when, where, and how to obtain good mental healthcare and developing the competencies needed for self-care). Increased awareness and MHL will help to address issues early and guide struggling individuals to professional support and the appropriate care. Greater public MHL will also reduce the stigma surrounding mental disorders and create a more positive and hopeful environment for treatment. A low level of MHL often allows problems to grow and fosters the use of coping strategies, which are frequently maladaptive, such as the use of alcohol and inappropriate drugs.[10,11] Improved MHL coupled with action will change behavior and improve mental health.[5] Enhanced empowerment and help-seeking would reduce the burden on health and social services and benefit society.

Healthcare professionals are expected to have a high level of MHL. Their role requires sufficient knowledge to participate in decision-making about health and disease.[4] These professionals provide services for a broad range of patients and MHL is essential to comprehensive, high-quality care. Those who work in mental health units generally have more detailed knowledge; however, MHL is important in other departments as well, as it can help to identify and secure early treatment for mental health problems in patients and their family members who are attended to for other reasons. This valuable contribution includes the ability to recognize contributing factors to illness, appropriate treatment, or treatment follow-up, and potentially preventing severe situations, such as suicide and homicide.[10] The aim of this study was to measure the MHL level of healthcare professionals working in departments other than mental health units at a single training and research hospital.

Materials and Method

Ethics Approval

Ethics committee approval for this study was granted by the Non-Interventional Research Ethics Committee of the University of Health Sciences on February 11, 2020 (No: 2020-38).

Study Design

This was a descriptive and cross-sectional study. The data were collected between March 1 and May 31, 2020. The study population comprised 780 non-physician healthcare professionals working in the hospital during the study period. Sample selection was not used; the entire population was targeted. The study sample was composed of 239 eligible healthcare professionals who agreed to participate in the research.

Participants

Healthcare professionals working in departments other than the mental health unit of a research and training hospital were included in this study. The inclusion criteria were age >18 years and voluntary participation. The exclusion criteria were current employment in the mental health unit and declining to participate. All of the institution's non-physician healthcare professionals were invited to participate in the study and a total of 239 professionals (nurses, dietitians, midwives, medical assistants, biologists, social service specialists, child development specialists) were enrolled.

Data Collection Tools

A data form was used to gather sociodemographic details of age, gender, marital status, educational level, profession, and sources of information about mental health issues, and the Mental Health Literacy Scale (MHLS) was administered to collect MHL data. Göktaş et al.[12] conducted a reliability and validity study of a Turkish MHLS. The scale is composed of 22 items and 3 subscales: There are 10 items in the knowledge-oriented subscale (items 1-10), 8 items in the belief-oriented subscale (items 11-18), and 4 items in the resource-oriented subscale (items 19-22). The total possible score is 0-22. Eighteen questions in the first 2 subscales are scored using a 6-point, Likert-type scale (strongly agree, agree, neutral, disagree, strongly disagree, I don't know). The 4 questions in the resource-oriented subscale are yes/no replies. Responses of strongly agree, agree, and yes are scored with 1 point, while other answers are scored 0 points. Items 11-18 (the belief-oriented subscale) are reverse scored. The Cronbach's alpha coefficient of the scale was 0.71. In this study, the Cronbach's alpha coefficient was 0.73.

Data Collection

The participants were informed about the aim of the study and they were asked to complete the data collection form and the MHLS, which took only a few minutes. A pilot application

was conducted with 10 nurses. As there was no negative feedback, the 10 nurses were included in the study.

Data Analysis

The mean, SD, minimum and maximum values, and percentage values were used as descriptive statistics. The Mann-Whitney U test and the Kruskal-Wallis test were used for non-normally distributed data in the assessment of the scale score based on independent variables.

Results

In alll, 239 healthcare professionals from a single institution participated in this research. The mean age of the respondents was 29.93±8.71 years, and they had a mean of 8.9±9.04 years of professional experience. Most of the participants were female (86.2%) and 58.6% were single. The sociodemographic characteristics of the participants are presented in Table 1.

Analysis of the information sources used by the participants is provided in Table 2. The resources most used to obtain knowledge of mental health issues were scientific papers, books, and magazines written about the field (60.66%), followed by the internet and social media (58.99%).

The mean total score on the MHLS was 16.96±3.30. The mean knowledge subscale score was 8.45±1.69, the mean belief subscale score was 5.32±1.70, and the mean resource subscale score was 3.19±1.25.

Table 3 shows the statistical analysis of the scale scores according to sociodemographic characteristics. A weak, positive correlation was observed between age and the total scale score, and the knowledge and resource subscale scores (r=0.233, p<0.01; r=0.162, p=0.012; r=0.268, p<0.01; respectively). As the age of the participants increased, the mean total scale score and knowledge and resource subscale scores increased; however, no statistical correlation was seen between age and the total belief subscale score (r=0.094; p=0.147).

The analysis revealed no statistically significant difference according to gender in the mean total MHLS score (p=0.218, p=0.087, p=0.631, p=0.976, respectively). The marital status variable, however, was significant (p<0.001, p=0.010, p=0.034, p<0.001, respectively). The mean scale score of the married participants were higher than that of the single participants.

Educational status was statistically significant in the evaluation of the total scale score and the knowledge and belief subscale scores (p=0.001, p=0.015, p=0.036, respectively). A significant difference was seen between healthcare professionals who were high school graduates and those with university and advanced degrees. The mean MHLS total score, and the knowledge and belief subscale scores, of the participants with a bachelor's degree, postgraduate, or doctorate degree were higher than those of high school graduates.

When examining the MHLS total score based on profession, it was revealed that the mean score of nurses was higher than that of midwives (p=0.030), and that the score of social service professionals was higher than that of nurses, midwives, biologists, and medical assistants (p=0.031, p=0.010,

Table 1. Socio demographic characteristics of the participants

Socio-demographic characteristics		Mean±SD	Minimum	Maximum	n	%
Age (years)		29.93±8.71	20	51	239	100
Years of professional experience		8.9±9.04	1	29	239	100
Gender	Female				206	86.2
	Male				33	13.8
Marital status	Married				99	41.4
	Single				140	58.6
Education	High school				61	25.5
	Undergraduate				136	56.9
	Postgraduate				29	12.1
	Doctorate				13	5.4
Professional title	Nurse				199	83.3
	Dietitian				14	5.9
	Medical assistant				10	4.2
	Midwife				4	1.7
	Biologist				3	1.3
	Social service specialist				5	2.1
	Child development specialist				4	1.7

SD: Standard deviation.

Table 2. Sources used to access information about mental illness

Information sources	n	%
Scientific papers, books and magazines about the field	145	60.66
TV and newspapers	26	10.87
The internet and social media	141	58.99
Healthcare professionals	106	44.35
The education I received at school is adequate, I do not need additional information on this subject	30	12.55

*Respondents had the option to select more than one source.

p=0.016, p=0.022, respectively), and that the mean score of child development specialists was higher than that of medical assistants and midwives (p=0.038, p=0.019, respectively). The knowledge subscale scores indicated that nurses scored higher than midwives and biologists (p=0.012, p=0.026, respectively), that dietitians scored higher than midwives and biologists (p=0.014, p=0.037), that social service specialists scored higher than medical assistants, midwives, and biologists (p=0.025, p=0.012, p=0.020, respectively), and that the mean score of child development specialists was higher than that of midwives or biologists (p=0.025, p=0.040, respectively).

Table 3. Comparison of scale scores based on independent variables

Characteristics	Total scale score	Knowledge subscale total score	Belief subscale total score	Resource subscale total score
	Mean±SD	Mean±SD	Mean±SD	Mean±SD
Gender				
Female	17.04±3.30	8.50±1.71	5.36±1.62	3.18±1.26
Male	16.42±3.35	8.15±1.50	5.06±2.17	3.21±1.21
U	2947.000	2789.000	3225.000	3390.000
p	0.218	0.087	0.631	0.976
Marital status				
Married	18.02±2.42	8.79±1.27	5.64±1.50	3.60±0.90
Single	16.21±3.63	8.21±1.90	5.10±1.81	2.90±1.38
U	4841.500	5620.000	5836.500	5087.500
p	<0.001	0.010	0 .034	<0.001
Educational status				
High school	15.93±3.07	8.16±1.56	4.89±1.65	2.89±1.39
Undergraduate	17.01±3.50	8.42±1.84	5.35±1.79	3.24±1.19
Postgraduate	18.28±2.64	9.00±1.22	5.90±1.34	3.38±1.32
Doctorate	18.31±2.05	8.85±1.14	5.77±1.30	3.69±0.75
χ^2	15.704	10.502	8.520	7.133
p	0.001	0.015	0.036	0.068
Professional title				
Nurse	16.93±3.31	8.48±1.70	5.31±1.70	3.15±1.27
Dietitian	17.00±4.11	8.79±1.36	5.07±2.09	3.14±1.51
Medical assistant	16.30±2.58	7.60±1.77	5.30±1.82	3.40±0.96
Midwife	13.75±2.06	6.75±1.25	4.50±0.57	2.50±1.00
Biologist	16.33±1.15	6.67±1.15	5.67±1.15	–
Social service specialist	19.60±0.89	9.60±0.54	6.00±0.70	–
Child development specialist	20.00±2.44	9.50±1.00	6.50±2.38	–
χ^2	14.647	20.371	5.360	8.428
p	0.023	0.002	0.499	0.208

SD: Standard deviation.

Discussion

The primary aim of this study was to determine the MHL level of non-physician healthcare professionals working in departments other than mental health units. Professionals working in mental health units have considerable knowledge of the specialty, especially disorders such as depression and schizophrenia.[13] This is desirable and expected; however, healthcare professionals working in other departments should also have an adequate level of MHL. Hospital employees come into contact with the general public, from pediatric patients to elderly patients, from patients with minor or internal diseases to those with surgical needs, as well as their families and others. The ability to recognize mental health disorders could provide important early support that would benefit the individuals, families, and to society. It is not an exaggeration to say that greater MHL and appropriate intervention could have substantial impact, including preventing suicide or homicide.

The mean MHLS score of the healthcare professionals participating in this study was 17. Given that the highest possible score is 22, the MHL level at our hospital would appear to be above average. A study of the attitudes, knowledge, and skills of intensive care nurses found that the nurses did not consider themselves sufficiently prepared to provide optimal care for individuals with mental diseases.[14] Another study examining the MHL level of healthcare professionals working in a pediatric hospital in the United Arab Emirates, most of whom were nurses, assessed knowledge of the diagnosis and treatment of post-traumatic stress disorder (PTSD), depression with suicidal thoughts, and psychosis. The researchers found that 47% of the participants were able to correctly respond the vignette describing PTSD, 53.7% answered appropriately to the depression scenario, and 54.3% could accurately identify psychosis.[15] The healthcare professionals had limited knowledge about a subject highly relevant to the population they worked with. A similar survey of non-mental health professionals in 6 general hospitals in China examined the MHL level related to the diagnosis and treatment of schizophrenia, depression, and general anxiety disorder. Wu et al.[16] found that 48.8% of the participants were able to identify schizophrenia, 58.1% correctly identified depression, and 31.8% of the participants accurately answered the questions related to the definition of general anxiety disorder. The authors recommended that there was an urgent need to provide for a more adequate level of MHL.

Our findings were similar. Greater ability to identify and enable the appropriate support to those with mental illness will have widespread benefits. Early diagnosis and intervention is important in mental health, as for other illnesses. The economic and societal costs of mental illness could be substantially reduced. Mental health training for all healthcare professionals is warranted. A review noted that clinical experience and training programs, particularly the use of role-playing and case scenarios, effectively contributed to the knowledge, attitude, and skills of healthcare professionals.[17] These may be some useful techniques to consider adding mental health awareness to regular in-service training programs for all healthcare professionals.

Our analysis revealed a positive correlation between age and the total MHLR score of the participants in this study. The Turkish reliability and validity study of the MHLRS did not find that age was a significant variable.[12] This difference may be due to the fact that the validity study was conducted with university students and the age distribution in that group was narrower than our research with professionals. The authors of another study assessing the role of age in MHL observed that the participants in the age group of 18-24 years demonstrated a higher level of MHL than other members of the group.[18] Differences in a correlation between age and MHL may be due to factors such as the age distribution of sample group and cultural characteristics.

Several studies in the literature have evaluated the effect of gender on MHL. Göktaş et al.[12] determined that gender did not have a significant influence on MHLS scores. However, female gender was found to have a small impact in another study.[19] Women were also seen to demonstrate more knowledge of mental diseases in research conducted by Wong et al.[20] In a study conducted with Australian participants aged 12-25, it was concluded that female respondents were more able to correctly define depression than male participants, and the authors found that other differences in both knowledge and attitudes suggested a need for further research to define and guide efforts to increase MHL.[21] An Indian study of caregivers of individuals with mental illness also observed that female participants had a higher level of MHL than male participants.[22] Bener and Ghuloumhe,[23] however, reported that women had more fear and less knowledge of mental illness than men in a study of Arabs aged >20. Cultural differences, differences in training programs, and the availability of technological opportunities to access information may also affect MHL status in terms of gender. Our results revealed no significant difference based on gender, however since our study population consisted of healthcare professionals, this may not be unexpected.

Marital status was found to be an influential variable. To the best of our knowledge, there is no previous study that has analyzed marital status and MHL. This may be because of the age group studied, or a result of a supposition that marital status would not be significant to MHL. The higher MHL level seen among married participants in this study may be related to greater age and professional experience.

Furnham et al.[19] found that education had a positive correlation with MHL. Less formal education and male gender were found to be associated with a low level of MHL in a study conducted in rural Japan.[24] Education does not appear to have been a factor evaluated in other studies assessing the MHL of healthcare professionals.[14,15,25] In this study, there was a significant difference in the results of those with only a high

school degree. The hiring practices around the world differ with respect to education, as well as other issues of access and culture. Nonetheless, education may be a valuable criterion in addition to job title in the assessment of the MHL results.

The MHL level varied in our study group. The scores of the nurses, dietitians, social service and child development specialists in this study were higher than those of the midwives, medical assistants, and biologists. Noonan et al.[25] found that midwives needed and wanted additional training about perinatal mental health. A qualitative study also concluded that entry-level dietitians were unprepared to manage patients with mental problems.[26] Epidemiological evidence has demonstrated that food and diet models affect mental health.[27] Therefore, it is important that dietitians be well-equipped to assess mental health as it may be directly related to the diets they recommend as well as guiding referral to appropriate care. While biologists generally have less patient contact, they also occasionally communicate with patients at sample acceptance points, for example, and a general awareness could also prove to be valuable for other reasons related to laboratory findings. Social service specialists and child development and health specialists work directly with patients, often in distressing circumstances; it clearly would be extremely helpful for them to have a good MHL competency.

Limitations

The interpretation of our results is limited by the single-center design and the large percentage of participants who were nurses.

Conclusion

Our results indicated that while the MHL of the non-mental health unit professionals was moderate, it was not at a desired level. All health professionals, and particularly nurses, have an important responsibility to be able to recognize mental health disorders. Early guidance toward treatment can support treatment of illness and enhance quality of life.[28] It is our recommendation that efforts be made to improve the MHL of all healthcare professionals. Institutional training programs to promote greater understanding of MHL and the value of this understanding could positively affect patient outcomes as well as societal well-being.

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