

RESEARCH ARTICLE

MENTAL HEALTH LITERACY OF MIDWIVES

Pelin Uymaz , Duygu Öztaş** , Şenay Akgün**

***Department of Public Health Nursing, Faculty of Health Sciences, Alanya Alaaddin Keykubat University, Alanya, Antalya, Turkey**

****Department of Midwifery, Faculty of Nursing, Ankara University, Ankara, Turkey**

Abstract

Objective: To determine mental health literacy status of midwives in Turkey. **Methods:** This study consists of 246 midwives. A socio-demographic form and the Mental Health Literacy Scale were used for collecting the data. The descriptive categorical data were analyzed using the number, percentage; while the continuous data were analyzed using the arithmetic mean and standard deviation. Comparisons between groups were made using one-way ANOVA test and Independent t-test for normally distributed data. The results were evaluated at the 95% confidence interval and at the $p < .05$ significance level. **Results:** The total score of MHLS is 111.21 ± 12.35 . Age, current place of residence, income status, family type, marital status, having a child, chronic disease status are statistically significant differences ($p < 0.05$). Also, there is statistically significant relation between age, income status, family type, marital status and MHLS ($p < 0.05$). **Conclusion:** The midwives' mean scores from MHLS were not at the desired level. Thus, we recommend this study to be carried out with different groups and the importance of mental health be emphasized in midwife training and in-service trainings to promote health at the primary level. *ASEAN Journal of Psychiatry, Vol. 22 (S1), October-November 2021: 1-11.*

Keywords: Mental Health, Literacy, Midwives, Community Health, Health Promotion

Introduction

Determination of mental health literacy in the society which is an important factor in developing mental health of the society is necessary for improving health. Determination of mental health literacy level is of importance for health professionals who can reach people from all social strata [1]. In particular, determination of mental health literacy of midwives who provide service to pregnant women affects the quality of life of midwives and care provided to individuals. As known, most women have experience mental health problems during pregnancy [2,3]. Midwives have a major role and responsibility in developing mental health of pregnant women who undergo changes physically, biologically and in terms of

social roles and neonates who need attention and care, and their mothers who have just given birth [4].

There is evidence in the literature reporting that midwives do not have adequate mental health knowledge [5-7]. Some studies have found that midwives are willing to provide care in psychological aspect, yet they do not feel competent in providing care to people with mental disorders. There is also evidence that midwives experience burnout due to difficult working conditions at hospitals, their experience of depression and stress and anxiety they perceive and they experience post-traumatic syndrome due to traumatic birth [8-13]. It is very important that midwives and their caregivers gain awareness of

their mental health status, they seek for solution to these problems and provide help in this regard, and they reflect their knowledge and skills to the care they provide. This is because their adequate knowledge about mental health status is important to provide support in managing mother's care during pregnancy, terminating the process in a healthy way, and to protect and promote both mother's and the baby's health.

Determining mental health literacy of midwives who provide care, health education and counseling to the community, gaining awareness on mental disorders of themselves and their caregivers, seeking help for and being able to solve these problems are very important for healthy societies and development of health. It is clear that midwives with high level of mental health literacy can approach more consciously to mental illnesses and disorders of both themselves and individuals to whom they provide care and they will provide quality services to the society. There are a limited studies in the literature evaluating the views of midwives and midwifery students on mental health problems, their mental health status related to the workplace and their knowledge and attitudes about mental disorders [4-7,12,13]. The fact that no study has been found regarding determination of mental health literacy of midwives is of importance in terms of investigating the subject. That's why; variables regarding mental health literacy of midwives have been identified in this study.

Material and Methods

Study Design and Participants

This is a descriptive and analytic study. The study consists of 246 voluntary midwives aged between 21 and 50 years, all of whom are female (100%). The study was carried out between July 1–July 30, 2021 and the data were collected online. Overall, 60.6% of the participants aged between 21 and 25 years, 84.1% had bachelor's degree, 68.3% lived in the town, 67.5% had middle income, 65.4% worked in public/institution and 89% had nuclear family. Of the participants, 72.4% were unmarried,

75.2% did not have children, and 52.5% had two children. Overall, 93.1% of them used social media.

Procedure and Data Collection

The data were collected using an online form. The sample of this study consisted of midwives who were working in primary care or antenatal, neonatal, postnatal or gynecology units at hospital and wanted to participate in the study voluntarily. The researchers contacted the midwives through social media application within the period when the study was conducted. The data were collected through online questionnaires. The pilot study was carried out with 10 midwives expect our participants. According pilot study findings, there were no incomprehensible questions, so we did not do any changes in the form. The results of the pilot study were not included in the study.

Measures

Data Collection Tools

The data were collected using a socio-demographic form and the Mental Health Literacy Scale.

Sociodemographic and other characteristics form

The socio-demographic form included items such as age, current place of residence, marital status, education level, income status, and family type, having a child, number of children, presence of chronic diseases and mental health diseases/disorders, taking medication and using social media. The total number of questions is 16.

Mental Health Literacy (MHLS)

The MHLS allows for assessment of the effectiveness of interventions to promote the MHL levels. The scale has 35 items scored using a Likert type self-assessment. The total possible score for MHLS ranges from 35 to 160, with higher scores indicating higher MHL levels. According to validity and reliability studies of the scale in its original language, the Cronbach's alpha coefficient was 0.87, while this was 0.89 in the Turkish

adaptation study by Tokur-Kesgin et al [14]. In this study, the Cronbach's alpha coefficient was found to be 0.83.

Statistical Analysis

The statistical analysis was performed using the statistical package SPSS software [15]. The descriptive categorical data were analyzed using the numbers and percentages, while the continuous data were analyzed using the arithmetic mean and standard deviation. For each continuous variable, the normality was checked using Kolmogorov Smirnov, Skewness and Kurtosis and histograms. The comparisons between groups were made using one way ANOVA test and Independent t-test for normally distributed data. Since the analysis of

variance was significant, comparisons were made using the Post Hoc test (Turkey). A logistic regression model was developed in consideration of the variables determined to be significant in the univariate analysis, the literature, and the correlated variables to identify the factors affecting the mental health literacy score. The age, income status, family type and marital status were included in the model. The results were evaluated at the 95% confidence interval and at the $p < .05$ significance level.

Results

The data in the following tables were obtained in the study made to determine MHL level of midwives.

Table 1. Findings on the Participants' Health Status and Family Members with Mental Illnesses (n=246)

Health status	n	%
Chronic disease		
Yes	38	15.4
No	208	84.6
Mental illness		
Yes	26	10.6
No	220	89.4
Diagnosis of mental illness (n=26)		
Depression	18	69.2
Anxiety disorder	6	23.1
Obsessive-compulsive disorder	2	7.7
Receiving treatment for mental illness (n=26)		
Yes	19	73.1
No	7	26.9
Taking medication for mental illness (n=26)		
Yes	17	65.4
No	9	34.6
Receiving psychotherapy for mental illness (n=26)		
Yes	15	57.7
No	11	42.3
Family members having mental illness		
Yes	65	26.4
No	181	73.6
Individuals with mental illness in the family (n=65)		

Mother	22	33.8
Female relatives like maternal and paternal aunt, sister, etc.	22	33.8
Male relatives like father, maternal and paternal uncle, brother, etc.	21	32.4

Abbreviations: n: number, %: percentage

Table 1 shows the findings regarding the distribution of the participants' health status and family members with mental illnesses. Of the participants, 15.4% had chronic disease, 10.6% had mental illness and 69.2% of those had depression. While 73.1% of those with mental illness have received or is receiving treatment,

65.4% have used or using medication for the disease; also, 57.7% have received or is receiving psychotherapy. The rate of individuals having family members with mental illness is 26.4%, consisting of female family members like mothers (33.8%) and maternal and paternal aunt, and sister (33.8%).

Table 2. Examining the Differences of the Mental Health Literacy Scale and its Sub-Scales in Terms of Participants' Descriptive Characteristics

Demographic Variables	MHLS Total Score	Recognition of diseases (F1)	Information on how to access information (F2)	Information on risk factors and their causes (F3)	Information on self-support/treatment interventions (F4)	Information on accessing professional help (F5)	Attitudes that facilitate seeking appropriate support for mental illnesses and attitudes towards mental illnesses (stigmatizing) (F6)
	X±SD	X±SD	X±SD	X±SD	X±SD	X±SD	X±SD
Age							
21-25 years of age	114.17±12.63	24.32±4.28	15.66±2.97	5.70±1.18	5.22±0.79	8.77±1.51	54.50±8.48
26 years and above	106.66±10.41	22.19±3.42	15.44±2.58	5.51±0.99	5.11±0.75	8.07±1.28	50.34±6.47
t;p	5.079;.000*	4.134;.000*	0.600;.549	1.334;.184	1.073;.284	3.889;.000*	4.347;.000*
Educational status							
High school (1)	107.84±15.20	20.95±4.30	15.00±3.45	5.16±0.69	5.21±0.71	8.16±2.01	53.37±9.00
Bachelor's degree (2)	111.62±11.82	23.80±4.04	15.64±2.77	5.66±1.15	5.18±0.78	8.52±1.42	52.82±7.89
Master's degree (3)	110.20±14.78	22.55±3.55	15.45±2.82	5.70±0.92	5.15±0.75	8.60±1.35	52.75±8.55
F;p	0.886;.414	4.957;.008*	0.471;.625	1.825;.163	0.030;.971	0.576;.563	0.042;.959
		1-2**					
Current place of residence							
Province	112.57±12.80	23.65±4.29	15.7±2.92	5.68±1.12	5.21±0.78	8.65±1.46	53.68±8.27

District	108.28±10.81	23.12±3.61	15.31±2.6	5.50±1.09	5.12±0.76	8.15±1.41	51.09±7.12
t;p	2.564;.011*	0.952;.342	1.021;.308	1.175;.241	0.878;.381	2.524;.012*	2.384;.018*
Income status							
Low (1)	113.95±11.82	24.24±4.23	15.78±2.89	5.76±1.06	5.22±0.79	8.81±1.35	54.14±8.60
Moderate (2)	111.93±12.40	23.72±3.95	15.52±2.80	5.63±1.12	5.22±0.79	8.51±1.51	53.33±7.97
Good (3)	106.07±11.41	21.91±4.21	15.60±2.90	5.47±1.12	4.98±0.67	8.16±1.33	49.95±7.01
F;p	5.083;.007*	4.211;.016*	0.130;.879	0.708;.494	1.797;.168	1.994;.138	3.666;.027*
	3-1.2**	3-1.2**					Difference: 2-3
Family type							
Nuclear	111.87±12.36	23.55±4.13	15.66±2.84	5.61±1.10	5.17±0.77	8.53±1.48	53.36±7.89
Extended	104.00±9.20	22.16±3.70	14.95±2.78	5.89±1.15	5.21±0.85	8.11±1.41	47.68±5.75
t;p	2.708;.007*	1.419;.157	1.046;.296	-1.092;.276	-0.224;.823	1.204;.230	3.060;.002*
Marital status							
Married	104.66±10.16	21.78±3.61	15.24±2.53	5.57±1.00	5.06±0.88	7.91±1.38	49.10±6.80
Single	113.71±12.21	24.13±4.08	15.71±2.92	5.64±1.15	5.22±0.72	8.72±1.44	54.29±7.98
t;p	-5.896;.000*	-4.163;.000*	-1.175;.241	-0.422;.673	-1.511;.132	-3.982;.000*	-4.745;.000*
Having a child							
Yes	106.28±10.05	22.02±3.44	15.46±2.36	5.54±1.04	5.08±0.86	8.08±1.29	50.10±6.93
No	112.84±12.62	23.96±4.18	15.62±2.96	5.65±1.13	5.21±0.74	8.63±1.49	53.77±8.14
t;p	-4.135;.000*	-3.286;.001*	-0.422;.674	-0.656;.512	-1.131;.259	-2.575;.011*	-3.163;.002*
Chronic disease							
Yes	106.50±13.02	22.21±4.58	15.50±2.68	5.37±0.97	5.05±1.01	8.47±1.37	49.89±7.50
No	112.07±12.06	23.71±3.96	15.59±2.85	5.67±1.13	5.20±0.72	8.50±1.48	53.40±7.99
t;p	-2.588;.010*	-2.095;.037*	-0.183;.855	-1.536;.126	-1.096;.274	-0.102;.919	-2.509;.013*
Mental illness							
Yes	114.35±14.02	23.85±3.81	15.42±3.86	5.81±1.1	5.23±0.86	8.35±1.35	55.69±8.62
No	110.84±12.12	23.44±4.13	15.60±2.69	5.6±1.11	5.17±0.76	8.51±1.48	52.52±7.88
t;p	1.371;.172	0.482;.630	-0.222;.826	0.912;.369	0.362;.718	-0.551;.582	1.921;.056
Scale Total and Sub-scale Mean Scores	111.21±12.35	23.48±4.09	15.58±2.82	5.62±1.11	5.18±0.77	8.50±1.46	52.86±8.00

Abbreviations: X: Mean, SD: Standard Deviation, t: Independent Sample T-Test, F: One-Way Analysis of Variance (ANOVA), *p<0.05, **Post-Hoc: Tukey

Table 2 shows the statistical comparison results of demographic variables and scores from the total and sub-scales of MHLS. According to the table, the MHLS total scores in the age group of 21-25 years (104.66±10.16), in those living in town (112.57±12.80), in nuclear family (111.87±12.36), in unmarried people (113.71±12.21), in those who did not have children (112.84±10.16), in those who

did not have a chronic disease (112.07±12.06) were significantly higher than other groups (p<.05). The MHLS scores of people with a high income (106.07±11.41) were significantly lower than those of people with low income (113.95±11.82) and middle income (111.93±12.40) (p<.05).

Table 3. Determining Variables Affecting the Scores from the Mental Health Literacy Scale

	Non- standardize d coefficients	Standard error	Standardize d coefficients	t	p	VIF
	β		β			
Age (21-25 years)	6.957	2.461	0.283	2.827	.005*	2.875
Current place of residence (Town)	-1.841	2.181	-0.069	-0.844	0.399	1.934
Income level (Middle)	5.468	1.934	0.209	2.827	.005*	1.565
Income level (Low)	8.045	2.631	0.232	3.058	.002*	1.648
Family type (Nuclear)	5.779	2.812	0.128	2.055	.041*	1.103
Marital status (Single)	7.611	3.328	0.279	2.287	.023*	4.253
Having a child (No)	-4.776	3.214	-0.17	-1.486	0.139	3.738
Having a chronic disease (No)	0.921	2.174	0.027	0.423	0.672	1.178

β : Regression Coefficient *: $p < 0.05$ $F = 7.185$ $p = 0.000$ * $R^2: 0.201$ Adjusted $R^2: 0.17$

Considering Table 3, the multiple linear regression model set to examine the effects of the current place of residence, income status, family type, marital status, having children and having a chronic disease on MHL scores is statistically significant ($F = 7.185$ $p < 0.05$). There is no autocorrelation and multiple connection problem in the model (Durbin Watson = 1.815, $VIF < 5$). The model explains 17.3% of the change in the MHL scores (Corrected $R^2: 0.173$). Since the independent variables are categorical in the model, reference categories were determined and dummy variables were created in interpretation. While the reference category for age is 26 and over, this is 21-25 years for the second category. While the reference category for the current place of residence variable is the district, the second category is the province. While the reference category is good in the income status, the second category is middle and the third category is low. While the reference category for the family type variable is extended family, the second category is nuclear family. While the reference category for marital status is married, the second category is single. While the reference category for having a child is “yes”, the second category is “no”. While

the reference category for having a chronic disease is “yes”, the second category is “no”.

Discussion

This study showed the MHL score of midwives to be insufficient. Similar to this present study, some studies indicated that mental health literacy levels of midwives were low. Furthermore, these studies showed that midwives found their knowledge on mental health disorders to be insufficient. Other similar studies showed that MHL levels were insufficient among health professionals [16,17]. Elyamani and Hammoud indicated that knowledge of health professionals is insufficient and they have negative attitudes and behaviours towards mental illnesses [18]. They added that health professionals avoid talking about mental disorders and feel insufficient for providing care on mental illnesses.

This study showed that age, current place of residence, income status, family type, marital status, having a child and chronic disease status were associated with mental health literacy level. Similarly, some studies found that younger age, higher education and higher income are the associated factor for higher MHL [19,20]. Norozzi

et al. found that education level and history of mental health disorder are significant associated with MHL score [21]. Also, Özdin and Bayrak Özdin stated that female gender, living in urban areas and history of psychiatric illness were risk factors for anxiety; living in urban areas was risk factor for depression; and female gender, accompanying chronic disease and history of psychiatric illness was risk factors for health anxiety [22].

The current study showed that the total and the sub-scales scores of MHLS are higher among younger midwives. Similarly, recent studies showed that older adults have lower mental health literacy than younger adults [23]. This result may lead young people to use technology better than the elders. Thus, young people may gain more useful sources about mental health disorders by effective use of Internet. These findings indicate that mental health literacy of elders should be increased because an older age is vulnerable to mental health disorders.

The current study showed that the total and sub-scales scores of midwives living in city were higher than the others. A similar study showed that the proportion of mental health illness is higher in rural areas than in urban areas [24]. Contrary to a recent study, Özdin and Bayrak Özdin found that living in urban area poses risk of low MHL. These results may be derived from living in town is enable to people have some opportunities to reach knowledge about mental health and to use mental health services. Other reasons may be the perceived economic status, insufficient health facilities and sources. These results indicated that mental health knowledge and mental health services must be increased in urban areas through media, mobile health services or by primary health professionals and services.

The current study showed that the total and the sub-scales scores of midwives perceiving their income to be low or medium are higher than the others. Also, some findings from the current study showed that midwives who perceive their income

to be low have mental disorders. On the contrary, some studies showed that low or medium income poses risk for low MHL and health literacy [25,26]. The study results showed that MHL levels of individuals who have perception of low income are higher than others. This result stemmed from the characteristics of the sample because most individuals who have perception of good income level are single and have no mental illness. The fact that the majority of individuals with mental illness have a perception of low income increases the MHL level. Tokur-Kesgin et al. found that MHL level of those with mental illness was higher compared to those who did not have any mental illness. This result can be attributed to having more mental illnesses for those with lower income.

The current study showed that the midwives' total and the sub-scales scores of MHLS were higher in the nuclear family than the others. A recent study has shown that family type does not have any effect on MHLS, but family functioning has an effect on MHLS. On the contrary, a research has shown that nuclear family is more related with mental illnesses than extended family [27]. These results may be derived the support system in nuclear or extended family. Because in the nuclear family, the roles of parents are more pronounced than extended family, so support system may be more functional in the nuclear family. This situation may lead to increase the interest for members of nuclear family about to mental disorders.

The current study showed that the total and the sub-scale scores of MHLS of single midwives higher than married midwives. A recent study has shown that single people have higher health literacy scores than married ones [28,29]. On the contrary, Martin et al. found unmarried person had lower health literacy. This result may be derived from married women have more responsibilities (children, home related works, occupational etc.) than unmarried women. This situation may be indicated that married women haven't enough time for developing mental health or health literacy [30].

The current study showed that the total and the sub-scales scores of MHLS of without childless midwives are higher than others. A recent study has shown that children's mental health problems are rarely noticed by the parents or community. Also, parents have insufficient knowledge about how to seek help and show high stigmatizing attitudes towards mental illness [31]. Mendenhall found that the mental health knowledge of parents is associated with quantity and quality of services used for a child with mental illness [32]. These results indicated that parents have very important role on their children's mental health but they don't have sufficient knowledge about to mental disorders. The result of this study may be explained the responsibilities of child take over time for mothers so they don't have time for gaining information about to mental health.

The current study showed that the total and the sub-scale scores of MHLS of without chronic disease midwives are higher than others. Similarly a study showed that poor mental health is higher in individuals with chronic disease [33]. These results indicated that the health literacy is very important for health promotion. Tehrani et al. and Wang et al. found that health literacy is an effective strategy for self-care in people with chronic disease. If individuals haven't enough knowledge about to illness or how protect their health or how prevent to illness, they won't take responsibility or action for healthy life [34]. The chronic diseases generally emerge from unhealthy lifestyle or insufficient knowledge about to health issues. When consider that the health literacy is a part of the health literacy, the result of this study is expected.

Conclusion

This current study showed that the score of MHLS of midwives is insufficient. Midwives have an important role in promoting community health care and particularly health of pregnant women. Midwives who are in contact with individuals in a community are health care professionals in an important position in regards to recognizing mental

illnesses, early intervention in diseases and acting the society. Therefore, by increasing MHL levels, they can become more equipped in regards to recognizing mental illnesses of the individuals they provide care, diagnosing mental illnesses, delivering aid to those individuals and thus, bringing solution to their mental disorders. In this way, the quality of care given by midwives to those with mental illnesses will increase and midwives will become more competent in managing care. Because of the increasing prevalence of mental health problems in pregnant women as in all individuals in the society and mental problems being more pronounced with the COVID-19 pandemics, intervention studies on mental health and mental disorders can be conducted; course contents for mental health can be made more comprehensive in the midwifery curriculum; and programs can be designed through in-service training to increase midwives' mental health literacy.

Ethics Committee Approval

The ethic committee of the state university approved this study (Approval date: 09/06/2021, Approval Number: 10-07).

Informed Consent

Voluntary participants were included in the study and in case midwives wanted to participate in the research, they signed the indicating "yes". on the online form we sent them. Then they filled the form.

Financial Support

None

Conflict of Interest

None

Contributions

Concept –P.U., D.Ö., Ş.A.; Design - P.U., D.Ö., Ş.A.; Supervision - P.U., D.Ö., Ş.A.; Resources - P.U., D.Ö., Ş.A.; Data collection and/or processing

- P.U., D.Ö., Ş.A.; Analysis and/or Interpretation - P.U., D.Ö., Ş.A.; Literature Review - P.U., D.Ö., Ş.A.; Writing - P.U., D.Ö., Ş.A.; Critical Review - P.U., D.Ö., Ş.A.

References

1. Praherso NF, Pols H, Tiliopoulos N. Mental health literacy of Indonesian health practitioners and implications for mental health system development. *Asian J Psychiatr.* 2020; 54: 102168.
2. Dadi AF, Miller ER, Woodman R, Bisetegn TA, Mwanri L. Antenatal depression and its potential causal mechanisms among pregnant mothers in Gondar town: Application of structural equation model. *BMC Pregnancy Childbirth.* 2020; 20: 168.
3. Durukan E, İlhan MN, Bumin MA, Aycan S. Postpartum depression frequency and quality of life among a group of mothers having a child aged 2 weeks-18 months. *Balkan Med J.* 2011; 28: 385–93.
4. Noonan M, Doody O, Jomeen J, Galvin R. Midwives' perceptions and experiences of caring for women who experience perinatal mental health problems: An integrative review. *Midwifery.* 2017; 45: 56-71.
5. Ross-Davie M, Green L, Sarkar A, Elliott S. A public health role in perinatal mental health: Are midwives ready? *Br J Midwifery.* 2006; 14: 330–335.
6. Hauck YL, Kelly G, Dragovic M, Butt J, Whittaker P, Badcock JC. Australian midwives knowledge, attitude and perceived learning needs around perinatal mental health. *Midwifery.* 2015; 31(1): 247-255.
7. Jones CJ, Creedy DK, Gamble JA. Australian midwives' attitudes towards care for women with emotional distress. *Midwifery.* 2012; 28(2): 216-221.
8. Båtsman A, Fahlbeck H, Hildingsson I. Depression, anxiety and stress in Swedish midwives: A cross-sectional survey. *Eur J Midwifery.* 2020; 4: 292.
9. Ben-Ezra M, Palgi Y, Walker R, Many A, Hamam-Raz Y. The impact of perinatal death on obstetrics nurses: a longitudinal and cross-sectional examination. *J Perinat Med.* 2014; 42: 75–81.
10. Suleiman-Martos N, Albendín-García L, Gómez-Urquiza JL, Vargas-Román K, Ramirez-Baena L, et al. Prevalence and predictors of burnout in midwives: A systematic review and meta-analysis. *Int J Environ Res Public Health.* 2020; 17(2): 641.
11. Yoshida Y, Sandall J. Occupational burnout and work factors in community and hospital midwives: A survey analysis. *Midwifery.* 2013; 29(8): 921-926.
12. Nightingale S, Spiby H, Sheen K, Slade P. Posttraumatic stress symptomatology following exposure to perceived traumatic perinatal events within the midwifery profession: The Impact of Trait Emotional Intelligence. *J Adv Nurs.* 2018; 74.
13. Sheen K, Spiby H, Slade P. Exposure to traumatic perinatal experiences and posttraumatic stress symptoms in midwives: prevalence and association with burnout. *Int J Nurs Stud.* 2015; 52: 578–87.
14. Tokur-Kesgin M, Pehlivan Ş, Uymaz P. (2020). Turkish version of the mental health literacy scale: Validity and reliability study. *Anatolian Journal of Psychiatry.* 2020; 21(2): 5-13.
15. IBM. *SPSS statistics for windows: Version 21.0.* Amonk, NY: IBM Corp; 2012.
16. Tahlia LB, Daniel LS, Frederick LC. Disorders among younger and older adults: A preliminary study. *J Geriatr.* 2018; 1(2): 1-6.
17. Marangu E, Mansouri F, Sands N, Ndeti D, Muriithi P, Wynter K, et al. Assessing mental health literacy of primary health care workers in Kenya: A cross-sectional

- survey. *Int J Ment Health Syst.* 2021; 15: 55.
18. Elyamani R, Hammoud H. Mental health literacy of healthcare providers in Arab gulf countries: A systematic review. *J Prim Care Community Health.* 2020; 11: 1-10.
 19. Holman, D. (2015). Exploring the relationship between social class, mental illness stigma and mental health literacy using British national survey data. *Health.* 2015; 19(4): 413-429.
 20. Yu Y, Li Z, Hu M, Liu X, Liu H et al. Assessment of mental health literacy using a multifaceted measure among a Chinese rural population. *BMJ Open.* 2015.
 21. Noroozi A, Khademolhosseini F, Lari H, Tahmasebi R. The mediator role of mental health literacy in the relationship between demographic variables and health-promoting behaviours. *Iran J Psychiatry Behav Sci.* 2018; 12(2): e12603.
 22. Özdin S, Bayrak Özdin Ş. Levels and predictors of anxiety, depression and health anxiety during COVID-19 pandemic in Turkish society: The importance of gender. *Int J Soc Psychiatry.* 2020; 66(5): 504–511.
 23. Bragg TL, Segal DL, Coolidge FL. Mental health literacy and attitudes about mental disorders among younger and older adults: A preliminary study. *Open J Geriatr.* 2018; 1(2): 1-6.
 24. Cheng Y, Zhang L, Wang F. The effects of family structure and function on mental health during China's transition: a cross-sectional analysis. *BMC Fam Pract.* 2017; 18: 59.
 25. Lastrucci V, Lorini C, Caini S, Bonaccorsi G. Health literacy as a mediator of the relationship between socioeconomic status and health: A cross-sectional study in a population-based sample in Florence. *PLoS ONE.* 2019; 14(12): e0227007.
 26. Howard DH, Sentell T, Gazmararian JA. (2006). Impact of health literacy on socioeconomic and racial differences in health in an elderly population. *J Gen Intern Med.* 2006; 21(8): 857–861.
 27. Bharat S. Research on family structure and problems: Review, implications and suggestions. In: Bharat S, editor. *J Fam Issues.* 1991; 1: 33–67.
 28. Mollakhalili H, Papi A, Zare-Farashbandi F, Sharifirad G, HasanZadeh A. A survey on health literacy of inpatient's educational hospitals of Isfahan University of medical sciences in 2012. *J Educ Health Promot.* 2014; 3: 66.
 29. Saatchi M, Panahi M, Ashraf Mozafari A, Sahebkar M, Azarpakan A, et al. Health literacy and its associated factors: A population-based study, Hormuz Island. *Iran J Epidemiol.* 2017; 13: 136-44.
 30. Martin LT, Ruder T, Escarce JJ, Ghosh-Dastidar B, Sherman D, et al. Developing predictive models of health literacy. *J Gen Intern Med.* 2009; 24(11): 1211–6.
 31. Tully LA, Hawes DJ, Doyle FL, Sawyer MG, Dadds MR. A national child mental health literacy initiative is needed to reduce childhood mental health disorders. *Aust N Z J Psychiatry.* 2019; 53(4): 286–290.
 32. Mendenhall AN. (2011). Predictors of service utilization among youth diagnosed with mood disorders. *J Child Fam Stud.* 2011; 21: 603–611.
 33. Wang S, Li B, Ungvari GS, Ng CH, Chiu, HF, Kou C, et al. Poor mental health status and its associations with demographic characteristics and chronic diseases in Chinese elderly. *Soc Psychiatry Psychiatr Epidemiol.* 2016; 51(10): 1449–1455.
 34. Tehrani H, Zarei F, Behzad F, Peyman N. (2020). Educational-communicative factors affecting the health literacy of people with chronic diseases from the perspective of health staff: A qualitative study. *Qual. Health Res.* 2020; 7(3): 326-336.

Corresponding author: *Şenay Akgün, Department of Nursing, Faculty of Health Sciences, Alanya Alaaddin Keykubat University, Antalya, Turkey*

Email: senay.akgun@alanya.edu.tr

Received: 25 October 2021

Accepted: 25 November 2021