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The Association Between Mental Health Literacy of Parents and Referral of Children and Adolescents to Mental Health Service Centers

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Abstract

Background: Mental health literacy refers to an individual's knowledge and beliefs about mental health, which can aid in the detection, management, and prevention of mental illnesses. Prompt diagnosis of mental disorders is crucial for timely intervention and treatment. This study aims to investigate the mental health literacy and help-seeking behaviors of parents with children and adolescents under the age of 18.

Methods: In this descriptive-analytical study, a cross-sectional design was utilized, and a surveying method was employed. A total of 134 parents of children and adolescents under 18, who were referred to the mental health service centers at Iran University of Medical Sciences and private psychiatric clinics in 2019 and 2020, participated in the study through convenient sampling. Two psychiatrists evaluated the psychiatric disorders of the children, and the parents completed the General Health Questionnaire-28 (GHQ-28) and the Mental Health Literacy Questionnaire. The collected data were analyzed using SPSS version 24.

Results: The results of the one-way analysis of variance indicated that the total score of mental health literacy significantly differed among groups with varying levels of maternal education (p=0.001).

Conclusion: This study underscores the impact of maternal education on mental health literacy among parents. Notably, parents with higher levels of education exhibited greater mental health literacy. It is essential to consider these findings in developing targeted interventions to improve mental health literacy among parents from diverse educational backgrounds. Further research should explore effective strategies for increasing awareness and knowledge about mental health in communities with varying levels of education.

Keywords: Adolescent, Child, Health literacy, Help-seeking behavior, Mental disorders, Mental health

Introduction

Mental Health Literacy (MHL) refers to an individual's knowledge and beliefs about mental health, encompassing the ability to recognize, manage, and prevent mental illnesses (1). It encompasses understanding preventive measures, early disease recognition, seeking help and treatment options, knowledge of self-help approaches for less severe conditions, and the ability to support others (1, 2). Health literacy has been recognized by the World Health Organization (WHO) as a crucial determinant of overall health in society (3) .

Insufficient health literacy has been associated with adverse health outcomes and behaviors, including reduced utilization of preventive services, longer diagnostic delays, decreased adherence to medical prescriptions, and increased risk of hospitalization and mortality (4).

Seeking help for mental health issues is an adaptive solution (5) and involves a four-step dynamic process: recognizing the presence of a problem, communicating the issue to others, identifying available and credible sources of support, and seeking professional help. MHL plays a significant role in this process (6). Insufficient MHL can impede individuals and their families from accessing necessary mental health services, particularly in societies with limited access to such services, as observed in many Asian countries (7). When MHL is lacking, warning signs of psychological difficulties may go unrecognized, leading to delays in seeking appropriate help. In some cases, treatments may be prescribed, but their effectiveness may be limited due to the lack of information (8).

Research has shown that at least one psychological problem has been reported in 22.31% of Iranian children and adolescents, and mental disorders in adolescence and early adulthood contribute significantly to the global burden of the disease (9).

In a systematic review by Gulliver *et al*, it was highlighted that children and adolescents face several obstacles when seeking treatment for psychiatric problems. These barriers include shyness, the stigma associated with mental health issues, and difficulties in correctly expressing their psychological problems. Furthermore, factors such as previous successful experiences with therapy and social support from their peers and families were identified as significant points that encourage them to seek help (10).

Furthermore, Chehri *et al* conducted a study examining the health literacy of parents with preschool children in selected areas of Tehran. The cross-sectional descriptive study aimed to measure the health literacy of parents of children in the preschool age group (three to six years). Among the 357 parents in the sample population, it was found that mothers displayed higher health literacy in areas such as nutrition, growth and development, health information, and overall health literacy scores, compared to fathers. The study also highlighted a notable relationship between higher levels of education and increased health literacy among parents (11).

While these studies provide valuable insights into MHL and health literacy within specific contexts, there remains a substantial gap in comprehending the broader landscape of MHL and its influence on help-seeking behaviors, particularly among children and adolescents. It is essential to bridge this knowledge gap comprehensively by exploring the factors that shape MHL and referral times. In doing so, the study aims to contribute to the existing body of knowledge by shedding light on the challenges and opportunities for promoting timely and effective utilization of mental health services. Ultimately, the research seeks to benefit the mental well-being of the youth and society as a whole.

The principal objective of this study was to investigate the factors influencing MHL and referral times, with a specific focus on children and adolescents. By addressing the existing gap in knowledge, this research provided a comprehensive understanding of the dynamics surrounding MHL and its impact on help-seeking behaviors within this population. Additionally, the study aimed to identify potential interventions and strategies for enhancing mental health service utilization, ultimately contributing to improved mental health outcomes for children and adolescents.

Materials and Methods

Study design

This study employed a descriptive-analytical design with a cross-sectional approach using the surveying method.

Participants

The study population consisted of parents of children and adolescents under the age of 18 who were referred to the mental health service centers at Iran University of Medical Sciences and private psychiatry clinics during the years 2019 and 2020. A total of 134 parents were included in this study through convenient sampling. The inclusion criteria required participants to express willingness to complete the questionnaire and be parents of children or adolescents under the age of 18. Exclusion criteria included partial completion of the questionnaire and the presence of psychiatric disorders in parents, such as mental retardation, as confirmed by clinical evaluation and diagnosis.

Data collection

Data collection was conducted using a surveying method. A comprehensive questionnaire was selected after a thorough literature review. Ethical approval (IR.IUMS.FMD.REC.1399.180) was obtained from Iran University of Medical Sciences, and a letter of introduction was obtained for the mental health service centers at the university and private psychiatry clinics. Demographic information about the children, adolescents, and their parents was collected using a researcher-made checklist. The checklist encompassed items such as age, gender, educational level, mother's number of children, and psychiatric disorders in other siblings. Additionally, two psychiatrists diagnosed the psychiatric disorders in the children. The parents completed the General Health Questionnaire-28 (GHQ-28) and the MHL Questionnaire.

Instruments

General health questionnaire-28 (GHQ28): This study employed the 28-item version of the General Health Questionnaire (GHQ-28), which is designed to assess mental well-being. The questionnaire comprises four distinct subscales: physical symptoms, social dysfunction, anxiety and insomnia, and depression, each consisting of seven items, resulting in a total of 28 items. The respondents completed the questionnaire in approximately 10-12 *min*. They provided responses using a Likert scale, where scores ranged from 0 to 3, corresponding to "never," "usually," "frequently," and "very frequently", respectively. Subscale scores were calculated for each participant by summing the scores of the relevant items, leading to subscale scores that ranged from 0 to 21. Additionally, an overall score was derived by summing the subscale scores. It is essential to note that on the GHQ-28, lower scores indicate better mental health. The GHQ-28 has a maximum possible total score of 84 (28 items, each with a maximum score of 3) and a minimum score of 0 (12).

Cronbach's alpha coefficient for the Persian version of the GHQ-28 was 0.91 (13,14). Test-retest reliability, assessed using a sample of 80 participants with a 7-10-day interval, yielded an overall reliability coefficient of 0.88. Internal consistency analysis, as determined by Cronbach's alpha, produced the following results: 0.85 for the physical symptoms subscale, 0.78 for the anxiety and insomnia subscale, 0.79 for the social dysfunction subscale, 0.91 for the depression subscale, and 0.85 for the entire questionnaire (15).

Mental health literacy questionnaire, iranian version: The short form of the MHL Questionnaire, developed for the Iranian context, was employed in this study (16). This questionnaire consists of six aspects, namely (a) ability to recognize disorders; (b) knowledge of risk factors and causes; (c) knowledge of self-treatment; (d) knowledge of available professional help; (e) attitudes about where to seek information; and (f) attitudes that promote recognition or appropriate help-seeking behavior (17). The participants responded to the items using a Likert scale. The total score was obtained by summing the scores of all the items. The maximum possible total score on the MHL Questionnaire was determined by the number of items and the response scale, and the minimum score was 0. The MHL Questionnaire demonstrated good psychometric properties, with an internal consistency coefficient of 0.87 (Cronbach's alpha). Its criterion validity was established by correlating the questionnaire scores with those obtained from the General Help-Seeking Questionnaire (GHSQ) and the 10-question Version of the Kessler Psychological Distress Scale (K10) (17).

Data analysis

The collected data were analyzed using IBM Statistical Package for the Social Sciences (SPSS) Statistics version 24. Descriptive statistics, such as means, standard deviations, frequencies, and central tendency and dispersion indexes, were used for the descriptive analysis. Inferential analysis involved independent t-tests and one-way analysis of variance (ANOVA) to examine the relationships between MHL, mental health, the time interval between symptom onset and help-seeking, and demographic variables of the participants.

Results

A total of 134 parents participated in the study. The mean score of parental MHL was determined to be 60.4±9.04, indicating a relatively high level of MHL among the participants. It is important to note that the determination of a high level of MHL is based on expert opinion and clinical experience, as there are no universally established benchmarks for MHL scores. The score range of 23-106 implies higher intermediate MHL.

Table 1 provides an overview of the demographic characteristics of the study participants, encompassing child and parental ages, gender distribution, educational levels, and other pertinent factors.

Descriptive statistics for MHL and its subscales, as well as general mental health and its subscales, are presented in table 2. The subscale means scores for MHL, which comprised knowledge regarding mental illnesses, knowledge of confidentiality, access to

Table 1. Demographic information of the participants (N = 134)

Variables	Amounts
Child's age	88.91 (49.49)
Mother's age	37.54 (6.04)
Father's age	41.49 (6.27)
Child's age at the time of observing the first symptoms by the mother	27.36 (27.81)
Child's age at the time of observing the first symptoms by the father	27.87 (28.71)
Referral after symptom recognition	15.94 (23.93)
Child's gender N (%)	
Female	48 (35.8)
Male	86 (64.2)
Mother's educational level N (%)	
Illiterate	4 (3)
Below high school diploma	8 (6)
High school diploma	39 (29.1)
Academic	83 (61.9)
Father's educational level N (%)	
Illiterate	3 (2.2)
Below high school diploma	16 (11.9)
High school diploma	43 (32.1)
Academic	72 (53.8)
Number of children N (%)	
One	92 (68.7)
Two	35 (26.1)
Three	7 (5.2)
Child's order N (%)	
First	64 (47.8)
Second	57 (42.5)
Third	13 (9.97)

Contd. table 1.

Referral after recognizing the first symptoms N (%)	
Yes	87 (64.9)
No	47 (35.11)
Visiting a specialist after onset of the symptoms N (%)	
General Practitioner	6 (4.5)
Psychologist/Counselor	36 (26.8)
Psychiatrist	51 (38.1)
Pediatrician	16 (11.9)
Neurologist	15 (11.2)
Other	10 (7.5)
Primary Diagnosis of Child's Psychiatric Disorder by a Psychiatrist	
ASD	35 (26.1)
ADHD	31 (23.1)
Anxiety	25 (18.7)
ODD	7 (5.2)
LD	11 (8.2)
MDD	1 (0.7)
Bipolar	1 (0.7)
OCD	8 (6)
Parenting	3 (2.2)
Intellectual Disability (Low IQ)	2 (1.5)
Other	10 (7.5)
Drug use	
Yes	34 (25.4)
No	100 (74.6)
Counselor at school N (%)	
Yes	26 (19.4)
No	108 (80.6)
Thinking of dying over the last six months N (%)	
Yes	7 (5.2)
No	127 (94.8)
Thinking of committing suicide in the last six months N (%)	
Yes	5 (3.7)
No	129 (96.3)
Child suicide attempts during the last six months N (%)	
Yes	1 (0.7)
No	133 (99.3)
Similar symptoms in other children N (%)	
Yes	10 (7.5)
No	124 (92.5)
Psychiatric disorders in other family members	
Yes N (%)	62 (46.3)
No	72 (53.7)
Income N (%)	
Less than 1 million	3 (2.2)
Between 1 and 3 million	41 (30.6)
Between 3 and 5 million	54 (40.3)
More than 5 million	36 (26.9)

Note: ASD = Autism Spectrum Disorder, ADHD = Attention-Deficit/Hyperactivity Disorder, ODD = Oppositional Defiant Disorder, LD = Learning Disability, MDD = Major Depressive Disorder, OCD = Obsessive-Compulsive Disorder.

Table 2. Descriptive Statistics of Parental Mental Health Literacy and Mental Health (N = 134)

Variables	Mean	Standard deviation
Mental Health Literacy of the parents		
Knowledge regarding mental illnesses	21.7	3.7
Knowledge of confidentiality	5.9	1.1
Access to information	13.2	2.9
Therapeutic Knowledge	5.5	2.8
Stigma	13.9	6.3
Total score	60.4	9.0
Mental Health of the parents		
Physical symptoms	6.8	3.2
Anxiety symptoms and sleep disorders	7.6	3.4
Symptoms of social function	7.8	2.6
Symptoms of depression	4.2	3.8
Total score	26.4	11.6

information, therapeutic knowledge, and stigma, ranged from 5.9 to 13.9, reflecting varying levels of knowledge and understanding across these domains. The mean total MHL score was 60.4. Regarding general mental health, the mean scores for physical symptoms, anxiety symptoms and sleep disorders, symptoms of social function, and symptoms of depression were relatively low, suggesting better mental health in these aspects.

Correlation analyses were conducted to explore the relationships between MHL and mental health outcomes, as well as between MHL and demographic variables. The findings indicated no significant correlations between MHL and mental health (r=0.022, p=0.803). Similarly, no significant correlations were observed between the total MHL score and the child's age (r=0.031, p=0.718), the mother's age (r=0.030, p=0.734), the number of children (r=0.046, p=0.596), and the interval between symptom onset and referral time (r=0.018, p=0.836).

To further explore the impact of maternal educational level on MHL, a one-way analysis of variance (ANOVA) was conducted. The results revealed a significant difference in the total MHL score among groups with different levels of maternal education (F=5.838, p=0.001). Further analysis demonstrated significant differences in knowledge regarding mental illnesses (F=11.255, p<0.001), knowledge of confidentiality (F=3.159, p=0.027), and symptoms of depression (F=3.228, p=0.025) based on maternal educational attainment.

Table 3 provides insights into the reasons for not seeking referral to mental health professionals, with the three most prevalent reasons being the belief that the problem would resolve gradually (25.4%), not perceiving the child's condition as a disease (21.6%), and concerns about the potential psychological stigma associated with seeking help for their child (13.4%).

Lastly, table 4 presents the findings from the comparative analysis of mean scores for mental health and MHL, along with their respective subscales, stratified by the mother's educational level.

The analysis yielded noteworthy results. Significant differences emerged in the domains of anxiety symptoms and sleep disorders (p=0.034) and symptoms of depression (p=0.025), both of which exhibited p-values below the conventional significance threshold of 0.05, thus indicating statistical significance. Additionally, the total mental health score (p=0.030) demonstrated statistical significance, as its p-value was less than 0.05. Nevertheless, no statistically significant disparities were identified in the domains of physical symptoms (p=0.071) and symptoms of social function (p=0.334), as their associated p-values surpassed the established significance level of 0.05. Furthermore, noteworthy distinctions were observed in the areas of knowledge regarding mental illnesses (p< 0.001), knowledge of confidentiality (p=0.027), and the total MHL score (p=0.001).

Discussion

Seeking help for mental health issues is a complex process, involving the recognition of the problem, communication with others, identification of support sources, and ultimately seeking expert assistance (18). Several factors, including knowledge, attitudes, beliefs, and social norms, influence help-seeking behaviors (19).

Table 3. Frequency Distribution of the Reasons for not Referring to Mental Health Professionals (N = 134)

Variables	Frequency	Percentage
I did not feel it was necessary to visit a specialist for my child	3	2.2
Being stressful or depressed mood is common and universal	3	2.2
I did not think my child's condition was a disease	29	21.6
I was afraid that I would have to take pills for my child after the visit	12	9
I do not believe in medications	2	1.5
I thought the problem would be resolved gradually	34	25.4
I did not think that they may understand my child's problem	3	2.2
I was afraid that the information about our family would not be confidential	1	0.7
I was worried that my child might get stigmatized	18	13.4
I did not have time for the visits	7	5.2
People around me did not agree with the referral	0	0
I did not have a choice, and people around me made the decisions	1	0.7
I did not know who or where to refer	10	7.5
Transportation to the mental service place was hard	1	0.7
We had financial issues	4	3
I was worried about the judgments of other people about my child	4	3
I believed that the counselor and psychologist would not help my child	0	0
I believed that I accepted the personality weakness by referral. I have to help my child myself	2	1.5
I would rather talk to family or friends about my child's problems than seek mental health visit	0	0

Table 4. Comparison of Mean Mental Health and Mental Health Literacy and its Subscales Based on the Mother's Educational Level (N = 134)

Variables	F-value	Df	p-value
Physical symptoms	2.397	3	0.071
Anxiety symptoms and sleep disorders	2.988	3	**0.034**
Symptoms of social function	1.143	3	0.334
Symptoms of depression	3.228	3	**0.025**
Total mental health score	3.083	3	**0.030**
Knowledge regarding mental illnesses	11.255	3	**<0.001**
Knowledge of confidentiality	3.159	3	**0.027**
Access to information	2.634	3	0.053
Therapeutic knowledge	1.174	3	0.322
Stigma	1.143	3	0.334
Total mental health literacy score	5.838	3	**0.001**

MHL plays a pivotal role in help-seeking behavior, with low MHL identified as a significant barrier to accessing help (18). Insufficient MHL is associated with delayed diagnosis and reduced treatment effectiveness for child mental health problems (20). People often prefer personal contact with trustworthy professionals like general practitioners or psychiatrists (21), which underscores the importance of MHL.

Enhancing parental MHL can lead to improved outcomes for children with mental health issues, facilitating early identification and appropriate treatment (22). The significance of parental depression literacy cannot be overstated, as it can lead to more supportive responses from parents, particularly among those who are depressed or have depressed youth (23). Furthermore, the educational level of parents influences their likelihood of seeking medical assistance for their children's mental health (24).

This study revealed a significant difference in the total score of maternal MHL among mothers with varying educational levels. Although the overall MHL score was above average, no correlation was observed between this score and the timing of referral. This discrepancy may be attributed to additional factors influencing help-seeking behavior, both positively and negatively. Prior personal and familial experiences with mental health disorders and help-seeking, as well as the experience of being a mental health caregiver, have been found to be associated with greater mental health knowledge (25). However, when parents actively experience a mental health condition, it can impact their cognitive and emotional functioning, potentially hindering their ability to acquire or recognize mental health knowledge relevant to their child's disorder (22). Interestingly, in contrast to other studies, no significant correlation was found between the MHL score and the mental health total score in our study.

These results suggest that while MHL is generally high among our study population, it may not exert a substantial influence on mental health outcomes or exhibit significant associations with the examined demographic variables.

Regarding reasons for non-referral to mental health professionals, it found that the most common reason was the belief that the problem would be resolved gradually (25.4%). This finding aligns with previous research suggesting that treatment may be delayed when behaviors are perceived as normal or temporary, biological factors are overlooked, and blame is placed on the child (20). Insufficient knowledge of risk factors associated with childhood mental disorders also contributes to the lower likelihood of seeking professional assistance.

The study findings also revealed that the second most common reason for non-referral to mental health professionals was parents' belief that their child was not sick (21.6%). This finding aligns with previous research, indicating that a significant barrier to seeking help is the misrecognition of their child's symptoms by parents, particularly in cases of adolescent depression, where limited understanding can lead to misattributions of symptom sources and potential treatments (23).

Furthermore, the type of mental health condition played a crucial role in parents' decision to seek help. Qualitative research has consistently shown that parents and caregivers are more likely to intervene when they observe disruptive externalizing behaviors or noticeable personality changes in their children (20). Another study conducted with Australian parents found that a higher impact of a mental health issue on the daily functioning of youth was associated with a stronger perception of parental help (25). Thus, it is reasonable to infer that if the parents in the study had recognized their child's illness earlier, it would have influenced the timing of referral for treatment.

This study demonstrated that 64.9% of parents referred their children to a mental health services center after noticing the first symptoms, with the majority of them (38.1%) seeking assistance from a psychiatrist on the initial visit. The ability of parents to recognize signs of child mental health disorders and understand treatment options significantly influences their decision to seek help from psychiatrists and other mental health professionals (20).

In line with previous research, positive help-seeking experiences among parents and caregivers were associated with more favorable attitudes towards help-seeking, reduced stigmatization, and increased intentions to seek help (25). Stigma and negative attitudes among both young people and their parents were identified as barriers to seeking help (24).

Additionally, parents and caregivers, irrespective of their own mental health conditions, tended to seek and utilize assistance from informal sources of support (21). Most parents and caregivers also perceived a responsibility to support the mental health of young individuals (25). Furthermore, ethnic, cultural, and religious affiliations were found to influence parents' judgments of suitable help-seeking strategies (25).

Limitations

Several limitations should be acknowledged. These include the limited number and geographical distribution of sampling clinics, potential recall bias, a predominance of mother participation, and a small number of fathers. Conducting a more comprehensive examination of parental help-seeking behavior patterns and investigating barriers to seeking help would provide valuable insights. Moreover, incorporating semi-structured diagnostic interviews could yield a more accurate assessment of parents' mental health status.

Conclusion

In conclusion, despite the above-average MHL score observed in the study, no correlation was found between this score and the timing of referral. Barriers to treatment engagement may involve parents' own mental health status, delayed recognition of their child's illness, and concerns about stigma. Further research and targeted interventions are warranted to address these barriers and promote timely help-seeking for child mental health issues.

Ethical Considerations

The study diligently adhered to ethical considerations pertaining to human research. Ethical issues concerning the rights and welfare of human subjects were comprehensively addressed, ensuring strict compliance with ethical guidelines, including those outlined in the Declaration of Helsinki.

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Conflict of Interest

The authors declare no conflict of interest related to this research study.

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