

Research Article

Mental Health Literacy among the Palestinian-Arab Minority in Israel and Its Correlates with Mental Health Service Use

Fareeda Abo-Rass  and Sarah Abu-Kaf 

Conflict Management and Resolution Program, Ben-Gurion University of the Negev, Beer-Sheva, Israel

Correspondence should be addressed to Fareeda Abo-Rass; fareeda@post.bgu.ac.il

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Background. Mental health literacy (MHL) has been proposed as a factor in facilitating the utilization of mental health services. This study examined MHL among the Palestinian-Arab minority in Israel, based on Jorm's six-dimension framework, and the contribution of each MHL dimension to mental health service use. **Methods.** A cross-sectional study consisting of a convenience sample of 214 Palestinian-Arabs ($M_{age} = 36.40 \pm 10.77$ years, 68.2% female), who completed measures of MHL, psychological distress, mental health service use, and sociodemographic characteristics. The differences between participants who reported using mental health services (30.38%) and those who did not were examined using *t*- and χ^2 tests. Binary logistic regression analysis was conducted to identify service use determinants. **Results.** Participants reported moderate or high levels on all MHL dimensions. Compared to those who did not report mental health service use, those who did had significantly ($p < 0.001$) higher MHL levels on three dimensions: knowledge of professional help available, knowledge of where to seek information, and attitudes that promote recognition or appropriate help-seeking behavior. The regression analysis indicated that the main determinants of mental health service use were psychological distress ($OR = 1.70$, 95% CI: 1.44–2.01), knowledge of where to seek information ($OR = 1.16$, 95% CI: 1.02–1.32), and attitudes that promote recognition or appropriate help-seeking behavior ($OR = 1.08$, 95% CI: 1.02–1.14). **Practice implications.** This study underlines MHL's crucial role and indicates that it is not only objective characteristics or psychological distress that determine service use among Palestinian-Arabs in Israel. Rather, individuals' knowledge of where to seek information and attitudes promoting recognition or help-seeking behavior are also important determinants. Interventions targeting these two MHL dimensions may help increase mental health service use among this population.

1. Introduction

Mental health literacy (MHL) was first conceptualized and defined by Jorm et al. [1] as knowledge and beliefs about mental health problems, including their recognition, management, and prevention. According to Jorm's (2000) conceptual framework, MHL incorporates six dimensions: (1) ability to recognize disorders, (2) knowledge of risk factors and causes, (3) knowledge of self-treatment, (4) knowledge of professional help available, (5) knowledge of where to seek information, and (6) attitudes that promote recognition or appropriate help-seeking behavior.

Over the decades, MHL has been understood as having a central role in promoting mental health outcomes [2–6]. Studies have shown that MHL is related to help-seeking

intentions and behaviors, health-promoting behaviors, and use of mental health services [7–9]. Most studies that have examined MHL and its correlates with mental health service use based on Jorm's (2000) framework, however, they have used an overall index. This limitation is significant, since MHL is essentially a multidimensional concept, so that using an overall index prevents us from concluding about the specific relationships of the various dimensions to the use of mental health services, and from tailoring interventions accordingly.

In addition, existing studies have been conducted specifically among samples of Western or majority groups, so that little is known about the relationship between MHL and mental health service use among minorities. Examining MHL among minority groups is

essential to address inequalities in mental healthcare [7, 10], given that rates of seeking and utilizing mental health services are typically lower among these groups, including even individuals with severe mental illness [11, 12]. Indeed, minority group members have reported less overall MHL than have individuals from majority groups [7, 13], while lower MHL among minorities is recognized as a barrier to mental health service use [3]. The current study aims to reduce the knowledge gaps regarding MHL dimensions and their relationship with service use by concentrating on the Palestinian-Arab minority in Israel. To the best of our knowledge, no study has yet assessed MHL within this group.

Palestinian-Arabs represent the largest minority in Israel, with 21% of the population [14]. They differ from the Jewish majority in their language, religion, culture, and socioeconomic characteristics. Compared to the individualist Jewish society, the Arab society is considered collectivist and traditional, despite undergoing socio-cultural change processes in recent years [15]. In addition, the Palestinian-Arab minority is discriminated against and disadvantaged in terms of income, education, and employment [16]. Most importantly for our purposes, studies indicate higher rates of mental health problems among the Arab minority than among the Jewish majority [17, 18]. Still, the percentage of Palestinian-Arabs in Israel who utilize mental health services is considerably lower than among the Jewish population—39% compared to 21% [19].

Based on this literature review, the present quantitative study examines the mental health literacy of the Palestinian-Arabs minority in Israel and its correlates with mental health service use. Informed by Jorm's [20] MHL framework, it does so using a battery of self-report questionnaires.

2. Methods

2.1. Participants and Procedure. This cross-sectional research uses a convenience sample of 214 adult Palestinian-Arabs from Israel. The two inclusion criteria were being a Palestinian-Arab citizen of Israel and being older than 18. The final sample size was determined based on Green's [21] formula— $N > 50 + 8p$, where p is the number of predictors. Since this study included seven independent variables, the required sample size was 106 and above.

Participants meeting the inclusion criteria were interviewed face-to-face by the first author, who also sent the survey form as an online link to additional relevant participants. The participants in the face-to-face meetings completed their survey forms independently, and the first author intervened only to answer clarification questions, taking care to remain objective and not bias their answers. We adopted this combined approach to data collection in order to make sure that not only Internet users completed the survey, but also potentially biasing our findings. Conversely, we also sought to include participants who might have felt uneasy participating in a study on mental health in a stranger's presence, given the stigma on mental health prevalent in the Arab society [22, 23].

Initially, the first author interviewed participants who varied in age, gender, marital status, area of residence, and education. Subsequently, she asked them to refer her to additional participants (snowball technique). Similarly, she first sent a link to the online survey to several participants, and asked them to forward it to others. Both interview types used a structured questionnaire form previously piloted with fifteen participants to ensure clarity. The first page of both versions provided a description of the study, and included an informed consent form and the authors' contact details. Only those who had signed the form or who had checked a box to indicate agreement to participate could proceed to complete the questionnaire. Note that due to the study's online component, the response rate could not be determined. Data collection occurred between July and October, 2021 and the study was approved by the Human Subjects Ethics Committee of Ben-Gurion University of the Negev, Israel.

2.2. Measures

2.2.1. Mental Health Literacy. MHL was assessed by the Mental Health Literacy Scale (MHLS) [24]. The MHLS consists of 35 items, which examine six dimensions: (1) ability to recognize disorders (8 items), (2) knowledge of risk factors and causes (2 items), (3) knowledge of self-treatment (2 items), (4) knowledge of professional help available (3 items), (5) knowledge of where to seek information (4 items), and (6) attitudes that promote recognition or appropriate help-seeking behavior (16 items). All items related to the ability to recognize disorders, risk factors, and causes, and professional help available were rated on a 4-point Likert scale ranging from 1 = "very unlikely" to 4 = "very likely". The questions about knowledge of self-treatment were rated on a 4-point Likert scale ranging from 1 = "very unhelpful" to 4 = "very helpful". Finally, the questions about where to seek information and attitudes that promote recognition or appropriate help-seeking behavior were rated on a 5-point Likert scale ranging from 1 = "strongly disagree" to 5 = "strongly agree". Eleven items were reverse-scored.

In the current study, the items in each dimension were summed, with a higher score in each of the six dimensions representing a higher level of that aspect of MHL. The scale was translated from English to Arabic using the back-and-forth method, and showed high internal consistency for all dimensions (Cronbach's alpha = 0.91, 0.67, 0.91, and 0.90 for dimensions 1, 4, 5, and 6, respectively). For dimensions 2 and 3, a significant relationship ($p < 0.001$) was found between the two items of each dimension ($r_s = 0.50$ and 0.53 , respectively).

2.2.2. Psychological Distress. Psychological distress was assessed using the General Health Questionnaire (GHQ-12) [25], which contains 12 items rated on a 4-point Likert scale. Seven items were reverse-scored. Sample items were "Have you recently lost much sleep over worry?" and "Have you recently been thinking of yourself as a worthless person?"

Following the original scoring method, an overall index was calculated by summing the scores of all items, where the scoring method became 0, 0, 1, and 1 instead of 1, 2, 3, and 4, respectively, providing scores ranging from 0 to 12, with higher scores representing higher levels of psychological distress. The scale is available and validated in Arabic [26]. The internal reliability of the scale in the current study was high (Cronbach's $\alpha = 0.89$).

2.2.3. Sociodemographic Characteristics. The sociodemographic questionnaire referred to age, gender (male and female), marital status (single, married, divorced, and widowed), educational attainment in years, and income (above average, average, or below average in Israel). In addition, participants reported whether they used mental health services.

2.3. Data Analysis. All data were coded and analyzed using SPSS-25 (IBM Corp., 2017). Descriptive statistics were used to describe participants' characteristics and the main variables. To assess differences in sociodemographic characteristics and psychological distress between participants who reported mental health services use and those who did not, t - and χ^2 tests were performed according to the type of variable. In addition, t -tests were employed to examine the difference in MHL dimensions between the two groups.

Binary logistic regression analysis was conducted to examine the determinants of mental health service use. In the first step, two sociodemographic variables found to be significantly related to mental health service use at the bivariate level were included as control variables: gender and education years. In the second step, psychological distress was added. The last step included all MHL dimensions found significantly related to mental health service use: knowledge of professional help available, knowledge of where to seek information, and attitudes that promote recognition or appropriate help-seeking behavior. To assess multicollinearity, we examined correlations between all covariates and found no strong associations ($r < 0.53$).

3. Results

3.1. Sample Description. Most (68.2%) of the participants were women, with a mean age of 36.40 years ($SD = 10.77$, range = 18–72), and their years of formal education averaged 14.23 ($SD = 4.77$). Sixty-five (30.38%) of the participants reported mental health service use (see Table 1). As can be observed, most of both service users and nonusers were female and married. However, significant gender differences were found between the two groups in that regard. Significant differences were also found in education, with more education years among those reporting using mental health services. Finally, and expectedly, participants who reported mental health services use had a significantly higher level of psychological distress.

3.2. Mental Health Literacy. Table 2 lists the MHL dimensions' ranges, means, and standard deviations for the entire sample. In addition, it lists differences in MHL dimensions between participants who reported mental health service use and those who did not. As can be observed, compared to participants who did not report mental health service use, those who did had higher levels of MHL in all dimensions. Statistically significant differences ($p < 0.001$) between the two groups were found in three dimensions: knowledge of professional help available, knowledge of where to seek information, and attitudes that promote recognition or appropriate help-seeking behavior.

3.3. Determinants of Mental Health Service Use. The results of the binary logistic regression models predicting mental health service use are shown in Table 3. As can be observed, sociodemographic characteristics explained 7% of the variance in mental health service use. Psychological distress added 23% to the explained variance, and together with sociodemographic characteristics, they explained nearly one-third of the variance in mental health service use. With the addition of the three significant dimensions of MHL, the Cox R^2 was 0.38, indicating that 38% of the variation of mental health service use was explained by the estimated model. Having a higher education level, higher psychological distress, higher knowledge of where to seek information and higher positive attitudes that promote recognition or appropriate help-seeking behavior, were the most important determinants of mental health service use.

4. Discussion

This study examined Jorm's [20] six dimensions of mental health literacy (MHL) among the Palestinian-Arabs minority in Israel to determine their contribution to explaining mental health service use. Overall, we found an intermediate level or above in all MHL dimensions. These findings were somewhat surprising given that several studies had indicated low MHL levels among ethnic minorities [7, 13, 27], as well as among the general public in several Arab countries [28, 29]. Three explanations may account for our findings. First, the process of modernization in the Arab society in Israel has been shown to positively affect prevailing attitudes to mental illness, treatment, and stigma [22, 23] and may therefore have also affected MHL positively. Second, most of our participants are women, with educational attainments higher than the average for the Arab society in Israel [30]. According to the literature, gender and education are significantly associated with MHL, with women and better educated individuals both reporting higher MHL [31, 32]. Third, the gap in MHL levels between the present study and previous ones may be the result of using different MHL measures.

Such gaps emphasize the need for a clear conceptual definition and for standardized MHL measures. Our empirical findings support the multidimensional concept of

TABLE 1: Participants' sociodemographic characteristics by use of mental health services.

	Reported mental health service use ($n = 65$)	Did not report mental health service use ($n = 149$)	
Gender (%)			
Male	15.4	38.9	$\chi^2_{(2)} = 11.5^{***}$
Female	84.6	61.1	
Marital status (%)			
Single	20.3	23.3	NS
Married	71.9	71.9	
Divorced	6.3	4.8	
Widowed	1.6	0	
Financial status (%)			
Above average	25	34.7	NS
Average	48.4	40.1	
Below average	26.6	25.2	
Years of education			
$M (SD)$	15.2 (4.4)	13.8 (4.8)	$t_{(212)} = 2.03^*$
Age			
$M (SD)$	36.9 (10.8)	36.1 (10.7)	NS
Psychological distress $M (SD)$	5.2 (2.2)	2.1 (2.1)	$t_{(212)} = 9.1^{***}$

Note * $p < 0.05$, and *** $p < 0.00$.

MHL [3], as it presents dimensions that have different relationships with mental health service use. The findings theoretically demonstrate that multidimensional scales should be used, as opposed to the tendency of most studies to examine MHL using vignettes that do not address MHL aspects and have psychometric validation issues [24]. This insight is critical at this point, given the growing interest in developing MHL-based psychoeducational programs in Israel.

This study corroborates the findings of studies that have shown MHL to be related to mental health service use [32, 33], but also extends them by addressing the specific effects of each MHL dimension on mental health service usage. Two dimensions in particular have been identified as significant service use determinants. The first is knowledge of where to seek information. According to [3], information is an important element in providing mental health first aid and in reducing disparities in the use of mental health services. Our study highlights the importance of enhancing the ability to find mental health-related information, similar to findings regarding the importance of concrete knowledge of mental illness and treatments as major predictors of both help-seeking behavior and disclosure of mental illness [34]. Accordingly, intervention programs need to provide information and teach users how to obtain it.

The second MHL dimension found to be a significant determinant of using mental health services is attitudes that promote recognition or appropriate help-seeking behavior. Note that whereas other studies have explored mental attitudes and stigma attached to help-seeking behaviors and intentions, our study adds to the literature by directly linking attitudes to actual service use. These findings are particularly important for groups with high negative attitudes towards mental disorders and their treatment, such as Arab societies [35], and for groups

with low rates of mental health service use, such as various ethnic minorities [11]. They are consistent with recent studies showing that attitudes and perceptions in general are related to health outcomes and behaviors [36–38], and highlight the need for intervention programs to seriously consider improving attitudes and reducing stigma, alongside addressing barriers associated with minority service users' disadvantaged socioeconomic status.

Finally, previous findings regarding the association between psychological distress and mental help-seeking behavior [38, 39], have been confirmed. This means that even among societies with instrumental and cultural barriers to mental health service use such as the Palestinian-Arab minority in Israel, psychological distress may potentially overcome these barriers and motivate individuals to seek mental health services. This finding emphasizes the importance of raising literacy regarding the identification of psychological distress, even though this study has not found the MHL dimension of ability to recognize disorders to be a significant determinant of service use.

4.1. Limitations. Despite its contributions, the current study also has several limitations. First, the use of a convenient and culturally homogeneous sample limits the generalizability of our results and conclusions. The sample includes only Palestinian-Arabs from central and northern Israel. Hence, the findings may not be applicable to the Bedouin Arabs in the south. Second, our observational, cross-sectional design prevents us from inferring causal relationships. Third, our data are based mostly on self-report measures administered online, which have several limitations such as preselection of high Internet users and the potential for inaccurate interpretation of certain questions. Finally, some of our data have been collected in face-to-face interviews, which might have involved social desirability bias.

TABLE 2: Means, standard deviations, and t-values for mental health literacy dimensions stratified by mental health service use.

	Possible range	The entire sample (n = 214)		Reported mental health service use (n = 65)		Did not report mental health service use (n = 149)		t	Hedges' g
		M (SD)	M (SD)	M (SD)	M (SD)				
Ability to recognize disorders	8–32	21.11 (6.06)	21.5 (6.1)	20.9 (6.8)	NS	0.09			
Knowledge of risk factors and causes	2–8	5.01 (1.80)	5.1 (1.4)	4.9 (1.9)	NS	0.1			
Knowledge of self-treatment	2–8	5.18 (1.76)	5.5 (1.7)	5.02 (1.7)	NS	0.2			
Knowledge of professional help available	3–12	7.56 (2.43)	8.2 (1.4)	7.2 (2.7)	t (198.5) = 3.5***	0.5			
Knowledge of where to seek information	4–20	14.80 (4.20)	16.4 (3.3)	14.05 (4.3)	t (155.3) = 4.3***	0.6			
Attitudes that promote recognition or appropriate help-seeking behavior	16–80	54.56 (10.02)	60.7 (6.3)	51.8 (10.1)	t(183.8) = 7.5***	0.9			

Note Hedges' g as a measure of size effect; 0.2 = small effect, 0.5 = medium effect, and 0.8 = large effect; *** p < 0.001.

TABLE 3: Logistic regression on mental health service use.

	Model 1			Model 2			Model 3					
	B(SE)	OR	P	95% CI	B(SE)	OR	P	95% CI	B(SE)	OR	P	95% CI
Gender	-1.19 (0.38)	0.30	0.002	0.14-0.65	-0.90(0.47)	0.40	0.56	0.16-1.02	-0.41(0.54)	0.65	0.43	0.23-1.90
Years of education	0.06 (0.034)	1.06	0.07	0.99-1.13	0.11 (0.41)	1.12	0.005	1.03-1.21	0.09 (0.04)	1.10	0.03	1.01-1.20
Psychological distress					0.53 (0.08)	1.70	0.000	1.44-2.01	0.56 (0.10)	1.76	0.000	1.44-2.15
Knowledge of professional help available									0.06 (0.10)	1.06	0.56	0.86-1.35
Knowledge of where to seek information									0.15 (0.06)	1.16	0.03	1.02-1.32
Attitudes that promote recognition or appropriate help-seeking behavior									0.80 (0.02)	1.08	0.004	1.02-1.14
Cox R2			0.07				0.30					0.38

5. Conclusions and Implications for Nursing Practice

Minorities may be more vulnerable to mental health issues but are at the same time less likely to seek help from mental health services. Our findings broaden the existing knowledge regarding factors that influence mental health service use among ethnic minorities, indicating that it is not determined only by the participants' sociodemographic and clinical characteristics. Instead, the MHL dimensions of knowledge of where to seek information and attitudes that promote recognition or appropriate help-seeking behavior are significant determinants as well. These findings inform professionals and policymakers about the crucial role of MHL with relation to mental health service use and may provide the foundation for strategies to promote greater usage of such services by minority populations. They stress the need to develop tailored intervention programs that target MHL, particularly the dimensions found significant, in order to increase mental health service use.

In addition, our findings expand the existing knowledge regarding MHL among minorities, and non-Western ethnic minorities particularly. However, we recommend additional, qualitative studies to explore whether Jorm's [20] MHL framework is also suitable for these minorities, especially as Jorm [3] and others [39] have suggested that MHL should be understood based on individuals' cultural background and ethnic identity. Such future studies would enable to ethnoculturally adapt the framework to non-Western groups, and thus contribute further to understand the relationship between MHL dimensions and the use of mental health services and other health-related outcomes. [40].

Data Availability

The data used in this study are available on request from the corresponding author.

Conflicts of Interest

The authors declare that they have no conflicts of interest.

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