



The Relationships between Mental Health Problems and Family Coping Strategies among Palestinian in the Gaza Strip

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Authors' contributions

This work was carried out in collaboration between all authors. Authors AMT and PV designed the study and wrote the protocol. Author SST performed the data collection and statistical analysis, managed the literature search. Author AMT wrote the first draft of the manuscript with assistance from author SST. Author PV read and approved the final manuscript.

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ABSTRACT

Aim: The aim of the study was to investigate mental health problems and family coping strategies among Palestinians in the Gaza Strip.

Methods: The sample consisted of 449 subjects. The age ranged from 21 to 60 years with mean age 41.5 years. Participants completed Hopkins Symptoms Checklist Scale and Family-Oriented Coping Scale support scale.

Results: The study showed that 52.6% had anxiety, and 50.6% had depression. Females scored more anxiety and depression than males. Mental health symptoms were more in family with family monthly income \$300 and less, and in families with 8 and more children. The results showed that mean total family coping strategy was 107.28. Males were significantly reported more coping

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strategies, including acquiring social support, reframing, seeking spiritual support, and mobilizing family to acquire and accept help. Total HSCL score was negatively correlated with total family coping strategies, acquiring social support, reframing, seeking spiritual support, and positive appraisal.

Conclusion: The study reported high rates of anxiety and depression which had negative impact on Palestinian families coping strategies. Psychologists, educators, social workers and community workers should support families to identify shortcomings in their coping and to help develop their latent resources.

Keywords: Coping; family; Gaza; mental health problems.

1. INTRODUCTION

Many studies have revealed a high prevalence of depression, anxiety in areas of war and conflict societies [1,2,3,4,5,6,7,8]. Wars in South Asia and Balkans had been sources of suffering in the last decades. In a household survey of psychiatric morbidity in Cambodia, using Hopkins Symptoms Checklist -25 in Kampong Cham province, prevalence of depression was 42.4% [9]. Another five-country study in the Balkans revealed that 22.8% had manic depressive disorder [10]. Moreover, in study examined psychological and physiological measures of trauma exposure in 2 groups of Iraqi refugees resettled in Australia, those seeking psychological treatment versus those not seeking treatment found that mean depression scores from the Hopkins Symptoms Checklist – 25 were significantly different in refugees seeking treatment compared to those not seeking treatment. (Mean 2.77 vs. 1.84) [11]. Furthermore, in a study of 1,000 households in the province of Siem Reap, Cambodia and the province of Surin, Thailand, showed that 49.5% of Siem Reap respondents and 19.7% of Surin were above the clinical threshold for depression [12]. Similarly, in study of a sample of 20,632 people across 18 of 25 districts in Sri Lanka, using the Hopkins Symptoms Checklist, found rates for threshold symptoms of depression and anxiety were 12% and 14%, respectively. Rates for threshold depressive symptoms across different ethnic groups were 8% for Sinhalese (the majority group), 25% for Tamils, and 22% for Moors/Burghers, whereas those for threshold anxiety were 12%, 20%, and 17%, respectively [13].

Coping refers to a process which begins with appraisal. Primary appraisal occurs when an individual is confronted with a potential stressor and decides whether it is of concern. Secondary appraisal follows if the situation is considered stressful, and requires a response from the

individual. Coping refers to the behavioral and cognitive efforts one uses to manage the internal and external demands of a stressful situation. Coping can be classified as being either problem-focused or emotion-focused in nature. Problem-focused coping involves activities that focus on directly changing elements of the stressful situation, whereas emotion-focused coping involves activities that focus more on modifying one's internal reactions resulting from the stressful situation. According to this view, coping is a dynamic process [14].

In a cohort study consisted of parents of children suffering from a selected chronic disease (diabetes mellitus, bronchial asthma, juvenile rheumatoid arthritis, atopic eczema, celiac disease, epilepsy, and thyroid gland disease), and attending specialized paediatric out-patient's departments in Ostrava hospitals. Results showed that the use of internal coping strategies significantly exceeded the use of external coping strategies. The most frequently used coping strategy was reframing or the ability to redefine onerous situations so that they were more manageable for the family. In contrast, the least used strategy was the external strategy focused on a search for spiritual support [15]. Also, in a study focusing on coping with stress in the family in the care for an autistic child where families having an autistic child were compared with a control cohort of families with healthy children. The study used the same questionnaire. The most frequently used coping strategies was reframing and obtaining social support. In contrast, the least used strategy was spiritual support [16]. Moreover in study of social relationships and PTSD symptomatology in combat veterans, results indicate that the level of PTSD is related to support received from a significant other, family, and military peers, but not friends. In general, higher levels of support from each category were associated with lower levels of PTSD in combat veterans [17].

Similarly, others found that, positive religious coping was associated with lower risk of major depression, poorer quality of life and increased alcohol use. Individuals who used high levels of positive religious coping were less likely to experience depression, poorer life quality or increases in alcohol use compared to individuals who did not use such high levels of positive religious coping [18]. Also, others suggested that positive religious coping is associated with positive psychological adjustment and negative religious coping is associated with poorer adjustment [19,20]. In the same culture, in a stratified random sample used to select a sample of 624 Palestinians who sustained intifada-related traumas such as families with one member who had been killed, injured, or imprisoned, and families whose houses had been demolished from records kept by the Palestinian National Authority (PNA). The study indicated that there were no significant gender differences in coping responses. However, cognitive and behavioural strategies F-COPES seem to combine and affect functioning among females. Females were more likely than males to have lower levels of psychological distress via various coping strategies including acquiring social support and passive appraisal [21].

The aims of the study were to 1) investigate prevalence depression and anxiety among Palestinians in the Gaza Strip, 2) types of coping strategies used to overcome the stress, 3) the relationship between families' mental health symptoms and coping strategies among Palestinians.

2. METHODS

2.1 Participants

The number of participants in this study consisted of 449 subjects, 242 were males (53.9%) and 207 were females 46.1%. The age ranged from 21 to 60 years with mean age 41.5 (SD = 8.6).

2.2 Measures

2.2.1 Demographic information

Participants were asked to provide background information about the gender, age, education, number of children, and family monthly income.

2.2.2 The Hopkins Symptom Checklist (HSCL-25) [22]

Psychological distress was assessed by the Hopkins Symptom Checklist- 25 which consists of 53 items, 10 items aim to assess anxiety and 15 items aim to assess depression. The response options for the items range from 1 to 4, anchored 'not at all', 'a little', 'quite a bit' and 'extremely'. Mean sum scores are calculated for the 10 anxiety items and for the 15 depression items. In addition a total score (average of all 25 items). The cutoff point score of HSCL-25 used in the study was 1.75, client who scored > 1.75 were considered as cases with mental disorder according to previous validity in Palestinian society [23]. In our study used the Arabic translated version which indicate that the split half reliability of the scale was $r=0.90$. The internal consistency of the scale in this study, calculated using Chronbach's alpha was $\alpha=0.95$.

2.2.3 Family crisis oriented personal evaluation scales (McCubbin et al. 1991) [24]

The F-COPES was developed to identify effective problem solving and behavioral strategies used by families in response to problems or difficulties. The 30-item scale assesses the ways in which a family internally and externally handles difficulties. Subscales which measure the type of coping strategy employed by the parents include: Social Support Seeking, Cognitive Reframing, Spiritual Support Seeking, Acquiring and Accepting Help (Mobilizing), and Passive Appraisal. Higher scores are considered indicative of more effective family coping. Cronbach alpha levels range from 0.71 to 0.86, and test-retest reliability coefficients range from 0.61 to 0.95 [24]. The internal consistency of the scale in this study, calculated using Chronbach's alpha was $\alpha=0.85$.

2.3 Study Procedure

The sample was selected randomly according to prepared list of number of males and females from each of the five areas of the Gaza. The original sample was 460 participants. Data collection was carried out by 8 trained mental health professionals of clinical psychology background (8 psychologists with BA in psychology) trained for 6 hours by the principal investigator about the aim of the study, sample, and instruments of the study. For reaching the

number of participants from each area, one street was selected in each area, and every second house was selected. In larger buildings, one flat from each floor was selected randomly. Covering letter was given to each participant explaining the aim of the study and about their right not to participate in study and ask them to sign the letter. Informed consent was required from respondents prior to the survey questionnaire. In selecting the size of the sample, we used the epidemiological package (EPI – INFO) for choosing the sample size. A total number of 460 participants came out of the calculation. About 11 participants refused to participate and 449 agreed to participate in this study with response rate of 97.6%. Data collection was done on May 2010.

2.4 Statistical Analysis

Statistical analyses were carried out using IBM SPSS Statistics version 20.0. Continuous variables were presented as $M \pm SD$ and categorical variables were expressed as frequencies (%). Group comparisons were tested using independent sample t tests for continuous data and χ^2 tests or Fisher's exact test for categorical data, where appropriate. Spearman's correlation coefficient tested the association between psychological symptoms, and coping strategies by families' scores. Prediction of coping strategies by psychological symptoms was tested by series of stepwise multiple linear regression analyses was conducted, with coping strategy entered as the predictor and total HSCL-25 score as the dependent variable. A two-tailed p value < .05 was considered statistically significant.

3. RESULTS

3.1 Sociodemographic Characteristics of Study Population (N = 449)

The sample consisted of 449 subjects, 242 were males (53.9%) and 207 were females 46.1%. The age ranged from 21 to 60 years with mean age 41.5 (SD = 8.6). According to place of residence, 16.3% were from North Gaza, 34.3% were from Gaza city, 18.3% were from middle area, 19.2% from Khan Younis, and 12% were from Rafah area. According to type of living, 64.1% live in cities, 9.9% live in villages, and 26% live in refugee camps. According to family monthly income, 73.2% had less than \$300 monthly, 23.1% had \$

301-650 monthly and 3.7% had \$651 and above.

3.2 Psychological Symptoms According to HSCL-25

The most common psychological symptoms reported by participants were: 17.8% said they cry easily, 12.7% lost hope of future, restriction and can't change their life. While the least common symptoms were: feeling horrible (3.1%), terror and panic attack (3.8%), and sickness, faint, and general weakness (3.8%).

Table 1. Sociodemographic characteristics of study population (N = 449)

	No.	%
Gender		
Male	242	53.9
Female	207	46.1
Age		
21-35	23.2	104
35-49	56.8	255
> 50	20.0	90
No. of children		
Less than 4 children	13.0	43
5-7 children	57.2	190
More than 8 children	29.8	99
Level of education		
0-9 years	205	45.7
10-12 years	152	33.9
> 13	92	20.5
Paternal job	128	52.9
Unemployed		
Employed	98	40.5
Others	16	6.6
Maternal job		
House wife	93.2	193
Employee	5.3	11
Others	1.4	3
Family monthly income		
Less than \$300	317	73.2
\$301-650	100	23.1
\$651 and more	16	3.7

3.3 Mean and Standard Deviations of Mental Health Problems on Screening Instrument HSCL-25

The study showed than mean HSCL-25 was 1.91 (SD=0.58), mean anxiety was 1.89 (SD=0.65), and depression mean was 1.93 (SD=0.59). The study showed that there were statistically significant differences in general psychological problems toward females (Mean females vs

Males) 2.06 vs.1.78 ($t(449) = 5.38, p < 0.001$). Also females significantly scored more than males in anxiety (mean = 2.09 vs. 1.71) ($t(449) = 6.50, p < 0.001$) and depression (mean 2.05 vs. 1.83) ($t(447) = 4.02, p < 0.001$).

3.4 Prevalence of Mental Health Symptoms

Considering cut-off point of <1.75 for cases, Our study showed that 52.8% of the participants scored above the clinical threshold for general mental health symptoms, 52.6% scored above the clinical threshold for anxiety, and 50.6% scores above the clinical threshold for depression. Chi square test was done. The results showed that 30.1% of females and 22.7% of males scored above the clinical threshold for general mental health symptoms ($\chi^2 = 23.82, df=1, p = 0.001$), 31.6% of females and 20.9% of males scored above the clinical threshold for anxiety ($\chi^2 = 39.16, df=1, p = 0.001$), and 26.7% of females and 23.8 % of males scored above the clinical threshold for general mental health symptoms ($\chi^2 = 8.44, df=1, p = 0.002$).

3.5 Differences in Mental Health Problems Rated by HSCL and Sociodemographic Variables

One Way ANOVA was performed in which the HSCL total and was entered as the independent variable as well as other sociodemographic variables such family monthly income, education, age, and number of children as dependent variables. Post Hoc test showed

that there were no statistically significant differences in HSCL total and age groups, ($F=(446/2) 0.28, p < 0.75$), HSCL total was significantly more in family with monthly income less than \$300 ($F=(446/2) 6.68, p < 0.001$), and mental health problems rated by HSCL were more in families with 8 and more children ($F=(446/2) 4.59, p < 0.01$).

3.6 Family Coping Strategies (FCOPE)

The results showed that Palestinian families coped with stressful situations by: 83.3% said that is God wish, 37.6% said they will ask for advice from relatives and grandparents, 34.2% face and try to solve the problems.

3.7 Means and Standard Deviations of Family Coping Strategies (FCOPE)

The results showed that mean total family coping strategies was 105.30 (SD = 12.41), acquiring social support mean was 29.59 (SD = 6.76), reframing mean was 31.22 (SD = 4.75), seeking spiritual support mean was 15.93 (SD = 2.73), mobilizing family support mean was 14.14 (SD = 2.87), positive appraisal mean was 12.02 (SD = 2.35).

3.8 Sex Differences in Mean and Standard Deviations of Family Coping Strategies (FCOPE)

As shown in Table 5, males were significantly reported coping strategies (Mean Male vs. females) (108.55 vs. 101.55) ($t(449) = 6.07,$

Table 2. Mean of the sum and standard deviations of mental health problems both males and females

	Sex	N	Mean	SD	t	p
HSCL total	Male	242	1.78	.55	-5.38	.001
	Female	207	2.06	.58		
HSCL general anxiety	Male	242	1.71	.61	-6.50	.001
	Female	207	2.09	.64		
HSCL depression	Male	242	1.83	.56	-4.02	.001
	Female	207	2.05	.60		

Table 3. Prevalence of mental health symptoms on screening instrument HSCL-25

Morbidity	Male		Female		Total		χ^2	p
	No.	%	No.	%	No.	%		
HSCL total	102	22.7	135	30.1	237	52.8	23.82	0.001
HSCL general anxiety	94	20.9	142	31.6	236	52.6	39.16	0.001
HSCL depression	107	23.8	120	26.7	227	50.6	8.44	0.002

Table 4. Means and standard deviations of family coping strategies (FCOPE)

	No.	Minimum	Maximum	Mean	SD
Family oriented coping scale	416	61	136	105.30	12.41
Acquiring social support	433	9	44	29.59	6.76
Reframing	440	13	40	31.22	4.75
Seeking spiritual support	441	7	20	15.93	2.73
Mobilizing family to acquire and accept help	447	4	20	14.14	2.87
Positive appraisal	416	4	19	12.02	2.35

$p < 0.01$), mean acquiring social support for male was 31.6 (SD = 5.34) and 27.26 for females ($t = (449) = 7.01, p < 0.001$), mean reframing for males was 31.57 and 27.26 for females ($t = (449) = 1.65, p < 0.004$), mean seeking spiritual support males was 16.50 and 15.51 for females ($t = (449) = 3.04, p < 0.001$), mean mobilizing family support males was 14.22 and 14.04 for females ($t = (449) = 0.66, p < 0.001$).

3.9 Relationships between Depression and Anxiety Symptoms and Family Coping Strategies Variables

Pearson's correlation coefficients were computed to detect the strength of the relationship between depression and anxiety symptoms and family coping strategies variables, results are reported in Table 6.

The results showed that HSCL total was negatively correlated with , acquiring social support ($r(449) = -0.32, p < 0.001$), reframing ($r(449) = -0.22, p < 0.001$), seeking spiritual support ($r(449) = -0.25, p < 0.001$), and positive appraisal ($r(449) = -0.26, p < 0.001$). Anxiety

was negatively correlated with acquiring social support ($r(449) = -0.32, p < 0.001$), reframing ($r(449) = -0.16, p < 0.001$), seeking spiritual support ($r(449) = -0.12, p < 0.001$), and positive appraisal ($r(449) = -0.25, p < 0.001$). Depression was negatively correlated with , acquiring social support ($r(449) = -0.29, p < 0.001$), reframing ($r(449) = -0.25, p < 0.001$), seeking spiritual support ($r(449) = -0.124, p < 0.001$), and positive appraisal ($r(449) = -0.25, p < 0.001$).

3.10 Prediction of Coping Strategies by Psychological Symptoms

In order to find the prediction of coping strategies by psychological symptoms, series of stepwise multiple linear regression analyses was conducted, with coping strategy entered as the predictor and total HSCL -25 score as the dependent variable. Lower use of Acquiring Social Support, Positive appraisal, Reframing, Mobilizing family to acquire and accept help indicating association with poorer mental health ($F = 27.38, [1/412], p < 0.001$).

Table 5. Sex differences in mean and standard deviations of family coping strategies (FCOPE)

	Sex	Mean	SD	t	p
Total FCOP	Male	108.65	11.00	6.076	.01
	Female	101.55	12.85		
Acquiring social support	Male	31.60	5.34	7.014	.001
	Female	27.26	7.47		
Reframing	Male	31.57	4.17	1.657	.004
	Female	30.82	5.32		
Seeking spiritual support	Male	16.30	2.49	3.045	.001
	Female	15.51	2.93		
Mobilizing family support	Male	14.22	2.47	.664	.001
	Female	14.04	3.28		
Positive appraisal	Male	12.49	2.17	4.695	.070
	Female	11.46	2.43		

Table 6. Relationship between mental health problems and coping strategies

	Acquiring social support	Reframing	Seeking spiritual support	Mobilizing family to acquire and accept help	Positive appraisal
Total HSCL-25	-.32**	-.22 **	-.14 **	.02	-.26 **
Anxiety	-.32 **	-.16 **	-.12 *	.00	-.25 **
Depression	-.29 **	-.25 **	-.14 **	.03	-.25 **

* $p < 0.05$, ** $p < 0.01$

Table 7. Mental health problems using HSCL-25 and coping strategies—logistic regression

	Unstandardized coefficients		Standardized coefficients	t	p	95.0% confidence interval for B	
	B	Std. error	Beta			Lower bound	Upper bound
Acquiring social support	-.03	.00	-.31	-6.27	.001	-.03	-.02
Positive appraisal	-.05	.01	-.22	-4.89	.001	-.08	-.03
Reframing	-.03	.01	-.22	-4.89	.001	-.04	-.02
Mobilizing family to acquire and accept help	.03	.01	.15	3.10	.001	.01	.05

4. DISCUSSION

Our study aimed to investigate prevalence depression and anxiety among Palestinians in the Gaza Strip and the relationship between families' mental health symptoms and coping strategies among Palestinians. Our study showed that 52.8% of the participants scored above the clinical threshold for depression and anxiety, 52.6% scored above the clinical threshold for anxiety, and 50.6% scores above the clinical threshold for depression. The study showed that there were statistically significant differences in general psychological problems toward females, in anxiety and depression. Our study results were consistent with a study of immigrants in Sweden which showed that prevalence of anxiety or depression to be very high among Iraqi-born (61%) and Iranian-born (49%) migrants [25]. However others found lower rates of depression and anxiety, in a study in immigrants in Finland, assessed the prevalence of mental health symptoms in Russian, Somali and Kurdish origin migrants in Finland. The study showed that the prevalence of mental health symptoms in Russian men was highest as measured by the HSCI-25 depression subscale (12%) and lowest as measured by the HSCI-25 anxiety subscale (4%). In Russian women, the prevalence rates for the HSCI-25 and the

depression and anxiety subscales were similar (23–24%), and the prevalence of somatization was almost as high (21%). In Somali men, the prevalence of mental health symptoms was highest as measured by the SCI-90 somatization scale (8%) and lowest as measured by the HSCI-25 anxiety subscale (4%). Similarly in Somali women, the highest prevalence was found for somatization (17%) and the lowest for anxiety symptoms (8%). In Kurdish men, the prevalence of mental health symptoms was highest as measured by the HSCI-25 depression subscale (26%) and lowest for somatization and anxiety symptoms (20–21%). In Kurdish women, the prevalence rates for the HSCL- 25 and the depression subscale were similar (49– 50%), the prevalence rates for anxiety symptoms and somatization were almost as high (40–43%) [26]. Such high rate of depression in this study is more than found in a review by Steel et al. [27] who examined 161 articles on refugees and conflict affected populations. After reviewing 181 surveys, a total subject pool of 81,866 subjects from 40 countries was identified. It was noted that weighted prevalence of depression was 30.8%. However, our high rate of depression was consistent with study of 1,000 households in the province of Siem Reap, Cambodia and the province of Surin, Thailand, in which 49.5% of the respondents in Siem Reap were above the

clinical threshold for depression [12]. The higher levels of depression and anxiety that we documented in Palestinian society may reflect the heightened level of historical political and community violence in area and exposure to three wars in 8 years. Our study showed that Palestinian used different coping strategies to coped with stressful situations in the Gaza Strip and said that it was God wish, they asked for advice from relatives and grandparents, they faced and tried to solve the problems. Our study showed that Palestinians used commonly reframing, acquiring social support, and seeking spiritual support for overcoming the adversities and stressors. Such findings were consistent with study a sample of Egyptian patients with cancer, 92% voiced their belief that God will help them in their illness [28]. Our findings consistent with study of 138 Bosnians who fled the war in the Balkan and settled in the United States, participants scored significantly higher on positive religious coping (A benevolent religious-spiritual way of understanding and dealing with life stressors), than on negative religious (religious struggle in coping) [29]. Similarly, in study examined the contribution of religious coping to the mental health of a sample of Iranian veterans of the Iran-Iraq war. They found that both religious practices and benevolent appraisal were correlated with better general mental health, whereas negative feelings toward God were tied to general mental health [30]. Moreover in study examined the emotions of Muslim Americans in the days preceding the 10-year 9/11 anniversary, and methods of coping with these emotions. Muslims participants were engaged in different coping methods, with religious coping being the most frequent method [31]. Similarly in study of universities students in the Gaza Strip found that the most frequent coping strategies were find comfort in religious beliefs, think about what steps to take, learn to live with situation [32]. Our results consistent with the findings of a study aimed to identify coping behaviours of families experiencing crises. Mean acquiring social support 26.51, reframing was 30.42, mobilizing the family to acquire and accept help mean was 11.82, seeking spiritual support was 15.96, and passive appraisal mean was 8.48 [33]. Our results were consistent with study of behavior problems, family functioning, and family coping on parent stress in families with a child with Smith-Magenis Syndrome which found that total cope mean was 103.5, acquiring social support was 28.1, reframing was 31, seeking spiritual support was 13, mobilizing family to support 14.6, and positive appraisal was

18.80 [34]. Our study showed that males were significantly had more F-COPE, acquiring social support was, reframing, seeking spiritual support, mobilizing family to support more than females except for positive appraisal which showed no gender differences. Our findings do lead to one clear conclusion: 3 wars and siege that involve Palestinians in the Gaza Strip may destroy the cognitive set of coping resources, particularly hope for the future. Our study results were consistent with study of a sample of 650 Palestinians who sustained intifada-related traumas, mean acquiring social support 36.80, reframing was 29.86, seeking spiritual support was 16.59, mobilizing family to acquire & accept help was 14.36, and passive appraisal mean was 12.49. No gender differences in coping strategies were found [21]. Our study showed that males were significantly had more F-COPE, acquiring social support was, reframing, seeking spiritual support, mobilizing family to support more than females except for positive appraisal which showed no gender differences. Moreover, in a study aimed to find the relationship between stressor due to restriction of Palestinian movement, traumatic events due to war on Gaza and psychological symptoms, quality of life, and resilience, Palestinians used religious factors in facing the stress and trauma, 98% said God help 85.1% said they are proud of their achievements, and 71.5% said they had strong sense of purpose [5]. The results showed that HSCL total was negatively correlated with coping strategies such as acquiring social support, reframing, seeking spiritual support, and positive appraisal. While, anxiety was negatively correlated with acquiring social support, reframing, seeking spiritual support, and positive appraisal. Depression was negatively correlated with, acquiring social support, reframing, seeking spiritual support, and positive appraisal. Also the results were consistent with previous studies that suggest positive religious coping is associated with positive psychological adjustment and negative religious coping is associated with poorer adjustment [19,20]. Our study consistent with study religious coping and psychological and behavioral adjustment after Hurricane Katrina, which showed that, positive religious coping was associated with lower risk of major depression, poorer quality of life and increased alcohol use [18].

5. LIMITATIONS

This study used self-administered interview to collect data, which may limit the depth and

breadth of data that could be gathered. This study did not assess the severity of patient's illness.

6. CONCLUSION AND IMPLICATIONS

This study adds to the growing body of research involving families who experience stressors due to siege and trauma due to repeated wars, in particular, on the underlying relationship between coping strategies and mental health. However, their high rates of continuing psychopathology indicated by HSCL indicated that families remain vulnerable and that their ability to cope is likely to be impaired, stressing the need for intervention. But the results of this study could not be generalized in other contexts. Psychologists, educators, social workers and community workers can support families to identify shortcomings in their coping and to help develop their latent resources. There is a deficiency of such programs that develop family resilience. Considering that the actual services focus on mental disorders leads to the exclusion and minimalization of strengths and supportive resources.

ETHICAL APPROVAL

All authors hereby declare that all experiments have been examined and approved by the appropriate ethics committee and have therefore been performed in accordance with the ethical standards laid down in the 1964 Declaration of Helsinki.

COMPETING INTERESTS

Authors have declared that no competing interests exist.

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