Coping with stress and siege in Palestinian families in the Gaza Strip (Cohort study III)

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Abstract

Aim: The aim of the study was to investigate the ways of coping in Palestinian families exposed to siege and stress and mediating effect of coping on mental health problems.

Methods: Previously selected sample of 184 households from the Cohort study II were selected from the entire Gaza Strip. The age ranged from 18 to 64 years with mean age was 41.53 years. The subjects were interviewed using self administrated questionnaire which include sociodemographic scale, Family Coping Oriented Family Coping scale, and John Hopkins Checklist. The data collection was carried our on October and November 2008.

Results : The results showed that the most common impact of siege of Gaza items were: prices are sharply increased (90.8%), I feel I am in a big prison (88.5%), I can not find things I need in the market (91.70%), I was not able to get specific medicine for me or for one of the family member due to shortage of fuel and absence of transportation (73.4%), and I was not able to get specific medicine for me or for one of the family member due to shortage of physicians and nurses (62.58). Each participants reported from 2-20 items of siege with mean siege scores of 10.83 (SD = 4.07). The results showed that people with monthly income less than 350 US $ were more affected by siege that the other groups.

The most common psychological problems were: Crying easily (21.7%), difficulty falling asleep (16.8%), worrying too much (16.3%), headaches (15.2%), and feeling tense (15.2%). The results showed than mean HSCL was 53.82, mean anxiety subscale scores was 21.70, and mean depression subscale scores was 32.11 (SD = 8.59), 139 of participants (75.5%) rated as psychiatric cases and 45 were not cases (24.5%).

People live in cities reported mental health problems less than those live in villages and camps. Also, the results showed that people with monthly income less than 350 US $ showed more mental health problems than the other two groups were more affected by siege that the other groups.

The study showed the most common coping strategies used were: having faith in God (85.9%) sharing our difficulties with relatives (83.7%), seeking encouragement and support from friends (83.2%), facing the problems "head-on" and trying to get a solution right away (82.1%), seeking information and advice from persons in other families who have faced the same or similar problems (81.5%), seeking advice from relatives (grandparents, etc.) (80.4%), participating in mosque activities (79.9%), and attending religious meetings (79.3%). The total scores of FCOPE ranged from 71 to 131 (Mean = 106.21), reframing (Mean = 29.35), seeking spiritual support (Mean = 16.08), mobilizing family support (14.76), passive appraisal (Mean = 10.74).

The results showed that the total HSCL scores were positively associated with the following siege items: I sold some of my furniture and wife gold, social visits are less than before due to shortage of money due to unemployment, I stopped smoking and using Nargela due to shortage of money, and negatively with the following items: I went to Zaka organizations and other organizations to get the food, I can not find things I need in the market.

Conclusion: The present study shows that Palestinian families are victims of stress and trauma and showed high level of depression and anxiety. However, coping strategies usually used perceived social support have direct effect on families member' outcomes. The reliance on spiritual coping and reframing could be useful for these families to face their difficulties even if we observe adjustment problems. Results also point out to the necessity of elaborating intervention models which include an active participation of significant others.

Key word: Family coping, siege, stress, mental health, Gaza Strip

Introduction

Since the beginning of 2006 the situation in the Gaza Strip has become more uncertain and only can be viewed with concern by the international organizations working in the West Bank and Gaza Strip. Specifically, this uncertainty is based on the results of the Palestinian Legislative Council elections at the end of January 2006 – in which the Islamic Resistance Movement (Hamas) won 74 of the 132 seats. Following this election, the international community, through public statements issued by the Quartet for the Gaza Disengagement, the United Nations (UN) and the European Union (EU) have asked the future Hamas-led government to commit to non-violence, to the recognition of Israel and to the acceptance of previous obligations (the Roadmap) in order to allow international donors to continue providing funds to the PA. Israel has announced that it will withhold monthly tax payments to the PA, amounting to between US$ 50 million and US$ 65 million per month and constituting about two-thirds of the income derived from Palestinian economic activity (WHO, 2006).

In July 2008 another historical period started when Israel and Palestinian factions agreed on truce period for 6 month ending in 19th December 2008. During this period at the least 22 Palestinians were killed in Gaza Strip and tens were wounded, locally made rocket continued to shell the near Israelis towns close to Gaza Strip border (PHS, 2008). On 19th December the Palestinian fighting factions decided not to prolong the truce for another period and started shelling the Israelis areas with locally mad rockets, Israelis voices inside the minister cabinet and streets started to increase to take military action against the Gaza Strip beside the siege measures which already present for the last 18 months. In the last 2 weeks, the humanitarian condition of the entire Gaza Strip entered into a very serious stage in which most of the bakeries stop working and cues of people are in front of the opened one, electricity is coming for 6 hours daily, no house gas and people started to use woods and kerosene cookers. Beside, there was a shortage in most of food material and UNRWA stopped distribution of food for around one million persons in the Gaza Strip. On 27th December 2008, a new chapter had been opened by new strikes by airplanes on Gaza Strip which left at least 700 people killed and 3000 wounded. Still the war is going on and no clear vision for the countries to end the current war.

All of the above mentioned stressors added new burden on Palestinian families and number of studies in the last 2 years showed that Palestinians are suffering of a variety of stress related psychiatric problems such as depression, anxiety, and PTSD. However, presence of other protective factors such as coping strategies, presence of family support, and community support buffer the effect of stress and trauma on Palestinians (Quota, 2003, Thabet et al, 2008a, 2008b).

McCubbin and Patterson's (1982) postulated that families in crisis must cope with a pile-up of stressors. Their coping responses are affected by precise stressors, existing and new resources, and perceptions of the crisis. Finally, coping leads to adaptation, which is on a continuum from nonadaptation to maladaptation.

The basic function of coping is to manage specific demands that are appraised as taxing and exceeding one's resources in order to protect mental health and psychological integrity (Lazarus & Folkman, 1984). In emotion-focused coping, people attempt to manipulate their feelings, perceptions, and attributes to be less threatening and more controllable. In problem-focused coping, people aim at changing the distressing reality and remove the cause of stress and trauma (Folkman & Lazarus, 1985; Skinner, Edge, Altman, & Sherwood, 2003). Other studies among Palestinians have showed that, against general beliefs, exposure to military violence increases rather than decreases active coping and political activity among children (Punamaki & Suleiman, 1989) and adults (Punamaki, 1986, 1988). Recently, Punamaki et al (2008) in study of Participants were 184 men recruited from a Palestinian community sample, 92 were former political prisoners and 92 non-prisoners. The results showed that, compared to non-prisoners, the political ex-prisoners employed less avoidant, denying, and emotion-focused coping strategies. Military trauma was associated with avoidant and denying coping only among non-prisoners. The ex-prisoners showed more mental health and medical problems, especially when exposed to military trauma. None of the coping styles or strategies were effective in protecting the mental health in general or in either groups. However, main effect results revealed that the high level of active and constructive and low level of emotion-focused coping was associated with low levels of psychiatric symptoms and psychological distress.

The aim of the study was to investigate the ways of coping in Palestinian families exposed to siege and stress and mediating effect of coping on mental health problems.

Methodology

Subjects

The sample included 184 parents, 44 of them were fathers (23.5%) and 140 mothers (76.5%). The age ranged from 26 to 65 years with mean age of 41.61 (SD = 8.66).

Procedure

We selected the sample of the parents according to the first and second stage of cohort study in which the names of the families was available for the data collection. We held a meeting and conducted training for 4 hours to 8 professionals working in the filed of community mental health and had previous experience in data collection (4 social workers, 4 psychologist). We explained to them the aim of the study and give them prepared list of number of the families to be interviewed. A cover letter was given to each parent to obtain written permission from them to participate in the study. Sociodemographic information for the study population was collected from parents. Each interview took 45 minutes to be completed. The data collection was done between September and November 2008.

Instruments

The data was collected from couples by using the following questionnaires:

Demographic questionnaire.

Demographic information about the participants was obtained using a survey developed by the authors. This questionnaire includes sex, age, citizenship, and education level.

Gaza Siege Checklist-Revised version (Thabet, 2008)

This checklist consisted of 21 items covering a wide range of daily life situation affected by Gaza Siege including the family,

health, education, social life, and economic issues. The first checklist was This scale was developed after conducting a focus group for 20 professionals working in different sectors of health, education, social services, and economic sectors. In this study, the split half reliability of the scale was high (r = .78). The internal consistency of the scale was calculated using Chronbach's alpha, and was also high (α = .72). Some items were changed to fulfill the needs of new changes in siege and strikes in Gaza Strip.

Hopkins Symptoms Checklist (HSCL-25) *(Mollica et al., 1987)*

The HSCL-25 contains four possible responses: not at all, a little, quite a bit, and extremely. An individual's score is obtained by summing the scores of all the responses and dividing by the total number of responses (Mollica et al., 1987). The score of 1.75 is generally accepted as indicative clinical symptoms (Mollica et al.; Nicholson, 1997). A 25 items version of HSCL-25 which has been used in wide range of primary health care settings as a valid and reliable measure of psychiatric symptoms, in particular screening of anxiety and depression experienced by client. Symptoms are scored on a 4-point Likert scale. Which has a 10-item anxiety and a 15-item depression scale? The established clinically significant item-average cut-off score of 51.75 for each sub-scale. The Cranach's alpha internal consistency coefficient in this sample was.87 for the HSCL-25 anxiety subscale,.87 for the HSCL-25 depression subscale, Shrestha et al (1998). In other study population, Cronbach's alpha was 0.91 and 0.88 for the anxiety and depression sub-scales respectively (Hollifield et al, 2008). The Arabic translated version has proven to be reliable and valid in a multicultural context (Afana et al 2002).

Family Crisis Oriented Personal Evaluation Scales The Family Crisis Oriented McCubbin, H. I., Olson, D. H., & Larsen, A. S. (1991).

Family Crisis Oriented Personal Evaluation Scales (F-COPES) is a self-report measure used to assess family coping strategies (McCubbin et al., 1991). The F -COPES was used in this study because coping as a construct deals with plans or actions that ameliorate the experience of stress (e.g., McCubbin et al., 1991). The scale is composed of 30 items, which result in five subscale scores and a total score. The five subscales are: (a) Acquiring Social Support; (b) Reframing; (c) Seeking Spiritual Support ; (d) Mobilizing Family to Acquire and Accept Help; and (e) Passive Appraisal. A score is obtained for each subscale and the total score by summing the respondents score for each of the items. The norm group for the final F-COPES scale consisted of 2,740 spouses and adolescents. Percentiles, means, and standard deviations are provided for subscales and the total score. Alpha reliabilities for the scales ranged from .63 to .83. The reliability of the total scale was .86. Test-retest reliability estimates range from a low .61 to a high of .95 for the subscales. Total scale test-retest reliability was .81 (n = 116, 4-week interval**)** (McCubbin, et al, 1991).

Statistical analysis

In this study we used SPSS ver. 14 for data entry and analysis. Frequencies and percentages of siege items, psychological symptoms, and coping were calculated. T-independent test, ANOVA tests for between-group comparison of continuous variables. Spearman's correlation coefficient tested the association between numbers of siege scores, psychological symptoms, and coping strategies by families' scores. Linear regression investigated the association between independent (siege items, coping strategies, and sociodemographic variables) and psychological problems as dependent variable.

Results

Sociodemographic characteristic of the study

The sample responded to the interview were 184 participants with response rate of 99%, it consisted of 144 male (52.07%) and 43 mothers (47.93%). The age ranged from 18 to 64 years with mean age was 41.53 years (SD =7.84). According to place of residence 26.1% were from North Gaza, 37.5% were from Gaza area, 14.7% from Middle area, 3.8% from Khan Younis area, and 17.9% were from Rafah area (south of Gaza). According to type of residence, 43.5% live in cities, 12.5% live in villages, and 44% live in camps. According to number of siblings, 13.6% of families had less than 4 children, 61.4% had 5-7 children, and 25% had 8 and more siblings. In looking for the family monthly income, 60.9% of the families monthly income was less than 350 US $ per month, 30.4% earned 351-700 US $, and only 8.7% earned more than 701 US $.

Table 1 : Sociodemographic characteristic of the study sample

	No	%
Place of residence		
North Gaza	48	26.1
Gaza	69	37.5
Middle area	27	14.7
Khan Younis	7	3.8
Rafah area	33	17.9
Place of residence		
City	80	43.5
Village	23	12.5
Camp	81	44.0
Siblings		
Less than 4	25	13.6
5-7 children	113	61.4
8 and above	46	25.0
Monthly family income		
Less than 350 US $	112	60.9
351-700 US $	56	30.4
More than 701 US $	16	8.7

Frequency of impact of siege of Gaza

The results showed that the most common impact of siege of Gaza items were: prices are sharply increased (90.8%), I feel I am in a big prison (88.5%), I can not find things I need in the market (91.70%), I was not able to get specific medicine for me or for one of the family member due to shortage of fuel and absence of transportation (73.4%), and I was not able to get specific medicine for me or for one of the family member due to shortage of physicians and nurses (62.58). Each participants reported from 2-20 items of siege with mean siege scores of 10.83 (SD = 4.07). Table 2.

Table 2 : Frequency of Impact of siege of Gaza items

	No.	%
1. Prices are sharply increased	167	90.8
2. I feel I am in a big prison	162	88.5
3. I was not able to get specific medicine for me or for one of the family member due to shortage of fuel and absence of transportation	135	73.4

4. I was not able to get specific medicine for me or for one of the family member due to shortage of physicians and nurses	115	62.8
5. Social visits are less than before due to shortage of fuel and absence of transportation	115	62.8
6. Social visits are less than before due to shortage of money due to unemployment	112	60.9
7. Ability to send children to schools due to shortage of money	110	59.8
8. I was not able to get specific medicine for me or for one of the family member due to shortage of medicine and equipment transportation	105	57.1
9. Losing the job due to shortage of cement ,and basic construction materials	105	57.4
10. I can not find things I need in the market	99	53.8
11. I went to Zaka organizations and other organizations to get the food	94	51.1
12. I sold some of my furniture and wife gold.	87	47.3
13. I started borrowing from banks and people to keep my family demands	85	46.2
14. I stopped smoking and using Nargela due to shortage of money	84	45.7
15. I postponed the marriage ceremony of my sons due to shortage of furniture and building materials	80	43.5
16. I can not finish some construction and repair work in my house due to shortage of cement and building materials	80	43.5
17. I thought of immigration	78	42.4
18. I started smoking and using Nargela and abusing drugs due to stress	58	31.5
19. I need to travel outside the Gaza Strip and can not	51	27.7
20. I stopped sending my children to schools due to shortage of money and let them do other jobs	51	27.7
21. I started doing the papers for immigration	32	17.4

Differences between siege other socioeconomic variables (place of residence, number of siblings, and family monthly income)

In order to find the differences between the place of residence, number of siblings, monthly income and siege, one way ANOVA test was performed. Pos hoc Bonnefroni test showed that people living in cities were more affected by siege than those in camps and not villages (Mean = 10.5 vs 8.9) (F=6.1, p = 0.001). There were no differences in siege and number of children in the Palestinian families. Pos hoc results showed that people with monthly income less than 350 US $ were more affected by siege that the other groups (Mean = 10.6 vs 8.66) (F=8.94, p = 0.001)

Psychological problems rated by families

The most common psychological problems were: Crying easily (21.7%), difficulty falling asleep (16.8%), worrying too much (16.3%), headaches (15.2%), and feeling tense (15.2%).

Table 3: Percentages of the sample endorsing items of the HSCL

	Extremely	Quite a bit	Somewhat	Not at all
1. Suddenly scared	10.3	19.0	47.3	23.4
2. Feeling fearful	6.5	23.9	48.9	20.7
3. Faintness, dizziness	8.2	27.2	31.0	33.7
4. Nervousness, shakiness	5.4	27.2	46.7	20.7
5. Heart pounding	8.7	23.4	39.7	28.3
6 .Trembling	7.1	21.7	34.8	36.4
7. Feeling tense	14.1	23.4	42.9	19.6
8. Headaches	15.2	28.3	40.2	16.3
9. Spells of terror	8.7	16.8	32.1	42.4
10. Feeling restless	11.4	25.0	53.3	10.3
11. Feeling low in energy	9.8	25.0	51.6	13.6
12. Blaming yourself	11.4	22.3	42.9	23.4
13. Crying easily	21.7	25.0	35.9	17.4
14. Loss of sexual interest	8.7	10.3	34.2	46.7
15. Poor appetite	10.3	20.1	48.4	21.2
16. Difficulty falling asleep	16.8	25.5	37.5	20.1
17. Feeling hopeless	12.5	20.7	34.2	32.6
18. Feeling blue	13.0	23.4	38.6	25.0
19. Feeling lonely	12.5	17.9	33.7	35.9
20. Feeling trapped or caught	8.7	8.7	17.9	64.7
21. Worrying too much	16.3	14.1	46.2	23.4
22. Feeling no interest	9.8	29.9	44.6	15.8
23. Thoughts of ending your life	2.7	27.7	34.8	34.8
24. Feeling everything is an effort	10.3	34.8	40.8	14.1
25. Feelings of worthlessness	3.8	12.0	29.9	54.3

Mean and standard deviation of mental health using HSCL

The results showed than mean HSCL was 53.82 (SD = 13.99), mean anxiety subscale scores was 21.70 (SD = 6.38), and mean depression subscale scores was 32.11 (SD = 8.59). Taking in consideration of cutoff point of >1.75 in HSCL, 139 of participants (75.5%) rated as psychiatric cases and 45 were not cases (24.5%).

Table 4: Mean and standard deviation of mental health using HSCL

	N	Min.	Max.	Mean	SD
Total HSCL	184	29	84	53.82	13.99
Anxiety	184	10	38	21.70	6.38
Depression	184	17	58	32.11	8.59

Differences between mental health problems rated by HSCL and other socioeconomic variables (place of residence, number of siblings, and family monthly income)

In order to find the differences between the place of residence, number of siblings, monthly income and mental health, one way ANOVA test was performed. Pos hoc Bonnefroni test showed that people living in cities reported mental health problems less than those live in villages and camps (F =18.06, p =0.001). Also, the results showed that people with monthly income less than 350 US $ showed more mental health problems than the other two groups were more affected by siege that the other groups (F=8.19, p = 0.001)There were no differences in mental health problems of adults and number of children in the Palestinian families (F = 2.44, p =.09).

Families coping with siege and stress

The study showed the most common coping strategies used were: having faith in God (85.9%) sharing our difficulties with relatives (83.7%), Seeking encouragement and support from friends (83.2%), facing the problems "head-on" and trying to get a solution right away (82.1%), seeking information and advice from persons in other families who have faced the same or similar problems (81.5%), seeking advice from relatives (grandparents, etc.) (80.4%), participating in mosque activities (79.9%), and attending religious meetings (79.3%). While the least common coping items used were: receiving gifts and favours from neighbours (e.g. food, taking in mail, etc.) (27.7%), feeling that no matter what we do to prepare, we will have difficulty in handling problems (21.2%), and watching television (14.1%).

The total scores of FCOPE ranged from 71 to 131 (Mean = 106.21, SD =11.46), reframing (Mean = 29.35, SD = 4.31), seeking spiritual support (Mean = 16.08, SD = 2.79), mobilizing family support (Mean = 14.76, SD = 4.31), passive appraisal (Mean = 10.74, SD = 2.78).

Table 5: Means and standard deviation of FCOPE and subscales

	N	Min.	Max.	Mean	SD
FCOPE	184	71	131	106.21	11.46
Reframing	184	14	40	29.35	4.31
Seeking spiritual support	184	7	20	16.08	2.79
Mobilizing family to acquire and accept help	184	7	20	14.76	2.78
Passive appraisal	184	4	19	10.74	2.86

Relationship between siege scores, mental health, and coping of families

In order to investigate the relationship between the siege total scores, mental health, and coping of families, Pearson coefficient correlation test was done. The results showed that there were statistically significant positive correlation between total siege scores and total family coping strategies (r = 0.19, p < 0.001), total HSCL (r = .22, p < 0.001), anxiety domain (r = 0.22,p < 0.001), depression subscale (r = 0.20, p < 0.001).

Table 5: Pearson correlations coefficient test between siege scores, mental health, and coping of families

	1	2	3	4	5	6	7	8	9	10
1. Siege	1									
2. FCOPE	.19**	1								
3. Acquiring -Social Support	-.08	-.18*	1							
4. Reframing	-.04	-.05	.55**	1						
5. Seeking Spiritual Support	-.12	-.07	.63**	.23**	1					
6. Mobilizing Family to Acquire and Accept Help	-.03	.16*	.38**	.57**	.24**	1				
7. Passive Appraisal	-.12	.03	.50**	.25**	.58**	.33**	1			
8. Total_HSCL	.22**	.09	-.08	-.12	-.02	-.03	.09	1		
9. Anxiety	.22**	.16*	-.15*	-.12	-.02	-.01	.10	.91**	1	
10. Depression	0.20**	0.03	-0.02	-0.11	-0.01	-0.05	0.08	0.95**	0.74**	1.00

Determinants of siege scores and psychological symptoms

In order to find out the predictive effect of siege on psychological symptoms, total psychological symptoms was entered as dependent variable in a multiple regression model, with siege items as the independent variables. The results showed that the total HSCL scores were positively associated with the following siege items: I sold some of my furniture and wife gold (B= .45, p< 0.001), social visits are less than before due to shortage of money due to unemployment (B= .16, p< 0.001), I stopped smoking and using Nargela due to shortage of money (B= .14, p< 0.001), and negatively with the following items: I went to Zaka organizations and other organizations to get the food (B= -.25, p< 0.001), I can not find things I need in the market (B= -.20 p< 0.001).

Table 6: Linear Regression analysis of psychological symptoms and siege items

	Unstandardized Coefficients		Standardized Coefficients		
	B	SE	Beta	t	Sig.
(Constant)	49.743	1.896		26.237	.000
I sold some of my furniture and wife gold.	12.665	2.127	.450	5.953	.000
I went to Zaka organizations and other organizations to get the food	-7.207	2.040	-.256	-3.534	.001

I can not find things I need in the market	-5.882	1.895	-.209	-3.104	.002
Social visits are less than before due to shortage of money due to unemployment	4.758	1.935	.165	2.459	.015
I stopped smoking and using Nargela due to shortage of money	4.144	1.853	.147	2.237	.027

$F = 16.21$, $p < 0.05$, $R^2 = 0.56$

Discussion

This study is the third stage of cohort study of Palestinian families in the Gaza Strip trying to highlight the effect of stress and trauma on Palestinians in the last 2 years.

The study showed that Palestinians exposed to variety of stressful events and the siege of the Gaza Strip was one of the last measure inflicted by the Israelis of the entire population namely: prices are sharply increase, feeling being in big prison, was not able to get specific medicine for them or for one of the family member due to shortage of fuel and absence of transportation, was not able to get specific medicine for them or for one of the family member due to shortage of physicians and nurses. This results showed that siege as stressful collective situation which increased with shortage of medicine and staff in hospitals due to dispute between the Palestinians in Gaza and West Bask. This is consistent with our previous study in similar sample in last April in Gaza (Thabet et al 2008b, in press).

Our results showed that the 75.5% of the study sample rated as psychiatric cases using HSCL consistent with our previous study in the beginning of Al Aqsa Intifada in which 72.9% of mothers rated as psychiatric caseness according to GHQ (Thabet and Vostanis, 2001). However, this high level of mental health problems is less than the rate of mental health problems in referred psychiatric patients in which 87.7% of the referred cases were scoring above cut off point of GHQ (using 4/5 as a cut-off point compared to only 13 (12.3%) of the controls (Thabet and Vostanis, 2005).

Our results is consistent with studies carried in the area in which in a nationwide epidemiological survey of mental health problems in terms of lifetime prevalence in Iran found that the prevalence of psychiatric disorders using GHQ-12 was 10.8%, (25.9% of the women and 14.9% of the men) using GHQ-28 to be likely 'cases', and 27.3% of the individuals had to be regarded as probably suffering from a psychological disturbance (Mohammadi et al, 2005; Noorbala et al, 2004; Mofidi et al, 2008).

The study showed the most common coping strategies used were: having faith in God, sharing our difficulties with relatives, seeking encouragement and support from friends, facing the problems "head-on" and trying to get a solution right away, seeking information and advice from persons in other families who have faced the same or similar problems, seeking advice from relatives (grandparents, etc.), participating in mosque activities, and attending religious meetings. Studies revealed that in times of disaster, individuals have to focus on survival, day-to-day needs, and basic essential tasks (Figley & Barnes, 2005). Eating well, exercise, self-reflection, and spiritual activities are self-care strategies recommended by mental health professionals (Coster & Schwebel, 1997; Jennings & Skovholt, 1999; Wright, 1997). Moreover, the literature indicates that one important factor in coping with disaster is the role of social support (Walsh, 1998). Research indicates that actively seeking social support is related to better adjustment postdisaster (Tang, 2006) and that overall levels of social support lead to more positive disaster outcomes (Cryder, Kilmer, Tedeschi, & Calhoun, 2006). Individual differences in coping with trauma have been associated with varying degrees of adjustment (Allen, 1999). For example, research on dealing with disasters indicates that more active forms of coping, such as problem solving, are related to better adjustment (Bodvarsdottir & Elklit, 2004; Lopez-Valequez & Marvan, 2003). Research on cognitive forms of coping indicates that cognitive reframing, optimism, and acceptance (when situations cannot change) tend to be successful coping strategies as well (Cryder et al., 2006; Seligman, 1998; Walsh, 1998). The literature also suggests that more emotional forms of coping, such as venting and catastrophizing, do not work well (Bodvarsdottir & Ask, 2004; LaGreca, Prinstein, Silverman, & Vernberg, 1996), but are certainly normal, and this is in line with my observations. This is consistent with study of victims of Asian Tusnami who coped with symptoms and distress by utilising a number of culturally relevant resources, the most common being their own strength, family and friends, the use of a Western-style hospital and their own religious practice (Tang, 2006). Others found that people utilised their own strength (70%), family and friends (56%), a Western-style hospital (56%) or their own religious practice (53%) to cope with symptoms or feelings since the tsunami (Hollifield et al 2008).

Conclusion and clinical implications

The present study shows that Palestinian families are victims of stress and trauma and showed high level of depression and anxiety. However, coping strategies usually used perceived social support have direct effect on families member' outcomes. The reliance on spiritual coping and reframing could be useful for these families to face their difficulties even if we observe adjustment problems. Results also point out to the necessity of elaborating intervention models which include an active participation of significant others. Groups of parents could be a way to include these persons in the adaptation process and reinforce the positive perception of support received. This kind of intervention could increase parents feelings of competence to deal with the and adversities.

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