Research Article

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Journal of Nursing and Health Studies
ISSN 2574-2825

2017
Vol.2 No.1:2

DOI: 10.21767/2574-2825.100009

Relationships Between Traumatic Events, Religious Coping Style, and Post-Traumatic Stress Disorder among Palestinians in the Gaza Strip

Abdel Aziz Mousa Thabet[1*], and Panos Vostanis[2]

[1]Child and Adolescent Psychiatry, Al Quds University, Child and Family Training and Counseling Center, Gaza Strip, Palestine

[2]School of Medicine, Greenwood Institute of Child Health, School of Psychology, UK

[*]**Corresponding author:** Mousa Thabet AA, Emeritus Professor of Child and Adolescent Psychiatry, Al Quds University, Palestine, Consultant at Child and Family Training and Counseling Center, Gaza Strip, Palestine, Tel: 4377771978; E-mail: abdelazizt@hotmail.com

Received Date: January 31, 2017; **Accepted Date:** March 24, 2017; **Published Date:** March 29, 2017

Citation: Mousa Thabet AA, Vostanis P. Relationships Between Traumatic Events, Religious Coping Style, and Post-traumatic stress disorder among Palestinians in the Gaza Strip. J Nurs Health Stud. 2017, 2:1.

Abstract

Aim: The aim of the study was to investigate the effect of trauma due to Gaza war on Palestinians' PTSD and copings strategies. A sample of 374 adults, the age ranged from 21 to 60 years with mean age 41.5 (SD=8.6), 193 were males (53.9%) and 181 were females 46.1%. Participants completed measures of experience of traumatic events (Gaza Traumatic Events Checklist-20 items, War on Gaza), PTSD, and Ways of Coping Scale.

Mean traumatic events experienced 5.4 traumatic events and 42% reported full criteria of PTSD. Mean coping scores was 107.28, acquiring social support mean was 29.59, reframing mean was 31.22, seeking spiritual support mean was 15.93, mobilizing family to acquire and accept help mean was 14.14, and positive appraisal mean was 13.89. Traumatic events were significantly negatively correlated to other coping strategies such as reframing and mobilizing family to acquire and accept help.

Participants with no PTSD scored more coping, acquiring social support, reframing, and seeking spiritual support, positive appraisal. While, there was no significant differences in mobilizing family to acquire and accept help with PTSD.

Keywords: Copings strategies; Palestinians; PTSD; War trauma

Introduction

Palestinians in Gaza are among the populations exposed to the highest levels of traumatization in history. Palestinians have experienced, in addition to chronic stressors and other personal interpersonal traumas and poverty, years of intergroup violence in the Israeli-Palestinian conflict and resulting refugee status without a land or recognized national identity. Palestinians are also experiencing a civil war; Palestinian factions fight for the leadership of Palestinian people with very different visions of what they hope to accomplish and how they hope the Palestinian State will be governed [1].

In United States, it has been estimated that at least half of the general population experiences one or more traumatic events during their lifetime, with approximately 6.4% to 6.8% of the population developing symptoms that meet the criteria for posttraumatic stress disorder (PTSD) [2,3]. However, in comparison study of Palestinians in Gaza and American Indians in the United State, [4] found that 16.5% scored in the range of severe and 46.9% scored above the suggested cutoff score for diagnosable PTSD.

Coping

Research suggests the ways individuals cope with trauma may play a more important role in their adjustment than the traumatic event itself [5]. Coping is defined as “efforts to prevent or diminish threat, harm, and loss, or to reduce associated distress” [6]. Several distinctions have been made between different types of coping mechanisms; a widely-used distinction is between avoidance (or disengagement) coping and approach (or engagement) coping. Based on Lazarus and Folkman’s model, 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. Coping strategies includes a broad diversity of thoughts and behaviors used to manage the demands of a taxing situation [7]. Multiple research groups have attempted to organize coping strategies (and styles) into different categories.

The approach/avoidance construct, as the label implies, indicates whether the individual makes attempts to change the situation or distance him- or herself from the stressor as a way to reduce negative outcomes. Coping strategies implemented immediately following trauma exposure, and in response to

post-traumatic stress. Avoidance as a sort of coping, such as behavioral or emotional avoidance, have been associated with increased psychological distress among interpersonal violence PTSD populations [8]. Avoidance behaviors could lead to withdrawal from support networks and reduced opportunities for positive experience, thereby compounding negative affect and reduced emotional experiencing. Approach-oriented coping strategies, such as active coping, planning, and support seeking, have been generally deemed adaptive following exposure to stress [9]. Social support is a variable that has been considered as both a means of coping and a resource contributing to the availability of other forms of coping [10]. The different ways of conceptualizing the role of social support in coping, and the relative lack of studies that examine reciprocal relationships between coping factors, has created some confusion about what roles social support may play in helping women deal with domestic violence.

Trauma-related coping self-efficacy, the perceived ability to cope with post trauma recovery demands, plays an important role in psychological recovery after trauma. A meta-analysis [11] demonstrated that higher coping self-efficacy, levels were consistently associated with lower levels of distress and posttraumatic stress symptom (PTSS) levels in cross-sectional and longitudinal studies.

The aims of the study were 1) to investigate the type of traumatic events due to war on Gaza, 2) to explore the prevalence of post-traumatic stress disorder, 3) to find the types of coping strategies used by Palestinians to overcome the impact of trauma, 4) and to elaborate the relationships between trauma, Post traumatic stress disorder, and religious coping strategies.

Method

Participants

The study population included 374 Palestinians living in Gaza Strip. They were randomly selected from five areas of the Gaza Strip (North, Gaza, Middle area, Khan Younis, and Rafah. They were interviewed 16 months after the end of end of war on Gaza in 2009. From 374, 193 were males (53.9%) and 181 were females 46.1%. According to the selection criteria, the age range was 20-60 years, with a mean age of 41.5 (SD=8.6).

Measures

A predesigned socio-demographic sheet: This questionnaire included including age, place of residence, and family monthly income.

The Gaza traumatic events checklist: This checklist describing the most common traumatic experiences families could have faced in the Gaza Strip during the Gaza War one and half year ago. The checklist was revised from a version used in earlier research [12-14], adapted for the nature of traumatic events occurring during the Gaza war. The scale consisted of 20 items with Yes and No answer. The scale was recorded into mild traumatic events (less than 5 traumatic events), moderate traumatic events (6-10) and severe traumatic events (11 and more traumatic events). In this study, the Cronbach's alpha coefficient was acceptable.

Posttraumatic stress disorder checklist: This checklist contains 17 items adapted from the DSM-IV-TR PTSD symptom criteria (APA, 2000). The 17 PTSD symptoms are rated by the participant for the previous month on a scale indicating the degree to which the respondent was bothered by a particular symptom from 1 (not at all) to 5 (extremely). Items can be categorized as follows: items 1, 2, 3, 4, 17 are for criteria B (intrusive re-experiencing); items 5, 6, 7, 8, 9, 10, 11 are for criteria C (avoidance and numbness); and items 12, 13, 14,15, 16 are for criteria D (hyperarousal). Respondents are asked to rate on a 5-point Likert scale (1=not at all to 5=extremely) the extent to which symptoms troubled them in the previous month. Using the recommended Posttraumatic Stress Disorder Checklist cutoff score of 50, Blanchard found cut of point of 44 [15]. Previous research [15] has suggested using as a minimum sum either a score of 3 or 4 on a symptom for it to count as positive towards the diagnosis. This scale was used in previous studies and showed high reliability and validity 27 [16]. In this study, the Cronbach's alpha coefficient was high and acceptable.

Ways of coping: The revised Ways of Coping [17] differs from the original Ways of Coping Checklist [18] in several ways. The response format in the original version was Yes/No; on the revised version, the subject responds on a 4-point Likert scale (0=does not apply and/or not used; 3=used a great deal). Redundant and unclear items were deleted or reworded, and several items, such as prayer, were added. The Way of Coping that used in this study shortened to 44 items divided in 7 subscales as follow: Wish and avoidance thinking including the following items (3, 11, 19, 21, 34, 39, 42), planful problem solving including the following items (7, 12, 15, 23, 43, 44), positive reappraisal including the following items (5, 8, 9, 16, 20, 31, 32, 38, 40), seeking social support including the following items (1,17, 24, 30, 33), accepting responsibility including the following items (2, 10,18, 26, 41), self-control including the following items (6, 13, 14, 22, 28, 35, 37), escape avoidance including the following items (4, 25, 27, 29, 36). The validity of this scale was tested before in study by Folkman et al. among community sample of people and showed their alphas independently as follow [19]; confronting coping (alpha=0.70); Distancing (alpha=0.61); self-controlling (alpha=0.70); seeking social support (alpha=0.76); accepting responsibility (alpha=0.66); escape and avoidance (alpha=0.72); planful problems solving (alpha=0.68); and positive reappraisal (alpha=0.79). The eight scales accounted for 46.2% of the variance. In this study, the (alpha=0.72). In this study, the Cronbach's alpha was α=0.80 and split half was 0.70.

Study procedure: Data collection was conducted by 8 professionals who attended day training by the principal investigator about the aim of the study, sample, and questionnaires of the study. Data collection was done after 16 months of end of war on Gaza in 2009. which include the 374 people in the five areas. For selecting the participants from

each district, one street was selected in each area, and every principal was selected. In larger buildings, one flat from each floor was selected randomly. Families were approached until 374 agreed to participate. 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 as well as interviewees.

Statistical analysis

In this study, we used SPSS ver. 20 for data entry and analysis. Frequencies and percentages of trauma items, PTSD, and coping were calculated. Independent t-test, ANOVA tests for between-group comparison of continuous variables. Spearman's correlation coefficient tested the association between numbers of traumatic events, PTSD, and coping strategies by families' scores. Linear regression investigated the association between independent variables (trauma events, PTSD, and coping strategies) as dependent variable was conducted to find the predicting effect of trauma on PTSD and coping strategies.

Results

Sociodemographic characteristics of study population (N=374)

Participants in this study consisted of 374 persons, 193 were males (53.9%) and 181 were females 46.1%. They had a mean age of 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. Regarding 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 US monthly, 23.1% had $ 301-650 family monthly income, and 3.7% had $ 651 and above family monthly income (**Table 1**).

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

	No.	%
1. Sex		
Male	242	53.9
Female	207	46.1
2. Place of residence		
North Gaza	73	16.3
Gaza	154	34.3
Middle area	82	18.3
Khan Younis	86	19.2
Rafah area	54	12
3. Type of residence		
City	284	64.1
Village	44	9.9
Camp	115	26
6. Family monthly income		
Less than $300	317	73.2
$301-650	100	23.1
$ 651 and more	16	3.7

Traumatic events experienced by subjects after War on Gaza

Table 2 Percentage of traumatic events due to War on Gaza (N=449).

	Yes		No	
	No	%	No	%

1. Watched mutilated bodies in TV	424	94.4	25	5.6
2. Deprivation of going to the toilet and leaving the room at home because of the firing and shelling in the area	226	50.3	223	49.7
3. Witnessed firing by tanks and heavy artillery at neighbors' homes	215	47.9	234	52.1
4. Witnessed shelling and destruction of neighbors home	196	43.7	253	56.3
5. Were detained at home during incursion	184	41	265	59
6. Loss of one of the friends, relatives during the war	175	39	274	61
7. Forced to move from home to a safer place during the war	174	38.8	275	61.2
8. Heard killing of a relative	119	26.5	330	73.5
9. Heard killing of a non-relative	111	24.7	338	75.3
10. Threatened by shooting	101	22.5	348	77.5
11. Witnessed shelling and destruction of own home	92	20.5	357	79.5
12. Destruction of personal belongings during the war	90	20	359	80
13. Witnessed firing by tanks and heavy artillery at own home	84	18.7	365	81.3
14. Witnessed shooting of a relative	59	13.1	390	86.9
15. Witnessed shooting of a friend	57	12.7	392	87.3
16. Threatened by shooting	46	10.2	403	89.8
17. Beaten and humiliated by the army during the war	29	6.5	419	93.5
18. Shot by bullets, rocket, or bombs	28	6.2	421	93.8
19. Exposure to burn by bombs and phosphorous bombs	28	6.2	421	93.8
20. Threatened with death by being used as human shield by the army to move from home to home	24	5.3	425	94.7

Participants commonly reported traumatic events such as 94.4% reported watched mutilated bodies in TV, 50.3% were deprived of going to the toilet and leaving the room at home because of the firing and shelling in the area, 47.9% witnessed firing by tanks and heavy artillery at neighbors homes, 43.7% and witnessed shelling and destruction of neighbors home (**Table 2**).

Mean traumatic events and sex differences

Palestinians experiences variety of traumatic events, the traumatic events ranged from one to 19, total number of traumatic events experienced by each participant were 5.4 traumatic events (SD=4.1). The results showed that mean traumatic events reported by males was 5.83 (SD=4.32) compared to mean in female=5.07 (SD=3.88). There was a significant effect for gender, t (442)=2.00, $p<0.05$, with male receiving higher scores than female.

Means and standard deviations o PTSD and subscales

Mean PTSD symptom severity score was 48.29 (SD=13.82), intrusion mean was 15.65 (SD=4.49), avoidance mean scores was 18.84 (SD=5.65), hyperarousal mean scores was 13.66 (SD=5.42).

Prevalence of PTSD

Using scoring of DSM-IV of one intrusion symptom, three avoidance, and two hyperarousal symptoms, 1.9% of the sample reported no PTS symptoms, 36.1% reported at least one DSM-IV traumatic stress symptom (B or C or D), 20% reported at least two DSM-IV traumatic stress symptom (partial PTSD) (C and B, C and D, B and D), and 42% reported at least three DSM-IV traumatic stress symptom (full criteria of PTSD).

Relationships between PTSD and sociodemographic variables

Using T independent test, the mean PTSD-17 in males was 44.76 (SD=13.66) compared to mean scores in females=52.32 (SD=12.88). These differences reached statistically significant differences toward females (t=(427) 5.862, $p<0.001$). Intrusion mean for males was 14.27 (SD=4.46) compared to 17.25 (SD=3.98) in females. These differences reached statistically significant differences toward females (t=(440) 3.15, $p<0.01$) avoidance mean scores in males was 17.87 (SD=5.69) compared to 19.97 (SD=5.40) in females. These differences reached statistically significant differences toward female (t=(439) 1.75, $p<0.01$), and hyperarousal mean scores in males was 12.54 (SD=5.26) compared to 14.97 (SD=5.31) in females.

These differences reached statistically significant differences toward female (t=(441) 4.81, p<0.01).

Post hoc test using LSD test showed that there was a significant main effect for families with low income (Less than $300) in which they reported more PTSD than the other groups (F=(2, 210) 11.43, p<0.001). This was also applicable to intrusion (F=(2/410) 6.81, p<0.01), avoidance (F (2/422)=9.13, p<0.01), and hyperarousal (F (2/424)=11.44, p<0.01).

Coping strategies used by Palestinian adults

The study showed that the most common coping items used by adults were: praying and calling Gods (77.9%), wishing that the difficult situation finished (67%), asking for advice from close person (55%), and promise themselves that next time the situation will be better (54.7%).

Means and standard deviations of coping strategies

The study showed that mean scores of coping strategies (44 items) was 124.88 (SD=16.75), mean wishful thinking was 18.99 (SD=3.97), mean planful problem solving was 17.45 (SD=3.40), mean positive reappraisal was a27.61 (SD=4.72), mean accepting responsibility was 14.82 (SD=2.99), mean seeking social support was 13.57 (SD=3.08), mean self-controlling was 20.86 (SD=3.63), escape avoidance mean was 11.29 (SD=3.12). The study showed that males were significantly reported more Planful problem solving than females (M=17.7 vs. 17.07) (t=(446) 3.05, p=0.02) and self-controlling than females (M=21.34 vs. 20.29) (t=(t=(442) 3.05, p=0.02) (**Table 3**).

Table 3 Means and standard deviations of coping strategies.

SD	Mean	
16.75	124.88	Total coping
4.72	27.61	Positive reappraisal
3.63	20.86	Self-control
3.97	18.99	Wishful thinking
3.4	17.45	Planful problem solving
2.99	14.82	Accepting responsibility
3.08	13.57	Seeking social support
3.12	11.29	Escape avoidance

Differences in coping strategies according to PTSD scoring

In order to find differences in coping strategies between people with PTSD and no PTSD, independent t test was performed. The results showed that people with PTSD scored statistically significant in total coping strategies than those without PTSD (t=-4.20, p=0.001). Also, adults with PTSD scored more in wishful thinking (t=8.44, p=0.001), seeking social support (t=5.41, p=0.001), and escape avoidance (t=6.77, p=0.001).

Bivariate relationships between trauma, PTSD Symptoms and coping strategies variables

Pearson's correlation coefficients were computed to detect the strength of the relationship between total trauma, PTSD symptom severity, each of the three PTSD symptom clusters, and total coping. The results showed that total traumatic events were correlated with PTSD (r (449)=0.31, p<0.001), intrusion symptoms (r (449)=0.35, p<0.001), avoidance symptoms (r (449)=0.25, p<0.001), hyperarousal symptoms (r (449)=0.25, p<0.001), and total coping strategies (r (449)=0.10, p<0.04). There was significant correlation between total traumatic events and some of the coping strategies subscales: trauma was correlated positively with total coping (r=(449) 0.09, p<0.04) wishful thinking (r (449)=0.21, p<0.001), and escape avoidance (r (449)=0.12, p<0.01) (**Table 4**).

Table 4 Bivariate correlations between trauma, PTSD symptoms, and coping strategies.

	1	2	3	4	5	6	7	8	9	10	11	12
Total trauma												
Total PTSD	0.30**											
Intrusion	0.33**	0.85**										
Avoidance	0.24**	0.90**	0.64**									
Hyperarousal	0.25**	0.91**	0.67**	0.72**								
Total Coping Strategies	0.10*	0.28**	0.29**	0.22**	0.25**							
Wishful thinking	0.22**	0.48**	0.45**	0.41**	0.43**	.55**						
Planful problem solving	0.02	0.03	0.04	0.02	0.02	0.74**	0.16**					

Positive reappraisal	-0.04	0.02	0.08	-0.02	-0.01	0.78**	0.17**	0.62**				
Accepting responsibility	0.02	0.11*	0.13**	0.09	0.07	0.64**	0.16**	0.47**	0.53**			
Seeking Social Support	0.02	0.31**	0.27**	0.25**	0.29**	0.73**	0.39**	0.44**	0.47**	0.43**		
Self-controlling	0.06	0.08	0.10*	0.06	0.04	0.69**	0.23**	0.53**	0.51**	0.36**	0.36**	
Escape-Avoidance	0.13**	0.38**	0.30**	0.34**	0.37**	0.52**	0.42**	0.21**	0.18**	0.14**	0.38**	0.22**
*p<0.05 ** p<0.01												

Prediction of PTSD by traumatic events

Separate multiple regression analyses were conducted for each traumatic event was entered as an independent variable with PTSD symptom as the dependent variables. PTSD was predicted by deprivation of going to the toilet and leaving the room at home because of the firing and shelling in the area (β=0.23, t(425)=4.31, p<0.001) and they were detained at home during the war (β=0.20, t(425)=3.88, p<0.001), and loss of one of the friends, relatives during the war (β=0.11, t(425)=2.46, p<0.001) (R^2=0.29, t(425)=11.69, p=0.001) (**Table 5**).

Table 5 Prediction of PTSD by traumatic events.

	Unstandardized Coefficients		Standardized Coefficients	t	Sig.	95.0% Confidence Interval for B	
	B	Std. Error	Beta			Lower Bound	Upper Bound
Deprivation of going to the toilet and leaving the room at home because of the firing and shelling in the area	6.49	1.51	0.23	4.31	0.001	3.53	9.45
Were detained at home during incursion	5.72	1.47	0.2	3.88	0.001	2.83	8.62
Loss of one of the friends, relatives during the war	3.36	1.37	0.11	2.46	0.01	0.68	6.04
R2=0.29, t=11.69, p=0.001							

Prediction of PTSD by coping strategies

Separate linear regression analyses were conducted for total coping and subscales scores was entered as an independent variable and total PTSD symptom as the dependent variables. PTSD symptoms were predicted positively by with wishful thinking (β=0.17, t (391)=7.08, p<0.001), escape-avoidance (β=0.21, t (392)=4.16, p<0.001), and seeking social support (β=0.24, t(392)=3.30, p<0.001), and was negatively predicted by positive reappraisal (β=0.14, t (392)=-3.45, p<0.001), (R^2=0.29, t=40.01, p=0.001) (**Table 6**).

Table 6 Prediction of PTDF by coping.

	Unstandardized Coefficients		Standardized Coefficients	t	Sig.	95.0% Confidence Interval for B	
	B	Std. Error	Beta	Lower Bound		Upper Bound	
Wishful thinking	1.22	0.17	0.35	7.08	0.001	0.88	1.56
Escape-Avoidance	0.89	0.21	0.2	4.16	0.001	0.47	1.3
Positive reappraisal	-0.48	0.14	-0.17	-3.45	0.001	-0.75	-0.21
Seeking Social Support	0.78	0.24	0.18	3.3	0.001	0.32	1.25

Discussion

The aim of the study was to investigate the effect of trauma due to Gaza war on Palestinians' PTSD, and coping. Participants commonly reported traumatic events after 16 months of war, 94.6% reported watched mutilated bodies in TV, 50.3% said they were deprived of going to the toilet and leaving the room at home because of the firing and shelling in the area, 48.1% witnessed firing by tanks and heavy artillery at neighbors' homes, 43.8% and witnessed shelling and destruction of neighbors home. Such findings were consistent with research in the area [14,16,20,21] which showed that the commonly reported traumatic events due to war were watching mutilated bodies in TV, hearing the shelling of the area, hearing the loud voice of the Drones. Mean traumatic events reported by males was 5.78 compared to mean in female was 5.11. Such level of trauma was less than found in studies conducted few months after the war on Gaza [14,22]. Such decrease in reporting the traumatic experience after 16 months of the war could be due to protective factors in the Palestinian society including family, social support, and coping strategies used to overcome such stressors and trauma. The mean PTSD-17 in was 48.29, intrusion mean was 15.65, avoidance mean scores was 18.84, hyperarousal mean scores was 13.66. After 16 months of war still 42% of Palestinians in the Gaza Strip reported full criteria of PTSD. Mean PTSD-17 in males was 44.76 compared to mean scores in females=52.32. Our findings of prevalence of PTSD were inconsistent with Steel et al. [23] who examined 161 articles on refugees and conflict affected populations. Reviewing a total of 181 surveys, a total subject pool of 81,866 subjects from 40 countries was identified. Studies showed that a weighted prevalence rate across the surveys was 30.6% and 30.8% for PTSD and depression, respectively. Our results were consistent with study of Kira et al. [4] in study of chronic stress and trauma profiles, cumulative trauma (CT) appraisal, and coping in 2 multiply traumatized communities: Palestinians in Gaza (N=132) and American Indians in the United States (N=302), showed that 46.9% of Palestinians scored above the suggested cutoff score for diagnosable PTSD. This study reported much higher rate of PTSD than found in study of Smith and Patton investigates traumatic stress symptoms among young Black males exposed to community violence and traumatic loss while living in Baltimore, USA in which 19% of participants reporting symptoms in all four categories of posttraumatic stress symptoms. Such high rate of PTSD could be due to cumulative effect of repeated traumatic events in the last decades. However, such rate of PTSD was less than found in a study of Palestinians after two weeks after the war on Gaza on 2009 in which 61% of the sample reported PTSD [14]. The results showed that PTSD was correlated with total traumatic events. PTSD was predicted by deprivation of going to the toilet and leaving the room at home because of the firing and shelling in the area and were detained at home during the war. Research examining direct forms of trauma exposure has often focused on cumulative trauma. Others found that higher cumulative trauma exposure is associated with greater PTSD risk [24].

The study showed that the most common used coping items by adults were: praying and calling Gods (77.9%), wishing that the difficult situation finished (67%), asking for advice from close person (55%), and promise themselves that next time the situation will be better (54.7%). The study showed that mean scores of coping strategies (44 items) was 124.88, mean wishful thinking was 18.99, mean planful problem solving was 17.45, mean positive reappraisal was 27.61, mean accepting responsibility was 14.82, mean seeking social support was 13.57, mean self-controlling was 20.86. Other studies have found that emotion-focused coping, especially an avoidant strategy, is generally related to worse mental health outcomes, whereas the research on avoidant coping has found mixed results [25]. Such findings of coping by praying and call God was consistent with study of Exline et al. [26], who found that those who used positive religious framing when writing about their traumatic events experienced more positive mood, and those who mentioned the use of prayer in particular experienced the greatest benefits of all. These findings suggest that actively engaging in prayer may be a helpful way of negotiating mental health concerns or processing exposure to potential traumas. Moreover, participating in frequent prayer when one adopts a distant, unloving image of God has been related to psychopathology, whereas the inverse pattern has been demonstrated among those who endorse a loving God image. Similarly, prayer that is focused on God has positively correlated with measures of subjective well-being, whereas ego-focused prayer has negatively correlated with well-being measures [27] used strategies [14,20,28]. The results showed that people with PTSD scored statistically significant in total coping strategies, more in wishful thinking, seeking social support, and escape avoidance.

Other research has supported the importance of prayer as religious ways in coping with stressful life events such as war-zone service. Prayer is an integral part of most major world religions and can be an important dimension of coping with pain and suffering [29]. Decker asserted that prayer can represent “a basic foundation of coping” with the mental health impact of serving in war [30].

Prayer coping might be conceptualized by victims in part as “disclosure to God” in the aftermath of potentially traumatic events [31].

Our findings showed that PTSD symptoms were predicted positively by wishful thinking, escape-avoidance, and Seeking Social Support. Our findings were consistent with longitudinal studies which indicated a reciprocal relationship between PTSD and avoidance coping [32,33], suggesting that while individuals with higher PTSD symptomatology turn to avoidance coping mechanisms to alleviate distress, using these coping mechanisms results in more persistent distress.

Clinical Applications

The present study has certain implications for clinical practice. Our findings showed that 45% of Palestinian reported full criteria of PTSD. Such rate of PTSD highlight the needs for establishing intervention programs targeting adults including

different types of intervention including psychoeducation and stress management programs.

Also, establish other types of psychotherapy programs in community based centers for trauma-related disorders ranging from trauma counseling, psycho-dynamic, cathartic approaches, and cognitive-behavioral techniques. With the knowledge that the coping mechanisms such as wishful thinking, seeking social support, and escape avoidance contribute to PTSD in war trauma-exposed individuals, other types of interventions showed be implemented in special programs to reduce these maladaptive coping mechanisms, which may play an important role in preventing further post-traumatic stress symptoms. In addition, courses for target groups such as parents, high risk groups living in border areas to teach them best ways of effective coping mechanisms which may increase their ability to flexibly and use different positive coping strategies in facing stress and trauma. Also, training courses for health professionals working in primary health care and other community center in the field of adult psychosocial intervention must be considered to help them gaining the knowledge and skill to deal with this large number of people with post-traumatic stress disorder.

Limitations

There are several limitations within this study that deserve consideration. For instance, this sample was selected 16 months after the end of the war in 2009 which may affect their remembering ability of the traumatic events. Also, other types of life stressors due to siege in the last 10 years may act as accumulative risk added with war traumatic events which may increase rate of PTSD symptoms. Additionally, as a cross-sectional, assessment-based investigation, we can draw few conclusions about the impact of coping strategy use on expression of post-traumatic stress disorder. Future research would benefit from exploration of other contributing variables to psychological distress (PTSD), such as substance use, trauma type, and social supports.

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