Effectiveness of Psychoeducation Program on coping and Mental Health of Palestinian women in the Gaza Strip

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Abstract

Aim: The aim of the study was to investigate the effectiveness of psychoeducation program on mental health and coping strategies of Palestinians women affected by War on Gaza .

Methodology:

Subjects: The study sample consisted of 176 women from three areas in the Gaza Strip from total number of 180 women with response rate of 97.7%. The age of women ranged from 18-65 years with mean age 40.42 years. Those women were investigated before starting the intervention and 6 months after the intervention program by the same instruments.

Instruments: We used self-reported questionnaire including demographic questionnaire, General Health Questionnaire (GHQ-28), and Ways of Coping scale which was applied before starting the program and after 6 months.

Results: The study showed mean GHQ-28 scores (mental health problems) decreased from 17.15 to 11.99, somatisation scores mean decreased from the first assessment 5.31 to 3.61 in the second assessment, social dysfunction mean scores decreased from 3.79 to 2.29, depression scores decrease from 3.64 to 2.48, mean anxiety in the first assessment was 4.56 compared to 3.77 in the second assessment, but it did not reached significantly statistically differences. The results showed that mental health problems rated by GHQ and all subscales were significantly decreased after the intervention, while, anxiety decreased but it did not reached a significant level. The results showed that there were significant differences in the following ways of coping: mean of total coping increased from 125.15 to 127, problems solving mean scores increase from 16.85 in the first assessment to 17.76, reinterpretation. However, no statistically significant differences in scores of other coping strategies after intervention.

Conclusion: This study showed that Palestinian women experienced variety of traumatic events ranged from exposure to shooting, shelling of their homes, witnessing killing of close relatives, being detained at their homes and prevent from leaving their homes, internal displacement, home and land destruction, and losing their homes. Those traumatic events increased women suffering and agony and lead to anxiety, depression, somatic and social dysfunctional symptoms. However, those women were continued to take care of their children and family in spite of devastating effect of war by using reinterpretation, self control, and wishful thinking. Those findings highlight the need for establishing community mental health centers to help such women in their area with well designed programs of individual, group, and family therapy. Also there are needs for more psychoeducation for women and their husband on mental health issues and reactions to trauma and ways of dealing of feelings of hopelessness and helplessness by creating new small projects which may improve their families' socioeconomic situation and increased women self-esteem and self confidence. Also psychosocial programs must be established targeting children and husbands.

Also new programs for helping women in developing better coping skills must be established with leaders from the same group who may teach the other women. Community women group should be established and extensive training of the group to be responsible of developing other women in the society.

Key word: War on Gaza, Effectiveness, counseling, psychoeducation, women mental Health, coping strategies

دراسة بعنوان "مدي فاعلية برنامج التدريب النفسي للنساء الفلسطينيات للتكيف مع الخبرات الصادمة و تحسين صحتهن النفسية في قطاع غزة"

الهدف العام: هدفت الدراسة لمعرفة مدي فاعلية برنامج التدريب النفسي للنساء الفلسطينيات للتكيف مع الخبرات الصادمة و تحسين صحتهن النفسية بعد الحرب على قطاع غزة.

عينة الدراسة: تكونت عينة الدراسة من 176 إمرأه من أصل 180 امرأة تم اختيارهن من مناطق تعرضت للقصف المباشر و تهديم بيوتهن (جحر الديك, والعطاطرة, والثوام, وتل الهوا, والشيخ عجلين). تراوحت أعمار النساء من 18-65 سنه بمتوسط عمر بلغ 40.42 سنه.

أدوات الدراسة: لتقييم البرنامج التدريبي النفسي تم استخدام عدة مقاييس قبل البدء في البرنامج و بعد الانتهاء منه و شملت المقاييس: مقياس الحالة الاجتماعية الاقتصادية, مقياس الصحة النفسية العام, ومقياس طرق التكيف مع الضغوط النفسية.

نتائج الدراسة: تبين أن متوسط المشاكل النفسية قد انخفض من 17.15 إلي 11.99, و متوسط الشكوى الجسمية انخفض من 5.31 إلي 3.61, متوسط الاضطراب الاجتماعي من 3.79 إلي 2.29 , ومتوسط الاكتئاب انخفض من 4.56 إلى 3.77, و معدل القلق على حسب مقياس الصحة النفسية قد انخفض متوسطه من 4.56 إلي 3.77. ويتضح من الدراسة أن كل المشاكل النفسية قد انخفضت و لكن معدل القلق انخفض و لكن بدون أن يكون هناك دلالة إحصائية.

كذلك تبين أن متوسط التأقلم قد ازداد بعد التدخل و خاصة بنود إعادة التقييم, والتحكم بالذات, و حل المشاكل

الخلاصة: بينت هذه الدراسة أن النساء الفلسطينيات قد تعرضن لأنواع مختلفة من الصدمات النفسية مثل التعرض للقصف, و هدم البيوت, و مشاهدة استشهاد أحباء لهن, الاحتجاز في داخل البيوت أثناء الحرب, و مغادرة البيوت و السكن في المدارس و عند الأصدقاء. و هذه الصدمات النفسية كان لها الأثر الكبير على الصحة النفسية و ظهور بعض ردود الفعل النفسية من قلق, و اكتئاب, و أعراض جسدية. و لكن تلك النسوة استمر رن في العناية بالبيت و بالأطفال باستخدام طرق تكيف مثل إعادة تقييم الموقف, و التحكم بالذات, و التمني. هذه النتائج تبين الحاجة إلي وجود مراكز متخصصة في المناطق المتأثرة بالحرب لمساعدة النساء على التغلب على المشاكل النفسية و كذلك إيجاد مشاريع مدرة للدخل للأسر الفقيرة, و عمل نفس البرامج في مناطق أخري وكذلك إستهداف الازواج في مثل تكلك البرامج, و عمل مجموعات قيادية من النساء لتدريب النساء الأخريات في مجال القيادة, و التكيف مع الأزمات, و مواجهة ضغوط الحياة المختلفة.

Introduction

War on Gaza

On 27 December, the Israeli occupying forces conducted sudden and intensive air strikes on Gaza Strip. The attacks began at approximately 11:30 am and lasted for approximately three hours. These attacks destroyed most of the Gaza security offices including police stations. As a result, more than 230 Palestinians were killed and at least 770 we re injured including 100 in critical condition. This military operation continued for 23 days. As a result, 1320 Palestinians, including 446 children and 110 women and 108 elderly, were killed and 5320 others, including 1855 children and 795 women, were injured. This doesn't mean that the rest of the fatalities and injuries were engaged in hostilities, or that they are not innocent civilians. A large number of men and male youth were killed in their homes, in the presence of their families. its phases resulted in a mass destruction of private properties. At least 4,000 houses were totally destroyed and other 16,000 houses were partially damaged (Humanitarian Duty Report, 2008).

Clients with trauma-related conditions have more difficulty internalizing coping skills through observation than individuals with normal brain functions and need to be taught effective coping skills. Family resources such as understanding of the trauma-related condition, finances, available time and energy, and ability to provide ongoing support also influence the course of recovery (Moller and Rice, 2006). .

Group intervention for adult trauma survivors is common (Foy, Eriksson, & Trice, 2001). There is some empirical support for these groups, indicating reduced levels of depression and PTSD symptoms (Foy et al., 2000; Stalker & Fry, 1999).

Group psychotherapies are applied as a treatment option for women with experiences of childhood sexual trauma (Hazzard, Rogers, & Angert, 1993), rape (Foa, Rothbaum, Riggs, & Murdock, 1991; Foa et al, 1999), and domestic and spouse violence (Rounsaville, Lifton, & Bieber, 1979; Yu¨ ksel et al., 1999). Although involving different approaches, group therapies share similar goals of balancing the physiological and psychological reactions to the trauma, revealing the related

emotions and perceptions, facilitating remembrance,understanding the negative effects of the past on present well-being and social relationships, and learning to cope with internal stress (Hazzard et al., 1993). The reviving, sharing, and restructuring of painful memories make it possible for trauma survivors to relieve trauma-related emotions in the ‘‘arms of the group,’’ which symbolizes safety, respect, and caring. Group dynamics enable trauma survivors to face their earlier losses and repair feelings of hopelessness and loneliness, as well as to express anger that emerges as a result of reworking traumatic memories (Brewin, Andrews, & Rose, 2000).

Some evidence is available on the effectiveness of group psychotherapy among women with multiple traumas in decreasing psychological distress and depression and in improving self-esteem (Lubin & Johnson, 1997; Resnick et al., 1989; Rosenthal, Feiring, & Taska, 2003). Resnick and her group (1989) showed that PTSD and depressive symptoms decreased among women exposed to rape who participated in therapy involving the cognitive structuring model, as compared with women in the waiting list control group. The therapy also had a positive impact on self-esteem and increased effectiveness in dealing with interpersonal

problems. There are demands that group therapy for women with multiple traumatic experiences should be sensitive to the relationship of gender and power and to the uniqueness of cultural needs, attributions, and interpretations (Gavranidou & Resver, 2003). A gender-sensitive approach indicates that group therapy aims at attenuating trauma symptoms and agony by increasing awareness of women’s issues and social questions and increasing empowerment and hopefulness. The sensitive approach emphasizes the sustainable development of personal resources, increases in social network participation and discovering multiple strengths in oneself and others (Hazzard et al., 1993; Herman, 1992).

Psychoeducation model

A psychoeducational model specific to coping with the aftermaths of trauma and abuse was developed in recognition of the role of biopsycho-social-spiritual processes in promoting recovery and subsequent health outcomes. In 1999, a pilot group psychoeducational group program based on the Three R’s Psychiatric Wellness

Rehabilitation Program (Moller & Murphy, 1997; Murphy & Moller, 1996) was conducted in two independent nurse-managed outpatient clinics. The goal of the pilot program was to develop a curriculum that would specifically address interventions to promote wellness for those living with the aftermaths of trauma and abuse. The original sample involved 16 women, 10 in one site and 6 in another, ranging in age from 21 to 48 years. The pilot curriculum, initially scheduled to be developed within 8 biweekly sessions, actually took 18 months to be developed. The final 12 session curriculum and participant workbook was finished in 2001. The course was named Become Empowered: Symptom Management for Abuse and Recovery from Trauma and is referred to as BE SMART (Moller & Murphy, 2001). Males with trauma-related disorders were invited to participate upon completion of the workbook and with recommendations from women who knew men who were also victims. Similar to the findings of Nicholas and Forrester (1999), the inclusion of men helped diffuse generalized resentments by the women as they realized that men could suffer similar kinds of abuse that they do (Nicholas & Forrester, 1999). The term ordinary heroes Q was coined by one participant to describe efforts to maintain wellness, practice symptom management, and prevent relapse. Basu et al (2009) in study examined the effectiveness of a 10-week community-based psycho-educational group intervention for women and children. Mothers’ (n = 36) and children’s outcomes (n = 20) were assessed preintervention and 3- and 6-months postintervention The results did not find significant differences between women in the intervention. group (IG), wait-list control group (CG), and an early termination comparison group (EG: people who completed 4 or fewer sessions but were available for follow up interviews). However, mean differences were in the expected direction. Graphical analyses of the symptom trajectories indicate that the IG condition showed the most decline in anxiety and depression symptoms compared to the CG and EG conditions. The aim of the study was to investigate the effectiveness of psychoeducation, and program on Palestinians women mental health and coping strategies.

Methodology

Subjects

The study sample consisted of 176 women from total number of 180 women who were exposed directly to war experiences and lost their homes with response rate of 97.7%. According to place of residence, 16.5% were from Tal El Hawa, 15.9% were from Shekh Ejlien (Gaza city), 34.1% were Joher El Deek (Middle area), 16.5% from Atatra, and 17% were from Thwam (north Gaza).

Group selection procedure

In order to select the sample, the project coordinator obtained a list of 180 women (60 from each location). The names were obtained from local community base organizations and municipalities and included women who were more affected by war due to direct exposure to traumatic events and as a result they lost partially or completely their homes, some on them lost husband, brother or a son. A Team of three psychologists were trained for 4 hours on using the study instruments and were ready to do the data collection. Women were contacted by telephone to be part of the project which will involve settings of debriefing, psychoeducation sessions including ways of coping with stress and trauma, children rearing, and leadership. Beside women received legal advice training and vocational training. The data collection was divided in two parts, the first include focus group of 20-30 women from each side and themes of the discussion include loss, grief, and reactions to trauma, coping with trauma, feelings after the war, social and family support, and children behaviour during and after war. In the next session women were interviewed using the instruments with written consent to participate in the study and only women signed the consent were interviewed and included in the project. The data collection was conducted at the first week of April for two weeks and data entry and clearing finished at the end of April 2009. The same women were interviewed using the same scales 6 months after the intervention on August 2009.

Psychoeducation program

The sample included 180 women who were selected from the most affected area in the Gaza Strip were divided into 6 groups (30 in each group) and two groups in each geographical area (North Gaza, Middle area, and Gaza). Each group attended 16 sessions biweekly in their area (2 hours each). The subjects include: debriefing for two sessions, meaning of trauma, stress

management, relaxation, coping strategies in war and stressful situations, leadership and women empowerment, family violence, early detection of children with mental health problems, dealing with children and family violence, legal advice, women rights, heritage, divorce, and marital law.

Such session where coordinated and run by three female psychologists with Master Degree in Community Mental Health and one male lawyer. After 4 months of training the women were asked to participate in vocational training in which a trainer in using stitching of Folk clothes and gifts were included.

Instruments

Demographic Questionnaire.

Women completed a background questionnaire that included questions about age,, number of children, and education level, and income .

General Health Questionnaire (GHQ-28) Goldberg, J.P., Hillier, V.F. (1979).

Women maternal mental health ratings were based on the General Health Questionnaire (GHQ-28). It covers severe depression and suicidal risk, anxiety and insomnia, social dysfunction, and somatic symptoms (59). Emphasis is on changes in condition, so items compare the present mental state to the person's normal mental health status. This scale had been validated in Arabic culture and showed reliability and validity. The internal consistency of the scale calculated using Cronbach's alpha, was α=0.91 and split half was 0.88 (Thabet et al, 2005). In this study the Cronbach's alpha was α=0.88 and split half was 0.74.

Ways of coping (Folkman et al, 1986)

The revised Ways of Coping (Folkman & Lazarus, 1985) differs from the original Ways of Coping Checklist (Folkman & Lazarus, 1980) 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), problem solving including the following items (7, 12, 15, 23, 43, 44), reinterpretation including the following items (5, 8, 9, 16, 20, 31, 32, 38, 40), affiliation including the following items (1,17,24,30,33), accountability including the following items (2, 10,18, 26, 41), self control including the following items (6, 13, 14, 22, 28, 35, 37), trouble and escape including the following items (4,25,27,29,36).

The validity of this scale was tested before in study by Folkman et al (1986) among community sample of people and showed their alphas independently as follow; 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.

Ethical issues

A covering letter was send to women explaining the aim of the baseline study and about their right not to participate in study and ask them to sign the letter if they agree to participate with in the study.

Analysis

SPSS (SPSS win, Ver. 12) was used for data entry and analysis and the validity and reliability of the instruments using split half method and Cronbach's alpha equation.

Frequency distribution was used in statistical analysis. Mean differences between the two times was measures using paired t test. For qualitative data such as structured interviews with women were be analyzed manually by the consultant depending in his previous experiences in similar research. The main themes emerged will be listed and discussed. At the end of the project the women were asked about the effectiveness of the sessions in ways of coping with their problems and mental health problems.

Results

Socideomographic characteristics of the study sample

The study sample consisted of 176 women from total number of 180 women with response rate of 97.7% in the first baseline study and 174 women in the second assessment. According to place of residence, 16.5% were from Tal El Hawa, 15.9% were from Shekh Ejlien (Gaza city), 34.1% were Joher El Deek (Middle area), 16.5% from Atatra, and 17% were from Thwam (north Gaza). The age of women ranged from 18-65 with mean age 40.42 (SD= 11.47). According to house type, 67.6% live in their own house, 22.7% rented a house, 3.4% live in camp area, and 6.3% live with extended family. According to number of children in each family, 24.4% had Less than 4 children, 42% had 5-7 children, and 29.5% had more than 8 children. The study showed that those families are coming from poor sector of the Palestinian society, 88.1% had less than 300$ monthly income, 6.8% had 301-600$ monthly, and 5.1% had 601-750 $ monthly.

Table 1: Socideomographic characteristics of the study sample (N= 176)

	No.	%
1. Place of residence		
Tal El Hawa (South Gaza)	29	16.5
Shekh Ejlien (South Gaza)	28	15.9
Joher Eldeek (Middle area)	60	34.1
Atatra (North Gaza)	29	16.5
Thwam (North Gaza)	30	17.0
2. Age	Mean = 40.42 (SD	
3. Type of residence		
4. House type		
Own	119	67.6
Rented	40	22.7
Camp	6	3.4
With family	11	6.3
5. Number of children		
Less than 4 children	43	24.4

5-7 children	74	42.0
More than 8 children	52	29.5
6. Family monthly income		
Less than 300 US $	155	88.1
301-600 US $	12	6.8
601-750 US $	9	5.1
7. Husband education		
Not educated	22	12.5
Preliminary	57	32.4
Primary	47	26.7
Secondary	36	20.5
Diploma	4	2.3
University	9	5.1
High education	1	0.6
8. Job of husband		
No working	113	64.2
Simple worker	34	19.3
Skilled worker	13	7.4
Employee	9	5.1
Merchant	3	1.7
Others	4	2.3
9. Women education	176	100.0
Not educated	50	28.4
Preliminary	20	11.4
Primary	43	24.4
Secondary	53	30.1
Diploma	4	2.3
University	6	3.4
10. Women's job		
House wife	170	96.6
Employee	4	2.3
Farmer	1	0.6
Merchant	1	0.6

Means and standard deviation of the GHQ-28 in the first assessment

The study showed than mean GHQ-28 was 17.15 (SD = 7.91), anxiety mean was 4.56 (SD = 2.35), somatisation mean was 5.31 (SD = 2.12), social dysfunction mean was 3.79 (SD = 2.27), and depression mean was 3.64 (SD = 3.02).

Means and standard deviation of the GHQ-28 in the second assessment

The study showed than mean GHQ-28 was 11.99 (SD = 9.57), anxiety mean was 3.77 (SD = 2.33), somatisation mean was 3.61 (SD = 2.60), social dysfunction mean was 2.29 (SD = 2.25), and depression mean was 2.48 (SD = 2.08).

Differences in means of GHQ-28 after the interventions

In order to find the differences in general mental in women using GHQ-18, paired t test was performed. The results showed that mean anxiety in the first assessment was 4.56 compared to 3.77 in the second assessment, but it did not reached significantly statistically differences (t = 1.67, p = 0.09), somatisation scores mean decreased from the first assessment 5.31 to 3.61 in the second assessment (t = 7.7, p = 0.001), social dysfunction mean scores decreased from 3.79 to 2.29 (t = 7.3, p =0.0001), mean depression scores decrease from 3.64 to 2.48 (3.65, p = 0.001). Mean GHQ-28 scores decreased from 17.15 to 11.99 (t = 6.5, p = 0.0001). The results showed that mental health problems rated by GHQ and all subscales were significantly decreased after the intervention, while, anxiety decreased but it did not reached a significant level. Table 2.

Table 2: Differences in means of GHQ-28 after intervention

GHQ	Assessment	Mean	SD	M.D.	t	p
Anxiety	First assessment	4.56	2.35	.79	1.672	.096
Anxiety	Second assessment	3.77	2.33			
Somatization	First assessment	5.31	2.12	1.70	7.787	.0001
Somatization	Second assessment	3.61	2.60			
Social dysfunction	First assessment	3.79	2.27	1.50	7.312	.0001
Social dysfunction	Second assessment	2.29	2.25			
Depression	First assessment	3.64	3.02	1.16	3.658	.0001
Depression	Second assessment	2.48	2.08			
Total GHQ	First assessment	17.15	7.91	5.15	6.655	.0001
Total GHQ	Second assessment	11.99	9.57			

Coping with trauma

Ways of coping items in the first assessment

Ways of coping items

As shown in table 3, the most common ways of coping items used by women were : I wished that stressful situation finished quickly (73.7%), I tried to forget the stressful events (52.9%), I wished there miracle had happened (52.3%), I know what to do so I increased my efforts to cope with the situation (50.9%), I promised myself that things will be better next time (48.9%), and I asked advice from people I respect (48%).

Table 3: Ways of coping items

	Never	Rarely	Some-times	Always
I wished that stressful situation finished quickly	5.7	8.0	12.6	73.7
I tried to forget the stressful events	15.7	7.6	23.8	52.9
I wished there miracle had happened	16.7	9.2	21.8	52.3
I know what to do so I increased my efforts to cope with the situation	6.4	13.9	28.9	50.9
I promised my self that things will be better next time	6.9	7.5	36.8	48.9
I asked advice from people I respect	13.1	13.7	25.1	48.0
I slept more hours than usual	53.4	19.0	16.1	11.5
I realized that I make problem for my self	40.0	34.9	15.4	9.7

Means and standard deviations of ways of coping scores in the first assessment

The study showed that mean ways of coping scores was 125.25 (SD = 18.33), mean reinterpretation was 27.04 (SD =5.96), mean self control was 20.75 (SD =3.90), mean wishful thinking was 20.38 (SD =5.59), mean problem solving was 16.83 (SD = 4.04), mean affiliation was 14.79 (SD =3.35), mean accountability was 13.85 (SD =2.53), and mean trouble and escape was 11.18 (SD =3.24)

Ways of coping items in the second assessment

As shown in table 4, the most common ways of coping items used by women were: I prayed and asked God for help (92.35%), I wished that stressful situation finished quickly (70.0%), I wished there miracle had happened (56.47%), I asked advice from people I respect (52.35%), I promised myself that things will be better next time (52.35%), and I discovered recently what is important in life (47.65).

Table 4: Ways of coping items in the second assessment

Coping items	Never	Rarely	Some-times	Always
I prayed and asked God for help	2.94	0.59	4.12	92.35
I wished that stressful situation finished quickly	5.3	10.0	14.7	70.0
I wished there miracle had happened	8.24	17.06	18.24	56.47
I asked advice from people I respect	6.47	10.59	30.00	52.35
I promised myself that things will be better next time	6.47	10.59	30.00	52.35
I discovered recently what is important in life	0.59	4.12	11.18	47.65

Means of coping strategies in the second assessment after the intervention

The study showed that mean ways of coping scores was 127.14, mean (SD = 13.85), reinterpretation was 27.04 (SD =5.96), mean self control was 20.75 (SD =3.90), mean wishful thinking was 20.38 (SD =5.59), mean problem solving was 16.83 (SD = 4.04), mean affiliation was 14.79 (SD =3.35), mean accountability was 13.85 (SD =2.53), and mean trouble and escape was 11.18 (SD =3.24).

Differences in the ways of coping scores after the intervention

In order to find the differences in coping strategies after intervention, t paired dependent test was performed. The results showed that there significant differences in the following ways of coping: problems solving mean scores increase from 16.85 in the first assessment to 17.76 (t =-2.76, p = 0.01), reinterpretation mean scores from 26.99 to 28.69 (t= -3.29, p = 0.001). However, no statistically significant differences in scores of other coping strategies after intervention.

Table 5: Differences in the ways of coping scores

		N	Mean	Std. Deviation	Mean Diff.	t	p
Total coping scores	First assessment	134	125.15	18.40	-1.99	-1.09	0.28
Total coping scores	Second assessment	134	127.14	13.85			
Wish and avoidance thinking	First assessment	161	20.51	5.64	0.39	0.82	0.41
Wish and avoidance thinking	Second assessment	161	20.12	3.54			
Problem solving	First assessment	161	16.85	3.97	-0.91	-2.76	0.01
Problem solving	Second assessment	161	17.76	3.37			
Reinterpretation	First assessment	160	26.99	5.94	-1.71	-3.29	0.00
Reinterpretation	Second assessment	160	28.69	4.66			
Affiliation	First assessment	163	14.77	3.37	-0.37	-1.20	0.23
Affiliation	Second assessment	163	15.13	2.92			
Accountability	First assessment	166	13.80	2.52	-0.46	-1.91	0.06
Accountability	Second assessment	166	14.26	2.50			
Self control	First assessment	161	20.75	3.93	-0.01	-0.03	0.97
Self control	Second assessment	161	20.76	3.41			
Trouble and escape	First assessment	164	11.12	3.25	0.30	0.98	0.33
Trouble and escape	Second assessment	164	10.82	3.03			

Discussion

This study is the first study to evaluate the effectiveness of psychoeducation on the long term intervention program with women victims of war and trauma which may improve mental health and coping strategies after war. The sample was selected from women who were exposed to war traumatic events during the war on Gaza which lasted 23 days and left them living mostly with relatives and in tents after their loss their homes. Most of women experiences shelling of their homes, home demolition, directed injury to due shelling, phosphorus inhalation, escaping from homes and living in schools, unable to get the necessary needs to eat and drink during the war, witnessing the killing of relatives and neighbours, hearing shelling of the area, witnessing bombardment of their homes and neighbours homes, being used as human shields, shot by bullets and rockets.

The results showed that the mental health problems rated by GHQ-28 decreased after 6 months of intervention from 17.15 to 11.99 , also mean anxiety decreased from the first assessment from 4.56 to 3.77 in the second assessment, somatisation scores mean decreased from the first assessment 5.31 to 3.61 in the second assessment, social dysfunction mean scores decreased from 3.79 to 2.29, mean depression scores decrease from 3.64 to 2.48 significantly decreased after the intervention, while, anxiety decreased but it did not reached a significant level. This was supported by the women voices from the focus groups.

Sousan from Joher El Deek (middle area) said

"*I was more calm before the war.. I was not nervous, and I was coping with all problems.. After the sessions, I changed and*

started to cope with our lost and mental health problems after the war.. The sessions give us space to move from homes and not stacked in our homes. I hope that new subjects concerning the adolescent's problems and how to deal with such problems are important".

Om Mohand Joher El Deek (middle area) said

"After war, I was anxious and after lectures I started to count from one to ten. I benefited much from the lectures and what I learn at the sessions I go back and talk to my daughters about the subjects".

Sara from Tel El hawa (Gaza city) said

"We learn the relaxation techniques and I started using this method to overcome the sleep problems, the psychiatrist helped me with sessions and some medications, the lawyer help us in knowing our rights, marriage, and divorce.. he is a good lawyer"

Om Ramy from Tel El hawa (Gaza city) said

"I am better than before, I changed completely and my nerves become better than before, the physician gave me some medications and anxiety is much less than before. All anxiety was after the war".

Samer from Atatra (North Gaza) said

"My psych was not good after the war. After talking to the trainers and sessions I had improved and we learned how to solve our problems and cope between with daily problems".

Halima from Atatra (North Gaza) said

"After war we stayed at home watching every day the destroyed homes. But, after coming for sessions, our worries were less than before and we were happy".

Naema from Atatra (North Gaza) said

"Our hearts were full of sadness and worries and after coming for sessions it opened and become less worried and our hearts were empty. We are more calm and quit".

Howida Atatra (North Gaza) said

"I swear by God I had chest pain and chocking attacks when I am at home, my sister husband was killed and I used to talk to hear about the lectures of the sessions and told her the ways of relaxation when she is distressed by talking very deep breath. I improved after the sessions and become happier and less fearful".

Mazzoza Atatra (North Gaza) said

"I feel more comfortable. Every time I attend the sessions the anxiety become less than before. My chest pain and tightness of chest is less than before".

However some of those women did not report any change in their mental health due to continuity of the trauma and inability to rebuild their homes due to siege of Gaza and prevention of construction material entry to Gaza Strip.

Entisar said

"I am tired due to war and loss of my relatives and my son..How I can forget my son. we come to sessions and listen to lectures and being calm.. After we go to our homes and watching the war effect on our homes we become worried and anxious and we cannot sleep at night and memories of the incursion is coming to our minds and I had stomach-aches due to thinking of our condition".

Faiza said

"When I came to the sessions, the bad images of my destroyed home disappear for a while. When I came back to my home and see the destruction I feel sad and unhappy.

Etaf said

"We are not happy at our places due to destruction of our home.. we improved a little. Now I can control myself.. The images and thoughts of war are still coming to my mind,, sadness become less than before. My home was destroyed so my thinking all the time in how to build our home. I had fears and anxiety sometimes at night. Whatever there is help from all organization, however no hope for future.

Our results showed that Palestinian women after war used reinterpretation, self control, and wishful thinking in coping with trauma resulted from War on Gaza.

Interestingly, 6 months after the intervention session's women used the same types of coping strategies such as reinterpretation, self control, wishful thinking and problem solving. The results showed that there was increase in all the three main coping strategies and this could be the effect of sessions which may increase women ability to understand their symptoms and being able of dealing with their emotion and feelings. This is consistent with previous literature on coping which showed that coping is process which may not change with time or stressful situation (Folkman and Lazarus, 1986).

The effectiveness of the program was highlighted by the women during the focus groups

Entisar said "After sessions, we learned how to deal with our children and other people.. when I face new problem, I face the problem and try to solve it.. before I was withdraw from the situation".

Eman said "Thanks God, many things changed after attending the session, I started to laugh . I make my self busy most of the time so I become calm and quite.

Sara said "We learned about how to cope with problems and we discussed such strategies with the trainers and especially using relaxation and how to deal with our children during the crisis and we applied what we learned on our children".

Tagreed said "The sessions with the lawyer was excellent.. Before the lecturers we did not know about our rights and we know now what to do if our husbands hit us what to do and how to go to the physician and ask him for medical report to be presented to the court.

Nema said "attending the sessions was very helpful and we accept our faith and God well.. Talking during the sessions improved our psych".

Other study in the area found that ideological commitment serves as a contextual resource for active coping responses; it provides the possibility of interpreting and attributing causes and consequences of trauma in meaningful, consoling and encouraging ways, sharing experiences and disclosing emotions with others, all contributing to empowerment and successful recovery (Punamaki et al, 2008). However, Gaza women used different types of coping strategies used by Ethiopian victims, Nordanger (2007) in study using in-depth interviews with 20 victims of the Ethio-Eritrean war, to addresses how psychosocial impacts of political violence are coped with in a Tigrayan context in northern Ethiopia showed that women used commonly diverted thinking, distraction, and future investment as coping strategies.

Conclusion and recommendations

This study showed that Palestinian women experienced variety of traumatic events ranged from exposure to shooting, shelling of their homes, witnessing killing of close relatives, being detained at their homes and prevent from leaving their homes, internal displacement, home and land destruction, and losing their homes. Those traumatic events increased women suffering and agony and lead to PTSD, anxiety, depression, somatic and social dysfunctional symptoms. The implication such intervention (psychoeducation) was very helpful for those women to be able to continue doing care of their children and family in spite of devastating effect of war. Those findings highlight the need for targeted more women in the affected areas of war and conflict with such low cost projects which decrease depending on highly skilled professionals and decrease burden on professional working during war in helping victims. Also there are needs for more psychoeducation husbands and adolescents on mental health issues and reactions to trauma and ways of dealing of feelings of hopelessness and helplessness by creating new small projects which may improve their families' socioeconomic situation and increased women self-esteem and self confidence. Also, we recommended conducting more group therapy for women, husbands, and adolescents to improve their wellness.

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