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The effectiveness of EMDR treatment approach in treating the parents or the caregivers and the wives of young martyrs with PTSD and depression symptoms in Bethlehem district

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Thesis Approval

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Dedication

This thesis is dedicated to my parents, my husband Akram my children Nidal, Shaban, Wissam with my love and gratitude.

Declaration

No portion of the work referred to in this study has been submitted in support of an application for any other degree or qualifications to this or any other university or other institution of learning.

Signature…….

Ferdoos Abed Rabo Alissa

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Abstract

The current study is designed to examine the effectiveness of EMDR treatment in treating PTSD and depression symptoms among the parents or the caregivers and the wives of the young martyrs from Bethlehem area. A quasi- experimental design was utilized to achieve this purpose. The data was collected by utilizing a self-report questionnaire distributed to 249 family members of the young martyrs in Bethlehem district. A total of 180 participants agreed to fill in the questionnaire. The response rate was 72%. Eighty six participants were diagnosed PTSD and forty of them accepted to participate in the experiment. 36 participants completed the experiment. (17 in the intervention group and 19 in the control group) and four dropped out, In the follow up stage, 14 participants agreed to fill in the questionnaires. Statistically analysis was performed using Statistical Package for Social Science (SPSS), Version 18.0. Descriptive statistics and nonparametric testes such as Wilxocion W were used.

The results of the study revealed that, EMDR treatment approach was effective in treating PTSD symptoms and depression symptoms at the level of (0.05). For example, the mean rank of the post test for the intervention group decreased from 16.88% to 9.0%, and in the control group increased from 19.95% to 27.0% p= (0.00). At the follow up for PTSD, the mean rank of the intervention group decreased from 9.00% to 7.50%. For the depression, the mean rank decreased from 17.88% to 9.71% for the intervention group and increased from 19.05% to 26.37% for the control group p= (0.00.)

The study further sought to determine the role of a number of demographic variables in the context of the major finding. The duration of loss was statistically significant in relationship with PTSD level (p=0.016).Also the marital status was statistically significant in relationship with depression level (p=0.025). However, the study's findings did not reveal significant differences between PTSD levels and age, gender, educational level, marital status, profession, place of residency, family relations and age of the martyrs. The implications of the study indicate the importance of using EMDR as a treatment modality for the Palestinians who are suffering from PTSD or depression as a result of a family member's martyrdom. Future research would include a larger sample with greater numbers of participants from the West Bank and Gaza.

ملخص الدراسة

مدى فعالية منهاج ال EMDR لعلاج اعراض ما بعد الصدمة النفسية واعراض الاكتئاب لدى ابـاء وزوجات الشهداء في منطقة بيت لحم.

الطالبة: فردوس عبد ربه العيسى

اشراف الدكتورة: منى حميد

هدفت هذة الدراسة الى اختبار مدى فعالية منهاج العلاج القائم علـى تخفيـف الحساسـية وتمريـر المعلومات من خلال حركة العيون في علاج اعراض ما بعد الصدمة واعراض الاكتئاب لـدى ابـاء وامهات واهالي وزوجات الشهداء الشباب في منطقة بيت لحم. استخدم المناج شبه التجريبـي الـذي يقوم على اختيار عينة عشوائية من اجل تحقيق هذا الهدف . جمعت المعلومـات اللازمـة للدراسـة بواسطة استبانات. وافق 180 من اهالي الشهداء على تعبئة الاستمارة الخاصة بالبحث. بلغـت نسـبة المشاركة 72%. تم تشخيص 87 من المبحوثين بانهم يعانون من اضطراب اعراض ما بعد الصدمة اعتمادا على مقياس اعراض ما بعد الصدمة PCL. وافق 40 منهم على المشاركة في التجربـة. 36 منهم استمروا في الدراسة حتى استكمال مرحلة التطبيق(العلاج) بينما انسحب اربعة منهم قبل انهـاء الدراسة. استخدم برنامج الرزم الاحصائية للعلوم الاجتماعية (SPSS) لتحليل العينة, حيث استعملت النسخة 18 من هذا البرنامج. كذلك استخدم منهاج التحليل الوصفي, بالاضافة الى (Nonparametric testes such as Wilxocion W) لتحليل المعلومات.

تظهر نتائج الدراسة ان منهاج تخفيف الحساسية وتمرير المعلومات من خلال حركة العيون فعالا فـي علاج اعراض ما بعد الصدمة واعراض الاكتئاب عند مستوى الدلالة (0.05). على سبيل المثال: لقد انخفض مستوى اعراض ما بعد الصدمة في المقياس البعدي للمجموعة التجريبية من 16.88% الـى 9.0% ولكن هذا المقياس ارتفع في المجموعة الضابطة من 19.95% الى 27.0% عنـد مسـتوى الدلالة (0.000). وقد اظهرت نتائج مرحلة المتابعة التي تمت بعد اربعة شهور من الانهاء ان مستوى اعراض ما بعد الصدمة للمشاركين في المجموعة التجريبية قد انخفـض ايضـا مـن 9.00% الـى 7.50%.

لقد اشارت نتائج الدراسة ان معدل الاكتئاب في المجموعة التجريبية قد انخفض ايضا مـن 17.88% الى 9.71% بينما ارتفع في المجموعة الضابطة من 19.05% الى 26.37% عند مسـتوى الدلالـة

0.000. ومن خلال الدراسة ايضا تم اختبار فعالية العـلاج بارتباطهـا بـالمتغيرات الديمغرافيـة المختلفة. حيث اشارت النتائج الى وجود فروق ذات دلالة احصائية لمستوى اعراض ما بعد الصـدمة لدي الافراد الذين تعرضوا للفقدان في الفترة 1987-1999 عند المسـتوى0.016. بالاضـافة الـى وجود فروق ذات دلالة احصائية لمستوى الاكتئاب لدى المتزوجين عند المستوى 0.025 بينمـا لـم تظهر النتائج فروق ذات دلالة احصائية تعزى لبقية المتغيرات. اظهرت النتائج ايضا انه لا يوجد فوق ذات دلالة احصائية في معدل اعراض ما بعد الصدمة بين المجموعة التجريبية والمجموعة الضـابطة تعزى لمتغير العمر, الجنس, صلة القرابة, مكان السكن, مستوى التعليم, العمل, عمر الشهيد, والفتـره الزمنية للاستشهاد عند مستوى الدلالة 0.05.

لقد اشارت النتائج الى اهمية استخدام منهاج تخفيف الحساسية وتمرير المعلومات مـن خـلال حركـة العيون في مساعدة الفلسطينين الذين يعانون من اعراض ما بعد الصدمة ومن اعراض الاكتئاب الناتج عن استشهاد احد افراد الاسرة. هذة النتائج تشير الى الحاجة لاجراء ابحاث مستقبلية موسعة بحيـث تشمل اعداد اكبر من المشاركين سواء من الضفة الغربية او من قطاع غزة.

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Definitions

Youth, adolescents, and young people: are used to describe people in the stage of life that marks the transition from childhood to adulthood. (Khanet al, 2008) The World Health Organization defines “adolescents” as people age 10-19; “youth” as those age 15-24; and “young people” as those ages 10-24. (World Health Organization, 1989)

Children: The Convention of the Rights of the United Nations in 1989 [CRC Article 1] defined a child as every human being below the age of 18 years unless the law in his / her country deems him / her to be an adult at an early age. (UN, 2008, Save the Children, 2010) Biologically, a child is anyone in the developmental stage of childhood, between infancy and adulthood or puberty. (Wikipedia, 2012)

Death: is defined as the cessation of all vital functions of the body including the heartbeat, brain activity (including the brain stem), and breathing. It is the “permanent cessation of the critical functions of the organism as a whole”. (Bernat, 1998)

Loss: which is defined as an event that leads to the permanent unavailability of a person or object that is emotionally significant to an individual and to which the individual was attached. Also loss is the separation of an individual or group of individual from a loved or prized object. The object may be for example, a person or group of persons, a job, social position or status, an ideal or fantasy, or a body part. (Zinner et al, 1999)

Bereavement: is the situation of a person who has recently experienced the loss of a significant someone notably a parent, partner, sibling, or child. Through that the person’s death is well-recognized as a debilitating experience causes a great deal of emotional pain. (Worden, 2009; Zinner et al, 1999)

Mourning: refers to the public display of grief in social situations. Mourning can be defined as the process that follows the loss. (Ciacco et al, 2008) and it is the social expression or expressive acts of grief that are shaped by the practices of a given society or cultural group. (Worden, 1991)

Grief: is the term that indicates one's reactions to loss and it is experienced when one confronts a significant loss. Grief reactions may be physical, psychological (emotional, cognitive), behavioral, social, and/or spiritual in nature. (Corr, 2010)

Post-traumatic Stress Disorder (PSTD): is defined "as exposure to an extreme traumatic stressors which involves actual or life threatened death or serious injury, threat to one's physical integrity, witnessing an event that involve death, injury or threat of another person or learning about unexpected or violent death or harm by another family members or others. As a result the person experiences intense fear, helplessness, and horror". (DSM-IV-TR, 2000, p. 424)

Complicated grief: is characterized by a constant yearning and searching for the deceased, consistent thoughts of the deceased and intense and painful emotions. The intensity of the grief is prohibiting the patient to regain the pre-loss state of social functioning. The existence of complicated grief is reflected in the increased interest of psychiatrists to include complicated grief as a pathological form of grief in the DSM. (Drenth et al, 2010)

Abbreviations

PTSD	Post traumatic stress Disorders
SPSS	Statistical package for Social Science
RCT	Randomize Control Trail
DSM-IV	Diagnostic and Statistical Manual of Mental Disorders
PSCCW	Psycho-Social Counseling Center for Women
EMDR	Eye Movement Desensitization and Reprocessing
PCL-S	PTSD Checklist – Specific
VOC	Validity of Cognition Scale
SUDS	Subjective Unit of Disturbance
LEC	Life Event Checklist
CAPS	Clinician Administered PTSD Scale
BDI	Beck Depression Inventory
CBT	Cognitive Behavior Therapy
SDQ	Strengths and Difficulties Questionnaire
CPTS-RI	Child Posttraumatic Stress Reaction Index
TRIG-F	Texas Revised Inventory of Grief
CG	Complicated Grief
MD	Major Depression

AIP	Adaptive Information Processing Model
HAM-A	Hamilton Anxiety Scale
HADS	Hospital Anxiety and Depression Scale
MADRS	Montgomery Asberg Depression Rating Scales
SITPE	Stress Inoculation Training with Prolonged Exposure
SSRIs	Selective serotonin reuptake inhibitor
CRIES-13	Gaza Traumatic checklist and Children's Revised Impact of Event Scale
CPTSD-RI	Grief inventory and Children's Post Traumatic Stress Reaction Index

CHAPTER ONE

INTRODUCTION

Chapter One

Introduction

1.1. Introduction

This study examines the effectiveness of EMDR treatment approach in the treatment of either parents or caregivers and wives of Palestinian young martyrs with PTSD and depression symptoms in Bethlehem district. A review of the literature reveals a general lack of knowledge about the effectiveness of EMDR treatment approach in treating victims of political violence in ongoing trauma such as the case of Palestine.

Before embarking on a discussion of the problem statement, aim and objectives of the current study, it is essential to have a brief overview of the political history and situation in Palestine. In general, the Palestinian society is young. For example, in 2007, children under the age of 18 were 2 millions, i.e. approximately half of population of the West Bank and Gaza Strip are children. The percentage of individuals aged (0-14) constituted 41.9% of the total population, (39.4% was in the West Bank while 44.4% in Gaza Strip). (Palestinian Bureau of Statistics, 2010) The percentage of young people represented 29.8% of the total population: 40.2% of them were adolescents aged between 10-19 years, and 60.4% were youths aged 15-24 years. (Palestinian Bureau of Statistics, 2012)

Since 1948, Palestinians have suffered from repeated episodes of war and conflict which reoccurred about every seven to ten years. This continued state of war and occupation compounded with continued sense of oppression has affected several aspects of the Palestinians lives psychologically, socially and functionally. (Awwad, 1998; El Sarraj et al, 2005) As a result family members such as children and adults can develop PTSD symptoms as a result of exposure to traumatic stressors such as being witnesses of death or violence. (DSM IV-TR, 2000)

Palestinian families, in particular, faced war and political traumas which ended up with the passing away of a family member. The family is the basic unit in the society which consists of more than one member related by blood, marriage, kinship and bonds. The members of the family live together in a single household, and they communicate and interact with each other in social roles such as mother, father, husband and so on. A family has different functions such as provision of resources such as money and shelter, nurture and support of other family members which is the primarily role of the family and it includes providing comfort, warmth, and reassurance for family members. (Hepworth et al, 1997) Each family constitutes an organization that has its own specific characteristics which affect its members ways of reaction to traumatic events such as death of a family member. (Danielson et al, 1993) Some families may experience normal bereavement, morning, grief and some may develop depression and PTSD. The need to treat these victims increases by time and the need to find a suitable treatment approach is determined by the community. (Giacaman, 2004) Many studies focused on the effect of war on family members such as children and women, but there is a lack of studies that focus on treatment of family members with mental problems such as PTSD due to loss of a loved person. (El Sarraj et al, 2005)

1.2. Research Problem

As mentioned above, Palestinian people are living in tragedy as a result of the Israeli occupation since 1948 and confronting several ongoing forms of trauma and violence. According to the Palestinian Bureau of Statistic, between the year 2000 and 2009, 7,235 Palestinians were killed by Israeli forces, 6,695 of which were men and 540 were women. In West Bank, there were 2,183 victims – 2,059 males and 124 females while in Gaza Strip there were 5,015 victims - 4,601 males and 414 females. The rest of the martyrs were from the 1948 area and outside the Palestinian Territory. (Palestinian Bureau of Statistics, 2010) The year 2009 was the bloodiest with 1,219 Palestinian martyrs followed by 2002 with 1,192 martyrs. (Palestinian Bureau of Statistics, 2010) Children were mainly targeted by the Israeli military. For example, between 2000 and 2008, 959 Palestinian children were martyred, constituting 18.2% of the total number

of martyrs, 384 of which children were in the West Bank, 573 were in Gaza Strip and two martyrs were in the Occupied Territory of 1948. (Palestinian Bureau of Statistics, 2010)

In addition, Palestinian Human Rights Information Centre (1993) reported that during the period of the first Intifada from 1987 to 1993, there were 130,472 injuries and 1,282 deaths, 332of which were deaths among children. Among the victims, there were individuals who were shot, beaten, tear gassed, or burned to the extent that they suffered from a permanent disability. Also approximately 57,000 Palestinians were arrested, many of whom were subjected to systematic physical and psychological torture; 481 were deported, and 2,532 had their homes demolished. The psychosocial and financial burdens on the inflicted families in terms of medical and psychosocial care, loss of productive time, chronic disability, loss of function, and loss of life and property, were enormous. (Khamis, 1995) Furthermore, as a result of the Israeli killing of hundreds of Palestinian children and adolescents, their family members grieved their loss particularly their parents and wives. Many studies which focused on the effect of losing a family member on the family showed that they developed many psychological or mental problems such as depression, complicated grief and PTSD. (Michon,2003; Murphy et al,1999; Murphy et al,2003; Schneider et al,2007; Neria et al,2005; Wijngaards-de Meij et al,2006; Onrus et al, 2007) For example, Maghalseh (2003) conducted a study in Bethlehem district to investigate the prevalence of PTSD among Palestinian people subjected to losing a family member as a martyr, having a family member in Israeli prisons, or having their houses demolished by the Israeli soldiers. The study sample, both males and females aged 16 years old and above were selected from Bethlehem areas including city, villages and camps. The sample was randomly selected and it consisted of 252 (46.6% were males and 53.1% were females). This sample was divided into 13 groups of 7 participants and each group represented city, villages, and camps in Bethlehem area. 90 of the participants were from families who lost one or more family members as martyrs. Out of those who lost a family member as a martyr, 21% were the wives of the martyrs, 41% were the parents, and 37% were the siblings. Questionnaires were used to collect data. The result of the study showed that 67.2% of the participants met the criteria of PTSD such as intense fear, helplessness and horror. Also the participants showed other symptoms such as recurrent intrusive images, thoughts, or perception (35.5%), recurrent distressing dreams (27.7%), and flashback episodes (18.7%). Furthermore, 60% of the participants were unable to recall important aspects

of the traumatic event. They were affected by the trauma symptoms for various periods. For example, 52% had PTSD symptoms for more than one month, and 48% had the PTSD symptoms for more than three months. In addition, 4.6% had delayed onsets, while 70.9% were significantly distressed and suffered impairment in social and occupational functions. Furthermore, the results showed that the Palestinians who lost a family member as a result of the Israeli forces were more affected when compared to other participants who had a loved one in the Israeli jails. In addition, it was found out that the wives who lost husbands as martyrs were more affected by trauma when compared to parents who lost sons, or siblings who lost brothers. (Maghalseh, 2003) The researcher proposed the reason why widows were subjected to overwhelming stress and concluded that this did not only mean loss of the family provider, but heavier burdens would be trusted on the wives' shoulders. (Maghalseh, 2003)

In spite of this harsh situation, Palestinians tried to cope by using traditional adaptive mechanisms such as family cohesion, tribal structure and political involvement. (El Sarraj et al, 2005) However, these efforts were not enough to deal with such mental problems which required well prepared and trained clinical psychologists and mental health professionals to offer immediate treatment and interventions such as psychotherapists to help the traumatized people especially women to reduce their stress and to cope with new changes in their life. (Giacaman, 2004); therefore, different treatment approaches such as CBT, family therapy, art therapy, and medication were used to overcome these problems. The EMDR is one potential treatment approach to treat victims of political violence as it showed good results for treating PTSD symptoms as indicated by many studies worldwide. (Zakrot- Hodali et al, 2008; Power et al, 2002; Lee et al, 2002; Kemp, 2009; Greenwald, 1994; Wilson et al, 1995,1997 and Ironson et al, 2002)) Recently EMDR is one of the treatment approaches used in Palestine. However, there is a lack of studies that assess EMDR effectiveness in treating either parents or e caregivers and wives of young martyrs who suffered from PTSD or depression symptoms in Palestine as a result of political violence.

1.3. Justification and significance of the study

As discussed earlier, this particular study is conducted for the following reasons:

1. The large number of young people killed by Israeli soldiers may increase the prevalence of PTSD and depression symptoms among their family members.
2. In Palestine, although EMDR approach is one of the treatment modalities that are used, there is a lack of studies that examine its effectiveness in treating either parents or caregivers and wives who had (PTSD) symptoms as a result of losing their child or husband due to Israeli political violence.
3. This study might be the first quasi-experimental that assesses EMDR effectiveness in Palestine.

1.4. Study aim and objectives

1.4.1. Study aim

The main aim of this study is to examine the effectiveness of the EMDR treatment approach in treating either traumatized parents or caregivers and wives of young martyrs aged 25 years old and less as a result of Israeli violence in Bethlehem district.

1.4.2. Specific objectives

1- To assess the prevalence of PTSD among parents or caregivers and wives of young martyrs in Bethlehem area.
2- To assess the prevalence of depression among parents or caregivers and wives of young martyrs in Bethlehem area.

3- To assess the prevalence of life traumatic events that parents or caregivers and wives of young martyrs experienced in Bethlehem area.
5- To examine the effectiveness of EMDR in treating PTSD symptoms and depression of parents or caregivers and wives of young martyrs killed as a result of the Israeli violence in compared with the control group.
6- To examine the effectiveness of EMDR in treating parents or caregivers and wives of young martyrs with PTSD and depression symptoms in relation to independent variables such as age, gender, duration of loss, educational level, profession, family relation, marital status, martyr age, and place of residency.

1.5. Research Hypotheses

Hypothesis is formal statement of the expected relationships between two or more variables. The hypothesis translates the research problems and purpose into clear explanation. (Burns, 1999) It is a prediction about the relationships between two or more variables. (Polit et al, 2004)

The main hypotheses of the current study are:

1- There is no statistically significant difference between the intervention group and the control group in relation to PTSD level at α 0.05
2- There is no statistically significant difference between the intervention group and the control group in relation to depression level at α 0.05
3- There is no statistically significant difference between the intervention group and the control group in relation to age at α 0 .05
4- There is no statistically significant difference between the intervention group and the control group in relation to family relation with the martyr at α 0 .05
5- There is no statistically significant difference between the intervention group and the control group in relation to place of residency at α 0 .05
6- There is no statistically significant difference between the intervention group and the control group in relation to education level at α 0.05

7- There are no statistically significant difference between the intervention group and the control group in relation to marital status at α 0. 05
8- There are no statistically significant difference between the intervention group and the control group in relation to profession at α 0. 05
9- There are no statistically significant difference between the intervention group and the control group in relation to the martyr's age at α 0. 05
10- There is no statistically significant difference between the intervention group and the control group in relation to gender at α 0 .05
11- There is no statistically significant difference between the intervention group and the control group in relation to duration of loss at α 0.05

1.6. Feasibility of the study

1. Researcher interest, knowledge and training in EMDR therapy has helped to facilitate the process of conducting this research.

2. Ethical approval was obtained from Al Quds University. Also the administrations of the Martyrs and Family Care Association and the Psycho-Social Counseling Center for Women (PSCCW) in Bethlehem were approached and accepted to facilitate the study.

1.7. Limitations of the Study

1- The small sample size may affect the generalization of the results in relation to the general population.

2- Only participants from Bethlehem area were included in the study and this may limit the generalization of the findings to other areas.

3- The participants of the study had the experience of loss for long periods of time so recollection of their traumatic memories might be affected.

1.8. Summary

1. The loss of a family member as a result of political violence in Palestine produced high prevalence of PTSD and depression symptoms. Different treatment approaches need to be used in order to overcome these problems.

2. EMDR is one of the potential treatment approaches that are used to treat the victims of political violence with PTSD symptoms.

3. The aim of the current study is to examine the effectiveness of EMDR in treating PTSD symptoms among parents or caregivers and wives of young martyrs in Bethlehem area.

4. The chapter also presents the study objectives, research hypotheses, limitations and the feasibility of the current study.

CHAPTER TWO

LITERATURE REVIEW

Chapter Two

Literature Review

2.1. Introduction*:*

This chapter focuses on different concepts related to the current thesis such as family, crisis, trauma, loss, grief, bereavement, and mourning. Also, the prevalence of PTSD, trauma, and its effects on family members and EMDR treatment approach are discussed. This chapter includes the following two sections:

1- Section one: Family and crisis
2- Section two: EMDR treatment approach

2.1.1. Section one: Family and trauma

2.1.1.1. Introduction:

Family is the basic unit in the society; it consists of more than one member related by blood, marriage, kinship and bonds. The members of the family live together in a single household, and they communicate and interact with each other in different social roles such as mother, father, husband and so on. It has the highest significance among the various systems that are of concern to social work. The family performs essential caretaking functions such as meeting the social, educational and health care needs of its members. (Hepworth et al, 1997)

The functions of the family can be summarized as the following: (Peterson et al, 1999)

- Provision of resources such as money, food, clothing, and shelter

- Nurturing and supporting other family members; this is the primary role of the family and it includes providing comfort, warmth, and reassurance for family members. For example, the family members support one another after the death of a loved one.
- Development of life skills including the physical, emotional, educational, and social development of children and adults. For example, the role of the parents is to help a child to join school. The family has a crucial influence on the formation of the individual identify and self-esteem.
- Maintenance and management of the family system. This role involves many tasks such as leadership, decision making, handling family finances, maintaining appropriate roles with respect to extended family, friends or neighbors and maintaining discipline.
- Sexual gratification of marital partners involves meeting sexual needs in a manner that is satisfying to both spouses. (Peterson et al, 1999)

When a family is confronted with traumatic situations, this may lead to a low level of function or the family may become dysfunctional and unable to meet the needs of the members. Also exposure to a traumatic event may affect relationships among family members. (Dyregrov, 2001) Traumatic events deeply challenge sense of safety and security of people in the world. It has the capacity to disturb vital functions within the family such as parenting functions including emotional nurturing, education, and protection. Children may be particularly at risk when trauma occurs in the family, as traumatized parents often reduce physical contact. Also communication, intimacy, expressiveness and role-distribution may be affected and result in a reduced capacity to cope with internal and external demands or traumas. (Dyregrov, 2001)

This section discus the following issue:

1- Types of trauma
2- Family and crisis

3- Family response to a death crisis
4- Family theories and trauma
5- Family coping
6- Mental problems due to trauma
7- Factors affect the PTSD and depression
8- Studies that assess family response to trauma and loss

2.1.1.2. Types of trauma that the family may face

The word trauma originally comes from Greek and it means "wound". It occurs when human beings are exposed to sudden and unexpected events. (Altwil, 2008) There are fundamental symptoms to the experience of trauma such as helplessness, which is the feeling of being at the mercy of others; loss of security; and extreme negative stress. Martín-Baró describes three types of trauma: psychic, social and psycho-social. Psychic trauma refers to a particular injury which was inflicted on an individual by a difficult or exceptional circumstance. Social trauma refers to the way in which some historical incident can leave the entire population affected while a psycho-social trauma refers to the socially produced trauma that maintains the relationship between individuals and society. (Altwil, 2008) Also trauma victims refer to those who are impacted by a traumatic occurrence. They can be primary victims who are directly involved in the trauma, and secondary victims who are indirectly impacted by the trauma such as relatives and loved ones. (Altwil, 2008)

There are different types of trauma that family members may experience:

1-Man made trauma (e.g. torture and prison). It is an extreme form of trauma and it is almost practiced in half of world nations. (Barbra, 1994) Methods of torture are designed to destroy the physical, emotional, spiritual and social life of the victim. After torture, a person's lives become a process of continuous conflict between the need to remember and bear witness and the need to forget. This is usually noticed by his/her family, community and society. (Barbra, 1994)

2-War trauma and armed conflicts: During times of war, violent and nonviolent trauma (lack of fuel and food) may have terrible effects on children's and people adjustment. (Caffo, 2003) For example, house demolition is a collective punishment of the population for its resistance activities and it is an action which can lead to psychological effects because home is not only a shelter but also the heart of the family life. (El Sarraj et al, 1997) Many studies focused on the impact of war trauma such as developing mental problems. For example, one survey was conducted by Amy et al. (2002) among Kosovo refugees in United States to address the frequency of war-related trauma, the prevalence and patterning of PTSD symptoms, and the association of PTSD symptoms with the frequency of trauma and demographic characteristics. The sample of the study consisted of 129 refugees who were resettled in the United States between the years 1999 – 2000. Fifty four of the participants were from Michigan, and 75 were from Washington. There were 71 males and 58 females. The average years of education were 11 years. The majority of participants identified themselves as Albanian and Muslim. The data was collected by questionnaire and self-report scales included the demographic data, Communal Traumatic Events Inventory, the Tangible, Emotional, and Informational Assistance from Others Scale, and PTSD Symptom Scale. The results of the study showed that the (60.5%) of the participants had PTSD. The mean number of war-related traumatic events reported was 15 events. (Amy et al, 2002)

Also a study was conducted by El-Sarraj et al. (2005) to assess the prevalence of PTSD among Palestinian mothers and children exposed to shelling and loss of home. Findings showed that both children and their mothers were suffering from different psychological symptoms as a result of direct exposure to traumatic experiences which lead to many behavioral and neurotic symptoms and high level of PTSD. Examples of direct personal experiences among children and mothers are shelling of their homes (99.2% among children and 99.5% among mothers), tear-gassed (94.9% among children and 97.5% of mother), experience of severe burns (1.7% among children and 2.5% among mothers), and 8% among children and 4.2% of the mothers experienced shots of live bullets. In addition, children as mothers witnessed many traumatic incidences such as shooting, fighting or explosion. For example, 96.6% of children were exposed

to shooting while 100% of the mothers witnessed it. Also 51.7% of the children saw a stranger being injured or killed and 62.2% of mothers had this experience. 35.6% of children saw a friend or neighbor being injured or killed while 4% of mothers had the same experience. In addition, 22.9% of children and 32.2% of mothers saw a family member being injured. The behavioral and neurotic symptoms among the Palestinian children were headaches (49.2%), stomach pain (26.1%), depression (51.7%), and bed-wetting at night (36.7%), day-wetting (10.9%), sleep difficulties (42.5%), restlessness (42.9%), fighting with other children (45.8%) and inability to settle down (52.1%). Finally the results showed that 55.1% of the children suffered from severe PTSD**.** (El-Sarraj et al, 2005)

Furthermore, another study was conducted by Quota et al. (2004) to assess the prevalence of PTSD and other psychological sufferings among Palestinian children living under severe conditions during the last two and half years of the Al-Aqsa Intifada. The sample consisted of 944 children aged between 10-19 years and they were randomly selected from all parts of Gaza Strip. 49.7% of the participants were boys while 50.3% were girls. Also 76.8% of the respondents were refugees and the rest were citizens and residents. The sample excluded subjects with previous mental health problems. Data was collected from students at schools after obtaining approval from teachers and principals. Two main measurements used were: the Trauma Questionnaire Scale and the Child Posttraumatic Stress Reaction Index (CPTS-RI). The result of the study showed that most prevalent types of trauma exposure for children in community areas are for those who had witnessed funerals (94.6%), shooting (83.2%) saw a friend or a neighbor being injured or killed (61.6%) and were tear gassed (36.1%). Also it was found out that 32.7% of the children in community areas suffered from acute level of PTSD, 49.2.1% of them suffered from a moderate level of PTSD, 15.6% suffered from a low level of PTSD and 2.5% of the children had no symptoms. In hot areas, 54.6% of the children suffered from an acute level of PTSD, 34.5% of the participants suffered from moderate level of PTSD and 9.2% of them suffered from low level of PTSD. In addition, the results found significant differences in the acute level of PTSD between boys and girls as 57.9% of the latter developed such symptoms while the percentage among the former was 42.1%. (Quota et al, 2004)

3-Child abuse: this refers to harmful or injurious treatment of a child that may include physical, sexual, verbal, psychological/emotional, intellectual, or spiritual maltreatment. Abuse may coexist with neglect, which is defined as failure to meet dependent person basic physical and medical needs, emotional deprivation, and/or desertion. (Deborah et al, 2002)

4- Health trauma**:** includes trauma due to the onset of disability or illness such as HIV, and the associated painful medical procedures such as severe burns, cancer, and limb amputations. (Caffo, 2003)

5- Natural disaster trauma such as volcano, tornadoes, floods, hurricanes and earthquakes may increase the prevalence of PTSD among population. (Umran, 2000; Kaniasty et al, 2004) For example, one study was conducted by Yassini et al. (2006) in Iran to assess the incidence and severity of PTSD symptoms in Bam earthquake survivors. The sample of the study consisted of 226 survivors who were referred to health services centers three months after the disaster. The participants were 80 males and 146 females. They were selected by a simple random sampling and the data collocated by questionnaire had 3 parts. The first part had demographic data; the second part included the physical injury secondary to earthquake, death of relatives in earthquake, personal and family history of psychiatric illness while the third part was Structured Interview for PTSD (SIP). The results of the study showed that the 62% of the participants had physical injury, 67.7% had lost a close family member during the earthquake, and 201 (89.2%) of the participants had PTSD symptoms, 34% of which had severe, 38% had moderate and 28% had mild PTSD symptoms. Also the results showed that there was a statistically significant relationship between the incidence and severity of PTSD symptoms and loss of a family member. (Yassin et al, 2006)

6-Developmental trauma such as middle age crisis is a predictable form of trauma because it occurs as part of maturation process. Developmental theories suggest that people progress through a series of life stages. During each of the life stages, there are particular tasks which must be resolved in order for the person to develop in a healthy fashion. If a person fails to accomplish the necessary task they may experience crises related to the lack of meeting the developmental need. (Shaffer et al, 2009)

7- Situational trauma occurs as a result of unanticipated events that are extraordinary in nature. These may happen at any time in one's life and can include suicides, automobile accidents, and train crashes. (Poal, 1990)

8-Personal loss**:** the most prevalent type of trauma is the loss of a person who has played a key role in one's life. Also losses may also include jobs, or any familiar object or environment or death, divorce, and separation such as marital, parental, and sibling separation. (Van der Kolk, 2005)

These traumatic events may expose family members to crisis situations particularly when the family loses one of its members, this is discussed further below.

2.1.1.3. Family and crisis

The term crisis is derived from the Greek word «krisis» which means decision or turning point. Rapoport (1970) defined crisis as "an upset in a steady state" where an individual finds himself in a hazardous situation. The crisis creates a problem that can be perceived as a threat, a loss or a challenge. (Poal, 1990) There are three interrelated factors usually produce a state of crisis: a hazardous event, a threat to life goals and the inability to respond with adequate coping mechanisms. (Poal, 1990) According to Lazarus (1968), the nature of the emotional response after an event is determined by the cognitive processes and the means of which stimulus is reevaluated, that is the appraisal of its personal significance. Primary appraisal deals with the issue of threat or non threat while secondary appraisal is the alternate way of coping with the threat. (Poal, 1990)

A crisis situation affects 90% of the families during their life cycle. (Poal, 1990) There are different classifications to crisis that the individuals and the families may be confronted with. One of these classifications was suggested by Rapoport (1970) who classified crisis situations into three categories: developmental crisis which is bio psychosocial in nature, or crisis of role transition (retirement) and accidental crisis or life threatening events. Also crisis can be classified

into two categories: predictable crisis which is planned, expected or normal process of life, and unpredictable crisis such as natural disasters, accidents or sudden losses. (Poal, 1990)
The family is a dynamic unit and one system of individuals who are all interrelated, where any change in the life of one will have an effect on the behavior, thoughts, and feelings of the others. (Cameron, 2001; Brown, 1999) Furthermore, family members are interdependent, so interdependence is the potential for strengthening internal family ties and encouraging common thought and cooperation among its members in order to function more effectively as a whole. (Brown, 1999)

Also every family is unique and is constantly adapting to changes in the surrounding environment, with strategies differing from one family to the other. The members react differently to major life events in the family such as leaving home, marrying, or having children. Families become imbalanced when they cannot adapt with such changes. Traumatic events such as losing a son or a partner interrupt the normal sequence of life. It can be extremely stressful because it is unexpected, and it has the potential to alter the family structure and identity to the extent that the family does not know how to deal with it. As a result, the family experiences a wide range of feelings such as anger, feelings of guilt, despair, and depression. (Smolina, 2007)

Lippmann- Blumens (1975) provided a model of ten dimensions which clarifies the characteristics of crisis and their impact on a family. (Poal, 1990; Danielson et al, 1993) This model focused on the origin of the stressor (inside vs. outside the family). For example, if the cause of stressor is linked to the family such as incest or death of a family member, the impact would be greater because the family is responsible for causing, dealing, and resolving the illness. The family may feel guilty in relation to the incident, and they may feel responsible for meeting the family demands which are the outcome of the event. Fulfilling these demands may require changes in family patterns and roles and these demands can generate family strain, stress, and crisis. (Danielson et al, 1993)

The second element is the extent of the stress impact which means (all family members vs. only a few). For example, a toothache may involve only one family member such as the mother or the

father who gives part of his / her time to the sick one; in case of one family member is affected by the stressor, the family uses the minimal of its resources, so the family tension and disruption would be mild. On the other hand, death of a family member may affect the whole family, each according to the significance of their relationship with the deceased. Thus, the need for change will be felt by the whole family, and many resources may be tapped. (Danielson et al, 1993)
The third characteristic of crisis is the severity of the stressor (mild vs. severe). In the case of losing a family member and when the deceased is unable to fulfill his / her role and tasks in the family, the need for a change within the family is a must. The severer the stress, the more demands it requires such as time, energy, and finances. Over time, stress demands can threaten family integrity and well-being, leading to an eruption of a family crisis. On the other hand, when stress is low or has little severity, it may have little or no impact on the family such as a mild level of tension. The demands are only temporary and would not threaten family integrity or well-being. (Danielson et al, 1993)

Also the duration of the stressor (short term vs. long term) is another important factor. The duration of the stressor impact predicatively contributes to individual and family difficulties. The long persistence of stress causes exhaustion and a state of physical and psychological illness. The long lasting stress causes financial burdens, and marital discord. When the family is confronted with short term stress, they need to adapt to the new situation. Adjustment behaviors rather than the more challenging adaptive behaviors can meet the demands of the situation. Changing the family pattern is difficult and the initial response to this change is to resist change and to keep established roles and patterns of functioning. In short- term stress, it may be possible to resist patterns of change successfully and temporarily the nature of the stress does not demand a permanent change. On the other hand, long-term stress requires permanent family changes. Grief is felt over the loss of the family previous lifestyle, their anticipated lifestyle, and health of the family member. The family may be unable to return to pervious roles, and the new roles may develop especially around the physical and emotional care of the family member. (Danielson et al, 1993)

In addition, the onset of the stressor (sudden vs. gradual) may influence the family function. It affects the meaning families attach to the event or stressor and it influences their response. For example, the sudden death by an accident produces a strong emotional reaction among family members and the more life – threatening the event is, the greater is the chance for family crisis. With a sudden event, the family has little time to investigate, gather information, and develop coping strategies with the event. The families need to find support and resources in order to deal with threat. The gradual onset of events such as illness with vague, fluctuating symptoms can produce denial and at the same time, gradual onset allows families to develop coping strategies and gather information. (Danielson et al, 1993)

Furthermore, the control of the stressor (manageable vs. unmanageable) particularly that apparently manageable can contribute positively to family sense of control. Families with a sense of control are less vulnerable to the impact of stressors. The sense of control assists the family in feeling cohesive and organized, and it gives a feeling of more energy to buffer against stressors because lesser family energy is spent while trying to establish control. Also the sense of control enhances family self-esteem and integrity; this helps the family to cope with the stressors. (Danielson et al, 1993)

In addition to abovementioned facts, the causes of stressors (natural, man-made, or unknown) affect family response to a crisis. The unknown causes have strong influence on families and society reaction to the event. In stressful situations, families cope more effectively when they have explanations of what happened, how the event happened, why the event happened, and how they can overcome this undesirable situation. When causes are known, such as natural, this helps them to have a sense of control and they manage the situation. Artificial causes of death often create a greater deal of anger and guilt, especially when the event can be prevented. When the causes of the event are unknown, helplessness, fear, and loss of control are felt by the family. (Danielson et al, 1993)

Also predictability of the stressor (predictable vs. uncertain) is another factor that influences the family response to crisis. The unexpected and progressive stress can have more serious impact

on the family than the predictable one. Predictable stressor seldom causes family crisis because the family have time to adjust and to accept the change. Uncertainty has a great influence on developing psychological distress and disruption in key life areas. (Danielson et al, 1993)

Moreover, resources demands of the stressor (great vs. small) may have an impact on family responses to crisis and affect its functions. When the family has good support system and good finical situation, they can better adjust with the changes, because the prominence of resources can help in resilience. The perceived balance between stressor demands and resources determines family appraisal and response. For example, families with many resources are more capable of handling the strain caused by crisis situations.

Finally, stigma of the stressor (great vs. small) has a crucial role in crisis situation. For example, when a family member is diagnosed with ADIS, the social stigma influences the level of strain, and it prevents them from receiving support which creates social isolation and guilt feeling as they are punished from God. (Danielson et al, 1993)
One of the most critical crises that the family may face is the sudden death of one of the members which may affect its entire system.

2.1.1.4. Family response to death crisis

As mentioned above, families differ in their reaction to traumatic events. Each family constitutes an organization that has its own specific characteristics that may affect their ways of reacting to traumatic events such as death of a family member. (Danielson et al, 1993)

Death is defined as the cessation of all vital functions of the body including the heartbeat, brain activity (including the brain stem), and breathing. It is the "permanent cessation of the critical functions of the organism as a whole". (Bernat, 1998) The death of a child causes changes in the lives of parents. Dealing with the death of a child is the most excruciating event since parents do not expect to outlive their children. It is a traumatic event which often creates a reaction of intense grief and bereavement. (Brower et al, 2010) Also violent death is a shocking experience especially when the event is sudden, unexpected and untimely death, particularly of a young

person. Such events disrupt and affect the lives of those bereaved and left behind. With deaths, the most profound bereavement may be experienced by those with intimate attachments, as their partner, spouse, parent, or child, but also a range of other intimate bonds may be affected. (Brower et al, 2010) Some families may experience normal bereavement as a result of their loss while others may experience complicated grief, depression and PTSD.

Death is considered is a type of *loss* which is defined as an event that leads to the permanent unavailability of a person or object that is emotionally significant to an individual and to which the individual was attached. Also Loss is the separation of an individual or group of individuals from a loved or prized object. The object may be for example, a person or group of people, a job, social position or status, an ideal or fantasy, or a body part. (Zinner et al, 1999)

As a result of the loss or death, the person may experience different responses such as bereavement, morning, grief and anxiety. *Bereavement* is the situation of a person who has recently experienced the loss of a significant someone notably a parent, partner, sibling, or child. The person's death is well-recognized as a debilitating experience which causes a great deal of emotional pain. (Worden, 2009; Zinner et al, 1999) there are three different forms of bereavement:

1- Normal bereavement which includes shock, numbness, disbelief as frequent initial responses, yearning, longing, protest, and searching behaviors. Also it is referred to as uncomplicated grief, and it encompasses a broad range of feelings and behaviors that are common after a loss. (Raphael et al, 2006)

2- Traumatic bereavement refers to the complex interaction that may occur between traumatic event and bereavement. This may particularly arise where the circumstances of the death also evoke personal life threat such as violent death. (Raphael et al, 2006)

3- Pathological grief or complicated grief. There is a little conceptual agreement among researchers about the definition or nature of pathological grief. Grief is a personal experience of loss, and it includes sadness, anger, guilt, despair and helplessness. (Ciacco et al, 2008, Worden, 2009; Zinner et al, 1999) This indicates that normal grief encompasses a broad range of feelings and behaviors that are common after a loss. The pathological grief is called

"exaggerated grief". Culture influences the reaction of people such as the expectation to keep a "stiff upper lip" which causes delayed response and fixation in the denial stage of the grief process for years. Feeling of sadness, anger, guilt, helplessness, hopelessness, and somatic complaints render the individual function in terms of management of daily living. Intensification of grief to the point that the person is overwhelmed demonstrates prolonged maladaptive behavior, manifests excessive symptoms and extensive interruption in healing. (Basavanthappa, 2007) Depression, anxiety, and somatization are used to measure pathological grief. (Raphael et al, 2006)

The length of bereavement process is varied according to culture and religion, and it can take a year or two. (Toner et al, 2010) People reach the healing phase by their own time; it can take months, while for others the process can last much longer. (Sanders, 1992) according to DSM-IV-TR the symptoms of bereavement are similar to depression, but the diagnoses of the depression cannot be made unless it persists for 2 months or more after the loss or it can be caused by impairment of function or suicidal ideation. (DSM IV-TR, 2000)

Also *mourning* is another important reaction to loss. The term mourning refers to the public display of grief in social situations. Mourning can be defined as the process that follows the loss. (Ciacco et al, 2008) it is the social expression or expressive acts of grief that are shaped by the practices of a given society or cultural group. (Worden, 1991) It is based on culture, religious or personal belief systems such as visiting the gravesite of a loved one on special dates, keeping a journal or making a photo album of the deceased. More dramatic expressions may include tearing of hair and clothes. (Zinner et al, 1999; Worden, 1991) Also mourning is the process which one goes through to adapt to the loss of a loved one. Worden (2002) and Rando (1993) created a definition of mourning which consisted of different elements such as undoing of psychosocial ties to the lost object and focus on the deceased; the revision of perceptions about life, roles, and the development of a new identity, focus on self, moving on without the lost object and focus on the external world. (Underwood, 2004)

People have a varied range of reactions toward loss. Some people have a mild reaction to a loss while others have a very intense reaction. For some, grief starts at the time they hear of the loss, while others delay their experience. There are many different reasons why people handle morning in different ways. For example, it is important to identify the dead person relationship to the survivor such as a spouse, a child, a parent, a sibling, or a friend or a lover. The grandmother who dies as a result of natural causes will be grieved differently than a sibling killed in a car accident. Also in the case of strong and secure attachment with the deceased person the reaction to the loss is severer while the ambivalence attachment in relationships may lead to a pathological reaction. (Worden, 1991)

Also Worden in (1982) suggested different tasks that need to be accomplished before mourning is completed. He provided a model that incorporates both grief and mourning into the emotional work necessary to accommodate to and accept a loss. He puts forward a four-task paradigm for the work of grief and healing:

- To accept the reality of the loss because the task of morning is to face the reality that the person will not come back after death and the reunion is therefore impossible. Many people can find themselves calling the lost person and sometimes misidentify others in their environment. Therefore, people deny the reality of the death and they deny the meaning of a loss. In this way, the loss can be seen as less significant than it actually is.
- To work through the pain of grief and morning as a result of exposure to a variety of life experiences, many people may have feelings of sadness, anger, harm, emptiness, and loneliness. A sudden, unexpected death can carry the pain of regret and unfinished business as well as the guilt that perhaps something could have been done to prevent death.. On the other hand, there is maybe a subtle interplay between the society and the mourner that makes pain more difficult as the society may be uncomfortable with the feelings of mourners; and hence; it may give the subtle message that reads. “You don’t need to grieve – you are only feeling sorry for yourself”.

- To adjust to the world without the deceased person: this includes rearranging, restructuring and redefining that take place as people begin to identify and fill the roles formerly occupied by the deceased.
- To emotionally relocate the deceased and move on with life: The "emotional relocation " of the deceased means moving from feelings of loss and longing that accompany people awareness that the deceased has really gone from their lives forever to being able to hold this person's memory in their hearts. People tend to be less conscious of the loss and less preoccupied with the deceased.(Worden,1991)

Also Sanders (1992) used the idea of five phases to describe the morning process:

1- Shock is defined as a sudden and violent disturbance of the mind or emotions. Unexpected death can be more shocking to the person. Also, if there is a traumatic death such as murder the period of shock will last longer, and the more complicated will be the process of resolving the grief. As a result of experiencing shock, many people withdraw from their friends and family as well as their usual everyday activities. They become preoccupied with thoughts of their lost loved one. When the funeral is over, friends and family may go back to their regular lives, but the bereaved person will be left with the loneliness of grief. (Sanders,1992)

2- Awareness of loss: During the shock phase, the person is provided with a temporary buffer against the emotional turmoil of loss. In the second phase, the feelings are very strong and people can feel exposed. (Sanders, 1992) In the awareness stage, the pain as a result of the awareness of loss can be experienced for moments, hours, days, or months. Yearning, frustration, crying, anger, guilt, shame, sleep disturbances, fear of death, over-sensitivity and disbelief are common reactions. Many people report that they dream of the deceased or even sense his / her presence. People may have a separation anxiety, feel alone and unsafe in the world. This period uses enormous amounts of psychic and physical energy. Intellectually, people are aware of their loss, but emotionally they are not convinced and they wish, bargain, yearn and search for some sign that the lost one is close by. Many people report having signs from the dead that seem to indicate

that they are still connected to them. This makes them feel more comfortable for the moment, but leads to terrible disappointment when the signs do not consistently appear. (Sanders, 1992)

3-Conservation withdrawal: In this stage people become exhausted from feeling so much psychic pain. They welcome being alone and they have fear of falling apart if they continue to feel and experience such intense emotions. They may feel that they do not want to return phone calls and may prefer not to communicate with others. They may feel weak, experience fatigue, a great need for sleep, a weakened immune system, helplessness and a feeling of loss of control. In addition, they may find themselves asking certain types of questions such as why it happened. Or they wonder if they could have done something to prevent it from happening. At the end of this stage, people understand that life would never be the same as it was in the past. They start moving at this time to a realization that, without forgetting their precious memories, they need to find new experiences and ways of perceiving life. (Sanders, 1992)

4-Healing: As people lessen their withdrawal, they reach a turning point. New events emerge or they simply find themselves feeling a little more hopeful. They are moving towards a resolution that they had doubted it would ever come. This process can take months or even longer. People in this stage start to like feeling better physically, have increased energy, better sleep and a stronger immune system. (Sanders, 1992)

5-Renewal: usually before people reach this stage, they think that their life is over, but little by little, they rebuild their lives. They know that they are different than what they used to be before; at the same time, they find a new strength in themselves. They are able to re-energize themselves in spite of their loss. At anniversaries and holidays, some of the grieving feelings return, but they soon pass. (Sanders, 1992; Worden, 2009)

Another important reaction to loss is grief. *Grief* is the term that indicates one's reactions to a loss and it is experienced when one confronts a significant loss. Grief reactions may be physical, psychological (emotional, cognitive), behavioral, social, and/or spiritual in nature. (Corr, 2010) For example, physical reactions to loss may include tightness in the chest, oversensitivity to noise, shortness of breath, lack of energy, and muscle weakness. Also loss has emotional reactions such as sadness, anger, guilt, loneliness, fatigue, helplessness, numbness, and

depersonalization. Cognitions as part of grief can involve disbelief, confusion, difficulties in concentration, a sense of presence of the deceased, and dreams about the deceased. Behaviors often experienced in grief include sleep or appetite disturbances, crying, loss of interest in activities, avoidance of reminders about the deceased, searching and calling out, restlessness, hyperactivity, or visiting places and cherishing objects that remind one of the deceased. Difficulties with interpersonal relationships, social withdrawal, and problems in functioning are examples of social reaction. A spiritual dimension in grief involves searching for a sense of meaning, hostility toward God or a higher power, and questioning beliefs. (Corr, 2010)

The grief processes have two distinct stages and multiple interconnecting phases. Also there are acute reactions and chronic grief. Both forms reflect a struggle of ego identity and the relationship one has to oneself, as distinct from the world and others. Early grief can significantly affect how one perceives oneself and influence one's attachments and behavioral interactions with others throughout one's lifespan. (Ciacco et al, 2008)

Many theories were developed to highlight the stages of grief process and the concept of phases was used by Packer, Bowl, and Sanders. For example, Packers (2006) defines four phases of grief as follows:

- Phase I: It is the period of numbness that occurs close to the time of the loss. Numbness helps the person to disregard the reality of the loss at least for a brief period of time.

- Phase II: It is when the person yearns for the lost one to return and tend to deny the permanence of the loss. Anger is the main part of these phases.

- Phase III: It is the phase of disorganization and despair and the bereaved person finds it difficult to function in the environment.

- Phase IV: It is the phase of reorganized behavior when the person begins to pull his life back together. (Packers, 2006)

Finally, Engle (1964) proposed the following 5 stages of grief:

Stage I: shock and disbelief:

The initial reaction to a loss is a stunned, numb feeling and refusal by the individual to acknowledge the reality of the loss. Engel states that this stage is an attempt on part of the individual to protect the self against the effect of this overwhelming stress by raising the threshold against its recognition or against the painful feeling.

Stage II: Developing awareness:

This stage begins within minutes to hours of the loss. Behaviours associated with this stage include excessive crying and regression to a state of helplessness and a childlike manner. Awareness of the loss creates feelings of emptiness, frustration, anguish and despair. Anger may be directed toward the self or toward others in the environment.

Stage III: Restitution:

In this stage, various rituals associated with loss in a culture are preformed. Examples include funeral, wakes, special attire, a gathering of friends and family, and religious practices customary to the spiritual beliefs of the bereaved. Participation in the rituals is thought to assist the individual to accept the reality of the loss and to facilitate the recovery process.

Stage IV: Resolution of the loss*:*

This stage is characterized by a preoccupation with the lost object. The concept of the lost object is idealized and the individual may even imitate and admire qualities that had been lost. Preoccupation with the lost object gradually decreases over a year or more and the individual eventually begins to reinvest feeling in others.

Stage V: Recovery:

In this stage, obsession with the lost object ends and the individual is able to go on with her/ his life. (Btasavanthappa, 2007)

Every grief experience is unique and depends on many variables such as circumstance of the death, sudden, traumatic or violent death and the young age of the deceased. Sudden death or unexpected or untimely death is a factor placing the griever at significant risk of complicated grief. Furthermore, communities as individuals can experience grief, and it can be complicated one too. For example, in the case of war or natural disasters, the whole community is affected and the event damages the support system. The grieved community experiences after a traumatic event may become either a developmental crisis "unsolved, and affect negatively the whole community" or opportunity for the community to grow and to develop. (Zinner et al, 1999; Toner et al, 2010, Worden, 2009)

2.1.1.5. Family theories and trauma

Most families maintain some type of homeostatic balance and the loss of a significant person in the family can negatively affect this homeostasis and cause the family to feel pain and seek help. (Danielson et al, 1993) Bowen (1978) states that knowledge of the total family configuration, the functioning position of the dying person in the family, and the overall level of life adaptation are important for anyone who attempts to help a family before, during, or after a death. Specific factors that affect the mourning process and influence the degree of family disruption have been identified such as stages in the family life cycle, roles played by the deceased, power, affection, communication patterns, and socio cultural factors. (Worden et al, 2009)

As the family is an interactional unit in which all members influence each other. (Greaves, 1983) each change that occurs following the death of a family member is symbolic of the death of the family itself, making its primary task the establishment of a new family out of the old one. (Greaves, 1983)Families are different in their ability to express feelings. Families that cope most effectively are open in their discussions about the deceased, whereas closed families not only lack this freedom but also provide excuses and make comments that allow and encourage other family members to remain quiet. Accordingly, functional families are more likely to process feelings about the death, including admitting to and accepting the feelings of vulnerability.

(Danielson et al, 1993) However, if openly expressed, feelings are not tolerated; this may lead to various types of acting-out behaviors that serve as grief equivalents. (Danielson et al, 1993)

In order to understand family ways of dealing with difficulties such as grief, bereavement and morning, it is essential to identify some examples of family theories that show how they can affect family members such as family system theory, family development theory, and attachment theory. (Danielson et al, 1993)

The family system theory was first established by Bertalanffy in 1940s. According to this theory, the essential properties of a living system are those of the whole, which none of the parts have. They arise from interactions and relationships among the parts. These properties are destroyed when the system is reduced into isolated elements and the whole is always greater than the sum of its parts. According to the system theory, it is not possible to understand the individual behavior or understand his feelings such as grief without the involvement of the family. (Danielson et al, 1993) Grief according to this theory is systemic rather than individualistic, marking the dissolution and reconstruction of a collaborative family identity in response to a new reality and physical absence of a vital member of the interdependent family. In addition, the theory proposes that the death of one of the family members seriously threatens the homeostasis (balance) of the system. The degree of threat varies according to features of both the family and the dead one. These features include timing of the death in the family life cycle, nature of the death, degree of openness within the family and role of the deceased member. (Danielson et al, 1993)

Each family member has certain social roles and psychological functions that provide each member, and the family as a whole, with an identity. In case of a death in the family, both the family unit and the so-called "surviving" family members themselves are at risk of losing themselves. The re-establishment of family equilibrium will follow the realignment of roles and reassignment of responsibilities. (Mander, 2006) The equilibrium of the unit may be disturbed by either an addition of a new member or loss of a member. The intensity of the emotional reaction is governed by the functioning level of emotional integration in the family, or by the functional

importance of the one added or lost to the family. For example, the birth of a child can disturb the emotional balance until family members can realign themselves around the child. Losses that can disturb family equilibrium are physical losses, such as a child who goes away to college or an adult child who marries and leaves the home. (Mander, 2006)

There are functional losses, such as a key family member who had long-term illness or injury which prevents him from doing the work on which the family depends. Also there are emotional losses which occur when the active member of the family is absent as a result of death. The length of time required for the family to establish a new emotional equilibrium depends on the emotional integration in the family. In addition, the unresolved grief may not only serve as a key factor in family pathology but also contributes to pathological relationships across generations. (Danielson et al, 1993) Therefore, the postponed mourning in the family of origin impedes one from experiencing emotional loss and separation within the current family. (Danielson et al, 1993) For example, accidents, homicides, and suicides produce both similar and different adjustment tasks for bereaved parents and have serious impacts on their adaptation. (Danielson et al, 1993) Parents and spouses of children and adolescents may be the most members of the family who are influenced by the death of their loved children. The death of spouse gives a feeling of loneliness. Also emotional adjustment and adaptation are the major concerns of a spouse who has lost a companion and a source of emotional support, particularly in long interdependent relationships in which both members had a shared identity based on systems of roles and traditions. (Marry et al, 2005) Parental grief is very intense as they feel that a part of them has died and they continue to be parents of the child who died. In addition, parents' response to grief includes intense sorrow and longing brought about by the child's absence, missing the child and hoping for his or her return, and feelings of guilt, anxiety, anger, low function and depression. The grief response overlaps with the trauma response (PTSD). Many parents bereaved by violent death show symptoms in one or all three PTSD symptoms: re experiencing, avoidance, and hyper arousal which affect their social and psychological role within the family (Murphy, 2006)

When a partner or a sibling dies with young children still at home, the gradual, expectable flow of change over the course of the family life cycle is radically altered. The family is challenged to absorb the reality of the death, with its many emotional and practical implications into the already demanding work of growing up together as a family. (Murphy, 2006)

Another more recent theory generated for studying families is family development. This theory attempts to account for the change over time in family system on one hand and interactions and relationships among family members on the other hand. The family developmental theory (family life cycle) was developed by Duvall and others (1977). Although each family goes through each stage of development in its own unique way, all families are considered as examples of an overall normative pattern and follow a universal sequence of development. (Scatur et al, 1992)

The emphasis of life cycle theory is on the critical timing of familiar modal events typically experienced by family as it is proceeds through eight stages. The family life cycle begins with marriage and ends with the death of both spouses is as follows (Carter et al, 1989; Scatur et al, 1992)

- Married couples without children (2 years). This stage begins with marriage and continues until the birth of the first child. The major goal of this stage is to adjust to living as a married couple. The couple's developmental tasks are to establish a home basically a place to call their own, establish mutually satisfactory ways of earning money and differentiation of self in relation to family of origin. Also it involves leaving the family of origin and detaching themselves emotionally and physically in readiness for intimacy with the partner both psychological and sexual, and agreement about roles, responsibilities, goals and values of couple marital relationship.(Carter et al, 1989)
- Childbearing families (oldest child, birth-30 months). The major goal is to adjust to pregnancy and the developmental tasks are to reorganize the house to provide for the expected child, and to acquire adequate knowledge about pregnancy and childbirth.

- Families with preschool children (oldest child, 30 months – 6 years). This stage is aims to reorganize family unit around needs of infant and preschool children. Its developmental tasks are to supply adequate space, facilities for the child, to provide security for the child including emotional and environmental support, and create an effective communication system within the family. (Carter et al, 1989)

- Families with children (oldest child, 6-13 years). The reorganization of the family to fit into the expanding world of school age child is its major goal. Its major developmental tasks are to deal with child separation and being more involved with community activities such as school, and sports group. (Scatur et al, 1992; Neighbor, 1985)

- Families with teenagers (oldest child, 13-20 years). It focuses on loosening of ties to permit greater freedom and heavier responsibility to members. Acceptance of adolescence social and sexual role changes of control versus freedom, power struggle and rebellion of teenagers, and holding of a life philosophy that fits into the new level of development as a family and as members of a challenging world are its major tasks.

- Families as launching centers (first to last child leaves home). The major goal is to arrange for a separation and leaving home, while its developmental tasks are to accept the child's independent adult role, to reallocate responsibilities among growing children, and maintain an open system of communication within the family. (Scatur et al ,1992; Neighbor, 1985; Carter et al, 1989)

- Middle-aged parents (empty nest to retirement). In this stage, the major transition goals to be achieved are the mid-life crisis; husband and wife should be able to communicate their emotions toward their physical changes, changing of self-image and accepting limitations and readiness for anticipating retirement and death of a partner.

- Aging family members (retirement to death of both spouses). The major goal is disengagement between the husband and wife while its tasks are to accept old age, adjust to retirement income, find a satisfying home for later years, and adjust with illness and death of a partner. (Scatur et al ,1992; Neighbor, 1985; Carter et al, 1989)

Each of these stages has its developmental tasks and they should be met in order to keep the level of the family function such as an independent home, satisfactory ways of getting spending money and mutually acceptable pattern in division of labor. The progress in stages may lead to periods of transition and change which may be followed by relative stability and then change once again. During these changes, family members attempt to cope with life events and demands. Also in this process, family relationship system, roles assigned to members, closeness between members, and boundary has to be changed in order to keep the balance of family. (Scatur et al, 1992; Neighbor, 1985)

Families are living systems moving through time. The time perspective relates problems to the flow of stress through the family and how it is addressed in the process of family coping. Challenges and problems often coincide with critical transition points in the family life cycle. (Van Katwy, 2003)

Some family stressors are predictable and normative, such as life cycle transitions, while others are unpredictable including untimely death and war. There are factors that impact the family ability to deal with these stressors such as family resources in coping with the stress and the family interpretations of the meaning of stress. Family crisis occurs in circumstances that require it to change its basic structure of being and doing things in response to stress. (Van Katwy, 2003)

The developmental approach provides an explanation of the grief process among family members. It indicates that the relationships in the family are the constituent elements of self. When death interrupts the marital bond, the transformation sense of self as wife and mother has to include the reality of the loss of a family member particularly loved ones such as husband and father enduring psychological and spiritual important in the radically restructured family. For example, the death of a father can interrupt the child- father bond, and at the same time the child continues to need father support. (Shapiro, 1994) The presence of parents in the child's life provides him with a sense of security and creates bonds that can provide care and protection across the life cycle. (Shapiro, 1994)

Finally, attachment theory was initially described by John Bowlby (1969; 1973; 1982) and later extended by Main Kablen (1985) it suggests that the intensity of the grief could be influenced by

the type of attachment that one has to the deceased. Bowlby identified how the circumstances surrounding the death of a loved one affected the characteristics, intensity, and duration of the bereavement process. The attachment style in the family can influence the personal well-being. So if he / she were prematurely separated from their parents as a result of death of one or both of them, they can develop many emotional disorders and trauma. (Wrigh et al, 2008) In addition, they will face great difficulties to start and maintain secure relationships as adults. On the other hand, attachment theories mention that if family members fail to negotiate their feeling including grief, the impact of death and grief on family development would be greater and it may involve a crisis of attachment and crisis of identity for family members. (Johnson, 1995)

2.1.1.5. Family coping with crisis

Families as individuals need to develop certain strategies to manage the wide range of emotions inside the families, and they use different coping strategies as a result of crisis, grief and trauma. Family resilience and family coping are important concepts. Family resilience defined by Walsh (1998) as the capacity to rebound from adversity, more strengthened and more resourceful. People cope with crisis and adversity by making a meaning of their experience and linking it to their social world, to their cultural and religious beliefs, to their multigenerational past, and to their hopes and dreams for the future. (Walsh, 1998) In addition, Walsh (2003) states that "the concept of family resilience extends our understanding of a healthy family which functional to situations of adversity. Although some families are shattered by crisis or chronic stresses, what is remarkable are that many others emerging strengthened and more resourceful" (Glicken, 2009, p.1) Coping is a psychological process used to manage difficulties and traumatic experiences such as losing a family member. The concept of coping is based on schema proposed by Lazarus and Folkmanis in which it is conceptualized as a response to perceive stress and it is defined as constantly changing cognitive and behavioral efforts to manage specific external and/or internal demands that are appraised as exceeding the resources of the person. (Murphy 2002; Thabet, et al, 2009)

According to Lazarus, coping affects stress reactions in many ways such as when the person's relationship with the environment is changed as a result of coping actions; the psychological stress may also be changed for the better status. This process is called problem-focused coping. The other coping processes are the emotion-focused coping which means that the person needs to change only the way that he / she interprets what is happening, and when the person successfully avoids thinking about the threatening situation even if only temporarily, then the level of stress is reduced. The reappraisal of a threat in nonthreatening terms removes the cognitive basis of the stress reaction. In other words, coping involves both the attempts to change the person-environment realities behind negative emotions (problem-focused coping) and the attempts to change either what attended to or how it is appraised (emotion-focused coping). (Lazarus, 1993) Also he describes four basic modes of coping. For example, instrumental strategies are directed towards managing the threat or stressor itself while intra psychic strategies are aimed primarily at regulating or minimizing the accompanying emotional distress. Inhibition of action refers to the ability to resist taking action when such action would increase the likelihood of harm, or danger while information seeking involves the instrumental activity of mobilizing support or investigating alternatives that can relieve emotional distress. (Lazarus, 1993)

Factors that influence family ability to cope with trauma and grief are hardiness, cohesion and flexibility. Hardness is the family sense of control and sense of adventure in solving problems. Cohesion is the degree to which families value loyalty, trust, caring, and shared values in managing life stressors, while flexibility refers to the ability of family to change roles and boundaries in order to adjust. (Danielson, 1993)

There are different family typologies; some are adaptive while others are maladaptive. For example, a regenerative type refers to the family ability to renew roles, communications, and interaction among family members in order to overcome the crisis or trauma. The resilience type refers to family strength and capabilities, social support and resources which enable the family to deal with stressors and crisis while, rhythmic type is a family with certain routine in life even if they are exposed to traumatic events, and the family has the ability to regain the balance.

(Danielson, 1993) Families can adapt successfully with death or other forms of crisis when they have resources that meet the demands of the stressor, have a positive appraisal of the stressor event, flexible and regenerative families with characteristics that successfully meet demands of the specific stressor and have good problem-solving capabilities. (Danielson el at, 1993)

However, some families exhibit a very passive coping strategy such as withdrawing and harboring of their emotions inside in order to comply with social perceptions that they have no valid reason to be distressed since this their faith. (Smolina, 2007) The maladaptive types of families may include vulnerable families, fragile families, and unpatented families. (Danielson el at, 1993) These types of families are characterized by poor adjustment with stressors. For example, vulnerable families have low coherence and hardiness. They may get angry and criticize the family members when stress is high. They do not feel that they have much control over life generally and tend to attribute good or bad events to luck. Also these types of families need to be skilled in moderating emotions in crisis situations and not blame each other. (Danielson et al, 1993)

The socio cultural context in which coping occurs can influence the type of coping strategies that the family utilizes. In the Palestinians context, for example, family support and social support system consists of people who fulfill different roles in the person's life such as friends, neighbors and extended family. (Salloum, 2006) The presence of a family as a primary resource of resilience because of the ingredients of kinship resilience, familiar stabilizing patterns of verbal and nonverbal interactions that restore the sense of safety, cohesion, and hope for survival have developed over years within the family matrix. The verbal and nonverbal communication among family members after loss helps to create a sense of safety for children and other family members. Family can create a sense of safety by establishing family routines and rituals such as bedtime, talk to children about what it means to feel safe, provide honest information in a developmentally appropriate manner, be emotionally available to respond to family members emotional needs. (Salloum, 2006) In addition, the signs for family resilience after violent death such as creation of a family narrative about the life of the deceased and about the violent death and ability individual family members to tolerate reminiscence. Family uses humor in a

respectful manner and family members understand and respect that each person's relationship to the deceased is unique and they respect how each family member expresses his or her grief. (Glicken, 2009) Also families may utilize spirituality or belief systems that offer hope, peace, or understanding for family members; it continues to have visions of future and does not allow stigma or guilt to become the predominate belief as a result of loss. Finally, the family may apply different problem solving skills in order to cope with violent death such as thoughts about creative approaches to solve new problems. This includes others in brainstorming solutions, utilizing internal and external resources to address problems, and ability to discern the pros and cons of making major life changes after death. (Salloum, 2006)

Furthermore, Endler and Parker (1999) indicate that there are three primary styles of coping with stress: task-oriented, emotion-oriented, and avoidance-oriented coping. Task oriented coping involves an attempt to solve or limit the impact of the stressful situation. Emotion-oriented coping involves an attempt to limit the emotional impact of stress rather than a resolution of the stressful situation while avoidance-oriented coping involves use of distraction and diversion unrelated to the stressful situation to reduce stress. (Glicken, 2009)

Some studies focus on assessing resistance and coping among family after loss of one of its members. For example, one study is conducted by Breen et al. (2010) in Australia to explore various acts of resistance of dominant grief discourse engaged in by people bereaved through the death of a family member in a traffic crash. The study sample consisted of 21 adults, aged from 24 to 71 years and their mean age was 47.95. They were selected from 16 bereaved families, and sixteen were women while five were men. The time that had passed since the death of their loved ones ranged from 13 months to 23 years. The age of the participants' deceased loved ones ranged from 6 to 73 years and they were predominantly children, followed by siblings, parents, a spouse, and a grandparent. Participants were recruited from three key sources: a bereavement mutual-help group, a road safety activist group, and a media release published in community newspapers. The data was collected by a semi-structured interview. The results of the study showed that resistance of dominant grief discourse was evident in three domains. First, the intrapersonal questioning the silence as most of the participants reported that they did not receive

any support from their social support system and they faced judgmental comments about their experiences of grief. Most of them reported that they learnt to rely on themselves. Some of the participants understood that those in their social network might think they were no longer grieving because grief is 'invisible'. Second, the interpersonal (breaking the silence) as some of the participants reported engage in a process of identification of their supporters and non-supporters, and then bringing about an alteration of their behavior accordingly. Also some reported that they avoided people, places, and events. Results showed that they turned to others with similar experiences in order to access support and get safe psychological space where they could be themselves and say what they wanted and needed to say. Finally, fighting the silence is another result domain that participants reported and it was important for them to explicitly and publicly promote their perspectives of being bereaved through crashes in order to create social and political change. They explained that their actions were motivated by the principle of justice and also by the notion of honoring their deceased children so they did not die in vain. (Breen et al, 2010)

Furthermore, following the loss of a loved one, individuals are often driven to search for meaning in both loss and their lives. (Niemeyer, 2006) Some studies focus on finding a meaning of loss. For example, one study was conducted by Lichtenthal et al. (2010) to identify specific themes of meaning making (sense making and benefit finding) among bereaved parents, as well as examining associations of these themes with the severity of grief symptoms. The sample of the study consisted of 156 bereaved parents who were recruited by direct advertising to two Southeastern United States chapters of the Compassionate Friends, a support group network for bereaved parents, or internet search engines and links from internet sites. The participants mean age was 49.41 years and the majority of participants were mothers (81%), Caucasian (93%), African American (4%) and Hispanic/Latino and biracial (3%). The participants reported the causes of their child death, including miscarriage or stillbirth (6%), naturally anticipated such as cancer (12%), and naturally sudden such as heart attack (20%), accident such as motor vehicle accident (45%), suicide (11%), and homicide (6%). The average length of time since the death was 6 years and the mean age of the child at the time of death was 17 years. The data was collected by an open-ended question about the sense of making and benefit finding. It was

assessed by asking participants a qualitative question: Despite the loss, have you been able to find any benefits from your experience of the loss? If so, please, in a brief paragraph, describe the benefits you have found. Also Core Bereavement Items (CBI) and Inventory of Complicated Grief (ICG) were used. The results of the study showed that 45% of the participants could not make sense of their loss, and 21% could not identify benefits related to their loss experience and they had severe normative and maladaptive grief symptoms. On the whole, parents discussed 32 distinct approaches in order to find meaning in their child's death, 14 involved a sense of making, and 18 involved themes of benefit finding. The most common sense-making themes involved spirituality and religious beliefs (13.5%) and death was God's will (17.5%). Also, the most common benefit findings themes entailed an increase in the desire to help and show compassion for others suffering (20.5%), and to help others who have experienced loss (20.5%). (Lichtenthal et al, 2010)

Finally, one study was conducted by Thabet (2009) in Gaza to investigate the effect of trauma, including loss of home due to demolition and beloved one, on Palestinian women mental health and coping strategies. The sample of the study consisted of 176 women out of a total number of 180 women (age ranged from 18-65 with a mean age of 40.42 years); their response rate was 97.7%. The data was collected by self-reported questionnaire including demographic questionnaire, General Health Questionnaire (GHQ-28), and Ways of Coping. The results of the study showed that 68% had bad health, 75% had difficulty in staying asleep, 71.1% had headache, 84.8% felt constant strain, 86.1% had bad temper, 70.2% get scared or panicky for no good reason, 87.4% found everything getting on top of them, 75.7% felt nervous all the time, and 51.5% had been satisfied with the way they carried out their tasks. Also the results showed that 91.1% of women were rated as psychiatric morbidity cases and needed further investigation, while 8.9% were not. The participants used different ways of coping and the most common were: I wished this stressful situation ends quickly (73.7%), I tried to forget stressful events (52.9%), I wished for a miracle to happen(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%). The least common ways of coping items were: I slept more hours than usual (11.5%) and I realized that I made problems for myself (9.7%). (Thabet, 2009)

As mentioned previously, the family uses different coping mechanisms to deal with the death of its members. However, if these coping mechanisms fail to help these families, their members may develop mental disorders such as PTSD and depression.

2.1.1.6. Mental disorders that may develop as a result of death of family members

As a result of loss, family members may develop mental disorders such as PTSD and depression which are the main focus of this study. Mental disorder is conceptualized as a clinically significant behavioral or psychological syndrome or pattern that occurs to an individual and it is associated with present distress such as disability or with a significantly increased risk of suffering from death, pain, disability, or an important loss of freedom. (DSM-TV-TR, 2000) Losing a family member can produce a wide range of emotional reactions. It can be a normal reaction and it can be abnormal distress. Normal reaction can combine distressing and turbulent moods, even confusing thoughts. It is assumed that equilibrium would recur eventually as a result of mourning processes, but extremes that may impair functional capacity to a psychopathological degree may occur such as depression and PTSD. (Horowitz et al, 1993)

PTSD is a mental disorder which results from exposure to an extreme, traumatic stressor. PTSD has a number of unique defining features and diagnostic criteria, as published in the American Psychiatric Association's Diagnostic and Statistical Manual of Mental Disorders, Fourth Edition Revise (DSM-IV-TR, 2000)

It is defined “as exposure to an extreme traumatic stressors which involve actual or life threatened death or serious injury, threat to one’s physical integrity, witnessing an event that involves death, injury or threat of another person or learning about unexpected or violent death

or harm by another family member or others. As a result, the person experiences intense fear, helplessness, and horror". (DSM-IV-TR, 2000 p. 424)

Also they may have re-experiencing symptoms including recurrent, unwanted, and intrusive distressing recollection of the event. The trauma comes back to the patient through memories, or distress in response to reminders of the trauma (images, thoughts, perceptions, and dreams), flashbacks as a result of individuals feeling as if they were reliving the traumatic experience, intense psychological distress when being exposed to internal and external cues, and physical reaction upon exposure to internal or external cues such as sweating or increase the heart rate. PTSD is distinguished from normal remembering of past events by the fact that re-experiencing memories of the trauma(s) are unwanted, occur involuntarily, elicit distressing emotions, and disrupts the individual's functioning and quality of life. (DSM-IV-TR, 2000)

Avoidance and numbing symptoms are another set of PTSD symptoms which involve the numbing of general responsiveness and persistent avoidance of stimuli associated with the trauma. These symptoms involve avoiding reminders of the trauma. Reminders can be internal cues, such as thoughts or feelings about the trauma, and external stimuli in the environment that brings unpleasant memories and feelings. (DSM-IV-TR, 2000)

Also they may develop symptoms of increased arousal which include difficulty falling or staying asleep, irritability or outbursts of anger, difficulty concentrating, hyper-vigilant watchfulness, and an exaggerated startle response. Patients who suffer from PTSD experience heightened physiological activation, which may occur any time even while at rest. This activation indicates excessive reactions to specific stressors that are directly or symbolically reminiscent of the trauma. This set of symptoms is often linked to the reliving of the traumatic event. For example, sleep disturbance may be caused by nightmares; intrusive memories may interfere with concentration. In addition, excessive watchfulness may reflect concerns about preventing the occurrence of a traumatic event similar to the previous trauma. (DSM-IV-TR, 2000) The

duration of symptoms is a very important element in order to make an appropriate diagnosis of PTSD. The symptoms must endure for at least one month and when the duration of symptoms is less than 3 months, it is called acute PTSD and when the symptoms last 3 months or more it is called chronic PTSD. (DSM-IV-TR, 2000)

One of the consequences of losing a family member which is considered as a traumatic event according to the (DSM-IV-TR, 2000) is that it may lead to development of PTSD symptoms which can affect the quality of survivors' relationships to others. For instance, re-experiencing as one of the PTSD symptoms (the disturbance in memory) affects the survivor's ability to be present in the present. While numbing and avoidance symptoms interfere with the individual's capacity to identify, modulate, and express feelings. In addition, the hyper-arousal symptoms impact the survivor's sense of safety and capacity to trust. All affect the person's capacity for interpersonal relatedness. (Wilson et al, 2001)

It is common for people to develop PTSD symptoms as a result of traumatic event such as losing a family member as mentioned previously. PTSD is often co morbid with other psychiatric disorders such as depression and approximately 80% of individuals with PTSD met the criteria for at least one additional psychiatric diagnosis such as depression, other anxiety disorders, and substance abuse. (Kozariæ-Kovaèiæ et al, 2001) Co-morbidity refers to any distinct clinical entity that has co-existed or that may occur during the clinical course of a patient who has index disease under study. (Teesson et al, 2005) There are several reasons why two disorders might co-occur; that is the pre-traumatic factors such as positive psychiatric family history and pre-existing mental disturbances before traumatic experience may predispose depression as co morbid diagnosis among people with PTSD. Depression can be a primary problem or secondary to other problems such as being exposed to traumatic event, substances abuse including alcohol, cocaine, or as a result of medical condition such as HIV or cancer. DSM–IV–TR (2000) provides specific symptoms in order to diagnose depressions which are:

- Symptoms of depression should be presented for 2 weeks

- Depressed mood most of the day such as feeling sad

- Loss of interest or pleasure or diminish interest or pleasure in all activities

- Weight loss or gain

- Changes in sleep pattern, appetite, and psychomotor activities

- Decrease energy, feelings of worthlessness or guilt

- Difficulty thinking, concentration or making decisions

- Recurrent thought of death or suicidal ideation, plans, or attempts

- Insomnia. (Goodwin et al, 1996; DSM-IV- TR, 2000)

The symptoms of depression must persist for most of the day, nearly every day for at least 2 weeks. In addition, those symptoms must be accompanied by clinical significant distress or impairment in social, occupational, or other important areas of functioning. (DSM –IV-TR, 2000) (Kozariæ-Kovaèiæ et al, 2001; Teesson et al, 2005) One of the studies that assessed the co morbidity of PTSD and depression was conducted by Thabet et al. (2004) to examine the prevalence and nature of co morbid post-traumatic stress reactions and depressive symptoms, and the impact of exposure to traumatic events on both types of psychopathology among Palestinian children during war conflict in the region. The sample of the study consisted of 403 children aged from 9 to 15 years, 52.9% were girls and 47.1% were boys. The participants in the study lived in four refugee camps in Gaza Strip, (Al Maghazi 23.3%, Dear El Balah 25.3%, Buirij, 32.5 and Nusirate 18.9%). They were randomly selected from a list of children who participated in summer camps in Gaza. Data was collected by questionnaires such as Gaza Traumatic Events Checklist, the Child Post Traumatic Stress Reaction Index (CPTSD-RI), and the Short Mood and Feelings Questionnaire (MFQ). The results of the study showed that participants were exposed to a wide range of traumatic events with a mean of four. The events that they were mostly exposed to were watching mutilated bodies and wounded people on TV (92.1%), and witnessing bombardment by airplanes and helicopters (71.2%). The least common events were witnessing demolition of their house (5.2%) and witnessing firing on their house by tanks and heavy artillery (7.7%). Also participants reported being exposed to both direct and indirect experiences of beating, shooting and killing of close relatives or friends. The exposure of

boys was significantly higher than girls. Also there was a significant difference in experiences of traumatic events according to the area of living, children who are living in the Al Nusirate and Maghazi refugee camps were the most exposed. Also the results showed that the Child Post Traumatic Stress Reaction Index D-RI and Mood Feelings Questionnaire scores were significantly and positively correlated. The CPTSD-RI items whose frequency was significantly associated with total MFQ scores were: sleep disturbance, somatic complaints, constricted effect, impulse control, and difficulties in concentration. (Thabet et al, 2004)

Another study was conducted by Bagoglu et al. (2004) in Turkey to examine the co morbidity of posttraumatic stress disorder (PTSD) and depression 14 months after the earthquake. The sample of the study consisted of 530 participants from the epicenter and 420 participants from a suburb of Istanbul 100 km from the epicenter and they were randomly selected. The participants from the epicenter mean age was 41.32 years, and (53.0 %) of them were females. The participants from suburb of Istanbul mean age was 35.69 years, and (71%) of them were females. Data was collected by questionnaires such as Survivor Information Form (S1F), Traumatic Stress Symptom Checklist (TSSC), Seventy of Disability Scale, Clinician-Administered FTSD Scale (CAPS), and the major depressive episode (MDE) module of the Structured Interview for DSM-IV. The results of the study showed that the rates of PTSD and depression co morbid with PTSD were 16% at the epicenter and 8% in Istanbul. Also the results showed that the devastating earthquakes had long-term and coexisting psychological effects such as PTSD and depression. (Bagoglu et al, 2004)

Another cross- sectional study was conducted by Campbell et al. (2007) in USA to estimate PTSD prevalence among depressed military veteran primary care patients and to compare demographic and illness characteristics of PTSD screen-positive depressed patients (MDD-PTSD) to those with depression alone (MDD). The sample of the study consisted of 677 participants who were randomly selected and should have at least 1 primary care visit in the last year. The population of the study was from 5 states. The participants mean age was 65 years, and 96.1 % were males, and 87.6 % were white. Data was collected by a 50 minute interview

asking questions to screen different forms of symptoms such as anxiety and panic, depression symptoms, suicidal ideation, and bipolar disorder. Also they used Primary Care PTSD Screen (PC-PTSD). The results of the study showed that the 36% of participants were diagnosed with MDD co morbid with PTSD based on the PC-PTSD scale. The co morbidity was significant among young, disabled, and black participants (P<.001). Also the findings showed that the participants who were diagnosed with MDD and PTSD significantly had worse depression symptoms (P<.001). (Campbell et al, 2007)

2.1.1.7. Studies that assess families' response to trauma and loss

There is a lack in studies that assess the impact of children death due to political violence on their family members; however many studies were conducted to assess the effect of death of family member due to other reasons such as suicide or accidents. For example, in Palestine, one study was conducted by Rasras (2006) included a group of women who suffered from the loss their loved ones as a result of Israeli violence. The sample consisted of (14 bereaved women) (10 mothers and four widows) who agreed to attend a closed, time-limited (20 sessions) group therapy after outreach assessment was established of enduring and dysfunctional symptoms of trauma and grief persisting for 4 to 12 months after the violent death. The women were adults and aged between 26 to 50 years. Ten of the participants were from the city of Ramallah while the remaining four were from refugee camps in the same district. Nine of the group members (eight mothers and one widow) were bereaved by the violent death of a noncombatant, while five (two mothers and three widows) were bereaved by a combatant death. 14 of the participants were diagnosed with complicated grief, and 4 of them co morbid major depressive disorder. (Rasras, 2006)

Also a study was conducted by Michon (2003) to evaluate the intensity of grief experienced by parents who had lost a child in the parental period (stillbirth, premature baby, and term baby less than one month) and parents who had lost a child after the parental period (one month to 18 years). The study included a comparison of the intensities of the bereavement reactions among grieving parents. The sample consisted of 71 bereaved parents and they represented 43 families.

The data was collected by bereavement questionnaire such as French version of Texas Revised Inventory of Grief [TRIG-F] which consisted of three-parts that quantify the intensity of grief near the time of death and in the present, and the perceived capacity of coping. The result of the study showed that the mothers expressed a greater intensity of grief than fathers. No significant difference between mothers of the parental group and mothers of the post parental group was shown. Also, sudden death and death occurring at home were associated with higher grief intensity. (Michon, 2003)

Another RCT was conducted in Seattle and Portland by Murphy et al. (1999) to examine the effectiveness of bereavement program for parents who bereaved the violent deaths of their 12-28 year old children. A community-based sample consisted of 171 bereaved mothers and 90 fathers who were recruited from the medical examiners records and were followed up for 2 years. Parents' ages ranged from 32 to 61 years, with 45 years being the average age. The study inclusion criteria were to recruit parents of 12- 28-year-old, children who died violently within the past two to six months. "Parent" was defined as married or single mothers and fathers of a biological, step, or adopted child. The deceased child was to be unmarried and between the ages of 12 and 28 at the time of death. The cause of death was limited to accident, homicide, or suicide. The result of the study showed that both parents' (mothers and fathers) and children's causes of death significantly affected the prevalence of PTSD symptoms. Twice as many mothers and fathers whose children were murdered met PTSD diagnostic criteria compared with accident and suicide bereavement. Symptoms of re experiencing were the most commonly reported. PTSD symptoms persisted over time with 21% of the mothers and 14% of the fathers who provided longitudinal data still meeting PTSD criteria 2 years after the deaths. (Murphy et al, 1999)

Furthermore, Murphy et al. (2003) examined the PTSD symptoms among parents whose children murdered. For example, it reported that there was a gender difference 60% of the mothers and 40% of the fathers whose children were murdered and met diagnostic criteria for PTSD. Whereas the percentages were lower for accidental and suicidal deaths; that is, 35% of the mothers and 17% of the fathers met criteria for PTSD diagnosis. Also there were differences between parents who met PTSD criteria and those who did not. Parents who met PTSD criteria reported higher

rates of mental distress, low self-esteem and self-efficacy, poor job performance, and used more repressive coping strategies than parents without PTSD. Five years later, 28% of the mothers and 12.5% of the fathers met PTSD diagnostic criteria. Symptoms reported in the PTSD clusters showed that 61% of the mothers and 55% of the fathers reported re experiencing symptoms. Also 48 % of the mothers and 38% of the fathers reported avoidance symptoms; and 47% of the mothers and 3% of the fathers reported hyper arousal symptoms. (Murphy, 2003)

Further, a cross-sectional study was conducted by Onrust et al. (2007) to explore the impact of spousal bereavement on mental health variables among the widowed. The sample was selected by using the register of births, deaths and marriages in 18 municipalities in the Netherlands. The inclusion criteria were: widowed during the past year, perceived non-supportiveness of their direct environment, and the absence of mental disorders. In addition, respondents had to be capable of participating in a one-hour interview and the recruitment of the participants took one-year. A total of 2,708 letters were sent out to widowed individuals, and 308 people (11.4%) returned the informed consent form. The sample consisted of 139 widows (63.8%) and 79 widowers (36.2%). The age of participants ranged from 50 - 92 years. Data was collected by interview form and lasted for an hour and examined different variables such as depression, anxiety, somatization, and quality of life. The results of the study showed that 41% of the participants had depression symptoms. Those symptoms were more among lower aged participants, shorter duration of widowhood, perceived non-supportiveness, more physical illnesses/disabilities and lower level of mastery. Also the results showed that 30% of the participants had complicated grief. (Onrust et al, 2007)

Also, Neria et al. (2005) conducted a study for the survivors of 11/9 attacks in New York to examine the prevalence and risk factors of complicated grief and unique loss symptoms. The study aimed to characterize the nature of grief reactions reported in a large survey of persons who suffered a personal loss due to the attacks of September 11, 2001, and were assessed between 2.5-3.5 years after the disaster. The study hypothesized that it was possible that sudden loss due to extreme acts of violence, such as terrorism or war, might cause additional difficulty, because the additional stress related to reactions to the traumatic event might compound the burden of grief. In addition, posttraumatic stress disorder (PTSD) is likely to interfere with the

normal grieving process, leading to significant post-loss impairment. Particularly, the study tried to find out the relationships between complicated grief and functional impairment, suicidal thoughts, co morbidity, and treatment-seeking patterns. The study sample consisted of 704 adults. 8 of 10 participants were females (79.1%), the mean age was 45.13 years, and 92.8% were of Caucasian origin. The study was conducted as a web-based survey. Data was collected by using Complicated Grief Scale (CG); Posttraumatic Stress Disorder (PTSD); major depression (MD) scale; overall anxiety (BSI) and it assessed alcohol use; health-related functioning (SF-12); and post 9/11 use of mental health care. The results of the study showed that 88.4% of the participants suffered from complicated grief. They reported one or more current complicated grief symptoms, and a total of 304 screened positive for current complicated grief. The most commonly reported complicated grief symptoms were yearning for the deceased (70.0%) and preoccupation with thoughts about the deceased that were interrupted with functioning (62.7%). In addition, 50.8% of the participants had complicated grief symptoms, 36.0% of the participants met criteria for major depression and 43.3% for PTSD. (Neria et al, 2005)

A cross sectional study was conducted by Xu Yao et al. (2008) to investigate the prevalence of symptoms of anxiety, depression, PTSD, and Prolong Grief Disorder in mothers 30 months after they had experienced the death of a child in the May 2008 Earthquake in Sichuan (China). The study sample consisted of 225 participants. The inclusion criteria for participants were to be a woman aged 20 to 46 years - reproductive age, directly exposed and bereaved of a child aged up to 18 years in the 2008 Sichuan Earthquake, and living in Dujiangyan. The exclusion criterion was being unable to read and speak Chinese. The data was collected by Self-Rating Anxiety Scale (SAS), Chinese version of Beck Depression Inventory (BDI), PTSD Checklist-Civilian (PCL-C), prolonged grief disorders (PGD), Inventory of Complicated Grief (ICG) and Loss Questionnaire. The results of the study showed that 82.3% of the women had clinically significant symptoms of depression, 82.3 %(n=186) of PTSD, 88.9 %(n= 201) of PGD and 33.6% (n=76) of anxiety. 85.4% (n=193) of the women were experiencing symptoms of more than one psychological disorder. The most prevalent co-morbidity was co-occurring symptoms of depression, PTSD and PGD (103/226). (Xu Yao et al, 2008)

Finally, another study was conducted by Schnider et al. (2007) in Midwest US. State University to examine how coping style use was associated with complicated grief and PTSD severity following a traumatic loss among college students. The sample consisted of 123 students (91 women, 31 men, and 1 gender was not indicated). The participants were experienced an unexpected death of an immediate family member, romantic partner, or very close friend. Participants ages ranged from 18 to 45 years old. Their educational levels ranged from 11 to 16 years and 95% of the participants were Caucasian, and 85% of them were single. Data was collected using, self report questionnaires such as Stressful Life Events Screening Questionnaire—Modified (SLESQ), Inventory of Complicated Grief—Revised—Short Form (ICG–R), the PTSD Checklist (PCL), and Brief COPE. The results of the study showed that complicated grief and PTSD severity were both significantly and positively correlated with problem-focus, active and avoidant emotional coping styles. Also the results showed that avoidant emotional coping remained significant in predicting complicated grief and PTSD severity. (Schnider et al, 2007)

2.1.1.8. Factors that affect the development of PTSD and depression

As discussed earlier, the family functions, roles and dynamics are changed as a result of loss a family member. Some families experience a normal grief as a result of loss while some others react in more pathological ways. As a result, their families may develop PTSD and depression. There are different factors that make the person more vulnerable to develop PTSD and each of these factors is discussed in details below.

The nature of the stressor: the stressor must be severe to be beyond the range of human experience. Packer (2002) defined the traumatic situation as an event or several events of extreme violence that occur within a social context: exemplified by war. This traumatic situation is a necessary but not sufficient condition for trauma to occur. While trauma implies the destruction of individual and/or collective structures, it does not always follow that such destruction causes immediate symptoms. (Packer, 2002) The traumatic events that may develop

PTSD symptoms include natural disasters (e.g. floods, and earthquakes) and manmade disasters (e.g. industrial accidents, war torture, and murder). In addition, if a traumatic event is avoidable such as a car accident, the person may feel responsible for the stressor and the impact of the traumatic event would be greater, the person may feel guilt and shame. (Nutt et al, 2009; Gille, 1999)

The nature of the person: personal factors determine a particular person predisposed to develop PTSD such as personality traits, previous experiences, genetic predisposing, neurobiological factors, and neuroendocrine factors. (Nutt et al, 2009; Tasman et al, 2008)

Exposure to more than one traumatic event: individuals with a trauma history rarely experience a single traumatic event but rather are likely to have experienced several episodes of traumatic exposure. Exposure to sustained, repeated or multiple traumas, particularly in the childhood years may lead to a complex PTSD. (Breslau et al, 1999)

Gender: gender stands for the societal and cultural expectations assigned to females and males on the basis of biological sex and, it is learned as a young child. (WHO, 2012) Also biological sex is determined at birth by sexual/ biological characteristics. (Kennelly, et al, 2001) There are important gender differences between males and females in the rate of impact as well as response to traumatic events. Men in general ignore adversity and find ways to distract themselves from their emotions. They use a variety of distracting strategies such as exercise, abusing substances, or focus exclusively on their work. However, women often mull over their problems in an attempt to determine whether they were to blame anybody for the loss and determine exactly what had occurred and resulted in the loss. (Breslau, et al, 1998) They are more inclined to seek out other people and discuss their grief in an attempt to resolve their loss. Females are less exposed than males to traumatic event; at the same time they are twice likely to develop PTSD. (Breslau, et al, 1998) For example, one study was conducted by Troy et al. (2002) in San Diego to examine gender differences in prolonged PTSD (L-PTSD) and to assess the impact of PTSD by gender on Quality of Life at the 6, 12, and 18-months follow-up time points in Trauma Recovery Project population. The sample of the study consisted of 1048 of trauma patients, aged 18 years and older. The data was collected by Admission Glasgow Coma Scale, Quality of

Well-being (QWB) Scale, Impact of Events Scale, and PTSD was diagnosed by using Standardized Diagnostic and Statistical Manual of Mental Disorders. The results of the study showed that the PTSD existed in 32% of the participants and women were significantly at a higher risk of PTSD than men. Women were also at risk for worse Quality of Well-being outcomes; beginning at discharge through the 18-month follow-up, and they had significantly lower QWB scores at each follow-up time than men, regardless of prolonged PTSD status. (Troy et al, 2002)

Also a study was conducted by Kalyjian et al. (2002) to explore how age, gender, marital status, and cultural differences have an impact on levels of Posttraumatic Stress Disorder (PTSD).Study sample consisted of 222 subjects, 123 of which were from Turkey and 99 were from California. The participants were the survivors from the 1999 earthquake in Turkey and from the 1994 Northridge earthquake in California. Also the characteristics of the California sample were as the follows: Out of the 99 participants, 54% were males and 46% were females. Their age ranged from 18 to over 60 years old and 70% of them aged between 30 and 50 years old. 88% were Christian, and 86% were Armenian, Latin, Irish, and Italian American, 51% were married and 30% were single. For the Turkish sample, there were 123 participants, aged between 10 to 59 years, and 58% of them were married. Data was collected by interview and Reaction Index Scale (RIS).The results of the study from California showed that there was a difference between men and women in relation to PTSD as (34.4%) men and (37.0%) women had PTSD symptoms. Also in the Turkish study, the results showed that men had less PTSD than women (mean 32.8 % vs. 47.5 % respectively). (Kalyjian et al, 2002)

On the contrary to these findings, another study was conducted by Pole et al. (2001) to assess ethnic and gender differences in duty-related symptoms of posttraumatic stress disorder (PTSD) among police officers and they found no difference. The sample of the study consisted of 655 urban police officers in different areas in USA. The participants mean age was 37.2 years old. Data was collected by using different scales such as Social Desirability Scale (SDS), Critical Incident History Questionnaire (CIHQ), the Pertraumatic Dissociative Experiences Questionnaire (PDEQ), Mississippi Scale–Civilian Version (MS-CV), and Symptom Checklist

90-Revised (SCL-90-R). The results of the study showed no gender or ethnicity differences in relation to PTSD symptoms or general psychiatric symptoms. (Pole et al, 2001)

Furthermore, Punamäki et al. (2005) in Gaza conducted a randomize study on gender-specific trauma exposure and mental health symptoms among Palestinians living in conditions of military violence. The study aimed to examine the gender-specific role of peritraumatic dissociation in moderating the association between lifetime trauma and mental health. Study sample consisted of 311 Palestinian women and 274 men aged 16–60 years. The participants were from cities, refugee camps, and resettled areas and they were randomly selected. Data was collected by interviews and questionnaires such as Life Events and Social History Questionnaire, Social History Questionnaire, Peritraumatic Dissociative Experiences Questionnaire, and Revised SCL-90-R Symptoms Checklist. The results of the study showed that the lifetime prevalence of traumatic events was higher among men (mean=4.68) than women (mean=1.13).Also 86% of the men and 44% of the women had experienced at least one traumatic event during their lifetimes. The association between lifetime trauma and PTSD and between genders was 30% of the women and 25% of the men. Also exposure to lifetime trauma was associated with anxiety, mood, and somatoform disorders among women. In addition, the results showed that peritraumatic dissociation made both men and women more vulnerable to symptoms of hostility and men to depressive symptoms when they were exposed to lifetime trauma. (Punamäki et al, 2005)

Age: age refers to the length of time that one has existed, or the duration of life. (Shrestha, 2007) Individuals pass through different age stages such as childhood, and adulthood. Children can be defined in different ways. One of these was provided by the Convention of the Rights of the United Nations in 1989[CRC Article 1] which defined a child as every human being below the age of 18 years unless the law in his / her country deems him / her to be an adult at an early age. (UN, 2008; Save the Children, 2010) Biologically, a child is anyone in the developmental stage of childhood, between infancy and adulthood or puberty. (Wikipedia, 2012)

Furthermore, the terms "youth," "adolescents," and "young people" are all used to describe people in the stage of life that marks the transition from childhood to adulthood. (Khan al, 2008) The World Health Organization defines "adolescents" as people aged 10-19; "youth" as those aged 15-24; and "young people" as those aged 10-24. (World Health Organization, 1989) For the purposes of the current study the WHO definition of young people was adopted.

Some of the studies which focus on age and traumatic event showed that the impact of traumatic event in children is more severe than that on adults while other studies showed that older people are more affected by traumatic event. For example, one study was conducted by Maercker et al. (2003) to explore the impact of traumatic event in childhood or adolescence in a community sample. The sample of the study consisted of 1966 young women from Dresden in Germany and aged from 18 years to 45 years. The participants were divided into a childhood trauma group (trauma up to age of 12 years) and an adolescent trauma group (trauma from age 13 years and more). Data was collected by structured interview, the F–DIPS version of the Anxiety Disorder Interview Schedule for DSM–IV Lifetime version (ADIS–IV–L), Global Assessment of Functioning Scale (GAF), and Beck Depression Inventory. The results of the study showed that 25% of the participants experienced at least one traumatic event at some time in their life, and 20% of them had PTSD. In the group who experienced trauma in their childhood the PTSD was 17.0% and the depression was 23.3%. In the adolescents group, 13.3% had PTSD and 6.5% had depression. Also 29% of those who had PTSD, major depression was also present. These results showed that the risk of developing major depressive disorder after exposure to traumatic event in childhood was approximately equal to the risk of developing PTSD. After the age of 13 years, the risk of PTSD is greater than the risk of major depression. (Maercker et al, 2003)

Another, case-control study was conducted by Seng et al. (2006) to explore the patterns of physical co morbidity with PTSD among a population of women via descriptive epidemiological analysis of Medicaid service-use data. The sample consisted of 14,948 women who were diagnosed with PTSD and were registered in the Michigan Medicaid program during the years 1994 and 1997. Age ranged from 0 to 94 years old and the participants were randomly selected. Data was collected from three health outcomes: ICD-9 categories of disease, chronic conditions associated with sexual assault history in previous research, and reproductive health conditions.

The results of the study showed that the prevalence of PTSD diagnosis among all females in different ages was 45% in 1994 and 50% in 1997. One third of rape or injury occurred after the PTSD diagnosis and older women showed higher PTSD score and they had significantly higher rates of chronic pelvic pain. In addition, PTSD was associated with increased risk of all categories of diseases such as endometriosis and dyspareunia. (Seng et al, 2006)

Espié et al. (2009) conducted a study to describe the occurrence and treatment of psychiatric disorders in the Palestinian populations of the Gaza Strip and Nablus district in the West Bank. The sample consisted of 1369 participants, 773 from Gaza Strip and 596 from Nablus. 50.2% were males, and the participants aged from 1.4 months to 83 years old. They were distributed between town (40.2%), rural village (33.5%), and refugee camp (25.6%). The results of the study showed that (23.2%) were diagnosed with PTSD, (17.3%) had anxiety disorders, and (15.3%) had depression. Children more than 15 years (25.8%) had more PTSD than adults (20.9%), whereas depression was more among adults (27.1%), than children (3.4%). PTSD, among children more than 15 years old, was associated by different types of traumatic events such as witness to murder or physical abuse, receiving threats, and property destruction or loss. 65.1% received psychological help and 30.6% required psychotropic medication. As a result of the psychotherapy, 79.0% had improved symptoms; this improvement was significantly higher in children more than 15 years old (82.8%) compared with adults (75.3%). Also results showed that the main complaint reported by patients was sadness (19.9%), fear (19.4%), anxiety (33.8%), and for over half of patients (58.3%), the severity of symptoms was considered moderate or mild. (Espié et al, 2009)

Finally, a study was conducted by Parto et al. (2011) to examine PTSD symptoms among different age groups of African-Americans and whites. The sample of the study consisted of 2104 participants and 268 were diagnosed with PTSD symptoms. They aged between 30 - 64 years and (55.9%) of the participants were females while 44.1% were males. Data was collected by using questionnaires such as PTSD Checklist Civilian version (PCL-C). The results of the

study showed that younger participants (16.1%) were more likely than older participants (10.2%) to screen positive for PTSD symptoms. The participants whose age was below the median of 47 years (16.1%) were more likely to screen positive for PTSD than those older than 47 years. (Parto et al, 2011)

Educational level: it refers to the stage of learning such as primary, secondary, elementary, and university. (UNESCO, 2007) Some studies examined the relationship between PTSD and the educational level of the individuals. The results showed that individuals with low level of education may develop more PTSD symptoms than individuals with higher level of education while other studies showed contrary findings. For example, one of these studies was conducted by Shin et al. (2009) to assess the prevalence of depression and post-traumatic stress disorder (PTSD) in Afghanistan, and to investigate socio demographic and quality of life variables, which predicted depression and PTSD. The sample of the study consisted of 125 Pashtun women living in Kandahar, Afghanistan. The participants' age ranged from 16 - 60 years, and 40.8% of them received formal education. The years of education ranged from 1 - 19 years. Data was collected by Beck Depression Inventory, Impact of Event Scale Revised, and Quality of Life Interview. The results showed that 40.6% of the participants had moderate depression and 54.8% had PTSD. Also results showed significant positive correlation between years of formal education and scores on IES-R which indicated that an increase in years of education was related to increase in PTSD symptoms. (Shin et al, 2009)

On the other hand, other studies showed that a low level of education is associated with high PTSD. For example, a study conducted by Kalyjian et al. (2002) to explore how education impacts the level of PTSD among Turkish and California survivors from earthquakes. The results of the study indicated significant relationships between PTSD and depression. For example, the participants with elementary school level of education were the highest on the PTSD scale, followed by high school and college education (Kalyjian et al, 2002)

Profession: it refers to the kind of work done by employed persons, irrespective of their training or education. Also it refers to the tasks carried out by a person. Profession means specialization in a particular field or an occupation. (Palestinian Central Bureau of Statistics, 2005) Unemployment increases the risk of mental disorders such as substance abuse, depression, and PTSD. Also it decreases the quality of mental health, life satisfaction, and physical well-being. (Beck et al, 2006). According to the DSM, PTSD can influence the social and occupational levels of performance. (DSM-IV-TR, 2000) For example, a study was conducted by Nandi et al (2004) to assess the role of job loss and work conditions on the persistence of PTSD in the aftermath of a disaster. The hypothesis of the study was that job loss, unemployment, higher levels of perceived work stress, and reduced job satisfaction would predict the persistence of probable PTSD 12 months after the September 11 attacks. The study sample consisted of 1939 participants. This representative sample was randomly selected from all adults living in the New York City Metropolitan area six months after the September 11 attacks. The participants represented 71% of the total population who had been interviewed 6 months after the baseline. The participants were aged 18 years and older. Data was collected using a modified version of the National Women's Study (NWS), and PTSD Check List (PCL). The results of the study showed that 42.7 % of the participants met the PTSD diagnoses. Among the employed subjects, the results showed that those with high levels of work stress were almost 10 times as likely as those with low levels of work stress to satisfy criteria of PTSD, suggesting an association between high levels of perceived work stress and the persistence of probable PTSD. (Nandi et al, 2004)

Another study was conducted by Beck et al. (2006) in Buffalo to investigate different factors such as unemployment that was associated with chronic PTSD. The study sample consisted of 223 participants,(162 women, and 61 men) with an average age of 40.7 years. The participants had experienced a motor vehicle accident that occurred at least 6 months before the assessment (range 6 months to 37 years) and they had PTSD. Data was collected by structured interview that assessed characteristics of the accident, the clinician-administered PTSD scale (CAPS), Anxiety Disorders Interview Schedule (ADIS-IV), and Life Events Checklist (LEC). The results of the study showed that the lack of employment is associated with PTSD and that this association is stronger for men than for women. Unemployed men were 9.94 times more likely to be diagnosed

with PTSD, in relation to employed men, while unemployed women were 2.85 times more likely to be diagnosed with PTSD, in relation to employed women. Also results indicated that the lack of employment impacts the chronic aspect of PTSD in men more than in women. (Beck et al, 2005)

Social support: if an individual is exposed to a repeated or continuous trauma, particularly of an interpersonal nature, he / she may be more likely to develop PTSD. (El Sarraj, 2005) Trauma involving loss of community or support structures is likely to be particularly damaging. Because social support has been held to produce a buffering effect, lack of support might be considered as an additional vulnerability factor. (Tasman et al, 2008) Losing a close relative, including child, father, or brother may not lead to a development of PTSD symptoms if the bereaved mother has a good support system. (Tasman et al, 2008) For example, one case study was conducted by Maqbul et al. (2008) in Gaza Strip to monitor psychological and social effects on women who lost their children, and to compare the effects of the loss during the lawlessness period with the loss resulting from the invasions of the Israeli occupation. The study sample consisted of 20 women from different areas in Gaza (Jabalia Camp and Beit Lahia) as these areas were the most targeted by several Israeli invasions and lead to the loss of close relative including child, father and mother. The participants of the study were intentionally selected from the victims of the last Israeli invasion to Gaza (2008). Data was collected by interviews which focused on different variables such as their economic status, kinship with the lost person, educational level, and place of residence. The results of the study showed that the loss of the children promoted the importance of solidarity and social networking between bereaved women. The social relationships among these bereaved women had reduced the feelings of loss, lessened the shock and reduced the development of (PTSD). (Maqbul et al, 2008)

Family relations with the dead person: losing a child has different impacts than those of losing a partner, or a father. Few studies examined the prevalence of PTSD and family relationship with dead person. The results showed a positive relationship between separation and distress and the family relationships including amount of contact with the deceased in the months preceding death, level of intimacy with the deceased, and the amount of time spent talking about it. For

example, one study was conducted by Niemeyer et al. (2006) to assess the relation between continuing bonds, coping and meaning reconstruction following the death of a loved one and complicated grief symptomatology. The sample of the study consisted of 506 young adults who were recruited from undergraduate introductory psychology courses at the University of Memphis over a 3-year period. They were aged from 18 - 53 years with a mean age of 21 years. 76.5% were females and 23.5% were males; 57.9% were Caucasian, 36.9% African American and 5% were of other ethnicities. 5% were parents, 2% were siblings, 4% were children, 4.3% were partners, 8% were spouses, 20.8% were grandparents, 21.7% were aunts, uncles, or cousins, 27.7% were friends, and other relatives were 6.5%. The inclusion criteria were that each participant reported having experienced the loss of a friend or loved one through death within the past 2 years. The participants had reported significant bereavement symptoms within the last 24 months or longer. Data was collected by questionnaires such as Inventory of Complicated Grief (ICG), and Continuing Bonds Scale (CBS). The results of the study showed no statistically significant relationships between the demographic variables such as age of bereaved, gender of bereaved, white American and the age of deceased and the complicated grief symptoms at level ($p = .061$). Only the African American had a statistically significant relation to separation distress and on average the African Americans reported more such symptomatology than Caucasians. Also the results showed statistically significant relationship between different variables such as family relationships, amount of contact with the deceased in the months preceding death, level of intimacy with the deceased, and amount of time spent talking about the loss and all had a positive relationship with separation distress .($p < .001$). (Niemeyer et al, 2006)

Marital status: studies showed varied results regarding the relationship between marital status and PTSD. Some studies showed that married people had more PTSD than unmarried ones or widows while other studies showed that married people had a lower level of PTSD than unmarried ones or widows. For example, a national survey was conducted by Kessler et al. (1995) in USA to assess the prevalence of PTSD among the general population. The sample of the study consisted of 5877 participants aged 15 to 54 years, 49.1% were males, 50.9% were females and 75.0% were white, 11.9% were black, 8.6% were Hispanic and 4.5% were others.

Also 59.8% were married, 10.1% were separated or widowed, 30.1% were divorced, and single. Data was collected by the Composite International Diagnostic Interview (CIDI). The results of the study showed that the life time prevalence of PTSD was 7.8% and the trauma most commonly associated with PTSD were combat exposure and witnessing war among men and rape and sexual molestation among women. Women were more than twice as likely overall as men to have lifetime PTSD (10.4% vs. 5.0%), and it was significantly higher among the previously married such as separated, divorced and widowed than currently married women (18.9% vs. 9.6%) compared with men (9.4% vs. 6.1%). Also prevalence was higher among the married than the never married, but this was significantly only among men (6.1% vs. 1.9% of men, compared with 9.6% vs. 18.9% among women). (Kessler et al, 1995)

Finally, another study was conducted by Margoob et al. (2006) in Kashmir to understand the development, course and effect of various factors such as marital status among PTSD patients who were seeking treatment for their symptoms at psychiatric hospital. The study sample consisted of 469 participants, aged more than 16 years. 46.26% were males and 53.73% were females, 50.71% were married, and 62.68% belonged to extended families. The majority 61.19% belonged to the middle class; most of the subjects had low educational achievement. The exclusion criteria were patients with substance use, major medical condition and neurological disorders. Data was collected by questionnaires such as Clinician Administered PTSD Scale (CAPS). The results of the study showed that the (85.07%) of the participants had a chronic PTSD, 67% had co morbid depression and the mean of PTSD among unmarried, divorced, and widowed participants was 47.93%, and it was among the married participants 49.39%. (Margoob et al, 2006)

The age of the dead person: witnessing the pain of one's child and being unable to do anything about it can exacerbate individual's own pain. Loss as a result of age is considered as natural death while losing a child is very traumatic. (Rand, 1991) Few studies focused on assessing the effect of age of loved ones when a family member is lost. For example, a longitudinal study was conducted by Wijngaards-de Meij et al. (2006) in Netherland to examine the relationship between the circumstances surrounding the death of a child and psychological adjustment among parents. The sample of the study consisted of 219 couples participants at 6, 13 and 20 months

post-loss. The parents age ranged from 26 - 68 years. 31% of the parents indicated that they were not religious, 38% were Roman-Catholic, 26% were Protestant and 5% belonged to other religions. The age of their deceased child's age ranged from stillborn to 29 years with a mean age of 10.2 years, and 68.7% of the deceased children were boys. The causes of death varied from neonatal death including stillborn (16.3%), illness (47.7%), accident, suicide or homicide (36.1%). Data was collected by using questionnaires such as Symptom Checklist-90 (SCL-90), and Inventory of Complicated Grief (ICG). Results of the study showed that there was a strong correlation between the grief and the age of the child. For example, the grief was more among parents who lost their child before age 17 years, and it was less among those who lost their children when they were more than 17 years old. (Wijngaards-de Meij et al, 2006)

Place of residency: place of living refers to the civil subdivision of a country (district, county, municipality, province, department, state) in which the individual resides. Places of residency are divided into urban, camps, and rural. (Palestinian Central Bureau of Statistics, 2005) Some studies examined the relationship between the place of living and PTSD. Some results showed that an individual who lives in urban areas may develop a higher level of PTSD. For example, one study was conducted by Parto et al. (2011) in Baltimore USA to examine PTSD symptoms among urban-residing, socioeconomically diverse, working-age African-Americans and whites. The sample of the study consisted of 2104 participants and 268 were diagnosed with PTSD symptoms. They were aged between 30-64 years and (55.9%) of the participants were females while 44.1% were males. Data was collected by using questionnaires such as the PTSD Checklist Civilian version (PCL-C). The results of the study showed that 12.7% of the participants had PTSD, and those who lived in an urban environment were more likely to develop PTSD symptoms than those in suburban or rural environments due to the violence neighbourhoods. (Parto et al, 2011)

The duration of loss: there is a negative relationship between duration of loss and PTSD. For example, a cross sectional study was conducted by Ndetei et al. (2004) to assess the level of traumatic grief among parents' guardians whose sons died in a fire tragedy at Kyanguli School in rural Kenya. The sample of the study consisted of 164 parents, and 92 of them were interviewed two months after the event, while 72 were interviewed a week later. In group one, 47.8% were

males and 52.2% were females. In group two, 60.6% were males and 39.4% were females. The age for both groups was from 27- 67 years old, 25% were employed, and 9.8% had other remaining children. All the students who were killed were males. Questionnaire and semi-structure interview were used to collect data such as Traumatic Grief Scale, Self Rating Questionnaire (SRQ), and the Ndetei-Othieno-Nathuku scale (NOK). The results showed that there was difference in terms or intensity of the level of distress among those who had longer duration of loss. The most reported symptoms were preoccupation, avoidance, re-experiencing, and hyper arousal. The preoccupation symptoms in the group who were interviewed after two months of the event was 9.71%, and the other group which was interviewed one week later, the intensity of the symptoms was 10.43%. Percentage of Avoidance symptoms among the first group was 24.93% and the second group was 27.61%. Also percentage of re experiences symptoms among the first group was 2.27%, and in the second group it was 3.60%; percentage of hyperactivity symptoms among the first group was 14.46%, and in the second group was 17.17%. Further, 90% of the participants were yearning for the departed and found themselves often searching for the son. Also 94% of them had detachment feeling, and 63% of the participant's symptoms did not meet the PTSD symptoms, while 37% of them met the PTSD. (Ndetei et al, 2004)

Another study was conducted by Carnelley et al. (2006) in Michigan to examine the frequency, intensity, and duration of anniversary reactions and their rate of change over time among individuals who had lost their spouse. The study sample consisted of 768 participants who had lost their spouse (from a few months to 64 years) prior to data collection; their ages were from 25 years or older and were living in the continental United States. 155 of the participants were males and 631 were females. Data was collected by 90 minute interview between May and December of 1986. All participants were asked questions about their health, well-being, productive activities and stressful life experiences, and coping resources. In addition, participants were asked about the circumstances surrounding the loss and their current thoughts and feelings about the loss. The results of the study showed that the widowed continued to talk, think, and feel emotions about their lost spouse decades later. Twenty years post loss, the widowed thought

about their spouse once every week or two and had a conversation about their spouse once a month on average. About 12.6 years post loss, the widowed reported feeling upset and sad when they thought about their spouse. Also the results showed that about 12.6 years post loss, participants had negative intrusive thoughts about the deceased. (Carnelley et al, 2006)

The medical history of the patient: it refers to the patient's health conditions such as disabilities, diabetes, and hypertension. In mental health professions, it is very important to have a brief systematic record of the patient's lifestyle, current physical health and recent receipt of healthcare to help the staff and patients to agree on a plan of action to address problem areas. (Phelan, et al, 2008) Many studies indicated a positive relationship between PTSD and patient's medical condition. For example, one study was conducted by Shipher et al. (2007) in USA to document the rate of co morbidity of physician-diagnosed chronic pain conditions in veterans who were seeking treatment for posttraumatic stress disorder (PTSD). The secondary aim was to examine pain ratings before, during, and after PTSD treatment. The sample of the study consisted of 90 male veterans who completed PTSD treatment between 2001 and 2004. Half of them were Caucasian, and 48.2% were African American. The participants mean age was 55.4 years old. Five participants were excluded from the analysis because their attendance was less than 50%. All the patients had experienced chronic PTSD over a period of 5 years to 30 years and they received treatment for their PTSD symptoms while 15 of them had sustained physical injuries as a result of the trauma. Also 58.8% of them had hypertension and diabetes (30.6%), hepatitis C (11.8%) or cardiac disease (10.6%), and co morbid mood disorders (31.8%). 57.6 % were taking psychiatric medications such as selective serotonin reuptake inhibitors (SSRIs). Data was collected by questionnaires such as Atlanta Retrospective Chart Review (VAMC) which includes basic demographic information, such as age, race/ethnicity, and period of service, International Classification of Diseases Ninth Edition (ICD-9), Initiative on Methods, Measurement, and Pain Assessment in Clinical Trials. Also they used Clinician Administered PTSD Scale (CAPS) and Mississippi Scale for Combat-Related PTSD. The results of the study revealed that 66% of the participants with PTSD symptoms had chronic pain diagnosis at pretreatment. Also the results revealed that patients with more pain before treatment reported reductions in pain over the course of PTSD treatment and in the 4 months following treatment. (Shipher et al, 2007)

Moreover, Gil et al. (2009) in USA conducted a study to identify medical symptoms and medical conditions that were associated with lifetime PTSD in a low-income urban healthcare-seeking sample of women. In addition, healthcare use in the past year was compared in women with and without a lifetime history of PTSD. The study sample consisted of 250 women seeking healthcare at an urban clinic in Baltimore, Maryland. 70% of patients are employed on a part-time or full-time basis; 86% of the patients at the clinic were African American, and all resided within Baltimore city limits. Data was collected by questionnaires such as Trauma Life Events Questionnaire (TLEQ), Diagnostic Inventory of Depression (DID), Clinician-Administered PTSD Scale (CAPS), and Miller Abuse and Physical Health Symptom Inventory. Results of the study showed that the women with history of PTSD showed more physical symptoms such as hypertension than women without this history. Also Women with lifetime PTSD had more annual clinic appointments (5.9 vs. 3.8) and were 2.4 times more likely to report lower appraisal of their physical health. (Gil et al, 2009)

The circumstances of loss: is another factor that may affect PTSD. When death occurs suddenly people have no time to prepare themselves psychologically for the impending loss. This lack of preparation gives the feeling out of control. (Worden, 1991) Also violent loss includes any type of violence such as traumatic death, suicide, accident or homicide which confronts people with a sense of horror and makes them feel shocked for they may think that such a traumatic event can happen to them. Pervasive feelings of helplessness overwhelm them when they realize that there is nothing that they can do to prevent the event. As a result of these feelings, they may react with rage and violence especially if there is a perpetrator of the violence. The rage may be targeted in this direction. Some people may get angry at God for permitting such a tragedy to occur. Arriving at a resolution can be especially difficult when the victims of violence are children because one of the societal responsibilities all adults share is to protect children from harm. When children die tragically, adults experience a collective sense of failure. (Worden, 1991) In addition, multiple losses, when people experience more than one loss at the same time, their capacity to grieve shuts down. It is simply more than they can bear of the emotions, and until they can separate the losses and deal with them one at a time, they keep feeling numbed. (Worden, 1991)

The losses that are unspeakable are those to which some type of social stigma is attached so the ability to discuss the death openly is difficult such as deaths from suicide and AIDS. (Worden, 1991) Furthermore, status of the victim, death of anyone before it is expected in the "normal" life cycle it is considered premature and presents more difficulties in grief. The death of a child or adolescent from any cause is considered as abnormal because a person believes that death is for old people. For example, adolescents who are struggling to develop their own identity, the death of a peer can be extremely and emotionally disorganizing. The death of someone whom we admire or view as a role model is usually more upsetting because the deceased life had a great deal of meaning and the loss is greater. (Worden, 1991)

Section*2*:

Trauma treatment

2.2.1. Introduction:

Recently, there is enough awareness among clinical researchers that the goals of treatment should include reduction of not only PTSD symptom severity but also associated symptoms, such as depression, general anxiety, anger, shame, and guilt, as well as improved quality of life. (Fao, 2009)

There are a variety of treatment approaches to treat PTSD and these treatment approaches have different therapeutic goals such as CBT, pharmacotherapy, and EMDR. Studies have shown that medication treatment (drugs) is effective in treating PTSD, depression, anxiety and insomnia. The most common medication for PTSD is antidepressant selective serotonin reuptake inhibitor (e.g. Prozac). (Van der Kolk et al, 1995) Hypnosis, art therapy, and psychodynamic therapy are emphasized to enrich the therapeutic process rather than the ability to improve the PTSD symptoms. Other treatment approaches include psychosocial rehabilitation which emphasizes improvement of the function of the clients with or without reduction of PTSD symptoms. Some interventions such as hospitalization and substance abuse treatment focus on severe disruptive behaviors or co morbid disorders that must be addressed before PTSD treatment.

This section discusses the following:

- Psychotherapy and EMDR treatment approach for trauma
- Mechanism of EMDR treatment approach

- Protocol of EMDR treatment approach
- Empirical studies that support the effectiveness of EMDR treatment approach

2.2.2. Psychotherapy and EMDR treatment approach for trauma

Psychotherapy can help trauma victims in many ways such as helping clients to explore and cope with the way a trauma changes one's view of the world, and to learn how to have reasonable precautions without shutting his/ herself off from the world and relationships. (Jaclyn et al, 2001) In addition, it can help to reduce symptoms of hyper arousal which are common with PTSD by providing methods of deep relaxation and stress reduction. (Jaclyn et al, 2001) Cognitive Behavior therapy is one of the main approaches to treat PTSD. It assumes that internal cognitive processes, called thinking or cognition, affect behavior; and a desired behavior change is affected through cognitive change. Cognitive behavior therapies share three fundamental propositions: cognitive activity affects behavior; cognitive activity may be monitored and altered; and desired behavior change may be effected through cognitive changes. (Jaclyn et al, 2001) It is considered one of the best validated therapeutic approaches for people who experienced trauma-related symptoms, particularly symptoms associated with anxiety or mood disorders. (Caffo, 2003) It is a useful treatment for PTSD survivors who have poor coping strategies, negative self- beliefs, escape avoidance behavior, self- blamed, humiliation, loss of control, guilt, shame and lack of hope and trust of others. (Stephen et al, 2003)

Also trauma-focused cognitive behavioral therapy (TF-CBT) is one of the effective treatment models for PTSD which was developed by Judith Cohen, Anthony Mannarino, and Esther Deblinger. This form of therapy was developed to treat posttraumatic stress disorder, and depressive and anxiety symptoms, as well as to address underlying distortions about self-blame, safety, the trustworthiness of others, and the world. (Cohen et al, 2004) Trauma-focused cognitive therapy involves helping the individual to identify distorted thinking patterns regarding themselves, the traumatic incident and the world. Individuals are encouraged to challenge their thoughts by weighing up available evidence and through the utilization of various techniques by

the therapist including specific questioning that leads the individual to challenge distorted views. (Bisson et al, 2009)

In addition, cognitive reconstruction is a set of techniques which help people to be aware of their thoughts and to modifying them when they are distorted or are not useful. This approach does not involve distorting reality in a positive direction or attempting to believe the unbelievable. Rather, it uses reason and evidence to replace distorted thought patterns with more accurate, believable, and functional ones. Also it is educative process that influences the existing of cognitive structure for maximizing meaningful learning. Cognitive restructuring generates meaningfulness by building insightful relationships among learning materials, providing anchorage for new materials, and constituting the most orderly, efficient, and stable way of retaining it for future availability. (Chang, 2005)

Also exposure therapy (ET) has been used with a wide range of trauma populations such as combat veterans, female survivors of sexual and physical assault. ET involves providing the patient with PTSD with prolonged contact with trauma-related cues in order to facilitate habituation and the development of neutral memory structures that "override" anxiety-provoking memories related to the trauma. (Beck et al, 2007)

In addition, family therapy is another effective approach to treat the victims of PTSD especially family members who experience one or more of the traumatic events such as death of one of their members. It is required after they were reunited in order to help them to reintegrate. Furthermore, expressive therapy such as play, music and art therapy (Turner, 2000) and group therapy are effective as individual therapy in treating a range of psychological problems, mental illness, complicated grief, trauma reaction and adjustment problems. Group therapy is another treatment of choice as it helps people to change, assist their personal-growth and prevents problems by teaching problem solving. (Corey &Corey 2005)

Eye Movement Desensitization and Reprocessing (EMDR) is another treatment approach that is used to treat people with PTSD symptoms. It is a comprehensive integrative psychotherapy approach and it contains elements of effective psychotherapy which are structured in protocols that are designed to maximize treatment effects. These include cognitive behavioral interpersonal experiential and body-centered therapies. (Shapiro & Forrest, 1997) It is considered as relatively

new treatment approach which was introduced first by Francine Shapiro in 1987. The procedure involves having the client focus intensively on the traumatic memory while moving the eyes rapidly from side to side by visually tracking the therapist's moving hand. This seems to be like leading the traumatic memory to be solved, worked through and integrated by finding the inner healing resources of the person. The treatment may involve many 'sets' of eye movements (10 seconds to a minute or more) with a focus on the change according to the client's status. (Shapiro, 2001) Also, the EMDR procedure requires the client to focus upon a disturbing image or memory and related cognition and emotions, while the therapist induced bilateral stimulation either by visual tracking, auditory stimulus or tactile stimulation. (Keven et al, 2002)

One advantage of EMDR is that it facilitates the accessing and processing of traumatic memories in the brain and brings them into adaptive resolution by desensitization of emotional distress, negative cognitions, and relief of physical arousal as it uses bilateral stimulation (eye movement, sound, or tapping). (Shapiro 1989, 1991) In addition, the complete treatment of the targets by using EMDR includes three prolonged protocols (past memory, present disturbance and future). The goals of EMDR therapy include processing of the whole experience which causes the problem for the client even recent ones. It does not include a narrative about the traumatic experience. However, it focuses on processing the memory which means that setting a learning state and allowing for the experience causing the problem to be digested and stored in an appropriate way in the brain. In this way, the problematic experience will be transformed into a new positive belief and emotionally would become healthy and adaptive and lead to a better understanding for the future. (Shapiro& Forrest, 1997)

2.2.3. EMDR mechanism

EMDR mechanism and its work is still controversial. Shapiro (2001) mentioned that EMDR is similar to the REM sleep rapid eye movements which occur during dream. There is some evidence that dreams are the way of working through life experiences and in this way the brain

solves the upsetting and traumatic memories. (Rapid Eye Movements) bring a relaxation effect which enables the processing of the experience and simultaneous activation to the brain by dual attention and counter conditioning. (Shapiro, 2001) But the most powerful explanation to how EMDR works is based on therapeutic stimulation of Adaptive Information Processing Model (AIP) which was introduced by Shapiro (1997). This theory is the basic guide of the clinical practice of EMDR. It is based on the basic assumption that all humans possess an information processing system that processes experiences and stores them as memories in a way which is accessible and are linked to a memory network either as images, sensations, emotions or beliefs. When the person faces a threatening situation or traumatic event, the processing system does not effectively work. With some people, trauma is stored with incomplete information processing, and much of this information is physiological. It is believed to be stored in memory networks that contain related thoughts, perceptions, attitudes, and behaviors. The disturbance events are a primary basis for pathology, and the disturbance of the process causes the information to be unprocessed and inappropriately stored as it was initially perceived (images, thoughts, feelings, sounds, tastes, smells, and other body sensations. (Dodgson, 2007; Shapiro, 2001) The information processing system changes this disturbance to adaptive resolution by the use of eye movements or other stimulation leading to the relief of the client from distress and dysfunctional reactions. As a result of the EMDR process, the clients have a better access to more adaptive information and are able to integrate them within the full range of memory. (Dodgson, 2007; Shapiro, 2001)

2.2.4. The protocol of EMDR treatment approach

The duration of EMDR treatment is related to the nature of the experience. It can take three 90 minute sessions and it eliminates PTSD in 80%-100% of civilians with a single trauma experience such as rape, accident or disaster (Shapiro, 2001). Also about 8-12 hours of treatment can result in 77-80% elimination of multiple traumas PTSD. It consists of eight phases, each is considered essential for effective application. (Shapiro, 1995; Shapiro & Forrest, 1997)

First phase is the history intake in which assessment of the patient's readiness and barriers to treatment is made and dysfunctional behaviors, specific symptoms, and other illness characteristics are identified. (Richard, et al, 2009) The therapist builds rapport, develops a treatment plan, and assesses the client's suitability for EMDR. (Maxfield, 1996; Shapiro, 1995)

In the second phase which is called the preparation phase, the therapeutic alliance is developed and fostered; the treatment technique is reviewed and explained for the client. (Richard, et al, 2009) The client is prepared by educating him / her about the process and teaching him self-control techniques. Client preparation may take several sessions to develop resources, strengths, safety and stabilization. (Maxfield, 1996; Shapiro, 1995)

In the third phase which is called assessment phase, the client chooses which memory he wants to target, and selects the most distressing image connected to that event. The therapist helps the client to recognize the present beliefs and feelings that are connected to the image. Then the client is asked to identify a current negative cognition about the related to target image "I'm powerless". Next the client is asked to identify positive cognition, which reflects the client desires, hopes of empowerment, such as "I'm competent". Then he/she rates this positive belief on the Validity of Cognition Scale (VOC) from 1-7, while 1 represents "completely false" and 7 represents "completely true". (Maxfield, 1996; Shapiro, 1995) The client next identifies the emotions that are combined with image and negative belief. The Subjective Unit of Disturbance (SUD) scale is used in order to rate the level of, disturbance, where 0 is "no disturbance" and 10 is "the worst disturbance ". The client then identifies where it is located in the body so he/she identifies the body sensations which accompany the emotions.

In the fourth phase which is the desensitization phase, the client focuses on the image, and his negative belief, emotions, and body sensations while followed by bilateral stimulation which could be tapping, eye movement and machine. The client is asked to hold all of them in mind during simultaneously moving his eyes from side to the other for 15 seconds or more, following

the therapist's fingers as they move across the visual field. (Maxfield, 1996; Shapiro, 1995) After the set of eye movements, the client is asked to take a deep breath, and then is asked what you note. The new material (image, thought, sensation, or emotion) then becomes the target of the next set of eye movements. This cycle continued until the client said that the disturbance related to the target image decreased. In some cases, this process stuck so the therapist uses specialized techniques (cognitive interweaves) in order to keep the process moving. The SUD level is only checked when some resolution in the emotional, physical, and cognitive levels appears. At the end, the rate of the SUD level may reaches 0 or 1 which indicates a completion of this phase.

Fifth phase of EMDR is the installation; the therapist asks the client to think about the original image and positive self-statement by using bilateral stimulation. In this phase, the client is asked to measure the VOC. The client and the therapist work to increase the VOC to a score of 6 or 7. (Shapiro, 1995)

In phase six, the body is scanned and the therapist asks the client to think of the image and positive cognition; the client notices if there is any tension or unusual sensations in his body. The processing is completed just when the client is able to bring the traumatic memory into consciousness without feeling body discomfort or body tension. If the client's feedback was accompanied by some tensions, the process should continue until this tension disappears.

In phase seven which is called the closure, the therapist assesses whether the material has been adequately worked through. If the client said no, the therapist should help him with self-calming techniques. Reevaluation is phase eight which takes place at the beginning of every subsequent EMDR session. The therapist checks with the client to make sure that there is no relapse and the treatment achievements are maintained by checking SUD, VOC and body self-report measures. (Maxfield, 1996; Shapiro, 1995, 2001)

EMDR can be offered in individual as well as group sessions EMDR group is nearly the same as individual standard protocol and it is used following large – scale natural or manmade disaster. It is useful to apply it on a homogenous group such as addiction, eating disorders and anxiety disorders. In addition, EMDR group can use play cards or generic page of common negative and positive cognitions. These modifications of the standard EMDR protocol are made to facilitate smooth group movements through assessment phases. Since individuals' clarification of cognitions and emotions is time consuming and could disrupt group processing, all participants in EMDR group process for the same specified length of time and some would complete while others would not. The clients, who complete the process before the specific time of the session, can go to their safe place or feel relaxed. If one participant left the room before the EMDR session is finished, he should return quickly to prevent unnecessary disruption. EMDR groups follow the standard protocol (History taking, preparation (the mechanics, emotions and sensations and safe place between the sessions), assessment (past incident, negative cognition, positive cognition, VOC, SUD and location in the body) desensitization, installation, body scan, future templates, personal resources connection, social resources connection, create art process and closure. (Shapiro, 1995, 2001)

2.2.5. Studies that support the effectiveness of EMDR for the treatment of traumatic experiences

Very few studies were conducted to assess the effectiveness of EMDR among victims of political violence such as torture and no study was conducted for the treatment of PTSD symptoms among the martyr's families. For example, in Palestine one pre and post intervention study was conducted by Zagrot-Hodali et al. (2008) in West Bank to assess the effectiveness of using EMDR with children in the situation of ongoing trauma. This study describes clinical work with 7 Palestinian children (3 girls and 4 boys) aged between 8-12 years from Aida Refugee Camp in Bethlehem area. They were referred by their parents for treatment at the YMCA Rehabilitation Program in Beth Sahour. Five days after a shooting against them by Israeli soldiers while the children were playing on a balcony of their building. Four of the children were harmed by

shrapnel, and another child was not included in the study because he was directly shot with a bullet in the belly and he was taken to the hospital. After he recovered from his wounds, he received EMDR. Five days after the event, the children were referred to psychological help after showing symptoms such as physical illness, hyperactivity, nightmares, sleeping difficulties including inability to sleep and fear of sleeping in their bed rooms, anxiety and worry, unwillingness to stay in a single place and severe grief reaction. The children received EMDR protocol (Butterfly hug) which is group approach unlike the eight phases of the standard EMDR protocol (History, Preparation, Assessment, Desensitization, Installation, Body Scan, Closure and Re-Evaluation). The group protocol phases are history, perpetration, assessment desensitization installation and closure including four sessions plus one follow-up session. Over sessions two and three, the children were exposed to another traumatic incident, and the therapist was afraid that the children would return to the same level of trauma symptoms before the intervention, but the children talked about the event and did not show any severe symptoms. Their account of the incident was like a narrative memory and rather than an intrusive experience. The results indicated that the EMDR approach can be effective in group setting, in an acute situation, both reducing symptoms of post- and pre-traumatic stress and in inoculation or building resilience in a setting of an ongoing trauma. The SUDS scale in the first session was 8-10 and 0-5 in the second session which showed fewer symptoms. In the last session, the SUDS score was 0-1 while in the follow up session after 5 months, the children did not show any of the symptoms. (Zagrot- Hodali et al, 2008)

In recent years, worldwide there has been an increase in the number of well-controlled randomized studies regarding the effectiveness of EMDR among people who have PTSD symptoms in general. For example in UK, one of those studies was conducted by Power et al. (2002) in Scotland, in order to compare EMDR versus exposure and cognitive restructuring and waiting list in treating clients with PTSD disorder. This study included 105 male clients with PTSD symptoms. 39 were randomly allocated to EMDR, 37 were in the exposure and cognitive restructuring group while 28 were in the waiting list in primary care setting. The participants' age was distributed as the following: 38.6 years old in the EMDR group, 21 years old in the

exposure and cognitive reconstruction group and 24 years old in the waiting list. The participants of the exposure cognitive restructuring and EMDR groups received 10 sessions for ten weeks. All clients were assessed by blind randomization at the end of the 10 weeks, at the mid-point of the ten weeks and on average at 15 months follow up.

To assess the PTSD, they used self reported scale such as Clinician Administrated PTSD Scale (CAPS), Impact Scale (IOE), Hamilton Anxiety Scale (HAM-A), and Hospital Anxiety and Depression Scale (HADS) and Montgomery Asberg Depression Rating Scales (MADRS). Drop –out rates between the three groups were 12 EMDR, 16 exposure and cognitive restructure, and five waiting lists. The result of the study showed a significant difference on all measures that compare EMDR versus exposure and cognitive reconstruction versus waiting list. The findings revealed that 60% of the EMDR group and 50% of the exposure and cognitive group achieved clinically significant change in comparison with 10% of the waiting list. Also it reported a reduction of PTSD symptoms among the clients who had EMDR and exposure and cognitive behavior, but no change in the waiting list group. In addition, in the EMDR exposure and cognitive reconstruction groups, the results showed equally clinical effectiveness on measures of self rated PTSD symptoms in comparison with waiting list group. The follow- up results after 15 months showed no significant differences in the level for PTSD symptoms anxiety and social function. (Power et al, 2002)

Also a randomized control study was conducted by Karatzias et al. (2011) in Scotland to compare (EMDR) and Emotional Freedom Techniques (EFT) for posttraumatic stress disorder. The sample of the study consisted of 46 participants, aged from 18- 56 years old, 20 males and 26 females. They were selected from the waiting list of a National Health Service (NHS) Psychotherapy Service in Scotland. Inclusion criteria were met DSM-IV criteria for PTSD, if participants on medication, they should be in stable dose for at least 6 weeks. Exclusion criteria were the presence of suicidal ideation, a history of psychotic illness, concurrent severe depressive illness, or substance use disorder; or receiving psychotherapy out of the study. The participants were randomly allocated in the two treatment groups, 23 participants in each (EMDR, and EFT). Of the 23 participants allocated to EMDR, 10 withdrew before post

treatment assessment. Of the 23 participants allocated to EFT, nine individuals withdrew before post treatment assessment. The participants were assessed at baseline and then reassessed after an 8-week waiting period, and post treatment and 3-months follow-up. The data was collected by questionnaires; demographic data was collected by self reported scale, Clinician-Administered PTSD Scale (CAPS), the PTSD Checklist (PCL-C), Hospital Anxiety and Depression Scale and Satisfaction with Life Scale. The results of the study showed that both interventions were effective in reducing the PTSD symptoms and the difference between pre test and post test and the follow -up was significant. Both treatment (EMDR, EFT) approaches have similar treatment effect sizes. Regarding clinical significant changes, patients in the EMDR group showed higher portion of improvements compared with the EFT group. (Karatzias et al, 2011)

In USA one study was conducted by Wilson et al. (1995) to investigate the effectiveness of EMDR on the traumatic memories and the psychological symptoms. The study included 80 subjects: 40 females and 40 males randomly assigned to treatment and control conditions. The age ranged from 21 to 63 years and their education ranged from 10-14 years. The trauma categories were physical-mental abuse (26%), death of significant others (19%), phobic memory (6%), rape and sexual molestation (22%) and health crisis (9%). The trauma occurred 3 months to 54 years before the study started. 29% of the participants were involved in outpatient and 35% had previously been in therapy, while 36% had never been in therapy. One EMDR- trained therapists did the intervention and independent assessor applied pre-post evaluation and after three months follow-up. The findings indicated the effectiveness of 3 sessions of 90-minutes of EMDR in reducing physical complaints, anxiety and increasing the participants' positive cognition. In addition, significant differences were found between the EMDR and the waiting list groups in relation to the PTSD symptoms, depression, and anxiety at post-treatment and 3 months follow-up. Treatment gains were strongest for those measures specifically related to trauma. When treatment was provided to the waiting list group treatment, the effects were replicated. (Wilson et al, 1995) Also the researchers conducted a follow up study, 15 months later and they contacted the participants by phone. They were able to contact 69 of the original 80 participants and conducted individual interviews with 56 of the participants. Ten of the participants responded to the measurements by mail and only 3 people refused to participate in the follow-up. The response rate was 83% of those who participated in the original study. The

result of the study showed 84% reduction in the PTSD diagnosis and 68% reduction in PTSD symptoms for all participants. (Wilson et al, 1997)

Furthermore, Lee et al. (2002) conducted one randomized control study to investigate the effectiveness of EMDR in the treatment of PTSD by comparing Stress inoculation training with prolonged exposure (SITPE) with (EMDR). The sample of the study included 24 participants who were referred for treatment as a result of traumatized recent event. Each participant was assessed and was allocated to a waiting list of either SITPE or EMDR. Self-reported questionnaire was utilized to assess the PTSD symptoms and depression before and after they received the treatment to measure outcomes immediately after treatment and after the three month follow-up. The exclusion criteria were for those who had alcohol and drug dependency, psychosis, or a cluster B personality disorder according to the DSM. The mean age of the participants was 24 years, and there were 13 males and 11 females. Most of the participants had a significant trauma in the past, and 29.2% had experienced multiple previous traumas. Among the participants, 70.8% had experienced a recent trauma. In addition 58.3% had experiences of childhood physical abuse, emotional neglect, or sexual abuse. 41.7% had received some types of psychological or psychiatric treatment in the past; 50% had family members who had received treatment from a mental health professional and 20.8% had been hospitalized before as a result of a psychiatric condition. The result of the study showed that EMDR significantly reduced the symptoms more than SITPE and 83% of the participants in the EMDR condition and 75% of those in SITPE no longer met the criteria for PTSD. At the follow-up, 83% out of each condition no longer met these criteria (Lee et al, 2002)

In addition, another study was conducted by Greenwald (1994) in Florida several months after Hurricane Andrew to assess the effectiveness of EMDR among five children aged 4-11 years who developed post-traumatic symptoms following a natural disaster and were treated with one or two sessions of EMDR. The mother was interviewed prior to the first session and asked to describe and rate the changes in her child since the hurricane, and to respond similarly at one week and four week follow-up telephone interviews. The sample of the study was 5 subjects referred by their parents because they showed emotional and behavior difficulties that began or worsened following the hurricane. The treatment was conducted according to the standard

protocol of EMDR and the session ranged from 20-90 minutes. Findings of the study showed that SUDs reached 0 on targeted upsetting of memories for all subjects in either one or two sessions. The telephone follow- up interviews were conducted one week and four weeks after the termination; all showed a marked improvement and all subjects recovered .(Greenwald, 1994) This study indicated the effectiveness of EMDR among children, but it has many drawbacks such as small sample size. (Greenwald, 1994)

Another study was conducted by Rothbaum et al. (2005) in USA to evaluate the relative efficacy of Prolonged Exposure (PE) and Eye Movement Desensitization and Reprocessing (EMDR) compared to control group in the treatment of PTSD in adult female rape victims. The sample of the study consisted of 60 females; their mean age was 33.8 years. They were randomly assigned to EMDR or Prolong Exposure or on the control group. Both treatments were delivered in nine 90-min, twice weekly sessions. The inclusion criteria were that the traumatic event must have been a rape in adulthood or in childhood (ages 0–11) by either a family or a nonfamily member. The exclusion criteria were history of schizophrenia or other psychoses, current suicidal risk or practiced self-mutilation, illiterate and thus unable to complete self-reports, current alcohol or drug dependence. The data was collected by interview and questionnaire, Structured Clinical Interview for Diagnostic and Statistical Manual of Mental Disease (DSM-IV), Clinician-Administered PTSD Scale (CAPS), Assault Information Interview, Stressful Life Events Screening Questionnaire (SLESQ), Impact of Event Scale-Revised (IES-R), Beck Depression Inventory (BDI), and State-Trait Anxiety Inventory (STAI), Dissociative Experiences Scale-II (DES-II). The results of the study showed in general an improvement in PTSD. At post treatment test the results revealed that 95% of PE participants and 75% of EMDR participants no longer met criteria for PTSD, which was not a significant difference. Also the depression scores decreased significantly from pretreatment to post treatment in both the Prolonged Exposure and EMDR group than in the control group. PE and EMDR did not differ significantly for change from baseline to either post treatment or 6-month follow-up measurement for any quantitative scale. (Rothbaum et al, 2005)

Another study was conducted by Raboni et al. (2006) to examine whether EMDR treatment can improve PTSD symptoms, such as sleep, depression, anxiety, and poor quality of life. The sample of the study consisted of 7 patients: two males and five females; aged 24–36 years, they were assaulted or kidnapped, for at least 3 months. The participants received one session a week, lasting from 30 to 90 min each. The average number of EMDR therapy sessions was five. Treatment ended when the patient reported not having the typical PTSD symptoms on his/her daily life. The data was collected by questionnaire, impact event scale (IES), Anxiety state (STAI), SF-36 Life Quality Inventory, Beck Depression Inventory (BDI), State-Trait Anxiety Inventory, Coping Strategy Inventory, and REST-48 for evaluation of general stress. The results of the study showed that the treatment of traumatic memories with EMDR promoted an improvement of the negative symptoms of PTSD, particularly arousal, flashbacks, sleep disturbances, and fear. Also the results showed an increase in sleep efficiency and reduced time of waking after sleep onset at discharge. The mean of sleep pre treatment was 1.89 while for t post treatment it was 4.39. Also results showed that EMDR resulted in reduction in depression mean from 17.71 to 4.00. (Raboni et al, 2006)

Furthermore, a comparison study was conducted by Ironson et al. (2002) to determine if EMDR and Prolonged Exposure (PE) are equally effective at reducing PTSD symptoms. The sample of the study consisted of 22 participants who were exposed to multiple traumas or to single trauma such as past spousal abuse, or were adult survivors of childhood sexual abuse, physical assault victims, accident victim, losing a family member, and one person whose wife was raped. The participants aged from 16 to 62 years, (17females and 5 males) and were randomly assigned to each treatment group (20 participants in each). Data was collected by a questionnaire such as PTSD Symptom Scale (PSS-SR), Beck Depression Inventory (BDI), DES self-report questionnaire that assesses dissociative symptoms, and SUDS scale. The participants were assessed at baseline, after six sessions (one for evaluation, two preparatory, and three treatment sessions), and at three-month follow-up and each session lasted for 90 min. The results of the study showed that both approaches had a significant reduction in PTSD while depression symptoms, were maintained at three-month follow-up. After three EMDR sessions patients showed 70% reduction in their PTSD symptoms. Also EMDR appeared to be fewer dropouts

than PE and the difference was significant. Finally, Subjective Units of Distress (SUDS) ratings decreased significantly during the initial session of EMDR, but changed little during PE. Post session SUDS were significantly lower for EMDR than for PE. (Ironson et al, 2002)

In Norway RCT study was conducted by Ahmad et al. (2007) to examine the efficacy of EMDR treatment for children with post-traumatic stress disorder (PTSD) compared with untreated children in a waiting list control group. The sample of the study consisted of 33 participants. The participants 10 females and 7 males were in the intervention group while 10 females and 6 males in the waiting list control group. Children age was from 6 to 16 years. Children were diagnosed with PTSD according to DSM diagnostic criteria. They were randomly assigned to eight weekly EMDR sessions or the WLC group. Data was collected by questionnaire, Harvard Uppsala Trauma questionnaire for Children (HUTQ-C), Diagnostic Interview for Children and Adolescence (DICA), Posttraumatic Stress Disorder Scale for Children (PTSS-C) and treatment sessions measurements SUD and VOC. The result of the study showed that post-treatment scores of the EMDR group were significantly lower than the WLC indicating improvement in total PTSS-C scores, PTSD-related symptom scale, and subscales re-experiencing and avoidance among subjects in the EMDR group, while children in the WLC improved in PTSD-non-related symptom scale. The improvement in re-experiencing symptoms proved to be the most significant between-group differences over time. Also results showed that no significant differences between the EMDR and WLC groups were found on any demographic characteristics. (Ahmad et al, 2007)

In Iran, a quasi-experimental design, study was conducted by Ahmadizadeh et al. (2010) to determine the effectiveness of each treatment method of CBT and EMDR separately on reduction of specific symptoms and recovery in patients with PTSD. The study sample consisted of 45 veterans suffering from PTSD; their age ranged from 37-55 years old. They were divided randomly into three groups, CBT, EMDR and control groups; each group contained 15 members. Exclusion criteria included major mental disorders except PTSD, personality disorders, addiction to drugs and alcohol, and educational level lower than high school. Data was collected by questionnaires such as Checklist of Post Traumatic Stress Disorder – a military version (PCL-

M), and Checklist of mental disorders (SCL-90-R). The results of the study showed no statistically significant differences between groups in terms of education, age and occupation. There was a significant difference between the CBT and EMDR methods in reducing the specific symptoms of PTSD in the pre-test and post-test ($p<0.001$). Also the results showed that the difference in the recovery of patients with PTSD in the CBT and the EMDR group compared with the control group, was a statistically significant ($p<0.001$). Also the results of the comparison of the groups showed that the EMDR group was more effective than CBT and both groups were more successful in reducing PTSD symptoms than the control group. (Ahmadizadeh et al, 2010)

In Italy, one study was conducted by Fernandez (2007) to explore the effectiveness of EMDR (eye movement desensitization and reprocessing) for the post-traumatic reactions of child victims in the post-emergency context of an earthquake that occurred in 2002 in Molise, a region of Central Italy. The study sample consisted of 22, aged between 7-11 years old. The participants experienced traumatic event in which they were being suddenly buried under the debris of their collapsed school and in contact with the bodies of their dead classmates from 1-10 hours. The children were exposed to a direct and extreme situation which caused the death of their friends and classmates, family members, and their own lives were threatened. Furthermore, many of these children lost their homes, and their daily life routine. The participants received three cycles of EMDR treatment over one year, with a total average of 6.5 sessions of EMDR each.

Data was collected by questionnaires and results showed that EMDR contributed to the reduction or remission of PTSD symptoms and facilitated the processing of the traumatic experience. (Fernandez, 2007)

Finally, another study was conducted by Van der Kolk et al. (2000-2003) to assess the relative short–term efficacy and long-term benefits of pharmacologic versus EMDR in treating PTSD. This study compared the efficacy of a selective serotonin reuptake inhibitor (SSRIs). Fluoxetine, with a psychotherapeutic treatment, EMDR and pill placebo and measured maintenance of treatment gains at 6 months follow up. The study sample consisted of 88 PTSD subjects

diagnosed according to DSM-IV criteria and aged from 18 to 65 years old. The subjects were randomly assigned to EMDR, Fluoxetine, or placebo pill. The subjects were recruited via newspaper advertisement and Internet and solicitation from medical and mental professionals. The participants received 8 weeks of treatment. The outcomes measured by clinician-Administrated PTSD Scale DSM-IV version and Beck Depression Inventory-II. The result of the study showed that psychotherapy intervention was more successful than pharmacotherapy in achieving sustained reductions in PTSD and depression symptoms, but this benefit accrued primarily for adults- onset trauma survivors. At 6 month follow- up, 75.0% of adult- onset versus 33.3% of child-onset trauma subjects who received EMDR achieved asymptomatic end-state functioning compared with none in the Fluoxetine group. For most childhood-onset trauma patients, neither treatment production completes symptoms remission. The study supports the efficacy of brief EMDR treatment to produce substantial and sustained reduction of PTSD and depression. (Van der Kolk et al, 2003)

In summary, there are many studies that show the effectiveness of EMDR in treating PTSD symptoms among people who have different types of trauma in many countries in the world; however, there is a lack of randomized controlled studies that assess the effectiveness of this treatment approach for families who suffer from PTSD symptoms due to the killing of their children due to political violence particularly in Palestine. The following chapter will discuss the methodology of the current thesis.

2.2.6. Summary

- The EMDR has been used in many studies to treat PTSD and depression symptoms**.**
- The EMDR is effective in treating PTSD and depression symptoms in different settings and different age groups.
- EMDR is effective in treating PTSD symptoms due to different causes but there is a lack in studies that assess EMDR effectiveness in the situation of an ongoing trauma or with victims of political violence.
- The EMDR model is adapted for the purpose of the current study.

CHAPTER THREE

Conceptual Framework

Chapter Three

Conceptual Framework

1.1. Introduction

The conceptual framework is a tool structured from a set of coherent ideas or concepts. It is taken from relevant fields of enquiry in order to explain the main problem to be studied including key factors, concepts, or variables and the presumed relationships among them. (Smyth, 2004) It can be a visual or written product that is explained either graphically or narratively. (Polit et al, 2004; Burns et al, 1999)

The conceptual framework has different purposes. It helps researchers see clearly the variables of the study; it provides researchers with a general framework for data analysis; and it is essential in the preparation of a research proposal using descriptive and experimental methods. It summarizes the major dependent and independent variables in the research, and it gives direction to the study. (Smyth, 2004) In the current study, the conceptual framework was developed depending on literature review of prior studies that tackled the same concepts. The major concepts of the current framework focus on PTSD and depression as dependant variables and other different independent variables such as age, gender, education, marital status, family relations, place of residency, and EMDR as seen in figure (3.1). Each concept will be discussed in more details below.

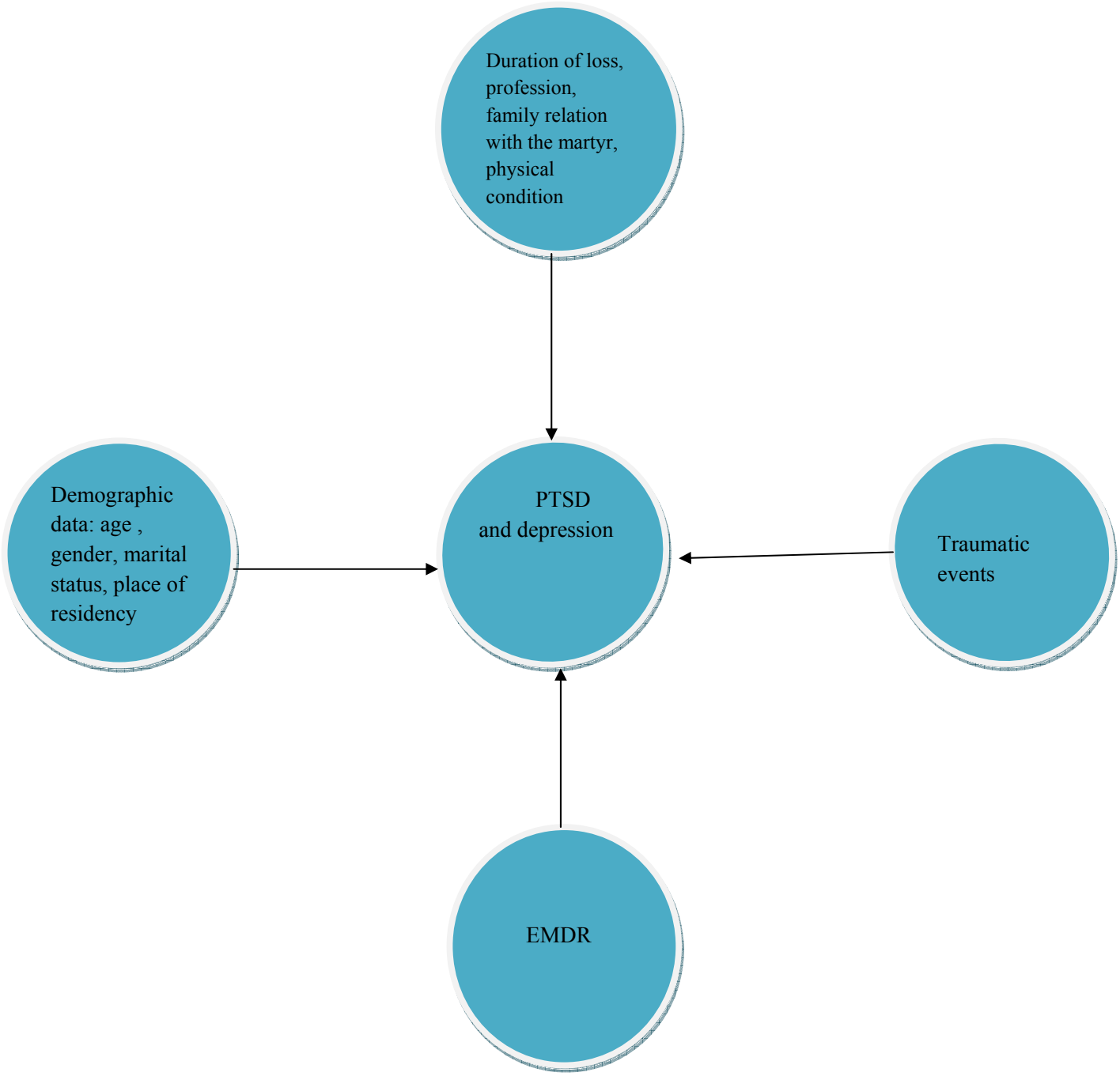

Figure (3.1): PTSD and depression and other independent variables

1.2. Dependant variables: PTSD and depression

PTSD is defined as mental disorder resulting from an exposure to an extreme and traumatic stressor. PTSD has a number of features and diagnostic criteria, as published in the American Psychiatric Association's Diagnostic and Statistical Manual of Mental Disorders, Fourth Edition Revise (DSM-IV-TR, 2000) and these criteria include:

- Exposure to traumatic stressors such as death, sexual abuse, torture and prison, war trauma and armed conflicts, developmental trauma, and natural disaster.
- Re-experiencing symptoms: They include having frequently upsetting thoughts or memories about a traumatic event, having recurrent nightmares, acting or feeling as the traumatic events were happening again, and flashback, having very strong feelings of distress when reminded of the traumatic event, and being physically responsive, such as experiencing an increase in heart rate or sweating. (DSM-IV-TR, 2000)
- Avoidance and numbing symptoms: which involve the numbing of general responsiveness and the persistent avoidance of stimuli associated with the trauma. These symptoms involve avoiding reminders of the trauma such as people, places, objects, and activates. Reminders can be internal cues, such as thoughts or feelings about the trauma, and external stimuli in the environment that bring unpleasant memories and feelings. PTSD symptoms also involve general symptoms of function impairment, such as lack of self care or social function.

-Symptoms of increased arousal: They involve having a difficult time falling or staying asleep, feeling more irritable or having outbursts of anger, having difficulty concentrating, and being "jumpy" or easily startled. The duration of the symptoms lasts at least one month. (DSM-IV-TR, 2000)

In the current study PTSD checklist- PCL-S scale was utilized to assess PTSD symptoms. It consists of 17 questions such as re experiences (q1-q5), avoidance (q6-q11) and hyper arousal (q12-q17). (See appendix 7) Many previous studies used this scale to assess PTSD such as Weathers et al. (1993); Ahmadizadeh et al. (2010); Tanielian et al. (2008); Buro et al.(2009); Andrykowski et al. (1998); Marin et al.(1998); Karatzias et al.(2011); Schnide et al. (2007); and Murphy, et al. (1999).

Depression: It is a mental disorder that is characterized by a low mood accompanied by low self esteem and by loss of interest or pleasure in normally enjoyable activities. (DSM-IV-TR, 2000)

The symptoms of depression must persist for most of the day, nearly every day for at least 2 weeks. In addition, those symptoms must be accompanied by clinical significant distress or impairment in social, occupational, or other important areas of functioning. (DSM –IV-TR, 2000)

In the current study, Beck Depression Inventory (BDI) was utilized; it included 21 questions. BDI assesses the depression symptoms as the following: Question 1 the severity of sadness, question 2 pessimism, question 3 past failure, question 4 loss of pleasure, question 5 feelings of guilt, question 6 feelings of punishment, question 7 self dislike, question 8 self-criticalness, question 9 suicidal thoughts or wishes, question 10 crying, question 11 agitation, question 12 loss of interest, question 13 indecisiveness , question 14 worthlessness, question 15 loss of energy, question 16 changes in sleeping pattern, question 17irritability, question 18 change in appetite, question 19 connectedness difficulty, question 20 tiredness or fatigue, and question 21 loss of interest in sex.(See appendix 6) Some studies utilized this scale to assess the effect of PTSD on depression development as a result of exposure to traumatic events as Murthy et al.(2006); Schulte et al. (2004); Thabet et al. (2004); Campbell et al. (2007); and Sulaye et al. (2008)

1.3. Independent variables that may affect PTSD severity

Many factors may affect PTSD symptoms severity**.** In the current study, the socio demographic variables were examined such as age, gender, marital status, place of residency, educational level, profession, and martyr's age. Question 1 to 9 in the questionnaires were dependant to assess theses variables (See appendix 4).These variables were studied by Kennelly et al. (2009); Breslau et al. (1998); Troy et al. (2002); Pole et al. (2001); Lilly et al. (2009); Punamäki et al. (2005); Maercker et al. (2003); Weine et al. (1998); Sen et al. (2006); Thabet et al. (2001); Shin et al. (2009); Kalyjia, et al. (2002); Nandi et al. (2004) ; Maqbul et al. (2008); Wijngaards-de Meij et al. (2006); Part et al. (2011); El-Sarraj (2005); Qouta et al. (2004), and Maghalseh (2003).

-The medical history of the patient: it was assessed through questions (q 10 – q 17) such as whether the participants received medical help, if they suffered from physical illness, if they received treatment for those physical illnesses, or for their psychological symptoms (see appendix 4). Many studies indicated the relationship between PTSD and depression and the patient medical condition such as Shipher et al. (2007); Gil et al. (2009), and Sen et al. (2006)

-Traumatic event: it must be severe to be outside the range of human experience; it is usually considered to be normal if it does not include marital conflicts, and business losses. It is causes the feeling of overwhelmmness on different dimensions such as emotional, cognitive, and physical. The circumstances of the event commonly include abuse of power, betrayal of trust, entrapment, pain, confusion, and/or loss. (Gille, 1999) Packer in 2000 defined the traumatic situation as an event or several events of extreme violence that occur within a social context: exemplified by war. This traumatic situation is a necessary but not a sufficient condition for a trauma to occur. While trauma implies the destruction of individual and/or collective structures, it does not always follow that such destruction causes immediate symptoms. (Packer, 2000)

In the current study, the Life Event Checklist (LEC) was utilized to assess the respondent's experience of different traumatic experiences (see appendix 5). The scale includes 18 questions and the respondents rate their experience of that event on a 5-point nominal scale (1 = happened to me, 2 = witnessed it, 3 = learned about it, 4 = not sure, and 5 = does not apply). Question (1) assesses the exposure to natural disaster such as (volcano, tornadoes, floods, and earthquake. Question 2 assesses explosion and fire. Question (3) assesses traffic accidents. Question (4) assesses exposure to work accidents; and question (5) assesses the exposure to toxic accidents. Also questions (6- 7 -10-11-12-13-14-15 -16) assess manmade traumatic events including being attacked, hit, slapped, kicked, and beaten up, being kidnapped, abducted, held hostage, prisoner of war, sudden violence death (e.g. homicide and suicide), sudden unexpected death of someone close to them, serious injury, harm or death. Questions 8-9 assess sexual abuse, question 17 assesses any other traumatic events, and question 18 assesses the event which has the most impact on participants .This scale was used by many studies such as El Sarraj et al. (1996); Qouta et al. (2004); Van der Kolk et al.(1996); Debora et al. (2002); and Umran (2000).

EMDR the intervention approach: it is a treatment approach that is used to treat people with PTSD symptoms. It is an integrative psychotherapy approach which contains elements of much effective psychotherapy in structured protocols that are designed to maximize treatment effects. These include cognitive behavioral interpersonal experiential and body-centered therapies. (Shapiro & Forrest, 1997; Keven et al, 2002)

This treatment approach was used by many studies to treat PTSD and depression such as Zagrot-Hodali et al. (2008); Bower et al. (2004); Power et al. (2002); Wilson et al. (1995,1997); Greenwald (1994); Karatzias et al. (2011); Rothbaum et al. (2005); Kemp et al. (2009); Lee et al. (2002); Raboni et al. (2006); Ahmad et al. (2007); Fernandez (2007); Ironson et al. (2002), and Ahmadizadeh et al. (2010).

In the current study the effectiveness of EMDR was assessed by measuring PTSD and depression severity level before and after intervention by using PCL-S scale and Beck scale.

1.4. Summary:

1- This chapter presents the conceptual framework which was developed based on literature review.

2- It consisted of two major concepts: dependent variables including PTSD and depression and independent variables such as age, gender, marital status, educational level, profession, place of residency, duration of loss, age of the martyr, family relation, medical history, and EMDR.

CHAPTER FOUR

METHODOLOGY

Chapter Four

Methodology

4.1. Introduction:

This study aims to examine the effectiveness of EMDR as a treatment approach for PTSD symptoms among youth martyrs' parents or caregivers and their wives in Bethlehem area. To achieve this aim, a quasi –experimental design was utilized. A proper instrument, data collection method, and data processing and analysis had been followed. This chapter discusses all these issues in addition to other methodological issues in more detail.

4.2. Quantitative Research:

Quantitative research is a formal, objective, rigorous, and systematic scientific process for gathering information or investigating quantifiable properties and phenomena and relationships. It involves collection of numerical data, where often there is considerable control and analysis of data by using statistical procedures. (Burns et al. 1999; Polit et al. 2004) The objective of quantitative research is to develop and employ mathematical models, theories, and hypotheses, and it is used widely in Social Sciences such as Psychology, Social Work, Sociology, Nursing and Political Science. (Polit & Beck, 2004)

There are two types of quantitative research: non-experimental and experimental design. Non-experimental research includes two categories: descriptive research and correlation research. (Polit & Beck, 2004)

Descriptive research, such as surveys and case studies, is designed to explore and describe the phenomena in a real life situation; it provides an accurate account of characteristics of particular individuals, situations, or groups. Through descriptive studies, the researcher discovers new

meaning, describes what exists, determines the frequency with which something has occurred, and categorizes information. The outcome of a descriptive research includes a description of concepts, identification of relationships, and development of hypotheses, and there is no manipulation of variables involved. (Burns et al, 1999; Polit et al, 2004)

The correlation research involves systematic investigations of relationships between or among two or more variables. In order to do this, the researcher measures the selected variables in the sample and then uses correlation statistics to determine relationships among variables. Using correlation analysis, the researcher is able to determine the degree or strength and type of relationship (positive or negative). Correlation research does not involve manipulation of an independent variable. (Burns et al, 1999)

The second type of quantitative research is experimental research which includes experimental and quasi - experimental design. The experimental is an objective systematic and controlled investigation for the purpose of predicting and controlling phenomena under investigation. Causality between an independent and dependent variable is examined under highly controlled conditions. It is the most powerful quantitative method because of the rigorous control of variables (Burns et al, 1999) and it is considered by many researchers as the golden standard for yielding reliable evidence about cause and effect. (Burns et al, 1999; Polit, 2004)

In the current study the quasi- experimental design is adapted. It involves manipulation of the independent variable but lacks a comparison (control) group or randomization. The purpose of quasi-experimental research is to examine causal relationships or determine the effect of one variable on another. (Burns et al, 1999)

A quasi-experimental study might compare outcomes for individuals receiving programmed activities with outcomes for a similar group of individuals not receiving programmed activities.

This type of study also may compare outcomes for one group of individuals before and after the group's involvement in a program (known as "pre-test/post-test design"). (Moore, 2008)

4.3. Characteristics of quasi-experimental design

Quasi-experimental designs have many characteristics such as manipulation and lack of randomization. (Polit et al, 2004) The most common characteristics are:

1. **Manipulation of independent variables:** manipulation is used most commonly in quasi-experimental research. Controlling treatment or intervention is the most commonly used manipulation. (Burns et al,1999) Manipulation means doing something to study participants, the "something" (the experimental treatment or intervention) constitutes the independent variable. The experimenter manipulates the independent variable by administrating a treatment to some subjects and denying it to others; then, he/she consciously observes the effect on the dependant variable. In the current study, the intervention group received EMDR sessions while the control group did not. (Bordens et al, 1996; Polit,1995, 2001, 2004; Seaman, 1987)

2. Lack of random assignment: assignment to conditions takes place by means of self selection, by which subjects choose treatment for themselves, or by means of administrator selection, by which teachers, bureaucrats, legislators, therapists, physicians, or others decide which persons should get which treatment. However, researchers who use quasi-experiments may still have considerable control over selecting and scheduling measures, over how nonrandom assignment is executed, over the kinds of comparison groups with which treatment, groups are compared, and over some aspects of how treatment is scheduled. (Polit et al, 2004) In the current study, randomization was not utilized to select participants for total population who met study criteria as the majority refused to participate and only 40 participants out of 180 accepted that. However, randomization was used to allocate participants to intervention and control groups by using computerized (SPSS) program version 18.0.

4.4. Strengths and limitations of the quasi- experiment

Quasi – experiment has many strengthens. (Polit et al, 2004) For example, it is practical when it is difficult to conduct true experiments. Mental health researches may conduct it in a real-life setting, where it is difficult to randomly deliver an innovative treatment to certain subjects but not to others. (Dooly, 2001; Moore, 2008)

The limitations of a quasi- experimental design may include: selecting a comparison population that is not really similar to the population being served. For example, if the comparison population is more advantaged than the population being served, then outcomes for program participants may seem less positive than they really are. Also if events change to comparison population – for example, if it gets served by a different, new program or a new community center opens in the neighborhood, then the value of making the comparison will be undermined. (Dooly, 2001; Moore, 2008)

As mentioned previously, quasi- experimental design was utilized in the current study because it is used to test hypotheses of cause-and-effect relationships between variables. (Polit et al, 1995, 2004; Burns et al. 1999) To achieve the aim of this study in assessing the effectiveness of EMDR treatment approach in treating Palestinian parents or caregivers and wives of young martyrs with PTSD and depression symptoms in the Bethlehem area. At the baseline stage the study population (249 participants) were asked to fill in the questionnaires; 180 agreed to do so and only 86 of them met the diagnostic criteria of PTSD, only 40 accepted to participate in the experiment, and they were randomly allocated to the control (20 participants) and intervention groups (20 participants). The participants in the intervention group received 5 EMDR sessions (2 sessions per week) and each session lasted between 60- 90 minutes. The control group did not receive any therapy. After completion of the study, they were referred to receive EMDR treatment for their PTSD symptoms to the Psych-Social Counseling Center for Women.

4.5. Study population and sampling

The targeted populations of this study were parents and wives of young martyrs who were killed by the Israeli military in Bethlehem district between the years 1987-2010 and they were aged 25 years old or less when they were killed. Caregivers were included if parents were deceased because it is assumed that they were affected by the loss of the family member similar to parents as they took their roles in the family. Study participants were selected from a complete list taken from the Martyrs and Family Care Association records in Bethlehem. This institution aims to support families of martyrs and assist them in community-based rehabilitation. Also it supports them in their social life and economic status, health, education, and follow-up their legal files in Israeli courts. It raises public awareness about Israeli violations committed against them, as well as at the local and international level in general. (Martyrs Families Care Association, 2010) The list included 121 youth martyrs who met the inclusion criteria of the study. The population of the study was 242 family members including 7 wives of martyrs.

The inclusion criteria were the following:

1. Parents and wives of young martyrs who agreed to participate.
2. Participants who met PTSD cutoff score of 50.
3. Participants whose PTSD symptoms were as a result of losing their son or daughter or husband as a result of Israeli violence and who were aged 25 years or less when they were killed.
4. Participants who took drugs due to other physical or medical conditions such as diabetes or receiving psychotherapy other than EMDR in the past.
5. Participants who lived in Bethlehem area.
6. Any participant who met PTSD symptoms co morbidity with depression or without depression symptoms.

7. Caregiver of the family of young martyr if mother, father or wives were deceased. It was assumed that caregivers are affected by loss of family members similar to traumatized mothers and fathers who were at risk of transferring their fears, anxiety and other symptoms to their children, which in turn makes them vulnerable to developing further mental health problems such as PTSD.

The exclusion criteria of the study:

1- Participants who had a mental disorder such as schizophrenia, bipolar disorder, and dementia.

2- Participants who suffered from vision problems, epilepsy or pregnancy as they are contraindicated to EMDR. (Shapiro, 1994, 1997)

3- Participants who did not live in Bethlehem area.

4- Participants who had depression without PTSD symptoms.

5- Participants who took psychotic drugs or EMDR for their PTSD symptoms when the study was carried out.

4.6. Sampling method

In the current study, a simple random sample was used and the participants were randomly allocated to control group and intervention group by using computerized (SPSS) program version 18.0. Simple random sample is the most basic of probability sampling design in which the researchers established the sampling frame (It is the actual list of sampling units or elements from which the sample would be chosen). Once sample population elements have been developed or located, the elements must be numbered consecutively. A table of random numbers would then be used to draw a sample of the desired size. (Polit et al, 2004)

There are many advantages for simple random sampling such as no chance for operating of personal preferences, development of sample frame, enumeration of all the elements. (Polit et al, 1995, 2004) On the other hand, there are some disadvantages for simple random sample such as, no guarantee that a randomly drawn sample will be representative; random selection does ensure that differences in the attributes of the sample and the population are purely a function of chance. (Polit et al, 1995,2001, 2004)

4.7. Sample size

Sample size should be large enough to deliver statistically meaningful information about the test products or treatment. (Korosteleva, 2011)

The sample of this study was selected from a complete list taken from the Martyrs and Family Care Association records in Bethlehem. The list included 121 young martyrs killed between 1987-2010. The total population of the study was 242 parents and 7 wives of martyrs, and 180 of them accepted to fill in the questionnaires in the assessment stage.

The participants who had PTSD diagnostic score (cut off point 50) reached 86 participants. Only 40 participants agreed to participate in the intervention stage and they were allocated randomly to the control group and intervention group; (20 in the intervention and 20 in the control group). The total number of participants who completed the study was 17 participants in intervention group and 19 subjects in control group.

4.8. Study settings

The intervention was held at different settings according to participant's preference, ability to move from houses, and availability of public transportation. The main setting was the Psycho-Social Counseling Center for Women in Bethlehem city (PSCCW). This center was established in 1997 as an independent, non-governmental and non-profit organization. It was founded by a group of women activists who focus on women issues and advocate on behalf of women rights.

PSCCW's vision is based on complete equality and elimination of all forms of discrimination against women. Its aim is to prevent violence against women and contribute to the creation of social changes in the Palestinian community. (www.psccw.org) Another setting was the participants' houses. This option was chosen by some participants who had a physical condition due to age or heath problems that prevented them from traveling to the center or due to social and cultural restrictions. Another local center used in this study was the Lajee Center. It is a community based institution and it was established in Aida Refugee Camp in April 2000. The main aim of the centre is to provide refugee youth with cultural, educational, social and developmental opportunities. Its programs are designed in response to particular needs of community and skills and abilities of its members. (www.lajee.org)

4.9. Instrument of current study

Data collection tools used in this study was a socio-demographic self-administrated questionnaire, PTSD Checklist-Specific (PCL-S), and Beck Depression Inventory (BDI).

- Socio-demographic self administrated questionnaire was developed for the purpose of this study and it included independent data such as gender, age, place of residency, educational level, profession, family relation, medical condition, marital status and duration of martyrdom, (See appendix(1)

- PTSD Checklist – Specific (PCL-S): It was developed by Weather et al in the year 1993. PCL-S is used to assess the traumatic event exposure to ensure that the event meets Criterion A of post-traumatic stress disorder (PTSD). PCL-S is developed to screen individuals for PTSD and diagnose PTSD. It asks about symptoms in relation to an identified stressful experience. It consists of 17 items which correspond to the DSM-IV-TR symptoms of PTSD. Participants are instructed to indicate how much they have been bothered by each symptom in the past month using a 5-point (1-5) scale and range from "Not at all" to "Extremely". Two versions of the PCL exist: PCL-M is specific to PTSD caused by military experiences and PCL-S is applied generally to any traumatic event. A

total symptom severity score (range = 17-85) can be obtained by summing the scores from each of the 17 items and the diagnostic cutoff score is 50 (1-18) no PTSD, (19-34) mild, (35-52) moderate, and (53-85) severe PTSD (Weathers et al,1993)

- Beck Depression Inventory (BDI) was developed by Aaron T. Beck in the year 1961. BDI includes 21 items which were developed to measure the intensity and severity of depression symptoms as listed in the (DSM-IV- IR, 2000). The items assess mood, pessimism, sense of failure, self-dissatisfaction, guilt, punishment, self-dislike, self-accusation, suicidal ideas, crying, irritability, social withdrawal, body image, work difficulties, insomnia, fatigue, appetite, weight loss, bodily preoccupation, and loss of libido. Items 1 to 13 assess psychological symptoms while items 14-21 asses physical symptoms. The participants were asked to consider each statement as it relates to the way they have felt for the past two weeks. There is a four-point scale for each item ranging from 0 to 3.The total score of 0-13 is considered minimal range, 14-19 is mild, 20-28 is moderate, and 29-63 is severe. (Beck, et al, 1961) In the current study the participants were diagnosed with depression at 14 cutoff score.
- Life Event Checklist: (LEC) it is a measure of exposure to traumatic events and it was developed at the National Center for Posttraumatic Stress Disorder (PTSD) with the Clinician Administered PTSD Scale (CAPS) to diagnose PTSD. The LEC is used to evaluate the respondent's experience of different traumatic experiences. The scale includes 17 items and the respondents rate their experience of that event on a 5-point nominal scale (1 = happened to me, 2 = witnessed it, 3 = learned about it, 4 = not sure, and 5 = does not apply). (Gray et al ,2004)

4.10. Reliability and Validity of instrument

The two most important and fundamental characteristics of any measurement procedure are reliability and validity. (Burns et al, 1999; Polit et al, 2004; Ruben el at, 2005)

Reliability refers to stability and consistency or degree to which an instrument measures the same thing in the same way every time if used under the same condition. (Burns et al, 1999; Polit et al, 2004; Rubin el at, 2005) An instrument is reliable to the extent that what it measures reflects true scores. That is, the extent to which errors of measurement are absent from obtained scores. Reliability of an instrument can be assessed in many ways such as stability which involves procedures that evaluate test-retest; this means repetition of the same test under same conditions, produces same results. Internal consistency or homogeneity reflects the extent to which its items measure the same trial. Internal consistency gives an estimate of the equivalence of sets of items from the same test. For example, a set of questions aimed at assessing quality of life or disease severity). The coefficient of internal consistency provides an estimate of the reliability of measurement and it is based on the assumption that items measuring the same construct should correlate. Cronbach's Alpha is the method used for estimating internal consistency reliability. Cronbach's Alpha is functions of the average inter correlations of items and the number of items in the scale. (Kimberlin et al, 2008) For the purpose of the current study, the reliability of the measurement scales was tested by using Cronbach's Alpha (Burn et al, 1999) Cronbach's Alpha coefficients are the most common and powerful method used for calculating internal consistency reliability. It measures the extent to which items obtained at the same time correlated highly with each other. Rubin and Bobbie in (2005) indicated that when alpha coefficients level is about 90 or above, the internal consistency reliability is considered to be excellent. When the Alpha coefficient level is from 0.80 to 0.89, reliability is considered good. The acceptable reliability level is 0.7 in this study; the Cronbach Alpha was calculated to measure the reliability by using SPSS and it was found to be 0 .89 for the depression scale and 0 .90 for the PTSD scale. (Burn et al, 1999; Ruben et al, 2005)

The second criterion for evaluating a quantitative instrument is validity which is the degree to which an instrument measures what it is supposed to measure. (Polit et al, 2004; Kimberlin et al, 2008) Validity also refers to the extent to which an empirical measure adequately reflects the real meaning of the concept under consideration. (Ruben et al, 2005) Furthermore, validity is the truthfulness of the measurements in assessing phenomena in a given sample. (Burns et al, 1999) There are several criteria of validity described below:

1. Face Validity: This type of validity refers to whether the instrument looks as though it is measuring the appropriate construct. Face validity should not be considered a primary evidence for instruments validity. It is helpful for a measure to have face validity if other types of validity are also demonstrated.(Ruben et al ,2005 ; Polit et al ,2004; Kimberlin et al , 2008)
2. Criterion Validity: This type of validity compares results of the questionnaire with a criterion that is known to be close to truth.
3. Predictive Validity: It refers to whether the measurements can predict future events.

4. Construct Validity: It is the degree to which an instrument measures the characteristic being investigated; it is the extent to which conceptual definitions match operational definitions. (Polit et al,2004)

5. Content Validity: The term refers to the degree to which a measure covers the range of meanings included within the concept. Content validity is established on the basis of judgments. That is, researchers or other experts make judgments about whether the measure covers the universe of the facets that make up the concept. (Rubin et al, 2005)

Content validity of the questionnaires was examined by a committee of four experts in Psychology and Mental Health who hold a doctoral degree (PhDs). Three of them were from Bethlehem University and one from Al Quds University. In addition, to achieve the aim of this study, the scales were translated into Arabic language by the researcher and a back translation was made by an English translator. Feedback helped the clarity and the validity of the study instrument.

4.11. Description intervention (EMDR) approach

Participants who met the criteria of the study were allocated randomly to intervention group and control group. The intervention group received EMDR treatment by the main researcher, who received EMDR level I and level II and was trained by the EMDR Institute in USA. The participants received 5 sessions, twice per week and each session lasted from 60-90 minutes. The control group did not receive any therapy during the intervention period. After completion of the study, the control group was referred to receive EMDR therapy at the Psycho-Social Counseling Center for Women in Bethlehem city.

The duration of EMDR treatment was decided based on the nature of the experience. It can take three 90 minute sessions and it eliminates PTSD in 80%-100% of civilians with a single trauma experience such as rape, accident or disaster (Shapiro, 1997). Also about 8-12 hours of treatment can result in 77-80% elimination of multiple traumas PTSD. It consists of eight phases, each is considered essential for effective application. (Shapiro, 1995; Shapiro & Forrest, 1997) The protocol of EMDR treatment approach was discussed in chapter two.

4. 12. Research process and data collection

The study was conducted in 3 stages: baseline or assessment stage, intervention stage and follow –up stage (four months after completion of the study) as shown in figure (4.1) below

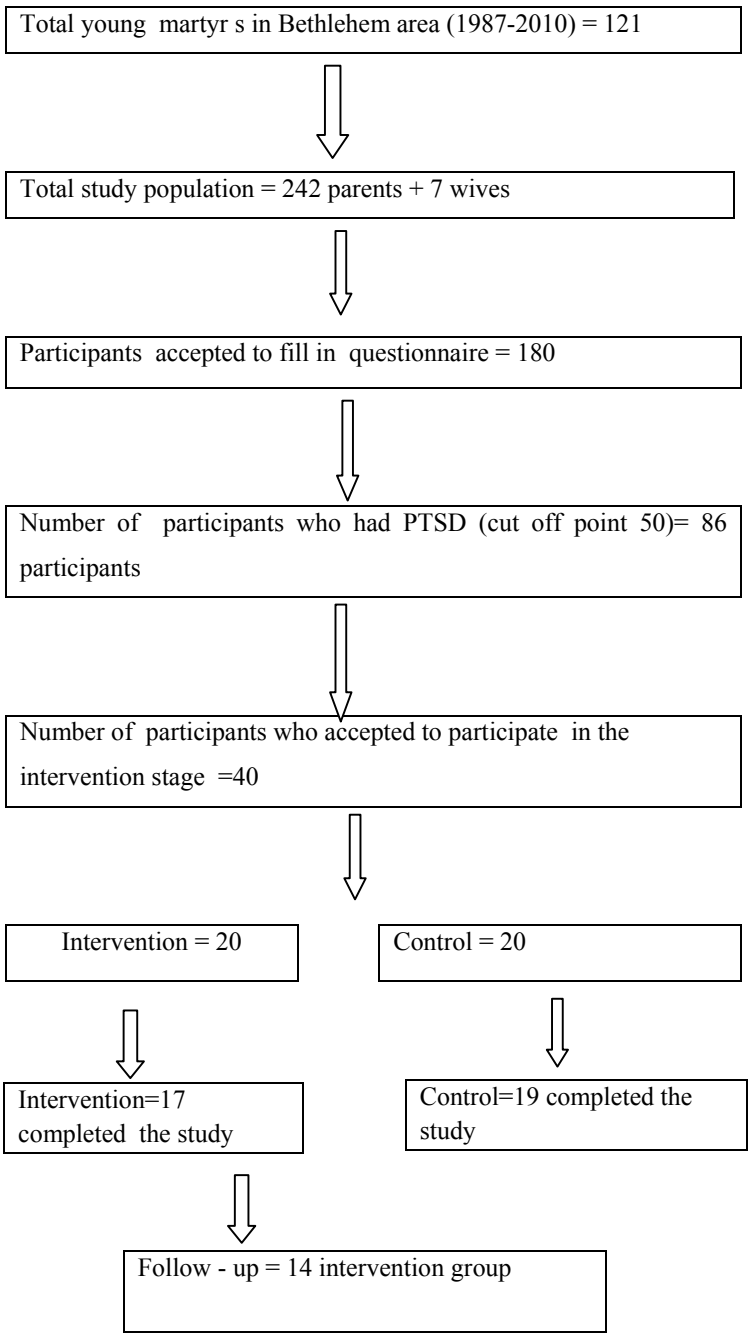

Figure (4.1) the framework study

Stage one (The assessment stage or (the baseline) which aimed to assess the severity of PTSD and depression symptoms among family members of youth martyrs. The complete list was taken from Martyrs and Family Care Association records in Bethlehem 121 martyrs, with family members of 242; and 7 wives of martyrs. (Total 249 participants) The data collection was made by the researcher and by volunteers from the Psycho-Social Counseling Center for Women. The researcher conducted a training workshop for 6 social workers in order to collect data. They were provided with information about the study and its purpose. Also they were trained how to answer the participants' questions. The training workshop provides the social workers with knowledge about the importance of being objective and not being biased during the process of collecting the data. The training workshop was conducted in the Psycho-Social Counseling Center for Women in Bethlehem city. Two of the data collectors were students of postgraduate studies and the other four had a BA degree in Social Work. All of them were from Bethlehem and Hebron areas. The process of collecting data took three months. A total of 180 family members of martyrs out of 249 agreed to fill in the questionnaire. 86 participants were diagnosed with PTSD and they got scores of 50 or above on the PTSD Checklist – Specific Scale (PCL-S). The researcher contacted them by telephone in order to ask them to participate in the study and a total of 40 participants agreed to participate in the trial. These were randomly allocated in the control group and intervention group by using SPSS program version 18.0 to guarantee the randomization.

Stage two: The intervention stage: In this stage, 20 participants allocated to control group and 20 allocated to intervention group were provided with a consent form before starting psychotherapy sessions. All participants received one or two evaluation sessions before providing them with 5 EMDR treatment sessions. These sessions included history taking in which an assessment of patient's readiness and barriers to treatment is made, dysfunctional behaviors, and specific symptoms. In addition to building a rapport, a treatment plan was developed, along with assessment of the client's suitability for EMDR.

The EMDR sessions were conducted twice per week and each one lasted from 60-90 minutes. Seventeen participants in the intervention group were able to complete the experiment stage and 3 of them dropped out. Also one participant withdrew from the control group. The duration of

the intervention phase took about two and half months. After the intervention stage was done, the post test was completed, by the main researcher for the control group and by two social workers for the intervention group who were working in the Psycho-Social Counseling Center for Women in Bethlehem city, for both intervention and control groups.

Follow up stage: four months after completion of the intervention, a follow –up assessment was done for the 14 participants in the intervention group who agreed to fill in the questionnaires. I The participants in the control group did not receive any therapy during the time of the experiment, but after the study was completed, they were referred to EMDR therapy in the Psycho-Social Counseling Center for Women in Bethlehem city. Follow –up assessment was not done for the control group because after the study was completed they were receiving EMDR therapy in the Psych-Social Counseling Center for Women (PSCCW).

4.13. Ethical considerations

In the current study, the participants were provided with informed consent (Polit et al, 1995, 2004) and they were provided with an information sheet about the study including the aim, procedures, and full explanation of the treatment approach including its advantages and disadvantages. In addition, confidentiality and privacy were assured for all participants. Furthermore, they were provided with explanations about the treatment plan, duration of treatment, and right to drop out from the study without any negative consequences. Consent forms were signed by the participants before the intervention started. All participants received the same treatment which includes eight phases of the EMDR (history, preparation, assessment, desensitization, installation, body scan, closure and reevaluation). Furthermore, all participants were treated respectfully and the researcher assured their privacy and confidentiality. For example, the researcher asked for permission to do home visits, and considered their desires in terms of time and place to conduct sessions. In addition, in order to gain access to different local institutions involved in the study, including the Martyrs Family Care Association, to Psycho-Social Counseling Center for women in Bethlehem city, and to the families of the martyrs, an introductory letter from Al Quds University was sent, with

information about the proposed study and its purpose. Ethical approval was obtained from Al Quds University and it was sent to the Martyrs Family Care Association and PSCCW to facilitate implementation of the study. Finally, before conducting the study, the proposal was submitted to the Faculty of Public Health at Al Quds University which gave its approval to conduct this study according to the thesis preparation guide of the Faculty of Graduate Studies.

4.14. Statistical analysis

Data was analyzed by using Statistical Package for Social Sciences (SPSS), version18.0.The data were checked for entry errors (data clearance).Characteristics of the sample were obtained through descriptive analysis (frequencies and percentage). The difference between intervention group and control group in relation to different variables was analyzed by the use of nonparametric tests such as (Mann-Whitney U), (Wilcoxon W), (2-tailed sig) and chi-square.

4.15. Summary

- Quasi-experimental was utilized in this study because it is a powerful design to examine casual relationships between variables.
- Data tools used in this study were self-reported questionnaires including socio-demographic data, Beck Depression Inventory, PTSD Checklist – Specific (PCL-S) and Life event checklist.
- Validity of the questionnaires was assessed by a committee of four psychologists and other experts from Bethlehem University and Al Quds University. Reliability of the instruments was tested by using Cronbach's Alpha coefficient and the result was high for depression scale (0.89) and excellent for the PTSD scale (0.90)
- The study was conducted in 3 stages: assessment, intervention and follow up.
- 40 participants agreed to participate in the intervention stage and 36 completed the study. 14 participants completed the follow up assessment

CHAPTER FIVE

RESULTS

Chapter Five

Results

5.1. Introduction

As discussed in chapter 3, in order to achieve the main aim of the current study, a quasi-experiment study was utilized. Also self- reported questionnaires related to the severity of PTSD and depression symptoms were distributed to 249 parents or caregivers and wives of young martyrs in Bethlehem area and 40 participants agreed to participate in the study.

This chapter presents the findings of the current study as the following:

- Description of the characteristics of the study participants.
- The findings of the intervention and follow up stage.

5.2. The Characteristics of the participants in the baseline stage

The selection of the participants in the current study was done in three stages. In assessment stage, 249 family members who met the criteria of the study were asked to participate in the study, 180 of them accepted to fill in the questionnaires. Eighty six of them had PTSD diagnosis according to the PCL scale. The response rate was 72%. In the intervention stage, only 40 participants agreed to participate in the experiment study (46.5%) out of 86 participants. In the third stage (follow up stage) 14 of the participants accepted to participate in the follow up stage.

The baseline data analysis showed that out of 180 respondents, 53.3% (n=96) were females, and 46.7% (n=84) were males (see figure 5.1).

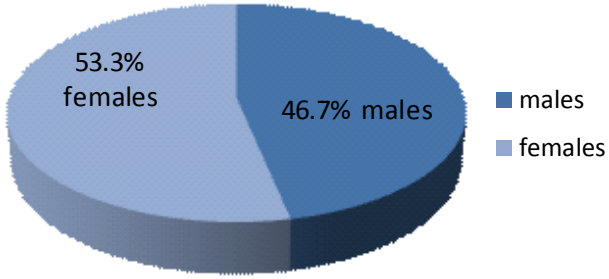

Figure (5.1) Distribution of participants by gender

Also 37.2% (n= 36) of the participants were less than 50 years old, and 62.8% (n=144) were equal to or more than 50 years old (see figure 5.2).

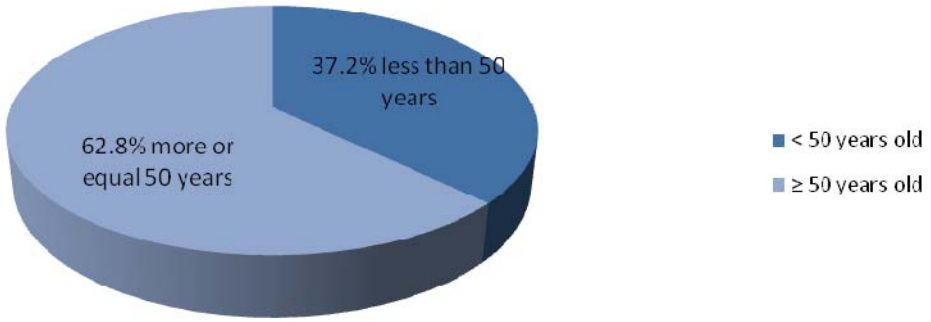

Figure (5.2) Distribution of participants by age

In addition, the majority of the participants were mothers (42.2% (n=76)), 28.3% (n=51) were fathers, 3.9% (n=7) were wives, and 25.6% (n= 46) were caregivers of the martyrs (see figure 5.3).

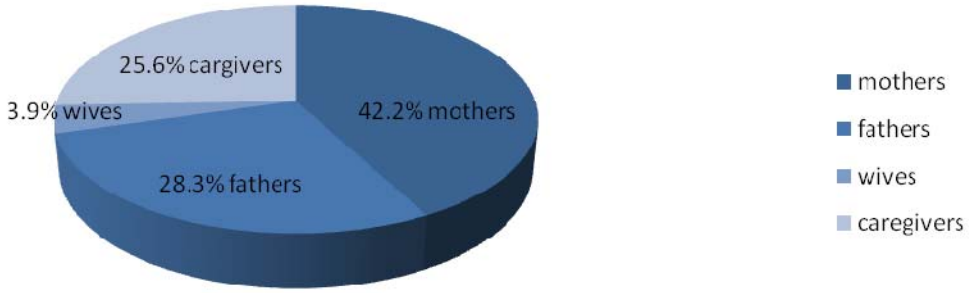

Figure (5.3) Distribution of participants by martyrs' relations

For the martyrs age, out of the 121 martyrs, 50.6 %(n=91) were less than 20 years in age, and 49.4% (n=89) were equal or more than 21 years old (see figure 5.4).

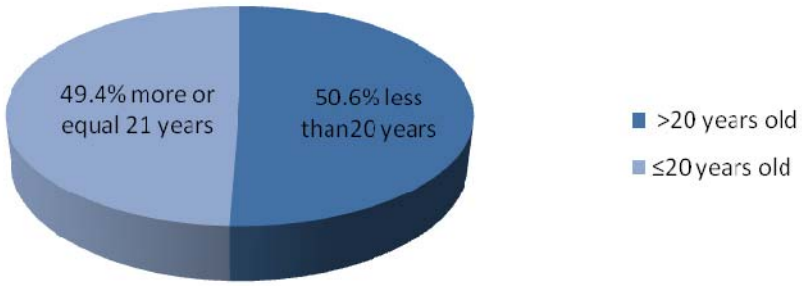

Figure (5.4) Distribution of martyr's age

For the duration of loss, 27.77% (n=50) of the participants lost their family members between the years 1987 -1999 and the majority (72.23% (n=130)) lost their family members between the years 2000 - 2010 (see figure 5.5).

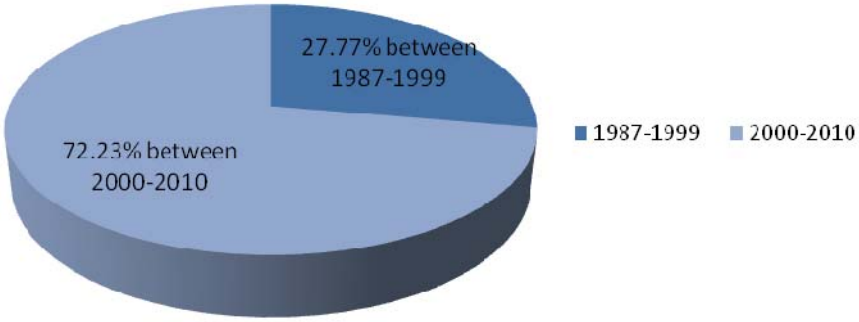

Figure (5.5) Distribution of participants by years of loss

Furthermore, 47.2 %(n=85) of the participants came from the city, 27.2 % (n=49) from the villages, and 25.6 % (n=46) from the refugee camps (see figure 5.6).

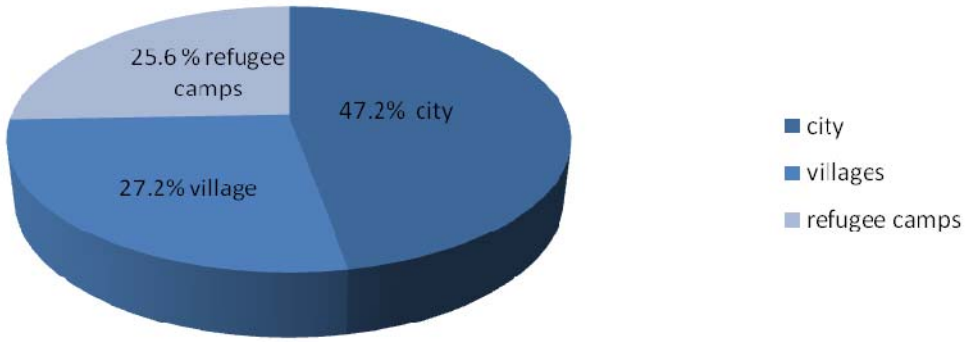

Figure (5.6) Distribution of participants by place of residency

The educational level of the participants ranged from illiteracy to university level as shown in figure (5.7). For example, 16.6% (n=30) of the participants were illiterate, 20.0% (n=36) had primary education, 20.0% (n=36) had elementary education, 12.3% (n=22) had secondary education, 16.1% (n=29) had a diploma, and 15.0% (n=27) had a bachelorette degree (BA) (see figure 5.7).

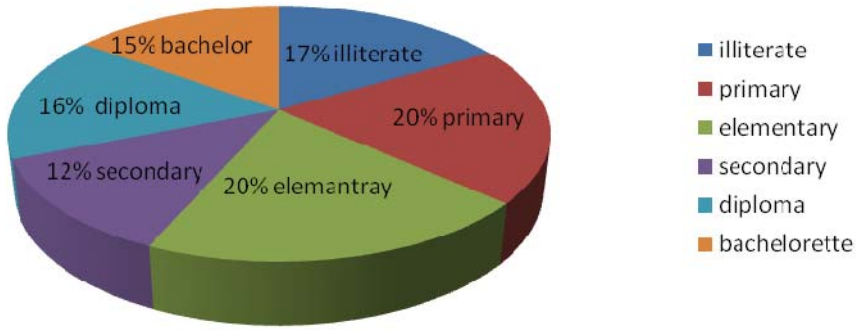

Figure (5.7) Distribution of participants by educational level

For the marital status, 6.7% (n=12) of the participants were single, 76.7% (n=138) were married, 1.7% (n=3) were divorced, and 15.0 %(n=27) were widowed (see figure 5.8).

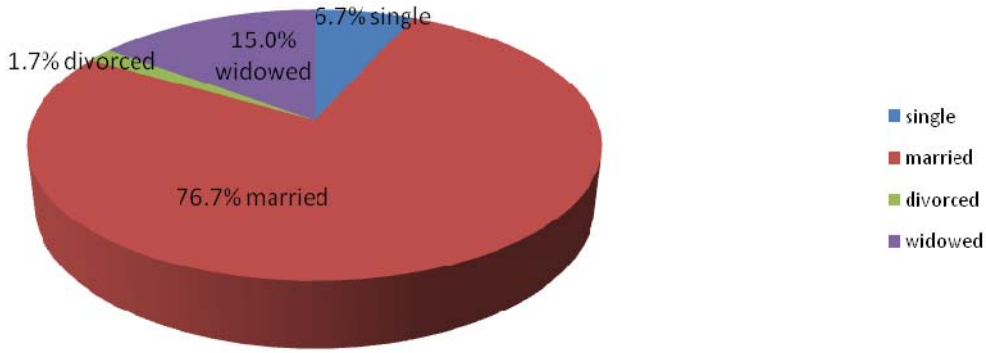

Figure (5.8) Distribution of respondents by marital status

The majority of the responders were unemployed (74.4% (n=134)), 10.0% (n=18) were farmers, 13.9 %(n=25) were workers, and only 1.1% (n=2) were employed. (See figure 5.9)

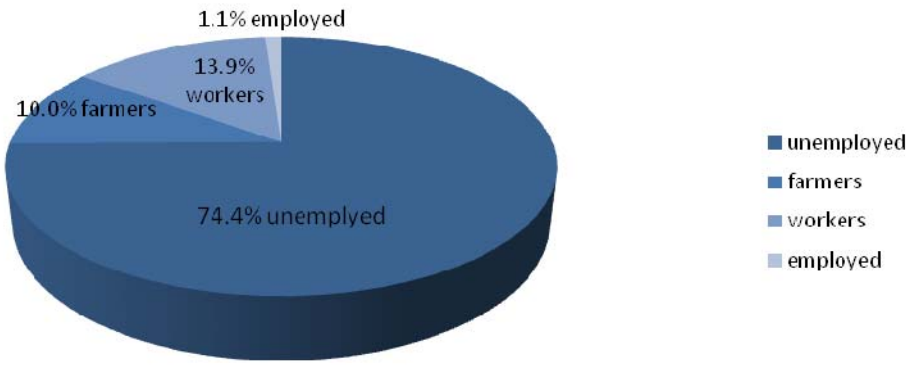

Figure (5.9) Distribution of participants by profession

Also the medical condition of the respondents ranged from good to bad as rated by them. For example, 48.9% (n=88) of the participants reported that they had a good medical condition, 20.0% (n=36) rated their medical condition as acceptable, and 31.1 %(n=56) stated that they had bad medical condition (see figure 5.10).

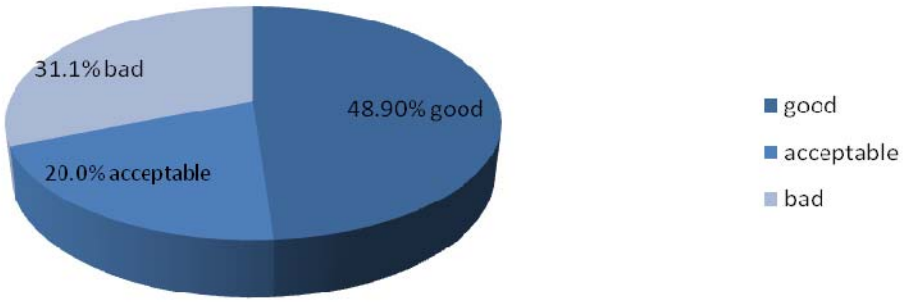

Figure (5.10) Distribution of participants rating of their medical condition

Less than half of the participants suffered from physical illnesses such as Hypertension or Arthritis (49.4% (n=89)), and 50.6% (n=91) did not have physical illness as seen in figure (5.11)

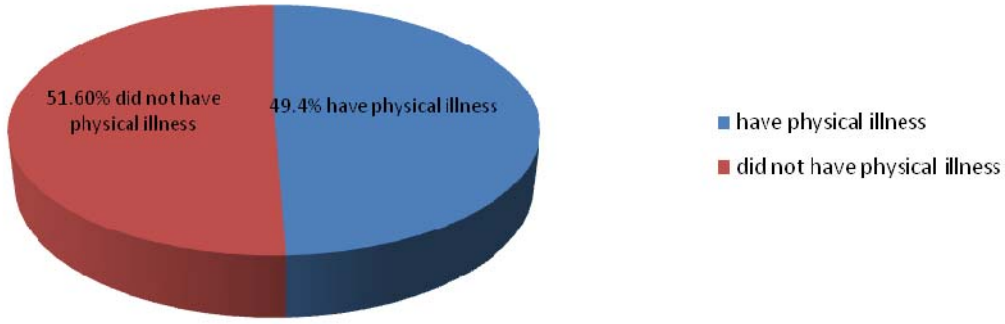

Figure (5.11) Distribution of participant's physical illness

23.3% (n=42) of the participants received medical help for their physical problems, and the majority (76.7% (n=138)) did not receive any medical services (see figure 5.12)

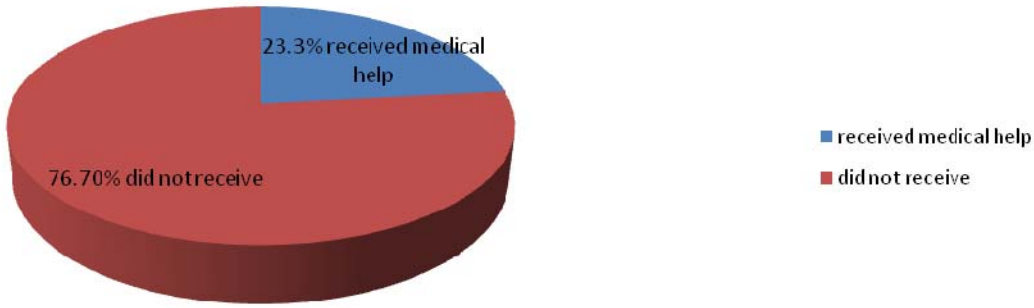

Figure (5.12) Distribution of participants who receive medical help

Furthermore, 47.2% (n=85) of the participants reported that they received medications for their physical illness, and 51.1% (n=92) of them indicated that they did not have such medications (see figure 5.13)

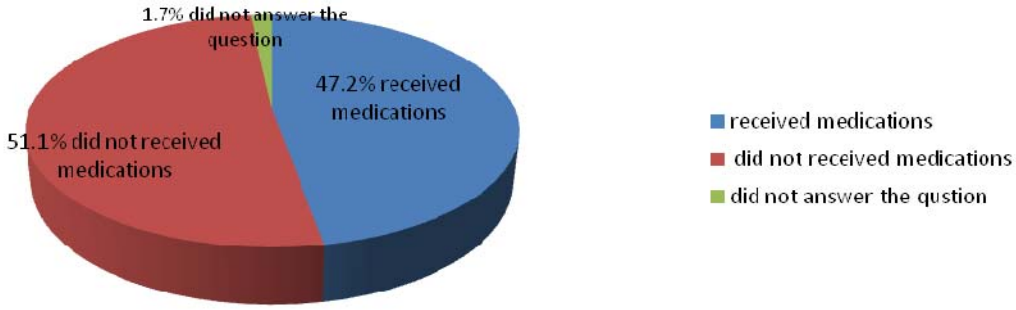

Figure (5.13) Distribution of participants who receive medications

The PTSD severity was assessed by using the PCL-S scale which includes 17 items that correspond to the DSM-IV-TR symptoms of PTSD. It was used to ensure that the traumatic event meets Criterion A of post traumatic stress disorder (PTSD).

The diagnostic cutoff score of 50 was used for the diagnosis of PTSD. The results of the baseline data analysis showed that 48.3 %(n= 86) of the participants had PTSD as seen in table (5.1) below.

Table (5.1) Percentage of PTSD cutoff point (50)

	Frequency	**Percentage**
1-49	94	51.7%
50-85	86	48.3%
Total	180	100%

Also, PTSD was classified into 4 categories as shown in table (5.2) and it was found out that only 0.6% (n= 1) of the participants did not have PTSD (1-18), 17.8 %(n=32) had mild symptoms (19-34), 37.2 %(n=67) had moderate symptoms (35-52), and 44.4 %(n=80) had severe symptoms (53—85) as shown in table (5.2)

Table (5.2) PTSD severity score at the baseline

PTSD Severity score	**Frequency**	**Percentage**
No PTSD (1-18)	1	0.6%
Mild (19-34)	32	17.8%
Moderate (35-52)	67	37.2%
Severe (53-85)	80	44.4%
Total	180	100%

For depression it was classified into 4 categories minimal, mild, moderate and severe as shown in table (5.3) below. The depression severity data at the baseline revealed that 22.5% (n=41) of the participants had minimal depression symptoms (0-13), 20.9% (n=38) had mild depression symptoms (14-19), 29.1% (n=53) had moderate depression symptoms (20-28), and 26.9 %(n=49) had severe depression symptoms (29-63).

Table (5.3) Depression severity score of participants at baseline

Depression severity score	**Frequency**	**Percentage**
Minimal depression (0-13)	40	22.2%
Mild depression (14-19)	38	21.1%
Moderate depression (20-28)	53	29.4%
Severe depression (29-63)	49	27.2%
Total	180	

For the psychological or mental symptoms, the majority of the participants reported that they did not receive a therapy (88.3% (n= 159), and only 11.7% (n= 21) of them indicated that they received such a treatment (see figure 5.14)

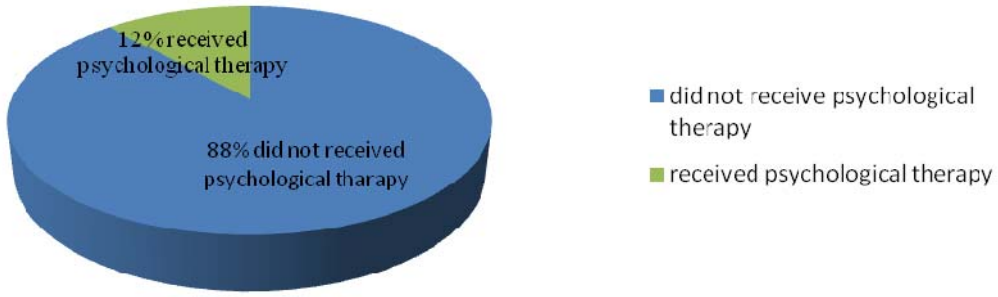

Figure (5.14) Distribution of participants who received psychological therapy

Also very few participants reported receiving medications (3.3% (n=6)) and psychotherapy (7.2% (n=13)) for their psychological problems, and the majority 89.4 %(n=161) not applicable (see figure 5.15)

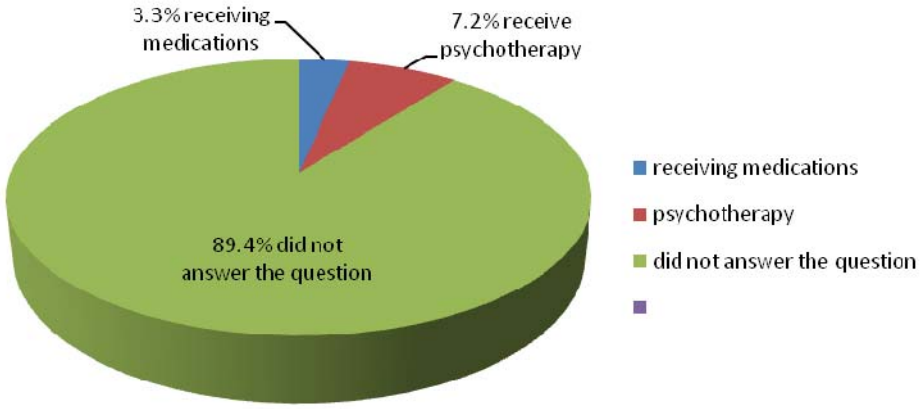

Figure (5.15) Distribution of types of treatment that participants received

In addition, only 0.6% (n= 1) of the participants reported that they received their treatment from governmental institutions, 2.2 %(n=4) received it from private clinics, 7.8% (n=14) had it from NGOs, and 89.4% (n=161) not applicable. (See figure 5.16)

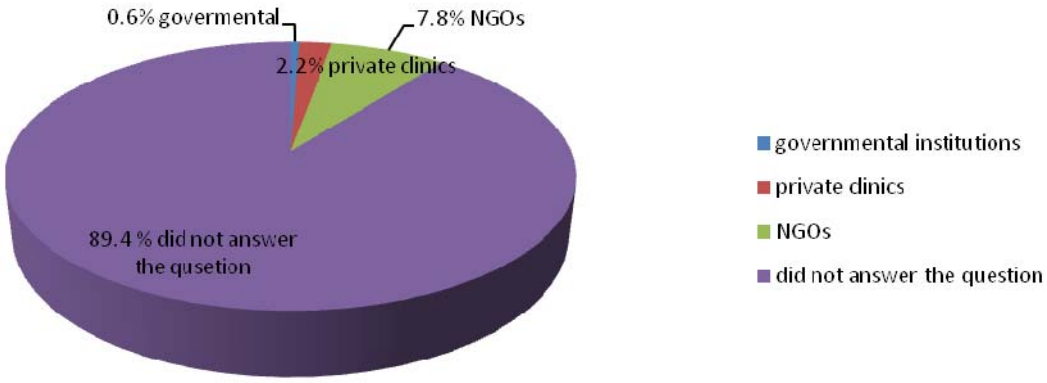

Figure (5.16) Distribution of the facility from which the participants had psychological treatment

For the duration of the treatment, 3.9% (n=7) of the participants received psychological treatment from 1 month to 3 months, 6.1% (n=11) were treated for more than 3 months, and 90.0% (n=162) of them did not answer this question (see figure 5.17).

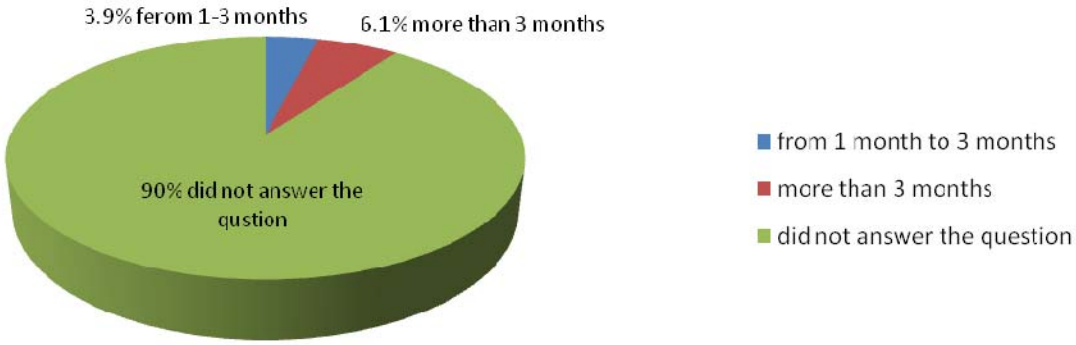

Figure (5.17) Distribution of treatment duration

Furthermore, the participants reported different barriers for not receiving treatment for their psychological problems such as being unaware of psychological services(26.1% (n=47)), lack of money (2.2% (n=4)), bad physical conditions (5.0 %(n=9)), religion such as belief or faith (13.9% (n=25)), and had good support system(1.0% (n= 18)).However 34.4% (n=62) of the participants did not answer the question (see figure 5.18)

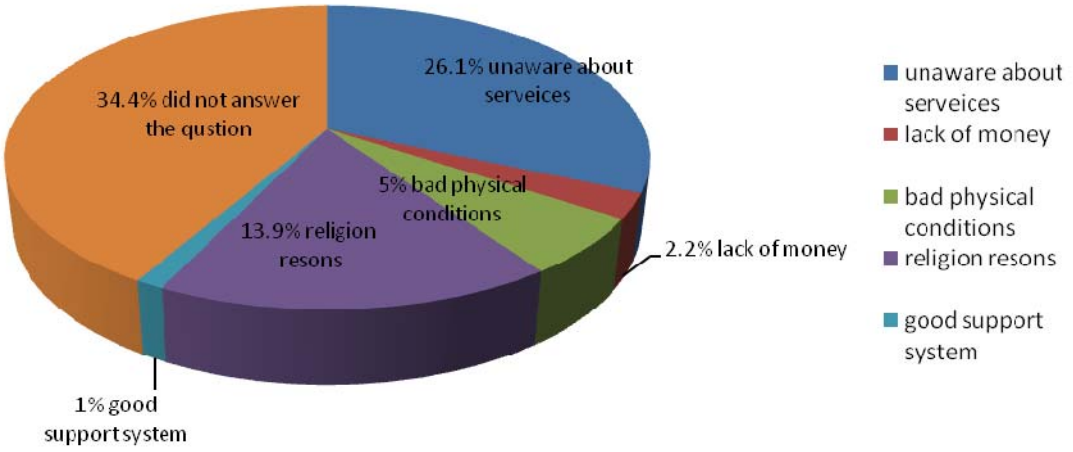

Figure (5.18) Barriers to receiving treatment

Furthermore, the relation between the dependant variable (PTSD) and the independent variables such as age, gender and family relation with the martyrs was examined by using cross tabulation. Cross tabulation is a process includes taking two variables and tabulating the results of one variable against the other variable in order to find how two variables inter-relate. (Polit et al, 2004) as seen in table (5.4)

Most of the results of the below table (5.4) showed no statistically significant relation between different variables and PTSD such as age, gender, family relations with the martyrs, profession, educational level, and martyrs age. For example, the relation between age and PTSD showed that the participants who were less than 50 years 0.0% (n=0) had no PTSD, 8.3% (n=15) had mild PTSD, 17.2% (n=31) had moderate PTSD, and 15.6 %(n=28) had severe PTSD. Also 0.6% (n=1) had no PTSD, 9.4% (n= 17) had mild PTSD, 20.0% (n=36) had moderate PTSD, and 28.9 %(n=52) of the participants who were equal or more than 50 years old had severe PTSD. (p=0.375)

On the contrary, the results showed statistically significant relationship between the place of residency and PTSD. For example, 0.6% (n=1) of the participants who live in the city had no PTSD, 12.2% (n=22) had mild PTSD, 20.0% (n=36) had moderate PTSD, 14.4% (n=26) had sever PTSD, 0.0% (n=0) of the participant who live in the village had no PTSD, 3.3% (n=6) had mild PTSD, 8.3% (n=15) had moderate PTSD, 15.6% (n=28) had severe PTSD. The results showed that 2.2% (n =4) of the participants who live in the refugee camps had mild PTSD, 8.9% (n=16) had moderate PTSD, and 14.4% (n=26) had severe PTSD. (p= 0.017)

Finally, the results showed statistically significant relationship between the physical illness and PTSD. For example, 0.6% (n=1) of the participants who had physical illness had no PTSD, 5.6% (n=10) had mild PTSD, 14.4% (n=26) had moderate PTSD, 28.9% (n=52) had severe PTSD. In addition, the results revealed that the participants who reported having physical illness, they had PTSD symptoms. For example, 0.0% (n=0) had no PTSD, 12.2% (n=22) had mild PTSD, 22.8% (n=41) had moderate PTSD, and 15.6% (n= 28) had severe PTSD. (P= 0.001) (see table 5.4)

Table (5.4) Cross tabulation of the dependant variable(PTSD) and independent variables

Variables	No PTSD		Mild PTSD		Moderate PTSD		Severe PTSD		P value	Chi-Square
Age	F	%	F	%	F	%	**F**	**%**		
Less than 50y	0	0.0%	15	8.3%	31	17.2%	**28**	**15.6%**	**0.375**	3.107
Equal or more than 50y	1	0.6%	17	9.4%	36	20.0%	**52**	**28.9%**		
Gender male	0	0.0%	21	11.7%	31	17.2%	32	17.8%	0.074	6.929
female	1	0.6%	11	6.1%	36	20.0%	48	26.7%		
Family relation										
Father	0	0.0%	14	7.8%	17	9.4%	20	11.1%	0.087	15.144
Mother	1	0.6%	7	3.9%	27	15.0%	41	22.8%		
Wives	0	0.0%	3	1.7%	1	0.6%	3	1.7%		
Caregivers	0	0.0%	8	4.4%	22	12.2%	16	8.9%		
Marital status										
Married	1	0.6%	25	13.9%	52	28.9%	60	33.3%	0.768	5.712
Divorce	0	0.0%	1	0.6%	1	0.6%	1	0.6%		
Widow	0	0.0%	4	2.2%	7	3.9%	16	8.9%		
Single	0	0.0%	2	1.1%	7	3.9%	3	1.7%		
Place of residency										
City	1	0.6%	22	12.2%	36	20.0%	26	14.4%	0.017	15.445
Village	0	0.0%	6	3.3%	15	8.3%	28	15.6%		
Refugee camps	0	0.0%	4	2.2%	16	8.9%	26	14.4%		
Educational level										
Illiterate	0	0.0%	6	3.3%	11	6.1%	15	8.3%	0.224	18.785
Primary	0	0.0%	5	2.8%	18	10.0%	19	10.6%		
Elementary	0	0.0%	5	2.8%	13	7.2%	22	12.2%		
Secondary	0	0.0%	7	3.9%	12	6.7%	16	8.91.1%		
Diploma	0	0.0%	5	2.8%	5	2.8%	2	3.3%		
BA	1	0.6%	4	2.2%	8	4.4%	6			
Profession										
Unemployed	1	0.6%	26	14.5%	42	23.5%	65	36.3%	0.440	8.973
Worker	0	0.0%	2	1.1%	14	7.8%	9	5.0%		
Farmer	0	0.0%	4	2.2%	9	5.0%	5	2.8%		
Employed	0	0.0%	0	0.0%	1	0.6%	1	0.6%		
Martyrs age										
Less than 20 y	0	0.0%	18	10.0%	32	17.8%	40	22.2%	0.652	1.634
Equal or more than 20y	1	0.6%	14	7.8%	35	19.4%	40	22.2%		
Have physical illness										
Yes	1	0.6%	10	5.6%	26	14.4%	52	28.9%	0.001	16.038
No	0	0.0%	22	12.2%	41	22.8%	28	15.6%		
Medical condition										
good	0	0.0%	20	11.1%	37	20.6%	31	17.2%	0.165	9.157
Acceptable	0	0.0%	4	2.2%	12	6.7%	20	11.1%		
Bad	1	0.6%	8	4.4%	18	10.0%	29	16.1%		
Receive help for physical illness										
Yes	0	0.0%	7	3.9%	13	7.2%	22	12.2%	0.080	1.697
No	1	0.6%	25	13.9%	54	30.0%	58	32.2		
Receive psychological help										
Yes	0	0.0%	3	1.7%	4	2.2%	14	7.8%	0.168	5.046
No	1	0.6	29	16.1%	63	35.0%	66	36.7%		

Type of psychological help										
Medications	-	-	0	0.0%	1	5.3%	5	26.5%	0.525	1.288
Psychotherapy	-	-	2	10.5%	3	15.8%	8	42.1%		
Duration of treatment										
1 month to 3 months	-	-	1	5.6%	1	5.6%	5	27.8%	0.792	0.468
More than 3 months	-	-	1	5.6%	3	16.7%	7	38.9%		

Also the Life Event Checklist (LEC) which is a measurement of the exposure to traumatic events was used to assess the respondent's exposure to different traumatic experiences. (Elhai et al, 2005) The scale includes 17 items and the respondents rate their experience of that event on a 5-point nominal scale (1 = directly confronted, 2 = witnessed it, 3 = learned about it, 4 = not sure, and 5 = does not apply as seen in table (5.5)

Table (5.5) Most common traumatic events according to percentage

	Directly confronted		Witness		Learned about		Not sure		Not applicable	
Event	**N**	**%**	**N**	**%**	**N**	**%**	**N**	**%**	**N**	**%**
Natural disaster	**66**	**36.7**	**29**	**16.1**	**30**	**16.7**	**4**	**2.2**	**51**	**28.3**
Exposed to fire or explosion	**43**	**23.9**	**54**	**30.0**	**51**	**28.3**	**6**	**3.3**	**26**	**14.5**
Exposed to transportation accident	**35**	**19.4**	**59**	**32.8**	**48**	**26.7**	**4**	**2.2**	**34**	**18.9**
Serious accident at work, home, or during recreational activity	**41**	**22.8**	**38**	**21.1**	**32**	**17.8**	**9**	**5.0**	**60**	**33.3**
Exposed to toxic substance	**27**	**15.0**	**12**	**6.6**	**32**	**17.8**	**9**	**5.0**	**100**	**55.6**
Physical assault (being attacked ,hit)	**61**	**33.9**	**26**	**14.5**	**22**	**12.2**	**2**	**1.1**	**69**	**38.3**
Assault with a weapon	**45**	**25.0**	**26**	**14.4**	**33**	**18.4**	**7**	**3.9**	**69**	**38.3**
Sexual assault (rape attempted)	**9**	**5.0**	**7**	**3.9**	**24**	**13.3**	**9**	**5.0**	**131**	**72.8**
Other unwanted sexual experience	**6**	**3.3**	**3**	**1.7**	**15**	**8.3**	**11**	**6.1**	**145**	**80.6**
Combat or exposure to a war-zone.	**87**	**48.3**	**36**	**20.0**	**16**	**8.9**	**4**	**2.2**	**37**	**20.6**
Captivity (for example, being kidnapped)	**58**	**32.2**	**58**	**32.2**	**19**	**10.6**	**3**	**1.7**	**42**	**23.3**
Life-threatening illness or injury	**55**	**30.6**	**18**	**10.0**	**18**	**10.0**	**9**	**5.0**	**80**	**44.4**
Severe human suffering	**65**	**36.1**	**28**	**15.6**	**27**	**15.0**	**4**	**2.2**	**56**	**31.1**
Sudden, violence death	**124**	**68.9**	**55**	**30.5**	**1**	**0.6**	**---**	**---**	**---**	**---**
Sudden, unexpected death of someone close	**155**	**86.1**	**12**	**6.7**	**13**	**7.2**	**-----**	**---**	**----**	**----**
Serious injury or death	**24**	**13.3**	**16**	**8.9**	**24**	**13.3**	**16**	**8.9**	**100**	**55.6**

The results in the above table showed that the participants were exposed to different types of life events. For example, the sudden, unexpected death of someone close was the most traumatic event that the participants confronted (86.1 %(n= 155)), in addition to sudden or violent death (68.9 %(n= 124)), and combat or exposure to a war –zone (48.3% (n= 87)).

Also 36.7% (n=66) the participants reported that they were confronted with natural disaster, 36.1% (n= 65) were confronted with severe human suffering, 33.9% (n=61) were confronted with physical assault such as being attacked, hit, and 30.6% (n=55) were confronted with life – threatening illness or injury. Finally, 5.0 % (n= 9) had sexual assault such as rape, and it was the lowest traumatic event that the participants were confronted with.

4.3. Characteristics of participants at the intervention stage

As mentioned earlier, only 40 participants agreed to participate in the trial (20 participants in the intervention and 20 participants in the control group), and 36 participants completed the study (17 in the intervention group and 19 in the control group). Analysis of socio demographic data of the participants who agreed to participate in the intervention stage did not differ from the characteristics of the participants in assessment stage. For example, the majority of the participants were females, (70.0 %(n=28), and 30.0% (n=12) were males (see figure 5.19).

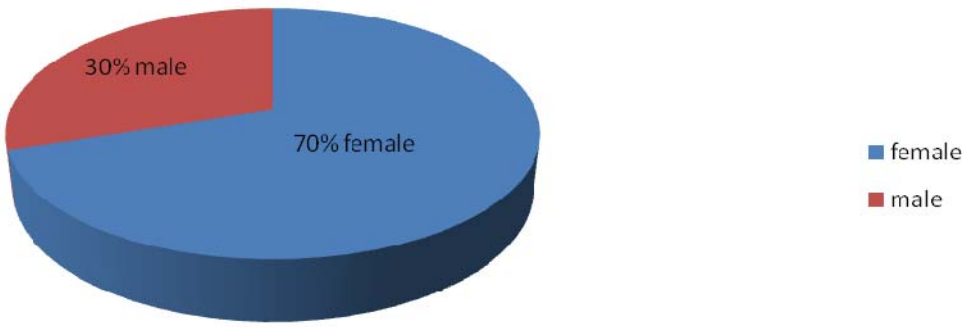

Figure (5.19) Distribution of participants by gender

Regarding age, 25.0% (n=10) of the participants were less than 50 years old, and 75.0% (n=30) were equal to or more than 50 years old (see figure 5.20).

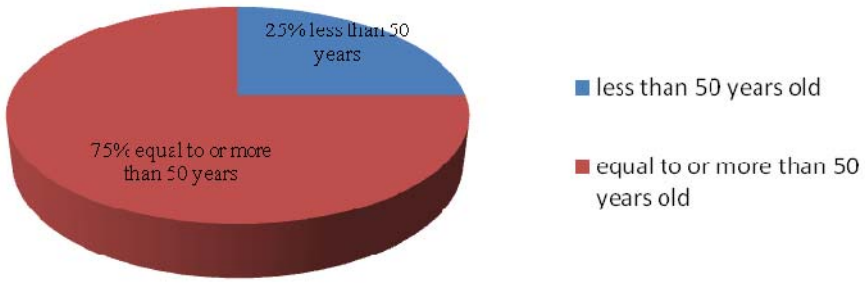

Figure (5.20) Distribution of participants by age

The majority of participants were martyr's mothers (62.5% (n=25)), 22.5% (n=9) were their fathers, 2.5% (n=1) were their wives, and 12.5 %(n=5) were their caregivers (see figure 5.21).

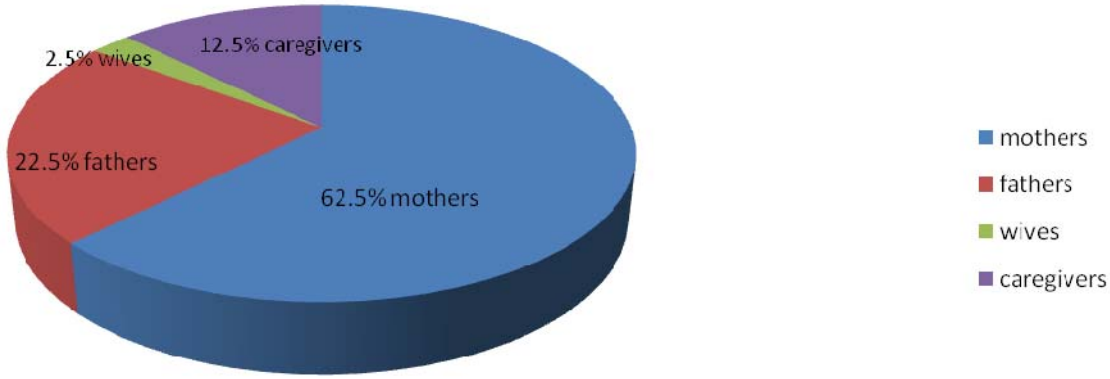

Figure (5.21) Distribution of participants by martyrs' relations

For the duration of loss, 22.2% (n=8) between the years 1987 and 1999, and 77.8% (n=28) were between the 2000 and 2010 (see figure 5.22)

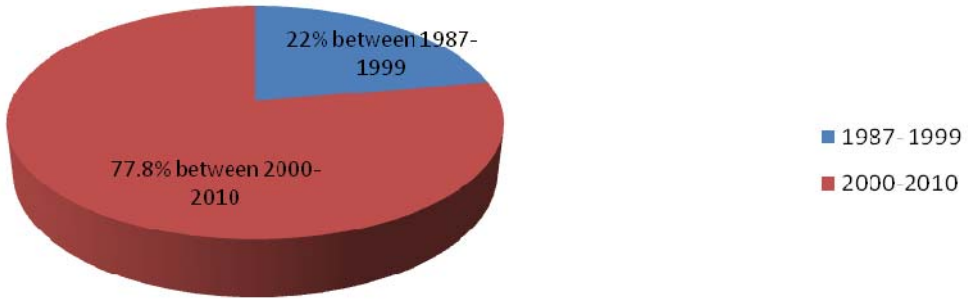

Figure (5.22) Distribution of participants by duration of loss

Also 22.5 %(n=9) of them were from the city, 27.5 %(n= 11) were from the villages and 50.0 % (n= 20) from the refugee camps (see figure 5.23).

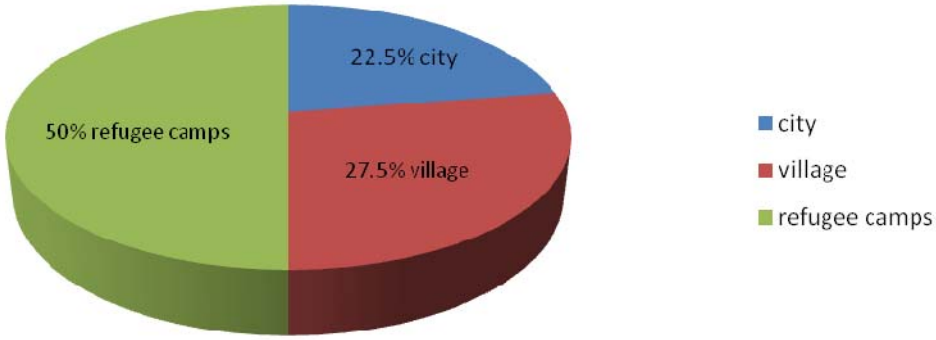

Figure (5.23) Distribution of participants by place of residency

For the educational level, figure (5.24) showed that 22.5%(n=9) of the participants were illiterate, 27.5%(n=11) had the primary level of education, 25.0 %(n=10) received elementary education,15.0%(n=6) had the secondary education, and 2.5%(n= 1) had a diploma, and 7.5% (n= 3) had a bachelor degree (BA) (see figure 5.24).

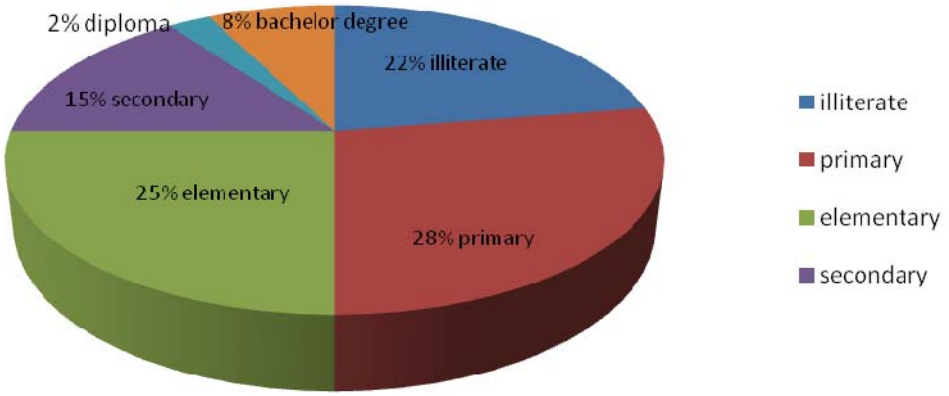

Figure (5.24) Percentage of participants by level of education

Furthermore, the majority of participants, (72.5% (n=29)) were married, 17.5 %(n=7) were widows, 10.0% (n=4) were single (see figure 5.25).

Figure (5.25) Distribution of participants by marital status

Most of the participants, 80.0 %(n=32) were unemployed, 17.5 %(n=7) were workers, and 2.5% (n=1) were farmers (see figure 5.26)

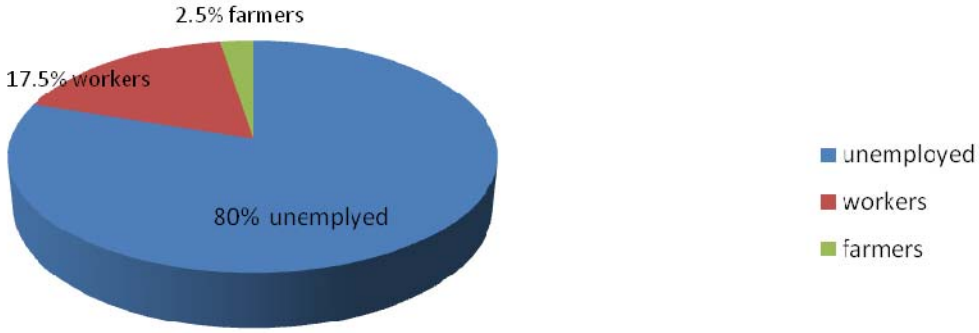

Figure (5.26) Distribution of participants by profession

The medical condition of respondents ranged from good to bad as they indicated. Figure (5.27) showed that 35.0 %(n=14) of the participants reported that they had bad medical conditions, 25.0 %(n=10) stated that they had acceptable medical conditions, and 40.0% (n=16) indicated that they had good medical conditions (see figure 5.27)

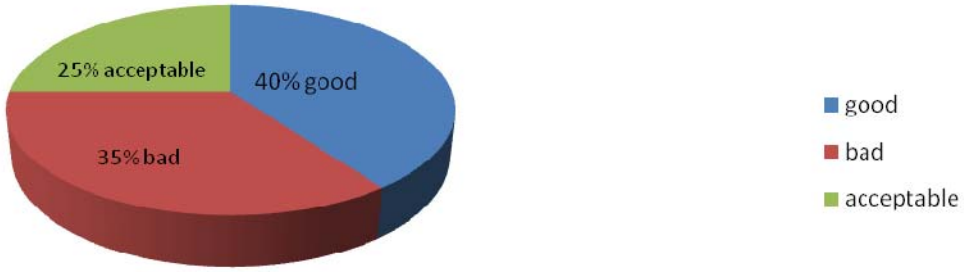

Figure (5.27) Distribution of participants by medical conditions

The majority of participants suffered from physical illness such as hypertension, arthritis (67.5% (n=27)), and 32.5% (n=13) of them did not suffer of any as shown in table (5.28)

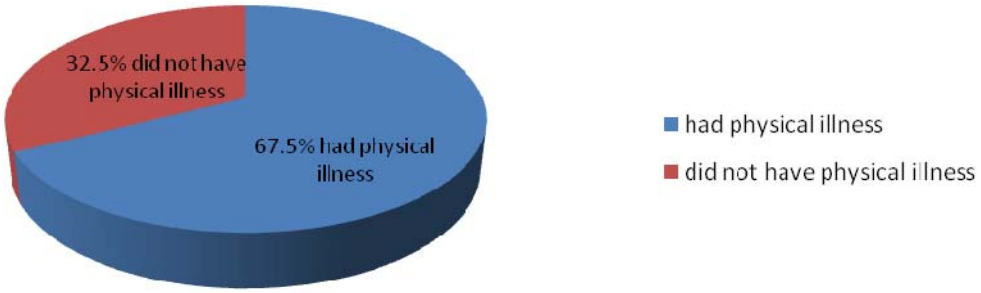

Figure (5.28) Distribution of participants who suffered from physical illness

Furthermore, 72.5% (n=29) of the participants reported that they did not receive medical services for their medical conditions, and 27.5% (n= 11) of them indicated that they received such treatment (see figure 5.29).

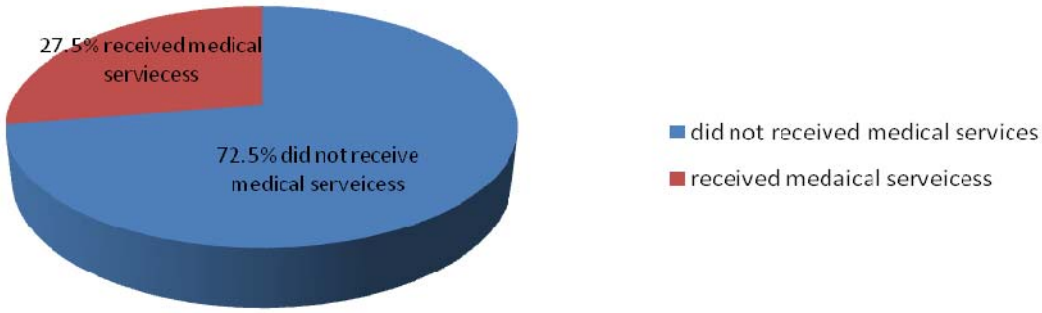

Figure (5.29) Distribution of participants by use of medical services

For the participants who reported that they received medical help, 60.0% (n=24) of them indicated that they received medications, and 40.0% (n=16) did not (see figure 5.30).

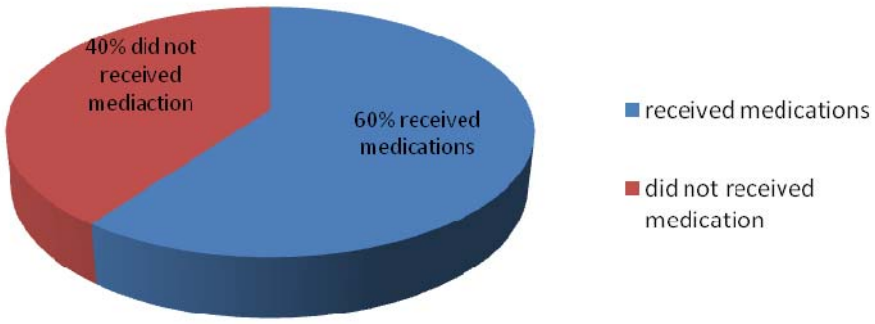

Figure (5.30) Distribution of participants who received medications

For depression severity, data revealed that 37.5% (n=15) of the participants had minimal depression (0-13), 12.5%(n=5) had mild depression symptoms(14-19), 35%(n=14) had moderate depression symptoms (20-28), and 15%(n=6) had severe depression symptoms(29-63) as shown in table(5.6)

Table (5.6) Depression severity score of participants at intervention stage

Depression severity score	**Frequency**	**Percentage**
Minimal depression (0-13)	15	37.5%
Mild depression (14-19)	5	12.5%
Moderate depression (20-28)	14	35%
Severe depression (29-63)	6	15%

In addition, the majority of participants (75.0% (n=30)) stated that they did not receive psychological treatment for their psychological problems, and only 25.0% (n=10) of them received such treatment (see figure 5.31).

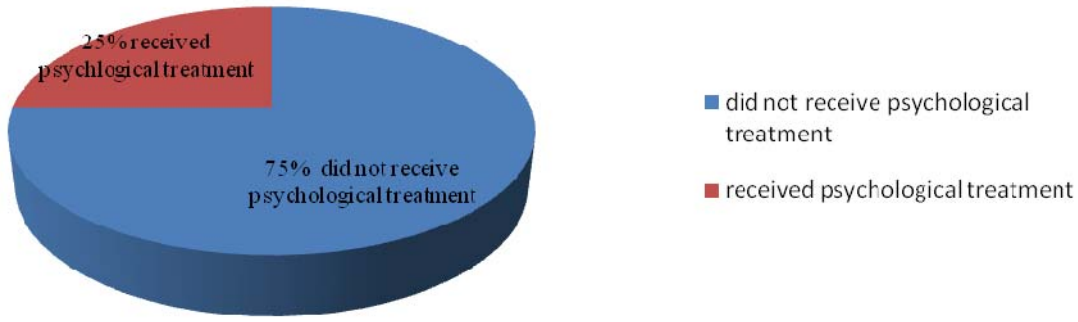

Figure (5.31) Distribution of participants by psychological treatment

(7.5% (n= 3)) of the participants reported that they received their treatment from private clinics, 20.0% (n=8) received it from NGOs, and 2.5% (n=1) had it from governmental institutions, and 70.0 %(n=28) did not answer this question (see figure 5.32).

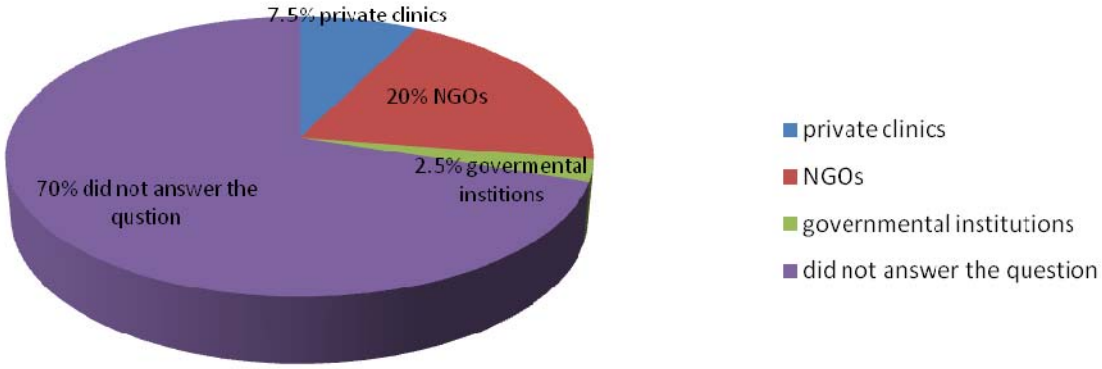

Figure (5.32) Distribution of the setting from which the participants had treatment

20.0 %(n=8) of the participants reported that they received psychological treatment from 1 month to 3 months, 7.5 %(n=3) stated that they had psychological treatment for more than three months, and 72.5% (n=29) of them did not answer this question (see figure 5.33).

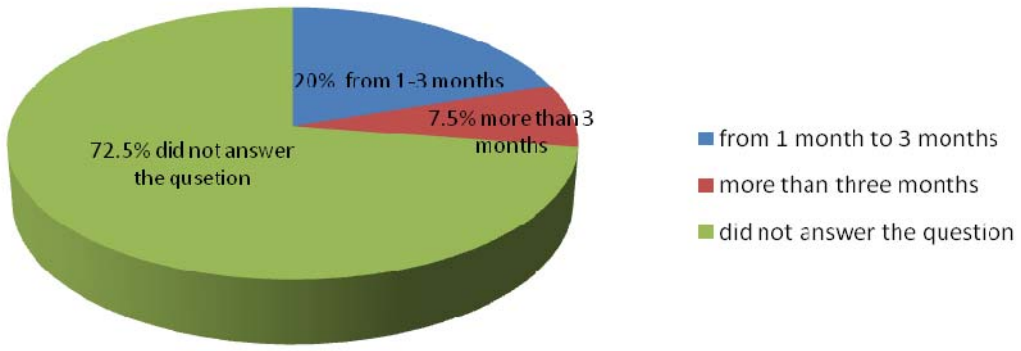

Figure (5.33) Duration of psychological treatment

The barriers that prevented the participants from seeking help for their psychological problems were, being unaware of psychological services (20.0%(n=8)), lack of money (10.0% (n=4)), religion such as belief or faith (25.0% (n=10)), had good support system (12.5%(n= 5)), had bad physical condition(22.5%(n=9)), and 10.0%(n=4) of them did not mention the reasons (see figure 5.34).

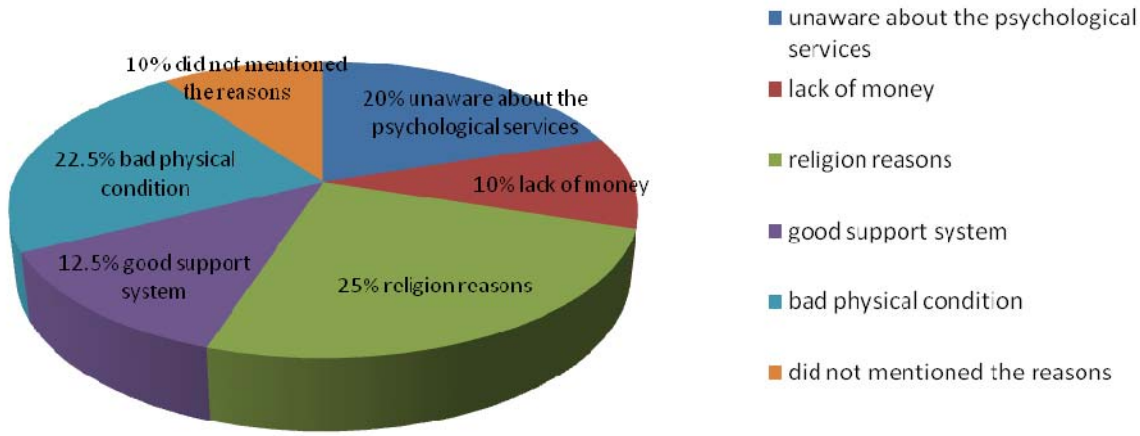

Figure (5.34) Barriers of receiving treatment

Furthermore, 4 participants withdraw from the trial, (1 from the control group and 3 from the intervention group). Analysis of their characteristics showed that 25% (n=1) of them were less than or equal to 50 years old, and 75% (n=3) were more than 50 years old. Also 50% (n= 2) were

females, and 50% (n= 2) were males. All of them were married (100% (n=4)), 50% (n= 2) were fathers and 50% (n=2) were mothers. For the educational level, 25% (n=1) were illiterate, 25% (n= 1) had primary education, 25%% (n=1) had elementary education, and a diploma 25% (n=1). Also 75% (n= 3) of them were unemployed, and 25% (n=1) were workers (see table (5.6))

Table (5.7) Demographic data for participants who withdraw from the study

		Frequency	Percentage
Age	Less than 50years	1	25%
	More than 50 years	3	75%
Gender	Male	2	50%
	Female	2	50%
Marital status	Married	4	100%
Family relation	Father	2	50%
	Mother	2	50%
Educational level	Illiterate	1	25%
	Primary	1	25%
	Elementary	1	25%
	Diploma	1	25%
Profession	Unemployed	3	75%
	Worker	1	25%
Martyr's age	Less than 20years	2	50%
	More than or equal 20yeras	2	50%

For the medical condition, 50% (n=2) reported having bad medical condition, and 50% (n= 2) had good condition. Also 100 % (n=4) of them suffered from physical illness such as Hypertension and Arthritis. 75% (n=3) of them received medical help, and 25% (n= 1) did not receive such help. Moreover, 75% (n=3) of the participants received psychological treatment in the past for their mental health conditions, 25% (n=1) did not receive and the majority 75% (n= 3) reported that they received medications. Furthermore, 25% (n=1) of the participants reported that the duration of the treatment was from 1 to 3 months, 50 %(n=2) reported more than 3 months, and 25 %(n=1) did not answer the question. Also 25 %(n=1) of the participants

reported that they received help from governmental clinics, and 50 %(n=2) had it from the private clinics and 25% (n=1) did not answer the question. The barriers that prevented them from receiving medical help were, lack of awareness (25% (n=1)), social support (25 %(n=1)), religious reasons (25 %(n=1)), and (25% (n=1)) reported that the bad physical condition were the reasons (see table (5.8)).

Table (5.8) Medical conditions and treatment for the participants who withdraw from the study.

		Frequency	Percentage
Medical condition	Good	2	50%
	Bad	2	50%
Physical illness	Yes	4	100%
	No	0	0%
Received Medical help	Yes	3	75%
	No	1	25%
Received psychological help	Yes	3	75%
	No	1	25%
Type of treatment (physical or mental)	Medication	3	75%
Duration of treatment	from 1 to 3 months	1	25%
	More than 3 months	2	50%
	No answer	1	25%
Facility from which they get psychotherapy	Private clinics	2	50%
	Governmental	1	25%
	No answer	1	25%
Barriers of receiving treatment	Lack of awareness	1	25%
	Social support	1	25%
	Bad physical condition	1	25%
	Religion	1	25%

Finally, 100 %(n=4) of the participants who withdraw from the trial had severe PTSD symptoms (53-85); 75% (n= 3) had moderate depression (20-28), and 25.0% (n=1) had severe depression (29-63 see table (5.9)

Table (5.9) PTSD and depression score for participants who withdraw from the trial

	Severity score	Frequency	Percentage
PTSD	Severe PTSD (53-85)	4	100%
Depression	Moderate depression (20-28)	3	75.0%
	Severe depression (29-63)	1	25%

5.4. Findings of the post intervention

After the completion of the intervention stage and follow up stage, a nonparametric test such as WilcoxonW, 2- tailed sig, the mean rank, and the sum of ranks were used to assess the significance of the PTSD and depression scores for the participants in the control group (19) and the intervention group (17). In general the findings showed a decrease in the PTSD and the depression scores for the participants in the intervention group. As shown in table (5.10) below

Table (5.10) PTSD and depression mean rank in the three stages of the study

	Group type	N	Mean Rank	Sum of Ranks	Wilcoxon W	Sig 2 tailed
PTSD pre	Control	19	19.95	379.00	287.000	0.381
	Intervention	17	16.88	287.00		
PTSD post	Control	19	27.00	513.00	153.00	0.000
	Intervention	17	9.00	153.00		
	Follow up	14	7.50	105.00		
Depression pre	Control	19	19.05	362.00	304.000	0.739
	Intervention	17	17.88	304.00		
Depression post	Control	19	26.37	501.00	165.000	0.000
	Intervention	17	9.71	165.00		
	Follow up	14	7.50	105.00		

For example the PTSD mean rank for the intervention group decreased from 16.88% to 9.0%, and in the control group increased from 19.95% to 27.0% (p= (0.00) for the follow up the mean rank decreased from 9.00 % to 7.50 %.

For the depression, the mean rank decreased from 17.88% to 9.71% in the intervention group and increased from 19.05% to 26.37% for the control group p= (0.00). After 4 months of follow up stage the mean rank decreased from 9.71% to 7.50% in the intervention group

Table (5.11) Results of PTSD and depression severity in relation to the age

	Age	Number	Mean Rank	Sum of Ranks	Wilcoxon W	2-tailed sig
Difference PTSD	< 50years	10	16.55	165.00	165.500	0.491
	Equal or more than 50years	26	19.25	500.50		
	Total	36				
Difference depression	< 50years	10	17.05	170.50	170.500	0.608
	Equal or more than 50 years	26	19.06	495.50		
	Total	36				

5.5. Hypothesis testing

Nine hypotheses were examined in the current study as the following:

Table (5.11) Results of PTSD and depression severity in relation to the age.

hypotheses were examined in the current study as the following:

Hypothesis one:

There is no statistically significant difference in PTSD and depression between the intervention group and the control group in relation to age at α level 0.05

In order to test this hypothesis, Wilcoxon W, 2-taild sig, the Mean Rank, and the Sum of Ranks for PTSD and depression were calculated to assess the differences between the intervention group and the control group in relation to age as shown in table (5.11)

The findings showed that the change in the PTSD severity in relation to age groups was not statistically significant (p = 0.491). For example, the mean rank for the age group less than 50 years old was 16.55 (n=10) and 19.25 (n=26) for the age group equal or more than 51 years old (p= 0.49).

Also the findings revealed that the changes in the depression severity in relation to the age groups did not show statistically significant differences (p=0.60). For example, the mean rank of depression for the age group less than 50 years old was 17.05 (n= 10) and 19.06% for age group more than or equal to 51 years old (p=0.608)

Hypothesis two

There is no statistically significant difference in PTSD and depression between the intervention group and the control group in relation to martyrs family relation at α level 0 .05

In order to test this hypothesis, Krystal Wallis Test, the Chi-square, the Mean Rank of PTSD and depression the Degree of Freedom, and the P value were calculated to assess the differences between the intervention group and the control group in relation to the family relation as shown in table (5.12)

Table (5.12) PTSD and Depression differences in relation to family relation

	Family relation with the martyrs	Number	Mean Rank	D.F	Chi-square	Sig
Difference PTSD	Father	7	21.93	3	0 .970	0.809
	Mother	23	17.87			
	Wife	1	16.00			
	Caregivers	5	17.10			
	Total	36				
Difference depression	Father	7	18.71	3	0.176	0. 981
	Mother	23	18.74			
	Wife	1	14.50			
	Caregivers	5	17.90			
	Total	36				

The findings indicated that the change of the PTSD severity mean was not statistically significant in relationship with the family relations (p=0.809). For example, the PTSD mean rank of the fathers was 21.93 (n=7), for mothers it was 17.87 (n=23), for the wives it was 16.00 (n=1) and for the caregivers it was 17.10 (n=5), (p=0.80).

Also the findings revealed that the change in the depression severity mean was not statistically significant in relationship with the family relations (p=0.981). For example, the mean rank of the fathers was 18.71 (n=7), for mothers was 18.74 (n=23), for the wives was 16.00 (n=1) and for the caregivers was 17.10 (n=5), (p=0.981)

Hypothesis three:

There is no statistically significant difference in PTSD and depression between the intervention group and the control group in relation to place of residency at α level 0 .05

In order to test this hypothesis, the Chi-square, the Mean Rank for the PTSD and depression the Degree of Freedom, and the P value were calculated to assess the differences between the intervention group and the control group in relation to the place of residency as shown in table (5.13)

Table (5.13) the PTSD and depression differences in relation to place of residency

Place of residency		Number	Mean Rank	D.F	Chi-square	Sig
Difference PTSD	City	8	21.19	2	1.308	0.520
	Village	10	15.60			
	Camp	18	18.92			
	Total	36				
Difference Depression	City	8	21.56	2	1.034	0.596
	Village	10	16.55			
	Camp	18	18.22			
	Total	36				

The findings showed that the changes of the PTSD mean severity was not statistically significant in relation to the place of residency (p=0.520). For example, the PTSD mean rank of the participants who lived in city it was 21.19 (n=8), for participants who lived in the villages it was 15.60 (n=10) and for the refugee camps it was 18.92 (n=18), (p=0.520).

Furthermore, the findings indicated that the changes in the depression level were not statistically significant in relation to place of residency (p=0.596). For example, the depression mean rank of the participants who lived in the cities was 21.56 (n=8) for the villages it was 16.55 (n=10) and for those who lived in the refugee camps, it was 18.22 (n=18), (p=0.595)

Hypothesis four:
There is no statistically significant difference in PTSD and depression between the intervention group and the control group in relation to the education level at α level 0.05

Similar to previous hypothesis, the Chi-square, the Mean Rank of PTSD and depression, the Degree of Freedom, and the P value were calculated to assess the differences between the intervention group and the control group in relation to the education level as seen in table (5.14)

Table (5.14) Differences of the PTSD and depression in relation to educational level

	Educational level	N	Mean Rank	D.F	Chi-square	Sig
Difference PTSD	literacy	8	17.19	5	4.429	0.489
	Primary	10	17.15			
	Elementary	8	16.94			
	Secondary	6	26.67			
	Diploma after Secondary/College	1	15.00			
	BA	3	15.50			
	Total	36				
Difference depression	literacy	8	19.94	5	1.101	0.954
	Primary	10	18.55			
	Elementary	8	15.69			
	Secondary	6	20.50			
	Diploma after Secondary/College	1	14.50			
	BA	3	19.33			
	Total	36				

The results indicated that the change of the PTSD level was not statistically significant in relationship with the levels of education (p=0.489). For example, the mean rank of illiteracy level was 17.19 (n=8), for the primary leve17.15 (n=10); for the elementary level it was 16.94 (n=8); for the secondary level 26.67 (n=6); for the diploma, it was 15.00 (n=1), and for the bachelor (BA) 15.50 (n=3), (p= 0.489).

Similarly, the change in depression level was not statistically significant in relationship with the levels of education (p=0.954). For example the mean rank of the literacy was 19.94 (n=8); it was for the primary level 18.55 (n=10), for the elementary, it was 15.69 (n=8), for the secondary level it was 20.50 (n=6), for the diploma it was 14.50 (n=1), and for the bachelor degree (BA) it was19.33 (n=3), (p=0.954)

Hypothesis five

There are no statistically significant differences in PTSD and depression between the intervention group and the control group in relation marital status at α level 0. 05

Also, Chi-square, Mean Rank of PTSD and depression, Degree of Freedom, and the P value were calculated to assess the differences between the intervention group and control group in relation to marital status as seen in table (5.15)

Table (5.15) PTSD and depression differences in relation to marital status

Marital status		N	Mean Rank	D.F	Chi-square	Sig
Difference PTSD	Married	25	18.92	2	1.319	.517
	Widow	7	14.93			
	Single	4	22.13			
	Total	36				
Difference depression	Married	25	19.68	2	7.357	.025
	Widow	7	9.79			
	Single	4	26.38			
	Total	36				

The findings indicated no statically significant relationships between the PTSD level and relationships to marital status (p=0.517). For example, the mean rank of the married was 18.92 (n=25), for the widows it was14.93 (n=7), and for the single it was 22.13 (n=4), (p=0.517).

Moreover, the findings showed that the change of the depression level had statistically significant relationship with marital status (p=0.025). For example, the mean rank of the married

participants was19.68 (n=25), for the widows it was 9.79 (n=7), and for the single it was 26.38 (n=4) p (0.025)

Hypothesis Six

There is no statistically significant difference in PTSD and depression between the intervention group and the control group in relation to employment at α level 0. 05

The same tests, Chi-square, Mean Rank of PTSD and depression, Degree of Freedom, and P value were calculated to assess the difference between the intervention group and the control group in relation to employment status as seen in table (5.16)

Table (5.16) PTSD and Depression differences in relation to profession

	Profession	Number	Mean Rank	D.F	Chi-square	Sig
Difference PTSD	Unemployed	29	17.50	2	1.810	0.405
	Worker	6	23.75			
	Farmer	1	16.00			
	Total	36				
Difference depression	Unemployed	29	17.69	2	1.455	0.483
	Worker	6	23.08			
	Farmer	1	14.50			
	Total	36				

The findings indicated no statistically significant relationship between the PTSD severity and profession (p=0.405). For example, the mean rank of the unemployment participants was 17.50 (n=29), the mean rank of workers was 23.75 (n=6), and for the farmers it was16.00% (n=1), (p= 0.405)

Moreover, the findings revealed that the change in depression level did not have a statistically significant relationship with the employment status (p= 0.483). For example, the mean rank of the unemployment participants was 17.69 (n=29), for the workers it was 23.08 (n=6), and for the farmers it was 14.50 % (n=1), (p=0.483)

Hypothesis seven

There is no statistically significant difference in PTSD and depression between the intervention group and the control group in relation to the martyr's age at α level 0. 05.

As seen in table (5.17) the findings showed that there was no statistically significant relationship between PTSD and martyrs age (p = 0.320). For example, the mean rank for the age group less than 20 years old was 16.43 (n=15), and for the age group equal to or more than 21 years old it was 19.98 (n= 21), (p=0.320).

Also the findings revealed no statistically significant relationship between depression and martyrs age (p= 0.574). For example, the mean rank for the age group less than 20 years old was 19.67 (n=15), and for the age group equal to or more than 21 years old it was 17.67 (n= 21), (p=0.574)(see table (5.17))

Table (5.17) PTSD and depression differences in relation to martyr's age

	Martyrs age	Number	Mean Rank	Sum of Ranks	Mann-Whitney U	Wilcoxon W	Z	2-tailed sig
Difference PTSD	< 20 years	15	16.43	246.50	126.500	246.500	-.995	.320
	More or equal 21years	21	19.98	419.50				
	Total	36						
Difference depression	< 20years	15	19.67	295.00	140.000	371.000	-.562	.574
	More or equal 21years	21	17.67	371.00				
	Total	36						

Hypothesis Eight

There is no statistically significant difference in PTSD and depression between the intervention group and the control group in relation to gender at α level 0 .05

As seen in table (5.18) the findings revealed that the change of PTSD level was not statistically significant in relationship to gender (p=0.406). For example, the mean rank of males was 20.85 (n=10), and for the females it was 17.60 (n=26), (p=0.406).
Similarly, the findings indicated no statistically significant relationship between the depression level and gender (p=0.777). For example, the mean rank of the males was 17.70 (n=10) for the females it was 18.81 (n=26), (p=0.777)

Table (5.18) PTSD and depression differences in relation to gender

	Gender	Number	Mean Rank	Sum of Ranks	Mann-Whitney U	Wilcoxon W	Sig. (2-tailed)
Difference PTSD	Male	10	20.85	208.50	106.500	457.500	.406
	Female	26	17.60	457.50			
	Total	36					
Difference depression	Male	10	17.70	177.00	122.000	177.000	.777
	Female	26	18.81	489.00			
	Total	36					

Hypothesis Nine

There is no statistically significant difference in PTSD and depression between the intervention group and the control group in relation to duration of loss at α level 0.05

The findings showed statistically significant relationship between the PTSD level and the duration of martyrdom (p= 0.16) as shown in table (5.19). For example, the mean rank of the duration of the martyrdom between the years 1987-1999 was10.63 (n=8), and for the years 2000-2010 it was 20.75 (n=28).

On the contrary, the findings revealed no statistically significant relationship between the depression level and the duration of the martyrdom (p= 0.413). For example, the mean rank of the duration of martyrdom between the years 1987-1999 was 15.81 (n=8), and for the duration of martyrdom between the years 2000-2010 it was 19.27 (n=28), (p=0.413).

Table (5.19) PTSD and depression differences in relation to duration of loss

	Duration	N	Mean Rank	Sum of Ranks	Mann-Whitney U	Wilcoxon W	Sig. 2-tailed
Difference PTSD	1987- 1999	8	10.63	85.00	49.000	85.000	.016
	2000- 2010	28	20.75	581.00			
	Total	36					
Difference depression	1987- 1999	8	15.81	126.50	90.500	126.500	0.413
	2000-2010	28	19.27	539.50			
	Total	36					

5.6. Summary

- Total populations of the current study were 294 family members of the martyrs. 180 agreed to fill in the questionnaires at the baseline stage. The response rate was 72% and eighty six of the participants were found to have PTSD diagnosis according to PCL scale.

- 40 participants agreed to participate in the experiment and 36 completed the study. ((19) in the control group, (17) in the intervention group). Follow up after 4 months of the study was done for the intervention group (14 participants).

- Nonparametric tests were used to analyze the results of the intervention such as (Mann-Whitney U), (Wilcoxon W), (chi-square) and P value.
- The findings showed a decrease in PTSD and depression symptoms in the intervention group than in control group.
- The findings of the post tests indicated that the changes in the level of PTSD symptoms and depression symptoms between the intervention group and control group were statistically significant (0.05)

- The findings showed that the changes in the level of PTSD symptoms in relation to age, gender, place of residency, family relation, profession, marital status, martyrs age, and educational level were not statistically significant and only duration of martyrdom was significant.

- The results showed that the changes in the level of the depression in relation with age, gender, place of residency, family relation, profession, martyrs age, educational level, and duration of the martyrdom were not statistically significant and only the marital status had significant relationship.
- The findings in the follow- up (four months after the completion of the intervention) showed that the changes in the PTSD level decreased from 9.0% to 7.50%, and for depression level it decreased from 9.71% to 7.50%.

CHAPTER SIX

DISCUSSION

Chapter Six
Discussion

6.1. Introduction

This chapter includes critical analysis of major findings of the present study and interpretations of the findings in relation to previously conducted studies. The relationships between some selected dependent variables and independent variables are highlighted.

6.2. Characteristics of participants at the baseline

The current study examined the effectiveness of the EMDR treatment approach in treating PTSD symptoms among parents or caregivers and wives of young martyrs in the Bethlehem area.

PTSD is one of the most common consequences that a person may develop as a result of exposure to traumatic events. As a result of the excessive exposure to traumatic events, Palestinians are prone to PTSD. In general, at the assessment stage 48.3 % (n= 86) of the participants in this study had PTSD symptoms at the cutoff score of 50 and out of 86 participants, 44.4 %(n=80) of them had severe PTSD symptoms. Neria et al. study (2005) showed similar results as 43.3% of the participants, who were exposed to traumatic events, suffered from PTSD while Xu Yaoet al. study (2008) showed an even higher level of PTSD among the participants (82.3 %(n=186)). Also the findings showed that mothers had more severe PTSD symptoms than fathers, wives or caregivers as a result of losing a family member. For example, at the assessment stage, the results showed that 11.1%(n=20) of the fathers had severe PTSD, 22.8% (n=41) of the mothers had severe PTSD, 1.7% (n=3) of the wives had severe PTSD, and 8.9% (n=16) of the caregivers had severe PTSD. Previous studies on this subject support the same pattern of findings. For example, Murphy et al study (2003) reported that 60% of the mothers and 40% of the fathers whose children were murdered met the diagnostic criteria for PTSD. Five years later, 28% of the mothers and 12.5% of the fathers met

the PTSD diagnostic criteria. Also the parents who met PTSD criteria reported higher rates of mental distress, low self-esteem and self-efficacy, and poor job performance than parents without PTSD. Furthermore, 61% of the mothers and 55% of the fathers reported re-experiencing symptoms, while 48 % of the mothers and 38% of the fathers reported avoidance symptoms; and 47% of the mothers and 3% of the fathers reported hyper arousal symptoms. Also Wijngaards-de Meij et al. study (2006) showed that the women had higher grief scores than men and there was a strong correlation between grief and age of the child. For example, participants who lost their child up to the age of 17 had greater grief than those who lost their child at the age of 17 years.

Furthermore, PTSD is correlated with depression, and other mental illnesses, in the case of severe traumatic events. (Kozariæ-Kovaèiæ et al, 2001) Approximately 80% of individuals with PTSD met the criteria for at least one additional psychiatric diagnosis such as depression. (Kozariæ-Kovaèiæ et al, 2001) In the current study the results at the assessment stage showed that 76.9 %(n=140 out of 180) of the participants had depression at cutoff score 14. For example, the results showed that 22.2 %(n=40) of the participants had minimal depression symptoms (0-13); 20.9 %(n=38) had mild depression symptoms (14-19); 29.1 %(n=53) had moderate depression symptoms (20-28), and 26.9 %(n=49) had severe depression symptoms (29-63). Consistently, Thabet et al. study (2004) showed positive correlation between the PTSD and depression. Campbell et al (2007) showed that 36% of participants were diagnosed with major depression disorder co-morbid with PTSD. The findings also showed that the participants who were diagnosed with MDD and PTSD significantly had worse depression symptoms (P<.001). Furthermore, Xu Yaoet al. (2008) study showed that 82.3% of the participants had clinically significant symptoms of depression, and 82.3 %(n=186) of PTSD. A notable exemption was the study of Bagoglu et al. (2004), which showed low morbidity of PTSD and depression (16% to 8%). There are several reasons why two disorders might co-occur; they are the pre-traumatic factors such as positive psychiatric family history and pre-existing mental disturbances before traumatic experience may predispose depression as co morbid diagnosis among people with PTSD. (Kozariæ-Kovaèiæ et al, 2001; Teesson et al, 2005).

Also in the current study, the majority of the participants were females in the assessment ((53.3% (n=96)) and the intervention stages (70.0% (n=28)). In general females are more willing to seek help than males. (Breslau, et al, 1998) It was found that men in general ignore adversity and find ways to distract themselves from their emotions using a variety of distracting strategies such as exercise, abusing substances, or focusing exclusively on their work. However, women often ruminate about their problems in an attempt to determine if they were to blame for the loss. (Breslau, et al, 1998) They are more inclined to seek out other people and discuss their grief in an attempt to resolve their loss. (Breslau, et al, 1998) Also females are less exposed than males to traumatic event but at the same time they are twice likely to develop PTSD. (Breslau et al, 1998) Similarly, the results of the current study are in consistent with the findings of previous studies in terms of the intensity of PTSD symptoms. The current study showed that females had higher PTSD levels than males. For example, the results of the assessment stage showed that 0.6% (n=1) of the females had no PTSD symptoms, 11.7% (n=21) of the males had mild PTSD, 6.1% (n=11) of the females had mild PTSD, 17.2% (n=31) of the males had moderate PTSD, 20.0% (n=36) of the females had moderate PTSD, 17.8% (n=32) of the males had severe PTSD , and 26.7% (n=48) of the females had severe PTSD. These results were supported by Troy et al. study (2002), which found that 32% of the participants had PTSD and women were significantly at a higher risk of PTSD than men. Also Kalyjia et al. study (2002) showed 37.0% of the women had PTSD as opposed to 34.4% of men. Kessler et al study (1995) indicated that women were more than twice as likely overall as men to have lifetime PTSD (10.4% vs. 5.0%). However, Pole et al. study (2001) showed no gender differences in relation to PTSD symptoms. Finally, Punamäki et al. (2005) reported that the lifetime prevalence of traumatic events was higher among men (mean=4.68) than women (mean=1.13) and 86% of men and 44% of women had experienced at least one traumatic event during their lifetimes.

Age is one crucial factor that impacts PTSD. This study found that older participants had higher level of PTSD than that of younger ones as 28.9% (n=52) of participants who were 50 years or older had severe PTSD compared with 15.6 %(n=28) of participants who were less than 50 years of age. On the contrary, Maercker et al. study (2003) showed that 17.0% of the younger participants had PTSD while 13.3% of the adolescent (older) participants had PTSD. Also Parto

et al. study (2011) showed that younger participants (16.1%) had more PTSD than older participants (10.2%) and Espié et al. study (2009) showed that children more than 15 years (25.8%) had more PTSD than adults (20.9%). These results may indicate that older victims may be exposed to multiple traumas and losses in their life time (Espié, et al, 2009) or old people have rigid coping mechanisms to deal with their traumas. (Davison &Neale, 1987)

Another crucial factor that affects PTSD severity is the educational level of the participants. It refers to the stage of learning such as primary, secondary, elementary, and university. (UNESCO, 2007) The results of the current study showed that the participants with low educational level had high PTSD symptoms. For example, 41.1% (n=74) of the participants who had a lower educational level less than a bachelor's degree (BA) had severe PTSD, while only 3.3% (n= 6) of the participants who had BA severe PTSD. These results are similar to the findings at Kalyjia et al. study (2002) which showed that the participants with elementary school level of education were the highest on the PTSD scale, followed by high school and then college education. On the contrary, Shin et al study (2009) showed that the increase in years of education was related to increase in symptoms of PTSD.

Duration of loss is a factor of interesting consequences. The results of the baseline stage showed that out of the 180 participants who agreed to take part in the study, 27.77% (n=50) of them lost their family members between the years 1987 -1999, while (72.23% (n=130)) lost their family members between the years 2000 – 2010. However, the results of the intervention stage showed that 22.2% (n=8) of the participants lost their children between the years 1987 and 1999, and 77.8% (n=28) lost them between the years 2000 and 2010. One possible explanation of the low response rate of the participants who lost their child between the years 1987-1999 might be as a result of the old age of the participants, their lack of inclination to talk about their experience after long time has elapsed or their PTSD symptoms are simply not severe. For example, the findings of the assessment stage showed that the participants who lost their family members during the First Intifada had a lower level of PTSD (29.4% (n=15)) than the participants who lost their family members during the Second Intifada (70.6% (n=65)). On the other hand, some previous studies did not support the findings of the current study. For example, Ndetei et al.

(2004) showed a difference in terms of the intensity of the level of distress among those who had longer duration of loss as 94% of them had detachment feeling, while 37% of them met the PTSD.

Marital status is another factor in determining the impact of PTSD. The results of this study indicated that the percentage of those who suffer from severe PTSD was higher among the married participants than that among widows and single participants. For example, 33.3 %(n=60) of the married (who represented 76.7% of the participants in the study) had severe PTSD compared to 8.9% (n=16) of the widows and only 1.7% (n=3) of the single participants. These are similar to Margoob et al. (2006) study which showed that the mean of PTSD among divorced and widowed participants was 47.93%, while the mean among currently married participants was 49.39%. However, the results contradicted with Kessler et al study (1995) which showed a higher level of PTSD symptoms among the previously married (i.e. separated, divorced and widowed) than the currently married participants.

The unemployment rate among the Palestinian population is very high (30.3% in Gaza and 16.6% in West Bank) according to the Palestinian Centre Bureau of Statistics (2012). This may impact their quality of life including their mental health. For example, (74.4% (n=134)) of the respondents in the baseline were unemployed, and only (1.1% (n=2)) were employed in the public or private sectors. (76.5% (n=13)) of the unemployed participants in the treatment group suffered from PTSD, as well as 11.8% (n=2) of the workers, and 5.9% (n=1) of the farmers. It can be concluded that the unemployment rate among the participants of this study correlated positively with the high level of PTSD as the unemployed individuals are more prone to PTSD symptoms. Similarly, Beck et al. study (2005) showed that the lack of employment is associated with high level of PTSD and that this association is stronger for men than for women. Unemployed men were 9.94 times more likely to be diagnosed with PTSD, compared to employed men, while unemployed women were 2.85 times more likely to be diagnosed with PTSD, compared to the employed women.

Another factor with an impact on the existence of PTSD in the participants is medical condition. At the baseline assessment, results showed that 48.9% (n=88) of the participants reported that they had good medical condition, 20.0% (n=36) rated their medical condition as acceptable, and 31.1 %(n=56) stated that they had bad medical condition. Data from the intervention stage, showed that the majority of the participants suffered from physical illness such as Hypertension, Arthritis (67.5% (n=27)), and 32.5% (n=13) of them did not suffer from any diseases.

Also the results showed that 16.1% (n= 29) of the participants who reported that they had bad medical condition had severe PTSD, 11.1 %(n= 20) of the participants with acceptable medical conditions had severe PTSD, and 17.1% (n=31) of the participants with good medical conditions had severe PTSD. This indicates that participants (in this particular study) with good medical conditions had more severe PTSD than other groups. These findings may suggest that healthy people may focus more on their loss than people with illnesses as their disease may distract them from their loss. Shipher et al. study (2007) showed different results as 66% of the participants with PTSD symptoms had chronic pain and bad health conditions. Also Gil et al. study (2009) found that women with history of PTSD had more physical symptoms such as hypertension than women without this history. Also Women with lifetime PTSD had more annual clinic appointments (5.9 vs. 3.8) and were 2.4 times more likely to report lower appraisal of their physical health.

Furthermore, results showed that the participants who received medical services for their physical problems such as medications were only 23.3 %(n=42). This percentage is considered low as 31.1% of the participants reported having bad health conditions. This could be a result of the general hardships encountered in providing medical services across the West Bank or due to poor economic situation as the majority were unemployed.

Parallel to that, the majority of participants reported that they did not receive psychological therapy (88.3% (n= 159), for their psychological or mental problems and only 11.7% (n= 21) of

them indicated that they received such treatment. Similarly, in the intervention stage, the majority of the participants (75.0% (n=30)) stated that they did not receive psychological treatment for their psychological problems, and only 25.0% (n=10) of them received treatment. These results may raise question about the role of the Palestinian Ministry of Health and other NGOS in addressing mental illness (including PTSD) with the same seriousness as they address other physical illness. However, social stigma that is associated with the use of mental health services maybe the reason for not seeking help from mental health providers.

Furthermore, participants who received treatment for their symptoms had a short duration of treatment which may not be enough to help them treat their PTSD symptoms. For example, 3.9% (n=7) of the participants received psychological treatment from 1 month to 3 months, and 6.1% (n=11) were treated for more than 3 months. Further studies may be needed to identify the reasons that prevent the victims of political violence from engagement in treatment for a long time.

On the other hand, the current study tried to assess the reasons that prevented the participants from receiving their treatment. For example, (26.1% (n=47)) reported lack of information about the availability of psychological services, and (13.9% (n=25)) indicated that it was so due to religious beliefs. The lack of awareness was one major obstacle that prevented people from receiving psychological treatment. Thus, it is imperative to increase awareness through available media about the psychological treatment and to decrease the social stigma associated with the use of mental illness in order to encourage people to seek treatment.

It is known that the Palestinian family members of martyrs were exposed to different types of traumatic events so the life event scales were used to assess the number of the traumatic events that the participants had. For example, the majority of (86.1% (n= 155)) of participants were confronted with sudden, unexpected death of someone close, (68.9% (n= 124)) were confronted with sudden or violent death, while (48.3% (n= 87)) were exposed to loss due to combat or

exposure to a war zone. These results are expected as in general in Palestine as different generations are affected by Israeli violence such as torture, physical injury and loss a family member which may increase PTSD prevalence. For example, Punamäki et al. study (2005) showed that 86% of the men and 44% of the women had experienced at least one traumatic event during their lifetimes. Similar results can be inferred from the Amy et al. study (2002), which showed that the mean number of war-related traumatic events reported by the participants was 15 events.

Also the current study examined the effectiveness of EMDR treatment approach in treating PTSD symptoms among parents, caregivers and wives of young martyrs in Bethlehem area. Eye Movement Desensitization and Reprocessing (EMDR) is a treatment approach that is used to treat people with PTSD symptoms. (Shapiro & Forrest, 1997) In the current study, the results showed that the mean rank of PTSD for the control group increased from 19.95% pre-intervention to 27.0% post-intervention. In a different way, the mean rank for the intervention group decreased from 16.88% pre-intervention to 9.0% post intervention. Also the difference between the intervention group and the control group was statistically significant p= (0.00). Furthermore, the result of the follow up after four months of the completion of the RCT showed that the mean rank of the PTSD in the intervention group decreased from 9.00 % to 7.50%. This may indicate that EMDR had sustainable effect in reducing the PTSD symptoms among the traumatic persons even after the termination of the treatment.

These findings were similar to what appeared in the literature. For example, Power et al. (2002) indicated that the EMDR approach can be effective in the treatment of PTSD symptoms. These findings revealed that 60% of the EMDR group and 50% of the exposure and cognitive group achieved clinically significant change in comparison with 10% of the waiting list. The follow-up results after 15 months showed no significant differences in the level for PTSD symptoms anxiety and social function. Wilson et al. study (1995) showed significant difference between the EMDR and the waiting list group in relation to the PTSD symptoms at post-treatment and 3 month follow-up. In the follow up after 15 months, the result of the study showed 84% reduction in the PTSD diagnosis and 68% reduction in PTSD symptoms for all participants. Lee et al. (2002) presented further proof to the same. His findings showed that EMDR significantly

reduced the symptoms than Stress Inoculation Training with Prolonged Exposure (SITPE) and 83% of the participants in the EMDR condition and 75% of those in SITPE no longer met the criteria for PTSD. At the follow-up, 83% from each condition no longer met these criteria. The Kemp study (2009) followed a similar pattern as that of the four one-hour sessions of EMDR treatment and it proved more effective than a six-week waiting-list in reducing PTSD symptoms. The PTSD symptoms decreased to 25% but remained at 100% in the waiting-list group.

Not only was EMDR effective in decreasing the symptoms for PTSD, but it also decreased the symptoms of depression. After the completion of the treatment, the depression mean rank increased from 19.05% to 26.37% for the control group and decreased from 17.88% to 9.71% for the intervention group. The difference between the depression mean rank pre-intervention and post-intervention was statistically significant at p= (0.05). It indicates that a statistically significant difference exists between the depression mean rank post-intervention in both control and intervention groups. Also the result of the follow up stage showed that the depression mean rank for the intervention group decreased from 9.71 % to 7.50 % so the decrease in depression level was sustainable after 4 months of the completion of the RCT. These results were similar to those found by Wilson et al. (1995) who reported significant differences between the EMDR and the waiting list groups in relation to the PTSD symptoms, depression, and anxiety at post-treatment and 3 month follow-up. Also Rothbaum et al. study (2005) indicated that EMDR was effective in reducing symptoms of depression. The depression scores decreased significantly from pretreatment to post treatment in both the prolonged exposure and EMDR group than in the control group. Also Raboni et al. study (2006) supported these as EMDR resulted in the reduction of depression mean from 17.71 to 4.00. Furthermore, Ironson et al. study (2002) reported similar results which indicated that Prolonged Exposure (PE) and EMDR had a significant reduction in depression symptoms which were maintained at three-month follow-up.

Different hypotheses were examined in the current study and the findings revealed that the change in the PTSD level was statistically significant in relationship to the duration of martyrdom (p= 0.16). For example, the mean rank of the duration since martyrdom between the years 1987-1999 was 10.63 (n=8), and for the duration since martyrdom between the years 2000-2010 was 20.75 (n=28).

In the contrary, the findings did not reveal significant differences between PTSD levels varied by age, gender, educational level, and marital status, and profession, place of residency, family relations, and age of the martyrs. For example, the mean rank for the age group less than 50 years old was 16.55 (n=10) and 19.25 (n=26) for the age group equal or more than 51 years old (p= 0.49). These results were similar to what was found by Ahmadizadeh et al. study (2010) which showed that EMDR was effective in reducing the PTSD symptoms. At the same time, no statistically significant differences in PTSD levels were found between groups in terms of education, age, occupation. Ahmad et al. study (2007) showed that the post-treatment scores of the EMDR group were significantly lower than the WLC indicating improvement in PTSD-related symptom in the EMDR group had no significant differences between the EMDR and WLC groups were found when varied by any demographic characteristics. Finally, the findings revealed that the changes in the depression level were not statistically significant between the control group and the intervention group on the age groups, gender, family relations, age of the martyrs, place of residency, profession, duration of the martyrdom, and educational level. At the same, the results showed that the change in the marital status produces a statistically significant change in depression levels (p=0.025). For example, the mean rank of the married participants was 19.68 (n=25), for the widows it was 9.79 (n=7), and for the singles it was 26.38 (n=4), (p=0.25).

Despite the fact that these differences were not statistically significant, they may still yield important information. They showed that EMDR is effective in treating PTSD as a result of losing a family member in the situation of ongoing trauma; at the same time it showed the importance of further studies. Small sample size may produce such non significant results.

6.3. Conclusion

This might be the first study in Palestine assessing the effectiveness of EMDR treatment approach in treating parents (or caregivers) and wives of young martyrs suffering from PTSD symptoms. The findings indicate that the EMDR treatment approach is effective in treating PTSD symptoms and depression symptoms among family members of martyrs.

Also EMDR holds merit not only for effectiveness as evident throughout the study but it is also a cost-effective, short-term treatment that results in comparatively minimal stigmatizing. EMDR showed results with specific importance in the Palestine context, where people are inclined to be hesitant in seeking mental health services due to security reasons or lack of knowledge and recourses. Moreover, the situation of ongoing trauma that the Palestinians have lived in for more than 64 years which produced huge number of traumatized people needs evidenced based service.

In addition, due to the high prevalence of PTSD symptoms among Palestinians, there is a need to apply different treatment approaches in order to help the victims of political violence; one of them is EMDR.

Recommendations

The results of the current study indicate that parents or caregivers and wives of young martyrs suffer from severe PTSD and depression symptoms as a result of losing their sons, daughters or husbands due to Israeli violence. To help them overcome their suffering, EMDR was offered, however the collaboration of several other Palestinian parties is required to achieve a complete rehabilitation process:

1. Palestinian Ministry of Health and Ministry of Social Welfare

a. Develop a well-funded National Health Plan to cover the increasing needs of mental health services as a result of the ongoing traumas that the Palestinians are confronted with.

b. Establish a regulatory framework. This should include the Palestinian Authority psychological and mental services to offer different psychological treatment approaches including the EMDR as part of government comprehensive services to family members of martyrs that they receive.

c. Increase public awareness about the importance of mental health. This should help in changing negative attitudes and reducing the stigma towards mental health services and mental illness. This can be achieved by spreading awareness through various types of media, such as TV, newspapers and magazines.

d. Hold and organize conferences on the state of mental health of the Palestinian people under military violence and effective treatment approaches in co-operation with national, and international mental health community and experts.

2. Palestinian civic society institutions

a. Training available for counselors and therapists needs to be community based in order to fully understand culture and address stigmatization and trust.

b. A comprehensive approach to treatment such as EMDR should be applied to treatment of trauma victims. The therapy should be provided immediately after the traumatic event, on continuous basis to help victims ventilate and discharge their feelings to prevent PTSD symptoms.

c. Create a knowledge network of training, research and applications in order to sustain the transfer of knowledge about trauma and PTSD.

d. More studies are required with involvement of greater numbers of participants from the West Bank and Gaza, as well as institutions from a variety of different settings (governmental, private, and non-governmental institutions).

e. Address the need to conduct further studies to examine the effectiveness of EMDR on additional population such as torture victims and their family members.
f. Most importantly, a sense of trust and security must be established, which would enable the therapeutic relationship to succeed, since security is unavailable neither for victim nor for therapists.
g. More studies are needed to assess the effectiveness of different treatment approaches such as EMDR in the treatment of PTSD among Palestinians.
h. More researches are needed to assess the prevalence of PTSD and other mental disorders among Palestinians in general
i. Media such as TV has an obligation to raise awareness about the effects of PTSD and its treatment options. This would help not only in treatment, but it would also help in erasing the social stigma associated with mental illness.
j. The religious institution must be used as an instrument to encourage scientific treatment rather than its alternative and to encourage people to seek treatment for their mental health problems.

References

Ahmad, A. Larsson, B., and Sundelin-Wahlsten, V. (2007). EMDR Treatment for Children with PTSD: Results of a Randomized Controlled Trial. Oslo. Nord J Psychiatry. 61:349354. 0803-9488.

Ahmadizadeh, M. J., Eskandari, H., Falsafinejad, M. R., and Borjali, A. (2010). Comparison the Effectiveness of "Cognitive-Behavioral" and "Eye Movement Desensitization Reprocessing" Treatment Models on Patients With War Post-Traumatic Stress Disorder. *Iranian Journal of Military Medicine,* volume 12. 3; 173-178.

Altawil, M., Nell, A. M., Asker, A., Samara, M., and Harold, D. (2008). The effects of Chronic War Trauma among Palestinian Children: The Invisible Victims of War- an Interdisciplinary Study. Peterborough-England: DSM Technical Publications.

Amy, L. A., Peterson, CH., and Ubelhor, D. (2002). War-Related Trauma and Symptoms of Posttraumatic Stress Disorder among Adult Kosovo Refugees. *Journal of Traumatic Stress*, vol. 15, No. 2, pp. 157–160.

Awwad, E. (1998). Palestinian adolescents' Survey in Gaza .Childhood Exposure to Violence: Psychological and Behavioral Aftermath in Adolescence .Palestine. Red Crescent Society

Bagoglu, M., Kihg, C., Ebru Salcioglu, E., and Livanoul, M. (2004). Prevalence of Posttraumatic Stress Disorder and Co morbid Depression in Earthquake Survivors in Turkey: An Epidemiological Study. *Journal of Traumatic Stress*, vol. 17, No. 2, (pp. 133-141).

Barbara, C. (1994). Treating Survivors of Political Torture. Handbook of Post-Traumatic Therapy. Westport, CT: Greenwood Press.

Basavanthappa, B. T. (2007). Psychiatric mental health nursing. First Edition. Jaypee Brothers Medical Publishers.

Beck, J. G., Sarah, A., Palyo, M., A., Edward, C., Blanchard, B., and Gudmundsdottir, B. (2006). What factors are associated with the maintenance of PTSD after a motor vehicle accident? The role of sex differences in a help-seeking population. *Journal of Behavior Therapy and Experimental Psychiatry,* 37; PMCID: 1524873

Beck, A. T., Ward, CH., Mendelson, M., Mock, J., and Erbaugh, J. (1961). An Inventory for Measuring Depression. *Archives of General Psychiatry*, 4: 561-571.

Beck,G.J., Palyo, S.A.,Winer,E.H. Schwagler, B.E. and Ang,E.J.(2007).Virtual Reality Exposure Therapy for PTSD Symptoms After a Road Accident: An Uncontrolled Case Series. Behavior Therapy 38 -39–48. Available at www.scencedirect.com

Becker, D. (2000). Dealing with the Consequences of Organized Violence in Trauma Work .in Section V: Recovering from War: Post –Conflict Regeneration and Reconciliation; Available at Http://www.berghof-handbook.net

Bisson, J. and Andrew, M. (2009). Psychological treatment of post traumatic stress disorder (PTSD) (Review). The Cochrane Collaboration library. Published by John Wiley & Sons, Ltd. Issue 1 http://www.thecochranelibrary.com

Bordens, K. and Abbott, B. B. (1996). Research Design and Methods: A Process Approach. Third Edition. California: Mayfield publications Company. 1-55934-409-1

Breen, L. J., and O'Connor, M. (2010). Acts of Resistance: Breaking the Silence of Grief Following Traffic Crash Fatalities. Edith Cowan University. http://ro.ecu.edu.au/ecuworks/6538

Breslau, N., Howard, D., Chilcoat, Sc. D., Ronald, C., Kessler, A., and Davis, G. C. (1998). Previous Exposure to Trauma and PTSD Effects of Subsequent Traumatic Results from the Detroit Area Survey of Trauma. *Am J Psychiatry*. 156:902–907

Bagoglu, M., Kihg, C., Salcioglu,E., Livanou, L. (2004). Prevalence of Posttraumatic Stress Disorder and Comorbid Depression in Earthquake Survivors in Turkey: An Epidemiological Study. *Journal of Traumatic Stress,* Vol. 17, No. 2, pp. 133-141

Bernat, J. (1998) A Defense of the Whole Brain Concept of Death. *Hastings Center Report.* 28 (2), 14-24.

Breen,J. N., and O'Connor, M.(2010). Acts of Resistance: Breaking the Silence of Grief Following Traffic Crash fatalities. Edith Cowan University Research Online. http://ro.ecu.edu.au/ecuworks/6538

Brower, N., and Peart, K. (2010). Coping with the Loss of a Child: Families and Communities. Utah State University Extension Publication.

Brown, J. (1999). Family System Theory and practice: Illustration and Critique Education Update Fundamental of theory and Practice. Vol.20, No.2, (pp94-103)

Burns, N., and Grove, S. K. (1999).Understanding Nursing Research .Second Edition. Philadelphia: W.B. Saunders Company; 0-7216-8106-9

.

Caffo, E., and Belaise, C. (2003). Psychological Aspects of Traumatic Injury in Children and Adolescents. *Department of Psychiatry and Mental health*. University of Mdema. Italy: 12(3):493-535

Cameron, J. K. (2001). Trauma in Human Systems: a Brief Introduction. *Paper presented to the Los Angeles Unified School District*. Los Angeles, CA.

Campbell, D. G., Felker, B. L., Liu, C. F., Yano, E. M., Kirchner, J. E., Chan, D., Rubenstein, L. V., and Chaney, E. F. (2007). Prevalence of Depression–PTSD Co morbidity: Implications for Clinical Practice Guidelines and Primary Care-based Interventions. *Society of General Internal Medicine:* 22:711–718.doi: 10.1007/s11606-006-0101-4

Carnelley, K. B., Wortman, C. B., Bolger, N., and Burke, Ch. T. (2006). The Time Course of Grief Reactions to Spousal Loss: Evidence from a National Probability Sample. *Journal of Personality and Social Psychology,* the American Psychological Association .Vol. 91, No. 3, 476 – 492 0022-3514.

Carter, B., and McGoldrick, M. (1989). The Changing Family Life Cycle: A Framework for Family Therapy. Second Edition. Boston: Allyn and Bacon Company; 0-205-12063-6

Chang, Sh.,L.(2005). The Effects of Facilitation on Cognitive Restructuring in Online Discussion University of Houston-Clear Lake. Journal of Interactive Online Learning Volume 3, Number 3. www.ncolr.org ISSN: 1541-4914

Ciacco, A. DI. J. (2008). The Colors of Grief: Understanding a Child's Journey through Loss from Birth to Adulthood. London and Philadelphia: Jessica Kingsley publishers; 978 1 84310 886 3

Cohen,J.A., r Deblinger,E. and Mannarino, A.(2004). Trauma-Focused Cognitive-Behavioral Therapy for Sexually Abused Children. Psychiatric Times . Vol. XXI Issue 10

Corey, M. S., and Corey, G. (2005). Group Process and Practice, Seventh Edition. Thomson Book/Cole, USA. 9780534607951

Corr, CH. A., and Coolican, M. B. (2010). Understanding Bereavement, Grief, and Mourning: implications for donation and transplant professionals. Progress in Transplantation, vol 20, No. 2.

Danielson, C. B., Bissell-Hamel, B., and Fry-Winsted, P. (1993). Families Health & Illness Perspective on Coping and Intervention. Mosby-year Book Inc; 0-8016-0360-9.

Davison, G. C., and Neale, J. M. (1987). Abnormal Psychology. John Wiley & Sons, New York. 0-471-63108-6

Deborah, L. K., and Leeds, A. M. (2002). Preliminary Evidence of Efficacy for EMDR Resource Development and Installation in the Stabilization Phase of Treatment of Complex Posttraumatic

Stress Disorder. *Journal of clinical psychology*, vol.58 (12), 1465-1487, available at www.interscience.wiley.com Dol:10.1002/jcip.10099

Diagnostic and Statistical Manual of Mental Disorder (DSM-IV-TR). (2000). Fourth Edition. Text Revision. *American Psychiatric Association*. Washington. 0-89042-061-0

Dodgson, Ph. W. (2007). EMDR: An integrative psychotherapy approach .*Impulse Journal for psychology*, Norway.

Dooly, D. (2001). Social Research Methods. Forth Edition. Library of Congress Cataloging in publication data; 0-13-955428-9.

Dyregrov, A. (2001). Early intervention–A family perspective. Advances in Mind–Body Medicine; 17, 9–17

El Sarraj, E., Qouta, S., and Punamaki, R. (1997). Prison Experiences and Coping Style among Palestinian Men. Gaza Community Mental Health program. At http://www.gcmhp.net/

El Sarraj, E., and Quota, S. (2005). Disaster and Mental Health. The Palestinian Experience. *World Psychiatric Association*. John Wiley & Sons Ltd, Chapter 16, 229-237

Espié, E. Gaboulaud, V., Baubet, T., Casas, G., Mouchenik, Y., Yun, O., Grais, R.F., and Moro, M. R. (2009). Short report Open Access Trauma-related psychological disorders among Palestinian children and adults in Gaza and West Bank, 2005-2008. *International Journal of*

Mental Health Systems, doi: 10.1186/1752-4458-3-21 available from: http://www.ijmhs.com/content/3/1/21

Fernandez, I. (2007). EMDR as treatment of post-traumatic reactions: A field study on child victims of an earthquake. Educational & Child Psychology. *The British Psychological Society*. Vo. l 24 No 1 65.

Foa, E. B. Keane, M. T., Friedman, J. M., and Cohen, J. A. (2009). Effectiveness Treatment of PTSD Practice Guideline from the International Society for Traumatic Stress studies. 2ed. The Guilford Press. ISBN 978-1-60623-001-5.

Giacaman, R. (2004). Psycho Social - Mental Health Care in the Occupied Palestinian Territory: The Embryonic System. Birzeit University.

Gill, J. M., Szanton, S., Taylor, T. J., Page, G. G., and Campbell, J. C. (2009). Medical conditions and symptoms associated with posttraumatic stress disorder in low-income urban women. *Journal of Women's Health*, 18, 261-267. PMID: 19183098

Glicken, M. D. (2009). Evidence-Based Practice with Emotionally Troubled Children and Adolescents. First Edition, Elsevier Company. Oxford library.

Goodwin, D. W., and Guze, S. B. (1996). Psychiatric Diagnosis .5th edition .Published by Oxford University Press.0-19-510421-8.

Greaves, C. C. (1983). Death in the Family: A Multifamily Therapy Approach. *International Journal of Family Psychiatry*; 4, 247–259

Greenwald, R. (1994). Applying Eye Movement Desensitization and Reprocessing (EMDR): To treatment of traumatized children: Five case studies. *Journal of Anxiety Disorder Practice,* 1, 83-97

Gray, M. J., Litz, B. T., Hsu, J. L., and Lombardo, T. W. (2004). The psychometric properties of the Life Events Checklist. Assessment; 11, 330-341.

Hepworth, D. H., Rooney, R. H., and Larsen, J. (1997). Direct Social Work Practice Theory and Skills. 5th Ed. Thomson Books / Cole.

Horowitz, A. J., Bonanno, G. A. and Holen, A. (1993). Pathological Grief: Diagnosis and explanation. *The psychosomatic medicine*: 55:260-273.

Ironson, G., Freund, B., Strauss, J. L., and Williams, J. (2002). Comparison of Two Treatments for Traumatic Stress: A Community-Based Study of EMDR and Prolonged Exposure. Journal of Clinical Psycho, Jan; 58(1):113-28.

Jaclyn, R., and Tracy, I. G. (2001). Psychology and Mental Health, Abnormality. Grief and Guilt. Volume 1. Salem Press: USA.

Johnson, B. S. (1995). Child, Adolescent & Family Psychiatric Nursing. J.B. Lippincott Company, USA.

Kalyjian, A., Kanazi, R. L., Aberson, CH. L., and Fegin, L. (2002). A Cross-Cultural Study of the psychological and spiritual impact of natural disaster. *International Journal of Group Tensions*, vol. 31, No. 2

Kaniasty, K., and Norris, F. J. (2004). Social Support in the Aftermath of Disasters, Catastrophes, and Acts of Terrorism: altruistic, overwhelmed, uncertain, antagonistic, and patriotic communities Bioterrorism: Psychological and Public Health Interventions. Cambridge University Press, UK.

Karatzias, Th., Power, K., Brown, K., McGoldrick, Th., Begum, M., Young, J., Chouliara, L., and Adams, S. (2011). A Controlled Comparison of the Effectiveness and Efficiency of Two Psychological Therapies for Posttraumatic Stress Disorder Eye Movement Desensitization and Reprocessing vs. Emotional Freedom Techniques. *The Journal of Nervous and Mental Disease,* volume 199, Number 6, 199: 372Y378.

Kemp, M., Drummond, P., and McDermott, A. (2009). A wait-list Controlled Pilot Study of Eye Movement Desensitization and Reprocessing (EMDR) for Children with Post-traumatic Stress Disorder (PTSD) Symptoms from Motor Vehicle Accidents. Clinical Child Psycho Psychiatry On line: 10.1177/1359104509339086

Kennelly, I., Merz, S. N., and Lorber, J. (2001). What Is Gender? Source: American Sociological Review: American Sociological Association Vol. 66, No. 4; (pp. 598-605) http://www.jstor.org/stable/3088925

Kessler, R. C., Sonnega, A., and Bromet, E. (1995). Posttraumatic stress disorder in the National Co morbidity Survey. Archives of General Psychiatry. 52, 1048–1060.

Keven, P., Theresa, Mc., Keith, B., Robin, B., Donald, S., Sharp, S., and Athanasius, K.(2002). A Controlled Comparison of Eye Movement Desensitization and Reprocessing Versus Exposure

plus Cognitive Restructuring versus Waiting List in the Treatment of Post-traumatic Stress Disorder. Department of Psychology. University of Stilling. UK.

Khamis, V. (1995). Coping with Stress: Palestinian Families and Intifada- Related Trauma. Unpublished manuscript. Palestine: Bethlehem University

Khan, Sh., and Mishra, V. (2008). Youth Reproductive and Sexual Health: DHS Comparative Reports No. 19.United States Agency for International Development.

Kimberline, C.L., and Winterstein A. G. (2008). Validity and Reliability of Measurement Instruments used in Research. Research Fundamentals. American Society of Health-System Pharmacists. Am J Health-System Pharm. Vol 65. 1079-2082/08/1201-2276 DOI 10.2146/ajhp070364.

Korosteleva, O. (2011). Clinical Statistics Introduction Analysis and Longitudinal Data Analysis. Massachusetts: Jon and Bartlett Publishers.

Kozariæ-Kovaèiæ, C., Hercigonja, D. K., and Grubišiæ-Iliæ, M. (2001). Posttraumatic Stress Disorder and Depression in Soldiers with Combat Experiences. National Center for Psycho trauma. Department of Psychiatry, University Hospital Dubrava; and Department of Applied Psychology and Forensic Psychiatry, Police Academy and Police College, Zagreb, Croatia; 42(2):165-170.

Lajee Center.(2011). Annual report www.lajee.org, 2011

Lazarus, R. S. (1993). From psychological Stress to the Emotions: A History of Changing Outlooks. Emory University: Annul Review Psychology; 44:1-22

Lee, C. Gavriel, H., Drummond, P., Richards, J., and Greenwald, R. (2002). Treatment of PTSD: Stress Inoculation Training with Prolonged Exposure Compared to EMDR. *Journal of Clinical Psychology*, 58(9):1071-89.

Lichtenthal, W. G., Currier, J. M., Niemeyer, R. A., and Keesee, N. J.(2010). Sense and Significant: A Mixed Methods Examination of Meaning Making after the Loss of One's Child. *Journal of Clinical Psychology*, vol. 66(7), 791--812

Maercker, A., Michael, T., Fehm, L., Becker, E. S., and Margraf, J. (2003). Age of Traumatisation as a Predictor of Post-Traumatic Stress Disorder or Major Depression in Young Women. Department of Clinical Psychology and Psychotherapy. Zurich University

Maghalaeh, J. K. (2003). Post traumatic Stress Disorder Related to Martyrdom (Loss), Imprisonment and Home Demolition. Al Quds University. Public Health College. Community Mental Health Department.

Mander,S.(2006). Loss and Bereavement in Childbearing. Second Edition. Routledge. ISBN10: 0–415–35410–2

Margoob, M. A., Firdosi, M. M., Ali, Z., Hussain, A., Mushtaq, H., Khan, A. Y., Malik, Y. A., Rather, Y. H., Ahmad, SH. A., Banal, R., and Muzamil, M. (2006). Treatment Seeking Post traumatic stress disorder Patient Population – Experience from Kashmir, JK-Practitioner; 13(Supple 1):S57-S60.

Martyr Families Care Association, 2010.

Maxfield, L. (1996). Eye Movement Desensitization and Reprocessing: A Review of the Efficacy of EMDR in the Treatment of PTSD. Canada: Lake Head University. Psychology Department

Meqbul, M., and Yunis, W. (2008). Psychological and Social Effects on Bereaved Women in Jabalia Camp- Case Study. Studies on Issues of Palestinian Women Women's Affairs Center - Research Program

Moore, K. A. (2008). Brief Research to Results: Quasi- experimental Evaluations: Part 6 in a Series on Practical Evaluation Methods, sponsored by: The Atlantic Philanthropies. Child Trend; Publication

Michon, B., and Balkou, S., Hivon, R. and Cyr, C. (2003). Death of a Child: Parental Perception of Grief Intensity – End-of-Life and Bereavement Care. Pediatric Child Health; 8(6):363-6.

Murray, C. I, Toth, K., and Clinkin, S. S. (2005). Death, Dying, and Grief in Families; www.equinox.unr.edu/homepage/cimurray

Murphy, S. A., Braun, T., Tillery, L., Cain, K. C., Johnson, C. L., and Beaton, R. D. (1999). PTSD among bereaved parents following the violent deaths of their 12-28 year-old children: a longitudinal prospective analysis. *Journal of Traumatic Stress Studies*, vol. 12, No. 2

Murphy, C.E.(2002) Coping Strategies, Family Environment, And Interpersonal Fear: A Study of Congruence between College students and Their Parents. A thesis presented to the faculty of the College of Arts and Sciences of Ohio University

Murphy, S. A., Johnson, L. C., Chung, I., and Beaton, R. D. (2003). The prevalence of PTSD following the violent death of a child and predictors of change 5 years later. *Journal of Traumatic Stress*, 16, 17–25.

Murphy, S. A.(2006). Evidence – Based Intervention for parents following their children's violent death, Chapter 10, Book Violent Death, and Editing by Rout hedge Taylor and Francis Group.

Nandi, A., Galea, S., Tracy, M., Ahern, J., Resnick, H., Gershon, R., and Vlahov, D. (2004). Job Loss, Unemployment, Work Stress, Job Satisfaction, and the Persistence of Posttraumatic Stress Disorder One Year after the September 11 Attacks. American College of Occupational and Environmental Medicine JOEM; Volume 46; 10.1097/01.jom.0000141663.22902.

Ndettei, D. M., Othieno, C. J., Gakinya, B., Ndumbu, A., Kokonya, D. A., Ongecha, F. A., Mutiso, V., Okettch, V., and Mwangi, J. (2004). Traumatic Grief in Kenyan Bereaved Parents Following the Kyanguli School Fire Tragedy. World psychiatry; 3(1):50-53.

Neighbor, R.H. (1985). The family life-cycle. *Journal of the Royal Society of Medicine*, no. 8 Volume 78.

Neria, Y., Brett, Litz, B., Gross, R., Maguen, SH., Seirmarco, G., Insel, B., Rosenfeld, H., Schmidt, A., Suh, E., J., and Marshall, R. (2005). The 9/11 Grief Survey: Initial Findings. New York State Psychiatric Institute.

Niemeyer, R. A., Baldwin, S. A., and Gillies, J. (2006). Continuing Bond and Reconstructing Meaning: Mitigating Complications Implications in Bereavement. Death Studies. Taylor & Francis Group; 30: 715–738.

Nutt, D. J. B., Stein, M. B., and Zohar, J. (2009).Post Traumatic Stress Disorder Diagnosis, Management, and Treatment. Chapter 15: Post-traumatic stress disorder – future prospects and needs (including 'pre miumnonnocere' and PTSD – what we should and should not do in the aftermath of psychological trauma). Second edition: 13: 9780415395717.

Onrust, S., Cuijpers, P., Smith, F., and Bohlmeijer, E. (2007). Predictors of psychological adjustment after bereavement. International Psycho geriatric Association.UK: 921–934C doi: 10.1017/S1041610206004248

Packers, C. M. (2006), love and loss: the roots of grief and complication. New York: Routhedge.

Palestinian Central Bureau of Statistics (PCBS). (2010). On the Eve of the International Population

Palestinian National Authority Palestinian Central Bureau of Statistics. (2012). Labor Force Survey

Palestinian Central Bureau of Statistics, Definition and Explanations. (2005).

Palestinian Territories Palestinian Bureau of Statistics, Analytical studies series (07), youth characteristics (10-24). (2005). http://www.pcbs.gov.ps/

Palestinian Central Bureau of Statistics (PCBS). (2012). On the Eve of International Youth Day

Parto, J. A., Evans, M. K., and Zonderman, A. B. (2011). Symptoms of Posttraumatic Stress Disorder among Urban Residents. *The Journal of Nervous and Mental Disease*, volume 199, Number 7. www.jonmd.com

Peterson, R., and Green S. (1999). Families First: Keys to Successful Family Functioning. Family Roles. Produced by Communications and Marketing, College of Agriculture and Life Sciences, Virginia Polytechnic Institute and State University; 350-093.

Phelan, M., and Blair, G. (2008). Medical History-Taking in Psychiatry: Advances in Psychiatric Treatment; 14: 229-234doi:10.1192/apt.bp.105.001099

Poal, P. (1990). Introduction to the Theory and Practice of Crisis Intervention. University of North Carolina, Department of Psychology. 10, 121-140.

Pole, N. , Suzann, E. R. , Best, S. R. , Weiss, D. S. , Metzler, T., Liberman, A. M., Fagan, J., and Marmar, Ch. R.(2001). Effects of Gender and Ethnicity on Duty-Related Posttraumatic Stress Symptoms among Urban Police Officers. *The Journal of Nervous and Mental Disorders*, vol. 189, No. 7; 189:442–448.

Polit D. F., and Hungler B.P. (1995). The practice of nursing research: Principles and methods. Philadelphia: J.B. Lippincott Company.

Polit, D.F., Beck Ch. T., and Hungler B. P.(2001) Essential of Nursing Research methods, Appraisal and Utilization. Fifth Edition: J.B. Lippincott Company; 0-7817-2557-7.

Polit, D.F., and Beck C. T. (2004) Nursing Research Principles and Methods. Seventh edition: Lippincott Williams &Williams Company; 0-7817-3733-8.

Power, K., McGoldrick, T., Brown, K., Buchanan, R., Donald, SH., Swanson, V., and Karatzias, A. (2002). A Controlled Comparison of Eye Movement Desensitization and Reprocessing Versus Exposure plus Cognitive Restructuring versus Waiting List in the Treatment of Post-traumatic Stress Disorder. Department of Psychology, University of Stilling. Scotland: John Wiley &Sons www.interscience.wiley.com

Psycho-Social Counseling Center for Women (PSCCW), (2011).

Punamäki, R. L., Kompro, I. H., Quota, S., Elmasri, M., and de Jon, J. (2005). The Role of Per traumatic Dissociation and Gender in the Association Between Trauma and Mental Health in a Palestinian Community Sample. 162:545–551.

Quota, S., and El Sarraj, E. (2004). Prevalence of PTSD Among Palestinian Children in Gaza Strip. Gaza Community Mental Health Program publications

Rand, T. A. (1991). How to Go on Living When Someone You Love Dies. New York: Bantam Books.

Raphael, B. Stevens, G., and Dunmore, J. (2006). Clinical Theories of Loss and Grief. In Rynearson E.K. (Ed), Violent Death Resilience and Intervention beyond the Crisis: Psychological stress series. (pp.3-31). Publisher Taylor and Francis Group; New York-London: 13: 978-0-415-95323-8

Rasras, K., Mitwali, S., and Sehwail, M. (2006). Group Therapy for Palestinian Family Members after Violent Death. In Rynearson E.K. (Ed), Violent Death Resilience and

Intervention beyond the Crisis: Psychological stress series.(pp.357-371). Publisher Taylor and Francis Group; New York-London: 13: 978-0-415-95323-8

Richard, S. C., Koch, E., Cusack, K., Pagoto, SH., and Waller, S. (2009). Eye Movement Desensitization and Reprocessing. .In Foa E. B. Keane T.M. Friedman M.J. and Cohen J.A (Eds). Effective treatment for PTSD practice guidelines from the international society for trauma stress studies. (pp. 279- 305). Second Edition. New York: The Guilford Press; 978-1-60623-001-5

Rothbaum, B. O., Astin, M. C., and Marsteller, F. (2005). Prolonged Exposure Versus Eye Movement Desensitization and Reprocessing (EMDR) for PTSD Rape Victims. *Journal of Traumatic Stress*, vol. 18, No. 6, (pp. 607–616).

Rubin, A., and Babbie, E., R. (2005). Research Methods for Social Work. Fifth Edition. Thomson brooks/ Cole; 0-534-62109-0

Salloum, A., and Rynearson, E. K. (2006). Family Resilience after Violent Death. In Rynearson E.K. (Ed), Violent Death Resilience and Intervention beyond the Crisis: Psychological stress series. (pp.357-371). Publisher Taylor and Francis Group; New York-London: 13: 978-0-415-95323-8.

Sanders, C. (1992). Surviving Grief and Learning to Live Again. New York: John Wiley & Sons.

Save the children Sweden. (2010). Post- trauma Rehabilitation of the Palestinian Ex-detainee Children in the West Bank. European Commission Directorate-General for Humanitarian AID-ECHO.

Scatur, D. J., and Haynmn, P. M. (1992). The Impact of Combat Trauma across the Family Life Cycle: Clinical Considerations. *Journal of Traumatic Stress*, vol. 5, No. 2.

Schnider, K. R., Elhaiand, D. J., and Gray, M. J. (2007). Coping Style Use Predicts Posttraumatic Stress and Complicated Grief Symptom Severity Among College Students Reporting a Traumatic Loss. *Journal of Counseling Psychology*, the American Psychological Association. Vol. 54, No. 3, 344 –350

Seaman, C. H.(1987). Research methods, Principles, Practice, and Theory for Nursing. Third Edition. Appleton &Lange.

Seng, J. S., Mc Carthy, K. C. A., and Roni, D. L. (2006). PTSD and Physical Co morbidity Among Women Receiving Medicaid: Results from Service -Us e Data. International Society for Traumatic Stress Studies. *Journal of Traumatic Stress*, Vol. 19, No. 1, pp. 45–56. DOI: 10.1002/jts.20097.Available at www.interscience.wiley.com

Shaffer, R. D., and Kipp, K. (2009). Developmental Psychology: Childhood and Adolescence. Eighth Edition.Wadeworth Cengage Learning.13:978-0-495-60171-5.

Shapiro, E. R. (1994). Grief as Family Process a Developmental Approach to Clinical Practice. New York: Guilford Press.

Shapiro, F. (1989). Efficiency of the Eye Movement Desensitization Procedure in the Treatment of Traumatic Memories. *Journal of Traumatic Stress Studies*, 2, 199–223.

Shapiro, F. (1991). Efficacy of the Eye Movement Desensitization Procedures: A New Treatment for Posttraumatic Stress Disorder. *Journal of Traumatic Stress,* 2(2), 199-223.

Shapiro, F.(1995). Eye movement desensitization and reprocessing: Basic principles, protocols, and procedures. 2 Ed. New York: Guilford Press; 1-57230-672-6.

Shapiro, F.(2001) Eye movement desensitization and reprocessing: Basic principles, protocols, and procedures 2nd ed.. New York: Guilford Press.

Shapiro, F., and Forrest M. S.(1997-2004) EMDR: The breakthrough therapy for overcoming anxiety, stress and trauma. Basic Books. New York. 0-465-04300-3.

Shin, S. M., Jeong Kim, H., Liwe L., and Kim, S. (2009). Depression and PTSD in Pashtu Women in Kandahar, Afghanistan. Asian Nursing Research. Vol 3, No 2.

Shipherd, J. C., Keyes, M., Jovanovic, T., Ready, D. J., Baltzell, D., Worley, V., Gordon-Brown, V., Hayslett, C., and Duncan, E.(2007). Veterans Seeking Treatment for Posttraumatic Stress Disorder: What about co morbid chronic pain. *Journal of Rehabilitation Research and Development*, Department of Veterans Affairs (VA). Volume 44. (Pages 153–166).

Shrestha, L. B. (2007). Life Expectancy in the United States. CRS Report for Congress. Congressional Research Service: the Library of Congress; RL32792.

Smolina, E.(2007). Psychological impact of Huntington's disease on family and spouses from the perspective of the system theory. Undergraduate Researchers. Guelph: Vol.1, No.1, 51-62.

Smyth, R.(2004). Exploring the Usefulness of a Conceptual Framework as a Research too: A Research's Reflections. The Educational Research, Vol.1.

Stephen, R. and Peter, B. (2003). Cognitive Behavioral Therapy with Torture Survivors: A case Report. Behavioral and cognitive psychotherapy.21 supplement 2; 1-75.

Tasman, A. Kay, J.,and Lieberman,J. A. (2008). In Psychiatry. Third Edition. Volume 1. Ltd.978-0470-06571-6.

Teesson, M., Degenhardt, L., Poudfoot, H., Hall, W., and Lynskey, M. (2005). How Common is Co morbidity and Why Does it Occur? Australian Psychologist, 40(2): 81 – 87.

Thabet, A. A., M., Yehia, A., and Vostanis, P. (2004). Co morbidity of PTSD and depression among refugee children during war conflict. *Journal of Child Psychology and Psychiatry,* 04/; 45(3):533-42.

Thabet, A. A.(2009). War on Gaza Coping of Palestinian women with trauma and loss**:** baseline study. Child and Family Training and Counseling Center-Gaza.

Toner, J. A., Mierswa, T. M., and Howe, J. L. (2010). Geriatric Mental Health Disaster and Emergency Preparation. New York: Springer Publishing Company. 978-0-8261-2222-3.

Troy, L. H., David, B., Murray, B. S., and William, J. (2002). Gender Differences in Long-Term Posttraumatic Stress Disorder Outcomes after Major Trauma: Women Are At Higher Risk of Adverse Outcomes than Men. *Journal of Trauma-Injury Infection and Critical Care,* volume 53 - Issue 5 (pp 882-888).

Turner, S. (2000). Psychiatric help for survivors of torture. The Royal College of Psychiatrists. Advance in Psychiatric Treatment, 6:295-303. http:// www.apt.rcpsych.org

Umran, K., and Seniz, P. (2000). Group EMDR with Child Survivors of the Earthquake in Turkey .Istanbul Medical Faculty, Department of Child Psychiatry. Turkey.

United Nation (UN). (2008). Definition of the child: Article 1. Section I.

Underwood, M. M. (2004). Group Interventions for Treatment psychological trauma module 10: Group Intervention for Bereavement Following Traumatic Events. American Group Psychotherapy Association

UNESCO.(2007). Operational Definition of Basic Education. Thematic Framework.

Van der Kolk, B., McFarlane, A., and Weisaeth, L. (1995). The Effects of Overwhelming Experience on Mind, Body, and Society: Traumatic Stress. Guilford Publication; New York: 978-157230-457-4.

Van der Kolk, B. (2005). Developmental Trauma Disorder: Toward a Rational Diagnosis for Children with Complex Trauma Histories. Psychiatric Annuals: 35, 401-408.

Van der Kolk, B., Spinazzola J., Blaustein M. E., Hopper, J. W., Hopper, E. K., Korn, D. L., and Simpson, W. S. (2000-2003). A randomized Clinical Trial of Eye Movement Desensitization and Reprocessing (EMDR),Fluoxetine, and Pill Placebo in the Treatment of Posttraumatic Stress Disorder: Treatment Effects and Long-Term Maintenance. Journal of Clinical Psychiatry, 68; 37-46

VanKatwyk, P.L. (2003). Textures and Threads: Life Cycle Transitions. In Spiritual Care and Therapy. (pp 95-104).

Walsh, F.(1998). Strengthening Family Resilience. New York: Guilford Press.

Weathers, F., Litz, B., Herman, D., Huska, J., and Keane, T.(1993). The PTSD Checklist (PCL): Reliability, Validity, and Diagnostic Utility. Paper presented at the Annual Convention of the International Society for Traumatic Stress Studies. San Antonio.

Wijngaards-de Meij, L. M., Stroebe, W., Schut, H., Bout,J., Van der Heijden, P. G. M., and Iris, Dijkstra, I.(2006). The Iimpact of Circumstances Surrounding the Death of a Child on Parents' Grief. Department of Psychology, Faculty of Social Sciences, Utrecht University, the Netherlands. Department of Methodology and Statistics, Faculty of Netherlands.

Wilson, J. P., Friedman, M. J., and Lindy, L. D. (2001). Treating Psychological Trauma and PTSD. New York: Guilford publication.

Wilson, A. S., Becker, L. A., and Tinker, R. H.,(1995). Special Future. Eye Movement Desensitization and Reprocessing (EMDR) Treatment for Psychology Traumatized Individuals. *Journal of Consulting and Clinical Psychology*, vol.63.928-937.

Wilson, A. S., Becker, L. A., and Tinker, R. H.(1997). Fifteen-Month Follow-up of Eye Movement Desensitization and Repressing (EMDR) Treatment for posttraumatic stress disorder and Psychology. *Journal of Consulting and Clinical Psychology*, vol, 65.No.6.1047-1056.

Worden, J. W. (1991). Grief Counseling & Grief Therapy: A Handbook for the Mental Health Practitioner. The Grieving Child Seminar. Second Edition. Greenville: New York

Worden, W.(2009). Greif Counseling and Grief Therapy. Handbook for the mental health practitioners. Forth Edition. Spring Publishing Company; 978-0-8261-2456-2.

World Health Organization (WHO).(2012). Gender, Women and Health.

World Health Organization (WHO). (1989). The health of youth: Document A42/Technical Discussions/2. Geneva.

Wright, P. M., and Hogan, N. S. (2008). Grief Theories and Models Applications to Hospice Nursing Practice. Fan. *Journal of Hospice and Palliative Nursing*, Vol. 10, No. 6.

www.wikipedia, 2012

Xu Yao, H. H., Tsutsumi, A., and Fisher, J. (2008). Mental Health Morbidity in Women Thirty Months After the Death of a Child in the 2008 Sichuan, China earthquake, Center for Women's Health, Gender and Society Melbourne School of Population Health.

Yassini, M., and Hosseini, FR.(2006). Short Communication: Post Traumatic Stress Disorders Symptoms after Bam Earthquake. Pak J Med Sci Vol. 22 No. 4 477-479. www.pjms.com.pk

Zagrot - Hodally, M.,Alissa,F.,and Dodgson, W. Ph.(2008).Building Resilience and Dismantling Fear: EMDR Group Protocol with Children in an area of Ongoing Trauma .*Journal of EMDR Practice and Research,* Springer Publishing Company; Volume 2, Number2.

Zinner, E. S., and Williams, M. B.(1999). When a Community Weeps, Case Studies in Group Survivorship. Series in trauma and loss. Library of Congress cataloging in published data

Appendix 1

حضرة السيد صلاح ابو لبن المحترم

تحية طبية وبعد

تقوم الطالبة فردوس عبد ربه العيسى وهي احدى الطالبات في ماجستير الصحة النفسية المجتمعية في جامعة القدس بدراسة حول مدى فعالية منهاج ال EMDR في علاج الاثار النفسية التي تعاني منها امهات واباء الشهداء في محافظة بيت لحم . وهذة الدراسة هي من اجل انهاء متطلبات رسالة الماجستير حيث تتطلب الحصول على قائمة باسماء الشهداء في منطقة بيت لحم للفترة ما بين 1987-2010 والذين لا تزيد اعمارهم عن 25 سنه.

وتقبلو ا فائق الاحترام وشكرا لكم على تعاونكم

عميدة كلية الصحة النفسية المجتمعية

الدكتورة : اسماء الامام

Appendix 2

استعمال منهاج ال EMDR لعلاج اعراض الصدمة الناتجة عن استشهاد احد افرد الاسرة

معلومات للمشاركين في الدراسة:

أنت مدعو للمشاركة في دراسة حول مدى فعالية ال EMDR لعلاج الآثار النفسية التي قد يعاني منها اباء وامهات وزوجات الشهداء في منطقة بيت لحم , والتي ستقوم بها الطالبة فردوس عبد ربه العيسى تحت إشراف الدكتورة منى حميد من اجل اكمال متطلبات رسالة الماجستير في جامعة القدس.

قبل أن تقرر المشاركة في هذه الدراسة ارجو قراءة المعلومات التالية :

ما هو موضوع الدراسة؟

يهدف البحث الى دراسة مدى فعالية ال EMDR لعلاج الآثار النفسية التي يعاني منها اباء وامهات وزوجات الشهداء في منطقة بيت لحم. حيث يتكون هذا من العلاج من 4-5 جلسات وتستمر كل جلسة لمدة ساعة . ولقد اثبتت الكثير من الدراسات العالمية ان هذا المنهاج العلاجي من المناهج الفعالة في علاج الصدمات والاعراض النفسية الناتجة عنها بما فيها فقدان احد افراد الاسرة .

ماذا يجب علي أن اعمل إذا قررت المشاركة في هذه الدراسة ؟

اذا وافقت ان تشارك في هذه الدراسة , سيطلب منك تعبئة استمارات تتضمن معلومات شخصية عنك مثل العمر, مكان السكن, التحصيل الاكاديمي. إضافة إلى استمارة لتقيم الآثار النفسية التي قد تكون تعاني منها بسبب تجربة الفقدان . وسيتم تحديد المكان والزمان المناسب لعقد الجلسات . سوف يتم توثيق الجلسات من قبل المعالجة بعد موافقتك . وبإمكانك أن تطلب عدم التوثيق في أي وقت تريد .

هل انأ مجبر على المشاركة؟

لا , المشاركة غير إجبارية بل هي طوعية, وسواء وافقت على المشاركة آم لا , سيبقى ذلك قرار شخصي لا يناقش مع أي شخص آخر.

الثقة والسرية؟

سيتم حفظ كل المعلومات التي سنحصل عليها أثناء المقابلات أو الجلسات العلاجية أو من خلال الاستمارات التي ستقوم بتعبئتها بشكل سري للغاية لا يمكن لأحد الاطلاع عليها . كل المعلومات ستحول لأرقام. ولن يذكر اسمك, وفي حالة ذكر بعض المعلومات الشخصية في اثناء المقابلة سوف يتم سيتم حذفها خلال تحليل المعلومات.

ماذا سيحدث لاحقا:

اذا قررت المشاركة في الدراسة , من فضلك اتصل على فردوس عبد ربه واذا كان عندك أي استفسار نحن على استعداد للاجابة .

شكرا لكم على قراءة هذه المعلومات ونأمل مشاركتكم في هذه الدراسة .

فردوس عبدربه العيسى

مركز المراة للارشاد النفسي والاجتماعي - تلفون : 2745578

Appendix 3

اتفاقية المشاركة في الدراسة

- لقد قمت بقراءة وفهم المعلومات الخاصة بالدراسة ( )
- كنت قادرا على طرح الأسئلة ومناقشة الدراسة ( )
- استطيع الانسحاب من الدراسة في أي وقت اريد بدون اعطاء تبريرات و بدون ان يؤثر ذلك على الخدمات التي أتلقاها .
- اوافق على كتابة وتوثيق مجريات الجلسات الإرشادية . ( )
- اوفق على تسجيل الجلسات بالفيديو. ( )
- اوافق على المشاركة في الدراسة . ( )

الاسم (المشترك) التوقيع التاريخ

الاسم (الباحث) التوقيع التاريخ

Appendix 4

استمارة بيانات اولية

1.العمر.....

2. الجنس: 1. ذكر 2: أنثى

3.صلة القرابة بالشهيد: 1.اب 2. ام 3 . زوجة 4. اخ \ اخت

4.مكان السكن: 1: مدينة 2 : قرية 3 :مخيم

5.المستوى التعليمي: .....

6.الوضع الصحي: .....

7 .الحالة الاجتماعية: 1: متزوج 2 : مطلق 3: أرمل

8 .الحالة المهنية: .....

9. عمر الابن \ الزوج عند استشهاده.....

10. بعد استشهاد ابنك \ زوجك هل تلقيت مساعدات طبية: 1: نعم 2:لا

11.هل عانيت من امراض جسمية بعد استشهاد ابنك \ زوجك؟ 1:نعم 2:لا

12.اذا كانت الاجابة نعم هل تلقيت علاج لهذة الامراض الجسمية؟ 1:نعم 2:لا

13. هل تلقيت علاج نفسي لبعض المشاكل النفسية التي ظهرت بعد استشهاد ابنك \ زوجك ؟

1- نعم 2:لا

14. في حال تلقيك لعلاج نفسي الرجاء الإجابة على الأسئلة التالية:

1.نوع العلاج :-.....

2. مدة العلاج.....

3. ما الجهة التي تلقيت فيها العلاج.....

15. اذا كنت لا تزال تعاني من فقدان ابنك\ زوجك فما هي الاسباب التي حالت دون توجهك لطلب المساعدة النفسية من الاخصائيين النفسيين او المراكز العلاجية؟

.....

.....

Appendix 5

مقياس الحدث

الاسم ..... التاريخ .....

تلفون \ بلفون.....

القائمة التالية تشمل عددا من الاحداث الصعبة التي قد يتعرض لها الانسان. لكل واحد من هذة الاحداث اربعة خيارات وهي كالتالي:

- تعرضت له بشكل مباشر - شاهدت اشخاص يتعرضون للحدث- عرفت عن اشخاص مقربين منك تعرضوا لمثل هذا الحدث- غير متاكد- لا ينطبق.

الحدث	تعرضت للحدث بشكل مباشر	شاهدت الحدث	سمعت عن الحدث	غير متاكد	لا ينطبق
كارثة طبيعية(بركان, اعصار,هزه, ارضية					
حريق او انفجار					
حادث سير (حادث سيارة,حادث قطار,تحطم طائرة, حادث باخرة)					
حادث عمل , حادث في البيت,أثناء رحلة .					
التعرض لحادث تسمم بمواد كيماوية او اشعاع.					

التعرض لاعتداء جسمي (كالضرب, الصفع, الرفس)					
التعرض لاعتداء بالاسلحة: مثل اصابة, طعن,تهديد بسكين,ببندقية,او بقنبلة.					
التعرض للاهانة الجنسية (اغتصاب, تحرش,الاجبار على ممارسة الجنس تحت التهديد.					
اي ممارسة او تجربة جنسية غير مرغوبة .					
التواجد في منطقة فيها مواجهات مسلحة (سواء كنت مدني او عسكري)					
الوقوع في الاسر(الاختطاف,الاخذ رهينه, الاعتقال)					
التهديد على الحياه بسبب مرض او اصابة.					
التعرض لمعاناه انسانية مزمنة.					
الموت المفاجىء كالانتحار او القتل.					

الموت المفاجىء اوغير المتوقع لشخص عزيز.					
التسبب باصابة او اذى لشخص ما.					

اية احداث اخرى صادمة؟

.....

.....

.....

أي من الاحداث السابقة لا زال يؤثر على حياتك اكثر من غيره الى الان؟

.....

.....

Appendix 6

مقياس بيك الاكتئاب

الاسم..... التاريخ .....

ستجد-ي في هذه الاستمارة مجموعة من الجمل والاسئلة , أرجو أن تقرئيها \ ئها بتمعن ثم اختار \ ي الجملة التي تصف مشاعرك خلال الايام القليلة الماضية . ضع \ي دائرة حول رقم الجملة التي تناسب حالتك.

1) 0- أنا لا اشعر بالحزن.
1- أنا اشعر بالحزن
2- أنا حزين طيلة الوقت ولا أستطيع أن أتخلص من حزني .
3- أنا حزين جدا أو غير سعيد إلى حد انني لا أستطيع تحمل ذلك.

2) 0- أنا متشجع (متحمس) نحوالمستقبل
1- اشعر بانني غير متحمس نحو المستقبل
2- اشعر بأنه لم يعد لدي شيء أتطلع إليه.
3- اشعر بان المستقبل لا أمل فيه وان الأمور لا يمكن أن تتحسن.

3) 0- لا اشعر بأنني فاشل.
1- اشعر بانني قد فشلت أكثر من الإنسان العادي.
2- عندما انظر إلى الفترة الماضية من حياتي فان كل ما اراه هو الكثير من الفشل.
3- اشعر أنني فاشل تماما كشخص .

4) 0- احصل على الرضا الكثير عن الأشياء كما تعودت دائما

1- لم اعد استمتع بالأشياء بنفس الطريقة التي كنت متعودا عليها.

2- لم اعد احصل على الشعور بالرضا الحقيقي من أي شيء الان.

3- أنا غير راضي أو اشعر بالملل من كل شيء .

5) 0- لا اشعر بالذنب

1- شعوري بالذنب ياخذ جزء كبير من وقتي

2- اشعر بالذنب تقريبا معظم الوقت.

3- اشعر بالذنب طوال الوقت.

6) 0- لا اشعر بأنني أعاقب.

1- اشعر انني من الممكن ان اعاقب.

2- أتوقع أنني سأعاقب.

3- اشعر بانني اعاقب .

7) 0- لا اشعر بخيبة أمل من نفسي.

1- اشعر بخيبة أمل من نفسي.

2- أنا مشمئز من نفسي.

3- أنا اكره نفسي.

8) 0- لا اشعر إنني أسوء من اي شخص اخر .

1- أنا انتقد نفسي على ضعفي او أخطائي .

2- إنني ألوم نفسي طيلة الوقت على أخطائي .

3- إنني ألوم نفسي على أي شيء سيء يحدث.

9) 0- لا يوجد لدي اي أفكار لقتل نفسي.

1- يوجد لدي أفكار لقتل نفسي ولكنني لن انفذها.

2- اود ان اقتل نفسي.

3- اود ان اقتل نفسي إذا أتيحت لي الفرصة.

10) 0- لا ابكي أكثر من المعتاد.

1- انني ابكي الان أكثر مما كنت سابقا .

2- إنني ابكي الان طيلة الوقت.

3- لقد كنت قادرا على البكاء , ولكنني الآن لا أستطيع البكاء رغم أنني أريد ذلك.

11) 0 – أنا لا انرفز من الاشياء اكثر مما كنت عليه دائما.

1- أنا الان انرفز قليلا أكثر من المعتاد.

2- انا منزعج او منرفز معظم الوقت

3- اشعر أنني منرفزطوال الوقت الآن.

12) 0- لم افقد اهتمامي بالناس الآخرين.

1- انا اقل اهتماما بالناس الآخرين مما كنت عليه من قبل.

2- لقد فقدت معظم اهتمامي بالناس الآخرين.

3- لقد فقدت كل اهتمامي بالناس الآخرين.

13) 0- استطيع اتخاذ القرارات كما كنت سابقا .

1- انا لم اعد كثيرا اتخذ قرارات كما كنت متعودا .

2- أجد صعوبة كبيره في اتخاذ القرارات الكثرمن ذي قبل .

3- لا استطيع بتاتا اتخاذ قرارت

14) 0- لا اشعر بأنني ابدو أسوأ مما كنت .

1- أنا قلق لانني أبدو اكبر من عمري و غير جذاب

2- اشعر أن هناك تغيرات دائمة في مظهري الشخصي مما يجعلني أبدو غير جذاب.

3-اعتقد أنني أبدو بشعا.

15)0- استطيع ان اعمل جيدا كما كنت سابقا .

1- احتاج إلى جهد إضافي من اجل البدء بعمل شيء ما.

2- يجب ان ادفع نفسي بصعوبة بالغة لعمل اي شيء .

3 -لا أستطيع القيام بأي عمل اطلاقا.

16)0- أستطيع أن أنام جيدا كالمعتاد.

1- لا انام جيدا كما تعودت .

2- استيقظ ساعة أو ساعتين مبكرا قبل المعتاد واجد صعوبة في العودة للنوم ثانية

3 استيقظ مبكرا عدة ساعات قبل المعتاد ولا أستطيع العودة إلى النوم ثانية

17) 0- لا اشعر بالتعب أكثر من المعتاد.

1- اتعب بسهولة اكثرمما تعودت .

2- اتعب عند القيام بأي شيء تقريبا.

3-انا متعب كثيرا لدرجة انني لا استطيع القيام باي شيء .

18)0- شهيتي للأكل ليست اسوأ من المعتاد.

1- شهيتي للأكل ليست جيدة كما كانت عليه.

2- شهيتي للأكل أصبحت أسوأ بكثير الآن.

3-لم يعد لدي شهية للاكل على الاطلاق.

19)0- لم افقد كثيرا من وزني مؤخرا (اذا كان هناك فقدان للوزن) .

1- فقدت أكثر من 2 كيلو من وزني.

2- فقدت أكثر من 4.5 كيلو من وزني .

3- فقدت أكثر من (6.5 كيلو) من وزني. (اذاحاولت تنقيص وزنك عن قصد (الرجيم) اعطي القيمة صفر(0) لهذة الاجابة).

20)0- انا لست قلقا على صحتي اكثر من المعتاد.

1- انا قلق بشان المشاكل الجسدية مثل الآلام , اواضطراب المعدة او الامساك .

2- انا قلق كثيرا بشان المشاكل الجسدية وانه لمن الصعب أن افكر في اشياء أخرى.

3 - انا قلق جدا بشان مشكلاتي الجسدية لدرجة أنني لا استطيع التفكير في اي شيء اخر.

21)0- لم ألاحظ أي تغيير جديد في اهتمامي بالجنس

1- انا اقل اهتماما بالجنس مما كنت عليه سابقا.

2-انا الان ضعف اهتمامي كثيرا بالجنس .

3 – لقد فقدت اهتمامي بالجنس كليا.

Appendix 7

مقياس PCL-S

حدد \ ي اكثر تجربة صعبة مررت بها :----------

هذه الاستمارة تحتوي على قائمة من المشاكل والشكاوي التي تظهر أحيانا لدى الناس احيانا نتيجة تعرضهم لخبرات ضاغطة في حياتهم. أرجو منك أن تقرأ - ي كل عبارة بتمعن ومن ثم الإجابة من خلال استخدام الأرقام التي على الجهة الشمال من الورقة إلى أي مدى أزعجتك هذه التجارب خلال الأسبوع الماضي.

	أبدا لا	قليلا	متوسط	بدرجة قليلة	بشكل كبير
تكرار ذكريات , أفكار أو صور مزعجة تتعلق بالتجربة الصعبة .	1	2	3	4	5
تكرار, أحلام مزعجة حول التجربة الصعبة .	1	2	3	4	5
بشكل مفاجئ أتصرف أو اشعر وكأن الحدث يتكرر ثانية (وكأنني أعيش التجربة مجددا).	1	2	3	4	5
الشعور بالانزعاج الشديد عندما يحدث ما يذكرني بالحدث المزعج .	1	2	3	4	5
اعاني من ردة فعل جسمية مثل (اضطرابات في القلب, صعوبات تنفس , العرق) عندما يحدث ما يذكرني بالحدث المزعج	1	2	3	4	5
اتجنب التفكير أو التحدث حول التجربة الصعبة أو اتجنب المشاعر المرتبطة بالحدث .	1	2	3	4	5
اتجنب الأنشطة أو المواقف التي تذكرني بالتجربة الصعبة .	1	2	3	4	5
اجد صعوبة في تذكر اجزاء مهمة من التجربة الصعبة .	1	2	3	4	5
فقدت الاهتمام في المشاركة في بالأنشطة التي كنت استمتع بها سابقا.	1	2	3	4	5

5	4	3	2	1	اشعر بوجود مسافة او بعد بيني وبين الناس الاخرين .
5	4	3	2	1	اشعر بالتبلد العاطفي أو الشعور بعدم القدرة على ان احب المقربين مني .
5	4	3	2	1	اشعر انه لا يوجد مستقبل او ان مستقبلي قد توقف .
5	4	3	2	1	أواجه صعوبات البدا بالنوم أو البقاء مستغرقا في النوم.
5	4	3	2	1	الشعور بالانفعال(الهيجان) أو بنوبات غضب .
5	4	3	2	1	أواجه صعوبات في التركيز
5	4	3	2	1	اشعر باني متيقظ او انني في حاله ترقب
5	4	3	2	1	اجفل بسهولة (اذهل بسهولة)