

**Deanship of Graduate Studies
Al-Quds University**



**Quality of Life and Mental Health of Martyrs' wives After
The Cast Lead Operation Against Gaza**

Emad Barham Al-Rekeb

MPH Thesis

Jerusalem- Palestine

1432 / 2011

**Quality of Life and Mental Health of Martyrs' wives After
The Cast Lead Operation Against Gaza**

Prepared By
Emad Barham Al-Rekeb

Bachelor of Nursing- Palestine College of Nursing
Palestine

Supervisor: Dr. Ahmad Abu Tawahina

**A Thesis Submitted in Partial Fulfillment of
Requirements for the Degree of Master of Mental Health
Community Mental Health
School of Public Health- Al- Quds University**

1432 / 2011

Dedication

To my family ... my father ... my mother ... my brothers and sisters ... I appreciate all the help, encouragement and support you gave me during my study.

Special thanks to my wife who supported me to have this work being accomplished.

Emad Al-Rekeb

Acknowledgement

First of all, praise and gratitude be given to Allah the almighty for giving me such a great strength, patience, courage and ability to complete this research, and peace and blessings of Allah be upon the noblest of all Prophets and messengers, our prophet Muhammad, all thanks for Allah who granted me the power and capability to complete this thesis.

I would like to thank all academic and administrative staff of School of Public Health, Al-Quds University for their guidance and support.

I had the great fortune to prepare this study under the supervision of Dr. Ahmad Abu Tawahina. I am very grateful for his guidance, encouragement and his support and enthusiasm.

I would like to express my deepest appreciation and gratitude to Dr. abed El-Aziz Thabet the director of School of Public Health for his support and encouragement.

I would like to convey my warm thanks to Mr. Abed El-Raheem Shagora for his assistance and knowledge during preparation of this work.

Many thanks to my colleagues at European Gaza Hospital.

Emad Al Rekeb

AUG 2011

Declaration

I declare that this research is my own work and that no part of it has been copied from any other previous works on the subject, except in such instances where acknowledgment has been duly made.

Signature:

Emad Al-Rekeb

Date.....

Abstract

The aim of this study is to examine the quality of life (QOL) and mental health of martyrs' wives after CLO. The sample of this study consisted of 199 martyrs' wives (empirical group) and 100 regular women (control group). The study used the Quality of Life scale, Aaron Beck Depression Inventory, Taylor Anxiety scale and Davidson PTSD check list. To analyze data, the researcher used frequencies, means, standard deviation, percentage, Pearson correlation test, t-test, ANOVA test and Post hoc Scheffe test. The results of the study showed that QOL among martyrs' wives was lower than women in the control group ($m = 84.00 \pm 12.35$ and 86.81 ± 11.26 respectively). Martyrs' wives who were 40 years and younger have a better QOL compared to older women, martyrs' wives who were married for 16 years and more have a lower QOL compared to those who were married for less years. Martyrs' wives who have less number of children have a higher QOL compared to those who have more children, martyrs' wives who have university education have a higher QOL compared to those who have secondary school education, martyrs' wives who were working / employed have a better QOL compared to those who were not working. There were no significant differences in QOL related to type of housing and monthly income. Regarding mental health, martyrs' wives had a higher level of depression compared to women in control group ($m = 23.08 \pm 10.13$ and 18.49 ± 8.99 respectively), higher anxiety ($M = 27.95 \pm 5.73$ and 29.29 ± 5.97 respectively) and higher PTSD ($m = 31.76 \pm 10.33$ and 26.37 ± 9.37 respectively). There were no significant differences in depression, anxiety and PTSD among martyrs' wives and women in the control group related to age, marry years, number of children, income. Martyrs' wives who live with their family in the same house have a higher level of anxiety and PTSD compared to those who live in an independent house or live with their husband family. Martyrs' wives who are not working / employed have a higher level of depression. There was significant negative relationship between QOL and mental health among martyrs' wives, which mean that as depression, anxiety and PTSD levels increase, level of QOL decrease. In conclusion, the results revealed that martyrs' wives have a lower level of QOL and a higher level of depression, anxiety and PTSD compared to other women.

Table of contents

Dedication	i
Acknowledgements	ii
Declaration	iii
Abstract	iv
Table of Contents	v
List of Abbreviations	vii
List of Tables	viii
List of Figures	ix
List of Annexes	ix

Chapter (1) Introduction and Background

1.1	Introduction	1
1.2	Research Problem	3
1.3	Justification of the Study	4
1.4	Objectives of the study	4
1.4.1	General Objective	4
1.4.2	Specific Objectives	4
1.5	Questions of the study	5
1.6	Context of the Study	6
1.6.1	Demographic Context	6
1.6.2	Socio-Political Context	7
1.6.3	Socio-economic Context	8
1.6.4	Health Care Context	8
1.6.5	Mental Health Services	9
1.7	Definition of Terms	10
1.8	Lay out of the Study	11

Chapter (2) Conceptual Framework and Literature Review

2.1	Conceptual Framework	13
2.2	Literature Review	14
2.2.1	Introduction	14
2.2.2	Definition of Quality of Life	14
2.2.3	Quality of Life and Health Care	15
2.2.4	Measuring Quality of Life and Wellbeing	15
2.2.5	Theories of Quality of Life	16
2.2.5.1	The integrative theory of quality of life	16
2.2.5.1.1	Wellbeing	17
2.2.5.1.2	Satisfaction with Life	18
2.2.5.1.3	Happiness	19
2.2.5.1.4	Meaning of Life	19
2.2.5.1.5	A Biological View of the Quality of Life: the Biological Information System and the State of Existential Balance	20
2.2.5.1.6	Realizing Life Potential	21
2.2.5.1.7	Fulfillment of Needs	22
2.2.5.1.8	Objective Factors	23
2.2.6	Mental Health	24
2.2.6.1	Definition of Mental Health	24
2.2.6.2	Characteristics of Mental Health	25

2.2.6.3	Theories of mental health	26
2.2.6.3.1	Erik Erikson: Psychoanalytic Developmental Theory	26
2.2.6.3.2	John Bowlby: Attachment Theory of Development	27
2.2.6.3.3	Piaget: Cognitive Developmental Theory	28
2.2.7	Trauma	29
2.2.7.1	Traumatic Stress	29
2.2.7.2	Trauma Victim	29
2.2.7.3	Types of Trauma	29
2.2.7.4	Categories of Traumatic Events	30
2.2.7.5	Effects of Traumatic Experiences	31
2.2.7.6	Re-experiencing Symptoms	32
2.2.8	Disorders of Mental Health	33
2.2.8.1	Depression	33
2.2.8.2	Anxiety	33
2.2.8.3	Post-Traumatic Stress Disorder (PTSD)	35
2.2.8.4	International PTSD Rates	35
2.2.9	Impact of Trauma on Mental Health	36
2.2.10	Impact of Trauma on Quality of Life	39
2.2.11	Summary	40

Chapter (3) Methodology

3.1	Study Design	41
3.2	Study Population	41
3.3	Study Sample and Sampling	41
3.4	Setting of the Study	42
3.5	Ethical Consideration	42
3.6	Study instruments	42
3.6.1	Quality of Life Questionnaire	42
3.6.2	Davidson PTSD check-list	43
3.6.3	Taylor Anxiety Scale	43
3.6.4	Aaron Beck Depression Inventory	43
3.7	Pilot Study	44
3.7.1	Validity and Reliability	44
3.7.1.1	Validity of Quality Of Life (QOL) scale (Internal consistency)	44
3.7.1.2	Reliability of the QOL Scale	45
3.7.1.3	Validity of Aaron Beck Depression Inventory (Internal consistency)	45
3.7.1.4	Reliability of the Aaron Beck Depression Inventory Scale	46
3.7.1.5	Validity of Taylor Anxiety Scale (Internal Consistency)	47
3.7.1.6	Reliability of Taylor anxiety Scale	48
3.7.1.7	Validity of Davidson PTSD check-list (Internal Consistency)	48
3.7.1.8	Reliability of Davidson PTSD Check-list	49
3.8	Period of Data Collection	49
3.9	Data Entry and Analysis	50
3.10	Limitation of the Study	50

Chapter (4) Results and Discussion

4.1	Sample Characteristics	51
4.2	Study Results	52
4.2.1	Quality of Life Level	52

4.2.2	Quality of Life and Age	54
4.2.3	Quality of Life and number of marital years	57
4.2.4	Quality of Life and Number of Children	60
4.2.5	Quality of Life and Education Level	63
4.2.6	Quality of Life and Housing	65
4.2.7	Quality of Life and Income	66
4.2.8	Quality of Life and Work	66
4.2.9	Quality of Life and Second Marriage	67
4.2.10	Mental Health	68
4.2.11	Mental Health and Age	71
4.2.12	Mental Health and number of marital years	72
4.2.13	Mental Health and Number of Children	73
4.2.14	Mental Health and Level of Education	74
4.2.15	Mental Health and Housing	75
4.2.16	Mental Health and Income	77
4.2.17	Mental Health and Work	78
4.2.18	Mental Health and Second Marriage	79
4.2.19	Relationship Between Quality of Life and Mental Health	80
4.3	Discussion	82
Chapter (5) Conclusion and Recommendations		
5.1	Conclusion	87
5.2	Recommendations	89
5.3	Suggestions for further researches	89
	References	90
	Annexes	98
	Arabic Summary	117

List of Abbreviations

ADL	Activities of Daily Living
CLO	Cast Lead Operation
GS	Gaza Strip
GW	Gulf War
HRQOL	Health Related Quality of Life
MOH	Ministry of Health
NGOs	Non-Governmental Organizations
PCBS	Palestinian Central Bureau of Statistics
PCHR	Palestinian Center for Human Rights
PNA	Palestinian National Authority
PTSD	Post Traumatic Stress Disorders
QOL	Quality of Life
UNRWA	United Nations Relief and Works Agency for the Palestinian Refugees
WHO	World Health Organization

List of Tables

N0.	Table	Page
2.1	International Rates of PTSD (2004)	36
3.1	Distribution of the Study Sample According to Provinces	41
3.2	Dimensions of QOL Scale	42
3.3	Dimensions of Davidson PTSD Scale	43
3.4	Internal Consistency of QOL Items With the Total Score	44
3.5	Internal Consistency of Sub-scales with Total Scores of QOL	45
3.6	Internal Consistency of Aaron Beck Depression Inventory Items with the Total Score	46
3.7	Internal Consistency of Anxiety Scale Items with the Total Score	47
3.8	Internal Consistency of PTSD Scale Items with the Total Score	48
3.9	Internal Consistency of Sub-scales with Total Scores of PTSD Scale	49
4.1	Sample Characteristics	51
4.2	Quality of Life Among Study Participants	52
4.3	Differences in QOL Between Empirical Group and Control Group	53
4.4	Differences in QOL Related to Age	55
4.5	Mean Scores for QOL and Age	55
4.6	Mean Differences in QOL Related to Age	56
4.7	QOL and number of marital years	57
4.8	Mean Scores for QOL and Marry Years (Empirical Group)	58
4.9	Mean Differences in QOL Related to Marry Years	58
4.10	QOL and Number of Children	60
4.11	Mean Scores for QOL and Number of Children (Empirical Group)	61
4.12	Mean Differences in QOL Related to Number of Children	61
4.13	Differences in QOL Related to Education Level	63
4.14	Mean Scores for QOL and Level of Education (Empirical Group)	64
4.15	Mean Differences in QOL Related to Education Level(Empirical Group)	64
4.16	Differences in QOL Related to Housing	65
4.17	Differences in QOL Related to Income	66
4.18	Differences in QOL Related to Work	67
4.19	Differences in QOL Related to Second Marriage Among Empirical Group	68
4.20	Mental Health Among Study Participants	68
4.21	Differences in Mental Health Between Empirical Group and Control Group	70
4.22	Differences in Mental Health Related to Age	71
4.23	Differences in Mental Health Related to number of marital years	72
4.24	Mental Health and Number of Children	73
4.25	Differences in Mental Health Related to Level of Education	74
4.26	Differences in Mental Health Related to Housing	75
4.27	Differences in Mean Scores Related to Housing(Empirical Group)	76
4.28	Mean Differences in Mental Health Related to Housing(Empirical Group)	76
4.29	Differences in Mental Health Related to Income	78

4.30	Differences in Mental Health Related to Work	79
4.31	Differences in Mental Health Related to Second Marriage Among Empirical Group	80
4.32	Relationship Between QOL and Mental Health	81

List of Figures

No.	Figure	Page
2.1	Conceptual Framework	13

List of Annexes

No.	Annex	Page
1	Quality of life Scale	98
2	Aaron Beck Depression Inventory	102
3	Taylor Anxiety Scale	107
4	Davidson PTSD Scale	109
5	Map of Gaza strip	111
6	Request to the institute of martyrs and injured families welfare	112
7	Helsinki Committee approval	113
8	Request to Al-Salah Islamic Institution	114
9	Approval from Al-Salah Islamic Institution	115
10	Request to Ministry of Social affairs	116

Chapter One

1.1 Introduction

Today, in the modern world and globalization, life became more complex due to increased demands and expectations. The term quality of life (QOL) starts to be an important component in today's daily living and authors and researchers starts to pay more attention to this term.

The term QOL is used to evaluate the general well-being of individuals and societies. The term is used in a wide range of contexts, including the fields of international development, healthcare, and political science. QOL should not be confused with the concept of standards of living, which is based primarily on income. Instead, standard indicators of the quality of life include not only wealth and employment, but also the built environment, physical and mental health, education, recreation and leisure time, and social belonging (Gregory, 2009).

QOL is used in health care to refer to an individual's emotional, social and physical wellbeing, including their ability to function in the ordinary tasks of living. It is a term used most frequently in the context of healthcare, where the impact of a disease may reduce Health-related Quality of Life (HRQOL) (University of Toronto, 2009).

Unusual hard life events, including natural and manmade, especially wars will add extra pressure and suffering among those who have been exposed to those events, which consequently will affect their mental health and mental well being. Mental health is defined by World Health Organization (WHO) as "a state of well-being in which the individual realizes his or her own abilities, can cope with the normal stresses of life, can work productively and fruitfully, and is able to make a contribution to his or her

community" (WHO, 2005). Mental health can be seen as a continuum, where an individual's mental health may have many different possible values. Mental wellness is generally viewed as a positive attribute, such that a person can reach enhanced levels of mental health, even if he does not have any diagnosable mental health condition. This definition of mental health highlights mental well-being, the capacity to live a full and creative life, and the flexibility to deal with life's inevitable challenges (Keyes, 2002). People who live in war zone usually exposed to threats that challenge their survival and well being, especially children, elderly and women. More challenges will face survivors after the war including post traumatic stress disorders (PTSD), especially for those who lost a family member. Among those, the wives of martyrs, who suddenly lost their husband, their household, leaving them with new responsibilities and duties that they may not be able to handle.

The Palestinian Center for Human Rights (PCHR) reported that the recent war against Gaza Strip named Cast Lead Operation (CLO), which was launched by Israeli Military Forces during December 2008 and January 2009, left more than 1400 martyrs – most of them were civilians - and thousands of injuries and a mass destruction in the infrastructure and houses (PCHR, 2009). Those who witnessed and survived are exposed to different traumatic events ranging from direct to indirect trauma (Thabet, 2010). The psychological consequences of war are well documented and frequently persistent and invalidating. Among the prevailing manifestations are anxiety, depression, irritability, emotional instability, cognitive disturbances, personality changes, behavioral disturbances, neurovegetative symptoms, such as lack of energy, sleep disturbances, and sexual dysfunction (Holtz,1998). An other study that reviewed the evidence from published literature about the impact of war on the mental health of the general population, the refugees, the soldiers and specific vulnerable groups found that consequences of war on the

mental health of the civilian population are one of the most significant, the impact on the general population showed a definite increase in the incidence and prevalence of mental disorders, Women were affected more than men (Murthy and Lakshminarayana, 2006). Many women may in war zones be faced with the main responsibility for care giving in the family, with the destiny of their husbands unknown and new and unfamiliar duties placed on them. If the household is facing disaster, this may overload women's capacity to cope, as preoccupation with the needs of the family may lead to that they are not able to consider their own needs, especially if they become widows (Kastrup, 2004). After the CLO, not much had been changed, houses have not been rebuilt, siege and constraints still in action, which led to reduction in social and welfare support and worsen the situation.

According to the researcher knowledge, no local studies were conducted regarding the effects of the Cast Lead on Gaza families, especially women.

The researcher in this study will explore the effects of the CLO on the quality of life among martyrs' wives, coping mechanisms and social aids offered to support those wives.

1.2 Research problem

Quality of life is an important concept that starts to get attention by researchers in the developed countries. QOL as a concept is related to physical and emotional health, well-being and enjoyment of activities of daily living (ADL) (Seedat, 2006). To be able to function properly and enjoy ADL, the individual needs to be emotionally well. In other words, he needs to be in a good mental health.

Individuals and societies who live war zones usually experience psychological problems after war, which may in turn affects their adaptation and productivity.

In this study, the researcher tries to focus on a special stratum in the society who experienced the loss of their household. The wives of martyrs after the CLO against Gaza

Strip at the end of December 2008 and January 2009, trying to explore their quality of life, their mental health status and how they adapted to the new situation.

1.3 Justification of the study

In an area like Gaza Strip, where long-term suffering is persistent due to the continuing conflict with Israeli occupation, many changes in life and living conditions may emerge as a mechanism for adaptation. The CLO left around 1400 martyrs and thousands of injuries and disabled, added to that the mass destruction of infrastructure facilities, buildings, houses and lands (PCHR, 2009).

The loss of a husband is considered a major catastrophe to the family, especially for the wife, whose role will change suddenly and her responsibilities will increase which will add extra pressure on her. On the other hand, societal norms, values and cultural beliefs will determine the wife's behavior and restricts her movement, which will add extra constraints on her. Within all these conditions, threats and uncertainty regarding the future of wives of martyrs, the researcher will explore the QOL and mental health for those wives after transition to the new life.

1.4 Objectives of the study

1.4.1 General objective

The general objective of this study is to explore the quality of life and mental health for the martyrs wives after the CLO in Gaza Strip.

1.4.2 Specific objectives

- To determine the quality of life of the martyrs wives' victims of cast Lead Operation in Gaza Strip.
- To identify the mental health status of the martyrs wives' victims of CLO in Gaza Strip.

- To examine the differences in quality of life in relation to some variables (age, number of children, employment, level of education).
- To examine differences in mental health status in relation to some variables (age, number of children, employment, level of education).
- To examine the differences in QOL of martyrs wives between those married after death of their husband and those who did not marry.
- To explore the differences in QOL of martyrs wives between those who live independently and those who live in extended family.
- To identify the relationship between quality of life and mental health.

1.5 Questions of the study

- How do martyrs' wives describe their quality of life after losing their husband?
- What is the of mental health status among martyrs' wives?
- Are there significant differences in quality of life between martyrs' wives related to age of wife at time of husband's death?
- Are there significant differences in quality of life between martyrs' wives related to number of children?
- Are there significant differences in quality of life between martyrs' wives related to employment VS unemployment?
- Are there significant differences in quality of life between martyrs' wives related to level of education?
- Are there significant differences in mental health status between martyrs' wives related to age at time of husband's death?
- Are there significant differences in mental health status between martyrs' wives related to number of children?

- Are there significant differences in mental health status between martyrs' wives related to employment VS unemployment?
- Are there significant differences in mental health status between martyrs' wives related to level of education?
- Are there differences QOL of martyrs' wives between those who married after death of their husband and those who did not married?
- Are there differences in QOL of martyrs wives between those who live independently and those who live in extended family?
- Is there a relationship between quality of life and mental health?

1.6 Context of the study

This study was conducted in GS. Therefore, the researcher presented some background information about the Palestinian population: geographical, demographical, socio-economical, political situation, health situation and mental health care services.

1.6.1. Demographic context

Palestine (historical Palestine) is a small country, its area is about 26,323 sq. km . Now Palestine comprises two areas separated geographically, the West Bank (WB) and GS, with total area of 6257 km² (UNEP, 2003). GS is a narrow band of land located on the south of Palestine, constituting the coastal zone of the Palestinian territory along the Mediterranean Sea between Egypt and Israel. It is 45 Kilometres long and 6-12 Kilometres wide with an area of 378 km² (PASSIA, 2008). The strategic position of GS as being at the cross roads of Africa, Asia and Europe made it a target for invaders and conquerors over the centuries. According to the Palestinian Central Bureau of Statistics (PCBS, 2010), the total population in the West Bank and GS was 4.05 million, (2.51

million in the WB and 1.54 million in GS). GS is a narrow piece of land lying on the coast of the Mediterranean Sea with a population density of 4,230 inhabitants per km², which is the highest after Singapore.

The Palestinian society is considered a young population, age structure in the GS is similar to that in many developing countries with 49.3% of people aged less than 14 years and sex ratio is 103 males per 100 females (PCBS, 2009).

1.6.2. Socio-political context

WB and GS have been occupied by Israel after the Six Day War in 1967. GS was run by Egypt between 1948 and 1967 after the partition of the British Mandate of Palestine and the declaration of what is called "Israel". Afterwards, Israel built further settlements in the occupied land (Bhat, 2008). The implementation of the partial autonomy in 1994 and the establishment of the Palestinian National Authority (PNA) have had its impacts on the society after the many devastating wars and the long years of occupation and dispersion over the globe (Hamad, 2009). However, Israel still holds overall sovereignty over the GS. It has the upper hand over borders, movement of goods and travellers in and out of GS, particularly the Palestinians themselves. It also controls trade, the commercial market, water, the main sources of energy, the means of communications and the overall security. Hence, it still has a hold over the Palestinian economy (Hamad, 2009).

Since 2000, there has been a chronic down turn in wage income from Israel due to the security closure of the borders between GS and Israel till it reached the zero level now. This has been complicated by the massive contraction of employment opportunities inside GS due to the current collapse of economy due to production factors such as lack of raw materials, fuel and electricity as well as to market failure resulting from closure, lack of transportations and widely prevailing poverty.

1.6.3. Socio-economic context

Economic crisis has been caused by restriction on the movement of people and goods. The Palestinian recession is among the worst in the modern history; average personal incomes have been declined by more than a third since 2000, and nearly a half of the Palestinians now live below the poverty line; 43% still live below the poverty average (World Bank, 2004). According to the PCBS, the subsistence poverty was 23% and that 56% of all households in the occupied Palestinian territory are living below the poverty line (80% in 2006 – versus 63% in 2005 – in the GS, and 43% in the West Bank), and that means that over two million people are attempting to subsist on less than \$ 2 / person / day (PCBS, 2007). According to the World Bank, approximately 3 out of 5 Palestinians live under the income poverty line and one third of the Palestinians live under the consumption poverty. Despite poverty, the Palestinians are eager to learn, literacy ratio in 2004 among those aged 15 years and more is 92.3% (male: 96.5%, female: 88%) which is considered among the highest percentage of literacy rates of the Arab countries (PASSIA, 2007).

1.6.4. Health care context

Palestine experience in health care system is rather unique and complicated. The several years of occupation and the following unilateral withdrawal of the Israeli government did strongly influence the health care system in Palestine. The consequences of closures and separation formed a great challenge for the ministry of health as it created obstacles regarding the accessibility to health care services and affected the unity of the health care system in all Palestinian governorates (MOH, 2004).

Health care services in Palestine are provided by five sectors including the ministry of health (MOH), United Nations Relief and Works Agency for the Palestinian Refugees (UNRWA), Medical Military Services for Police and General Security, Non-Governmental

Organizations (NGOs) and private sector (non- and for-profit hospitals). MOH is the main health care provider; it provides primary, secondary, and tertiary services and purchases some services from private providers domestically and abroad (MOH, 2006). MOH plays the main role in providing and controlling immunizations scheme, public health activities, licensing and registration of health facilities. Health care financing is mainly provided through the government, apart from the out-of-pocket health financing which is the first source of health financing in Palestine (MOH, 2006). Additionally, external donations constitute a considerable source for health funding. UNRWA mainly provides primary health care services to the refugee population. The Medical Services for Police provides preventive and curative services for policemen, general security persons and their families, in addition to the general population. UNRWA operates 20 Primary Health Centers (WHO, 2009). The NGOs sector is extensive: from missionary hospitals, to facilities supported by international organizations, to community health centers. The NGOs sector operates about 50 centers. The private for-profit health sector also provides the three levels of care through wide range of practices (WHO, 2009).

1.6.5 Mental health services

In Palestine, mental health services are provided by four sectors, the MOH, UNRWA, NGOs and private sector. The community mental health department in MOH provides preventive, curative and community-based rehabilitation programs. The MOH in cooperation with WHO, Italian and French cooperation are implementing a new project to improve mental health services and policy (MOH, 2004).

In Palestine, within the activities of community mental health, the total number of new cases of mental disorders reported in 2004 was 1,967 with an incidence rate of 54.1 per 100,000 compared with 956 cases in 2000 with an incidence rate of 30.3 per 100,000, with

an annual average incidence of 41.3 per 100,000 in the last five years resulted mainly from the Israeli incidents of violation against Palestinians during AI Aqsa Intifada. The incidence rates of mental illness were more common in Gaza Strip than in West Bank (MOH,2004). Mental health services are provided for the Palestinian population by 15 community mental health clinics (5 in Gaza Strip, one specialized in child mental health, and 10 clinics in West Bank). These clinics are distributed through primary health care centers in the different governorates in Palestine since 1994, in addition to four Electro-encephalography units.

In 2004, 58,355 visits were made to community mental health clinics (41,749 in West Bank vs. 16,606 in GS). Compared with 53,554 visits in 2000, with an increase percentage of 9.3%. In addition to community mental health clinics, there are two mental hospitals in Palestine (Bethlehem and Gaza psychiatric hospitals). The reported incidence rate of mental disorders in 2004 was higher than that reported in 2000. This is mainly due to psychological trauma and stress that affected Palestinian people as a result of the Israeli violence (MOH, 2006).

1.7 Definition of terms

Quality of life

WHO defined quality of life as an individual's Perception for their position in life in the context of the culture and value systems in which they live and in relation to their goals, expectation, standards, and concerns (WHO, 1995).

The researcher defines quality of life operationally as the total scores gained by study participants on quality of life scale.

Mental Health

A state of well-being in which every individual realizes his or her own potential, can cope with the normal stresses of life, can work productively and fruitfully, and is able to make a contribution to her or his community. (WHO, 2005).

The researcher defines mental health operationally as the total scores gained on depression scale, anxiety scale and PTSD scale.

Martyrs' wives

The researcher defines martyrs' wives operationally as widows who lost their husbands as a result of Israeli military operation CLO against Gaza Strip at the end of December 2008.

Gaza war (Cast Lead Operation)

The Gaza War known as Cast Lead Operation (CLO) launched by the Israeli Military Forces against Gaza Strip at the end of December 2008 to January 2009, lasted for three weeks, left around 1400 martyrs and thousands of injured casualties, the vast majority of them were civilians (PCHR, 2009).

1.8 Lay out of the study

This study consists of five chapters. Chapter one includes the introduction, problem statement, justification, purpose, questions of the study, definition of terms and context of the study.

Chapter two includes conceptual framework and review of literature.

Chapter three includes study design, population, sample and sampling method, instruments for data collection, statistical procedures used, inclusion-exclusion criteria, ethical consideration and limitations of the study.

Chapter four includes description of study sample, results of the study and discussion.

And finally chapter five includes conclusion, recommendations and references.

Chapter Two

Conceptual Framework and Literature review

2.1 Conceptual framework

The conceptual framework was designed by the researcher based on the review of previous literature which is the map that guides the construction of the design and the implementation of the study.

The conceptual framework design illustrated below is used to guide and direct the research process. The diagram denotes that some indicators including physical health, psychological health, level of independence, social relationships and environment are determining the quality of life. It also denotes that PTSD, depression and grief are contributing states that determines level of mental health. Paying attention and good management of those factors and indicators could play an important role in improving quality of life and mental health of individuals.

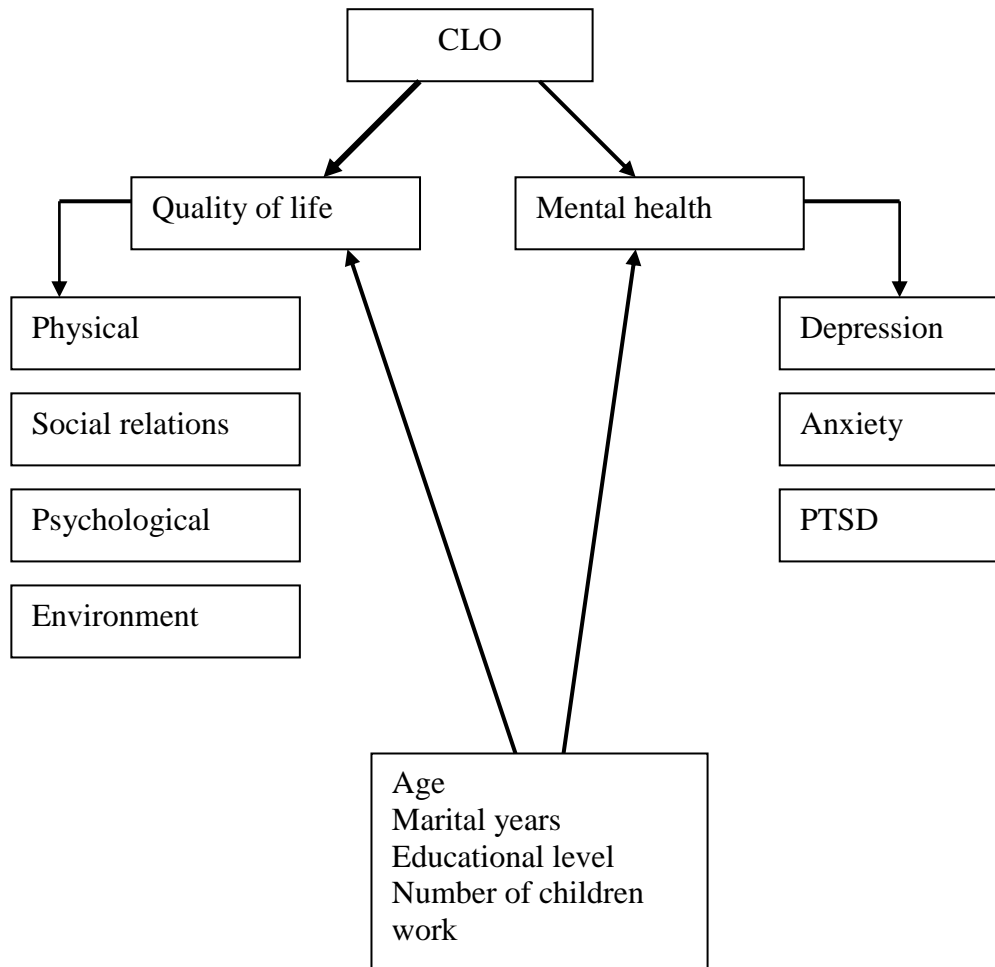


Figure 2.1: Diagram of conceptual framework

2.2 Literature review

2.2.1 Introduction

The CLO which took place on 26th of December 2008 to mid January 2009 left a great damage to both citizens and properties. There were about 1400 martyrs, thousands of injuries and disabilities, mass destruction of houses, infrastructure, community and governmental buildings and land. Till now, reconstruction of houses did not take place due to the strict siege which prohibited international aids and unavailability of local resources. As a result, many families still homeless or living in poor quality houses or in tents, with its consequences on quality of life from all aspects.

2.2.2 Definition of quality of life

QOL is a complex multi-dimensional concept. In fact there is no universally accepted definition for QOL. In the past, many researchers measured only one dimension, such as physical function, or economic concern, or sexual function. More recently, researchers have attempted to further define QOL (Raphael, 1996). The concept of QOL was first applied in bio-medical research in the 1980s to assess subjective, qualitative aspects of life, to accompany quantitative measures such as life expectancy or health care costs (Mendlowicz and Stein, 2000). WHO definition of QOL which identifies it as a multidimensional concept and defines it as "individuals' perceptions of their position in life in the context of the culture and value system in which they live and in relation to their goals, standards and concerns". This definition includes six broad domains: physical health, psychological state, level of independence, social relationships, environmental features and spiritual concerns (WHO, 1993). Raphael et al., (1996) defined quality of life as "the degree to which a person enjoys the important possibilities of his/her life". McDowell & Newell (1987) suggested that QOL "relates both to the adequacy of material circumstances and to people's feelings about these circumstances".

2.2.3 Quality of life and health care

Many clinicians remain unsure of the relevance of measuring quality of life to their clinical practice. In health economics quality of life measures have become the standard means of assessing the results of health care interventions and, more controversially, the means of prioritizing funding (Fitzpatrick, et al., 1992). QOL is used in health care to refer to an individual's emotional, social and physical wellbeing, including their ability to function in the ordinary tasks of living. It is a term used most frequently in the context of healthcare, where the impact of a disease may reduce HRQOL (University of Toronto, 2009).

2.2.4 Measuring quality of life and well-being

Due to the lack of a universal and generic definition of quality of life, there is absence of agreement on its measurement. Medical science boasts numerous health-related quality of life instruments and scales (Bowling, 1995; Kliem et al., 2000), while most social science measures take a multidimensional approach by integrating more than just health variables. Haug and Folmar (1986) assess quality of life by measuring physical health, functional ability, perceived income inadequacy, social contacts, absence of physiological distress and cognitive ability. QOL is a term used loosely to indicate general well-being. Whether quality of life and well-being are somehow synonymous or different, and which of those terms may be more appropriate, warrants further consideration. Like quality of life, wellbeing has been measured by many different disciplines across a breadth of variables. The WHO's European Charter on Environment and Health reported that 'good health and wellbeing require a clean and harmonious environment in which physical, psychological, social and aesthetic factors are all given their due importance (WHO, 2001).

2.2.5 Theories of quality of life

2.2.5.1 The integrative theory of the quality of life

QOL means a good life. A good life is the same as living a life with a high quality. This may seem evident, but it is necessary to make such a simple clarification, because medical jargon often uses very narrow concepts of the quality of life (for example, side effect profiles). All great religions and philosophies have a notion of a good life ranging from saying that a good life is attained by practical codes of conduct to requests to engage in a certain positive attitude to life or to search into the depths of your own being. Notions

about a good life are closely linked to the culture of which you are a part. When people in a Western culture view a good life, the cultural conditioning makes them tend to include happiness, fulfillment of needs, functioning in a social context, etc. These notions can then be divided into three loosely separate groups, each concerned with an aspect of a good life:

1. The subjective quality of life is how good a life each individual feels he or she has. Each individual personally evaluates how he or she views things and his or her feelings and notions. Whether an individual is content with life and happy are aspects that reflect the subjective quality of life.
2. The existential quality of life means how good one's life is at a deeper level. It is assumed that the individual has a deeper nature that deserves to be respected and that the individual can live in harmony with. We might think that a number of needs in our biological nature have to be fulfilled, that these factors - such as conditions of growth - must be optimized, or that we must all live life in accordance with certain spiritual and religious ideals laid down by the nature of our being.
3. The objective quality of life means how one's life is perceived by the outside world. This view is influenced by the culture in which people live. The objective quality of life reveals itself in a person's ability to adapt to the values of a culture and tells us little about that person's life. Examples may be social status or the status symbols one should have to be a good member of that culture. Objective is used here in the sense of nonsubjective or objective facts. Nonsubjective is concerned with the external and easily established conditions of life that many observers can rate identically (Csikszentmihalyi, 1993). As these three overall aspects of the quality of life are loosely grouped with notions relevant to the quality of life, which tend to overlap, they can be placed in a spectrum ranging from the subjective to the objective. We place the existential element in the middle, because it unites the subjective and the objective, as

shown later. This existential center also represents the depth of the being of humanity.

Other researchers of the quality of life integrate the subjective and the objective aspects of a person's life at a higher state in life. This has been expressed variously by the terms flow (Csikszentmihalyi, 1993) and sense of coherence (Antonovsky, 1987).

This spectrum, from the subjective to the objective quality of life via the quality of life in the existential depths, incorporates a number of existing quality-of-life theories. We therefore call this spectrum the integrative quality-of-life (IQOL) theory. Each theory is presented, followed by a short synopsis of the central notion and how it relates to other life theories and notions.

2.2.5.1.1 Well Being

The most natural aspect of the subjective quality of life is well being. The quality of life is seen here in terms of an assessment of one's own quality of life. When we meet other people, we always say, "How are you?" or "How's life?" We are thus asking that person to give us an evaluation of their quality of life. Such questions do not require a lengthy explanation of matters of life, merely a spontaneous assessment of life in general. If, however, we are asked how content we are with life or how happy we are, these questions are assessed differently to such a question as "How are things?" Such questions are much more complex. In other words, satisfaction with life and happiness are deeper dimensions that are not as straightforward as well being (Cella and Tulsky, 1993).

2.2.5.1.2 Satisfaction with life

When people are asked whether they are satisfied with life, they often say that something or other is amiss. People are usually less satisfied with life than their state of well being would indicate. People tend to feel good, but are not very satisfied, just satisfied. In

retrospect, there is always something to be dissatisfied or disgruntled about. Being satisfied means feeling that life is the way it should be. When one's expectations, needs, and desires in life are being met by the surrounding world, one is satisfied. Satisfaction is a mental state: a cognitive entity. This symmetry and concord can come about in two ways: either we try to change the external world so that it matches our dreams or we give up our dreams because they are unrealistic, and adapt them to the world as it is, thus creating concord between the external world and our dreams. Both approaches generate the same satisfaction. However, these two strategies of life generate entirely different lives: one life meets with one's dreams and the other life is lived in resignation; but both lives will be satisfactory. Thus, satisfaction does not necessarily involve realizing life potential, fulfillment of needs, or the ability to function well in life objectively. A person who has lived a difficult life, such as prostitution, chronic illness, or poverty, always seems to be satisfied with his or her life because of gradual adaptation through resignation. One can be satisfied with life yet feel bad inside (Nordenfelt, 1991). The process of adapting to one's environment may lead to an individual letting him- or herself down by compromising the deep dreams of a good life. The person may not be unhappy with life but deep down considers it meaningless. Satisfaction with life is thus not the same as experiencing meaning in life. It is very common to be satisfied yet not happy. There are classical types of satisfaction theories. One of these is called preference theory. It is typically formulated in such a way that a good life lies in seeing one's wishes come true (Nordenfelt, 1991).

2.2.5.1.3 Happiness

Most people use this word with caution, because it has special significance. They use it with respect. Being happy is not just being cheerful and content. It is a special feeling that is precious and very desirable, but hard to attain. Happiness is something deep in the

individual that involves a special balance or symmetry. Happiness is an intoxication, a rare sweetness of life, when tiny bubbles sparkle. It is best described in metaphors, preferably by poets. Happiness is closely associated with the body, but is not limited to it. It comprises an individual's whole existence and is signified by a certain intensity of an experience, which is also the case with unhappiness. The intensity of the experience is a dimension that does not separate happiness from more superficial aspects of the quality of life such as being satisfied with life and well being. Many people link the concept of happiness with human nature: happiness comes to people who live in extraordinary harmony with his or her nature. Nevertheless, not many people believe that happiness is achieved by merely adapting to one's culture and related factors (Ventegodt, 1995).

2.2.5.1.4 Meaning in life

Meaning in life is a very important concept and is seldom used. We only speak of the meaning of life with our most intimate friends and relatives, if at all. People who seek meaning in life are often catapulted into a confusing situation, where the value of all aspects of life is viewed quite differently. Are relations with my friends or partner as meaningful as they ought to be? Am I doing the right thing in life? Have I got the right job? Am I using my talents in the right way? Are my beliefs in life really correct? A search for meaning in life involves an acceptance of the meaninglessness and meaningfulness of life and an obligation towards oneself to make amends for what is meaningless. In this way, the question of meaning in life becomes deeply personal, and very few people attempt to answer it because, by doing so, we risk our security in everyday life (Ventegodt, 2003).

2.2.5.1.5 A Biological view of the quality of life: The biological information system and the state of existential balance

This aspect of the quality of life concerns the fundamental, biological constitution of humans. From a biological point of view, a human is a living organism, a colony of cells that, through intense exchange of information, realizes a deep biological potential to create a human being. When the formula for becoming a person, which is contained deep within our nature, has been realized in the structure of the human organism, then life is characterized by order; biologically, psychologically, socially, and religiously understood in a broad sense as what we believe about life and reality (Ventegodt, 2003; Ventegodt, 1994). Viewed from this angle, physical health reflects the state of the biological information system, as the cells of the body need precise information to function correctly and to keep the body healthy and well. According to this notion, the quality of life lies in the conformity between the actual life lived and the formula for being a person that lies deep within the organism. As our consciousness and life experiences are also biologically conditioned, the experience that life has or does not have meaning can also be seen as conditioned by the state of the biological information system. If communication between the cells of the organism is not optimal, states of experience and of conscious life cannot be optimal either. Some people with arthritis are doing well and some people who are not sick are doing poorly. The interesting question is whether one can have arthritis and still have a life that is totally meaningful. If there is a connection between the quality of life and illness, it is probably located deep within human beings in connection with their existential center (including their state of health and “soul”) and not on the surface in connection with how good they feel. Meaning in life and biological order go hand in hand in such a life theory. The person who lives in such a way that their meaning in life is gradually lost is also the kind of person who is susceptible to illnesses that affect the physical appearance

and well being of the body, seemingly without cause. The relation between the quality of life and illness is therefore best illustrated by using a theory of the individual as a biological information system (Ventegodt, 2003; Ventegodt, 1994).

2.2.5.1.6 Realizing life potential

Humans are in constant development. It starts with a fertilized egg, which contains a vast array of information. Throughout life, it must manifest and realize the potential of this information. Taking this as our starting point, realizing life potential becomes a key concept in the quality of life. Just as a sunflower seed uses its potential to become a sunflower with flowers and leaves, humans use a store of potential for creative activities, good social relations, a meaningful job, and starting a family: living life to the full. In the course of realizing our life potential, we all link with reality on a number of levels. The central nervous system - the brain - enabled us to arise from the earth in which we were planted and relocate to another place better suited for self-realization. Human life is thus far more complex than that of the sunflower. It develops in far more abstract ways (Ventegodt, et al., 2003).

The theory of realizing life potential is a theory of the links between nature and humanity. It links the quality of life closely to the human roots in nature. This biological starting point does not reduce the significance of living beings but merely states that this is a general theory of the exchange of meaningful information in living systems: from cell to organism to society (a biopsychosocial model). This theory is explained in detail in the next paper in this series (Ventegodt, et al., 2003).

2.2.5.1.7 Fulfillment of needs

The concept of fulfillment of needs is far less abstract than the previous aspects. It is also more superficial and culturally conditioned. It is used in a broad sense, also popularly. The

needs traditionally relate to the quality of life such that, when your needs are fulfilled, your quality of life is high. The needs are an expression of our nature: that is, something all human beings have in common. The notion of fulfillment of needs is ubiquitous: "I need a cup of coffee" or "We all need the security a family can give us." The concept is used far more stringently in scientific terms because a closer look reveals that the meaning of the concept is unclear and ambiguous. Maslow (Ventegodt, 1994) provided a very important formulation of the concept of needs. Besides such well-known needs as food, sex, and social relations, Maslow talks about a more abstract need to realize oneself. This idea has become an integral part of our culture. As outlined above, the notion of fulfillment of needs is intuitively meaningful. It is a stage between the deep, extremely existential aspects and the superficial objective phenomena, and we have therefore included it in our spectrum. The need is also closely linked with desires and the satisfaction we all achieve by having our needs fulfilled. The subjective part of the spectrum includes satisfaction and is intermediate between the superficial aspects and the depths of our being.

Fulfillment of needs is not identical to well being, as needs are related to aspects of human nature. However, it is part of the theory of needs that we feel good once our needs have been fulfilled. Fulfillment of needs is not the same as realizing life potential, which takes the extreme stance that life is all about realizing one's biological information. This information exists in such complex forms that one can hardly reduce it to simple, actual needs.

If we take Maslow's need in the abstract, the human need for self-realization, the definition becomes vague and unclear. A need is no longer something the individual has to satisfy from an outside source such as food and shelter but something the person has to contribute to and accomplish for himself or herself. Are we then to fulfill this urge from the outside world or from within our inner depths? And does this then mean that our needs are

fulfilled? Who or what in each of us, is it that needs? The ego? The self? Learned expectations?

The more one digs into the concept of need, the more unclear and ambiguous it all seems. Many researchers, notably sociologists, suggest that we should move away from talking of need. Nevertheless, the need concept is extremely simple to work with in practice because the concept is so well integrated into many languages. The third paper in this series present a modern understanding of Maslow (Ventegodt, 2003).

2.2.5.1.8 Objective factors

The objective aspects of the quality of life are related to the external factors of life and are fairly easy to establish. They include income, marital status, state of health, and the number of daily contacts with other people. We need to distinguish these aspects of the quality of life, because a good life is easily confused with the sort of life we generally consider as being "right", and rich in an external sense of the word. You can be unhappy in a sports car and happy in a tram car. This general truth is lent credence by the clinical fact that there is often little agreement between a physician's evaluation of a person's (objective) quality of life and the patient's own evaluation of his or her (subjective) quality of life. The factors chosen to indicate the objective quality of life are closely associated with the culture in which we live. The objective quality of life thus very much reflects our ability to adapt to the culture in which we live. It is thus somewhat superficial, as it does not presuppose any deep reflection or pondering on the nature of this culture. The degree of adaptation to the norms of the culture is superficially synonymous with the notion of well being.

Research into the quality of life has been greatly influenced by attempts to measure the quality of life objectively. These tests span from the purely objective from a medical viewpoint (Can you stand? Walk? Run?) to counting, by sociologists, of people's social

contacts, etc. (state-of-life research). Practically all such research is based on theories that generate lists of the objective factors that are part of a good life. This can be done in a number of ways. Ours is based on the cultural orientation of our Western societies and on the theory of realizing life potential (Ventegodt, 2003).

2.2.6 Mental health

2.2.6.1 Definition of mental health

Mental health has been defined in variant ways by different authors and organizations. Mental health is a term used to describe either a level of cognitive or emotional well-being or an absence of a mental disorder. From perspectives of the discipline of positive psychology or holism mental health may include an individual's ability to enjoy life and procure a balance between life activities and efforts to achieve psychological resilience (aboutcom, 2006). Mental health can be seen as a continuum, where an individual's mental health may have many different possible values (Keyes, 2002). Mental wellness is generally viewed as a positive attribute, such that a person can reach enhanced levels of mental health, even if they do not have any diagnosable mental health condition. This definition of mental health highlights emotional well-being, the capacity to live a full and creative life, and the flexibility to deal with life's inevitable challenges (Hattie et al, 2004). It is "a state of well-being in which the individual realizes his or her own abilities, can cope with the normal stresses of life, can work productively and fruitfully, and is able to make a contribution to his or her community". In this positive sense, mental health is the foundation for wellbeing and effective functioning for an individual and for a community. This core concept of health is consistent with its wide and varied interpretation across cultures (WHO,2005).

2.2.6.2 Characteristics of mental health

For a person to be said that he has a good mental status, he should have some characteristics including;

- a. **The ability to enjoy life:** The ability to enjoy life is essential to good mental health. James Taylor mentioned that the secret of life is enjoying the passing of time, the practice of mindfulness meditation is one way to cultivate the ability to enjoy the present. We, of course, need to plan for the future at times; and we also need to learn from the past (Taylor, et al., 2002).
- b. **The ability to bounce back from adversity (resilience):** It has been known that some people handle stress better than others. Why do some adults raised in alcoholic families do well, while others have repeated problems in life? The characteristic of "resilience" is shared by those who cope well with stress (Taylor, et al., 2002).
- c. **Balance:** We all need to balance time spent socially with time spent alone. Extreme social isolation may even result in a split with reality. Those who ignore the need for some solitary times also risk such a split. Balancing these two needs seems to be the key - although we all balance these differently (Bonanno, et al., 2006).
- d. **Flexibility:** We all know people who hold very rigid opinions. No amount of discussion can change their views. Such people often set themselves up for added stress by the rigid expectations that they hold. Working on making our expectations more flexible can improve our mental health. Emotional flexibility may be just as important as cognitive flexibility. Mental health people experience a range of emotions and allow themselves to express these feelings, Some people shut off certain feelings, finding them to be unacceptable. This emotional rigidity may result in other mental health problems (Taylor, et al., 2002).

e. Self-actualization: What have we made of the gifts that we have been given? We all know people who have surpassed their potential and others who seem to have squandered their gifts. We first need to recognize our gifts, of course, and the process of recognition is part of the path toward self-actualization. Mental health persons are persons who are in the process of actualizing their potential. In order to do this we must first feel secure (Kajita, 2002). These are just a few of the concepts that are important in attempting to describe mental health. The ability to form healthy relationships with others is also important. Adult and adolescent mental health also includes the concepts of self-esteem and healthy sexuality. How we deal with loss and death is also an important element of mental health (Bonanno, et al., 2006).

2.2.6.3 Theories of mental health

2.2.6.3.1 Erik Erikson: Psychoanalytic developmental theory

The psychoanalytic theory of development is best exemplified in the work of Erik Erikson, a psychoanalyst who expanded upon Freud's original theories of psychosexual development. One of Erikson's pioneering contributions was that development unfolded throughout the life span, a view that has become widely embraced (Bennett, 2003).

Freud postulated that development proceeded through a series of stages in which children seek pleasure or gratification from a particular body part (i.e., the oral, anal, and phallic stage). In contrast, Erikson's theories of child development focus on the interrelationship between a developing child's internal psychosexual development and his or her more external emotional development, emphasizing the interpersonal relationships that arise between the child and parents (Hansen, 2006).

Erikson conceived the life course from birth to old age, as a series of eight epigenetic stages that, as other developmental theories, proceed in a stepwise fashion, the next dependent upon how well the previous has been mastered: trust versus mistrust; autonomy versus shame and doubt; initiative versus guilt; industry versus inferiority; identity versus role diffusion; intimacy versus isolation; generatively versus stagnation; ego integrity versus despair (Garcia, 1995).

Erikson portrayed each stage as a crisis or conflict that needed resolution, either at the time or at a subsequent stage. Each successive stage presents its own challenges but, at the same time, offers the opportunity for correction of unresolved challenges of previous stages. At each stage the tension was between the psychosocial and psychosexual-the outward looking versus inward-looking perspectives. Psychopathology, in the form of a mental disorder, would arise if a stage was ultimately not mastered successfully (Hansen, 2006).

2.2.6.3.2 John Bowlby: Attachment theory of development

Fifty years ago, a new conceptualization of the psychoanalytic approach to development came into the lexicon of human development theory. John Bowlby's reinterpretation of Freudian development is grounded in both Darwinian evolutionary theory and animal etiology. The previous work of Konrad Lorenz and others, who explored the relationship between other animals and their caregivers, determined that the bonds of infant care and the attachment of young to their caregivers are seminal in the drive for survival. Similarly, Bowlby theorized that for humans, attachment to a caregiver had a biological basis in the need for survival. Moreover, he suggested that this attachment drive exists alongside the drive for nutrition and the sex drive, yet distinct and separate from them. Attachment is seen as the anchor that enables the developing child to explore the world (Fall, et al., 2003). With the comfort and security of a stable and routine attachment to the mother or

other primary caregiver, a child is able to organize other elements of development in a coherent way. In contrast, instability in the care giving relationship whether physical distance, erratic patterns of parental behavior, or even physical or emotional abuse may interfere with the sense of trust and security, potentially giving rise to anxiety and psychological problems later in childhood or even decades later in life (Mercer, 2006).

2.2.6.3.3 Piaget: Cognitive developmental theory

Jean Piaget formulated one of the most influential theories of cognitive development. Its focus was on cognitive (intellectual) development, that is, the processes by which children come to know and understand the world. Other aspects of human growth, both physical and emotional, are beyond the scope of his theory. Piaget posited that each step of cognitive development proceeds from the previous step in a fixed pattern, beginning at birth and ending in the teen years. Piaget had a seminal influence on the discipline of cognitive psychology. Although empirical research has called into question some of the specifics of his theories, the broad outlines remain widely accepted (Garcia, 1995).

2.2.7 Trauma

Trauma is a psychologically distressing event outside the range of usual human experience. Trauma often involves a sense of fear, terror and helplessness. Trauma is an experience that induces an abnormally intense and prolonged stress response (Perry, 2006). A traumatic event is defined by the Diagnostic and Statistical Manual IV of the American Psychiatric Association 2000 as "An event or events that involve actual or threatened death or serious injury, or a threat to the physical integrity of self or others" (APA ,2000).

2.2.7.1 Traumatic stress

Stress resulting from exposure to, or witnessing of events that are severe and/or life

threatening. The extent of traumatic stress experiences varies by duration of exposure and number of exposures. Additionally, the amount of stress incurred will vary according to the availability of resources and coping skills.

2.2.7.2 Trauma victim

Trauma victims are those individuals who are impacted by a traumatic occurrence.

Primary Victims - individuals who are directly involved in the trauma.

Secondary Victims - individuals who are indirectly impacted by the trauma, these include relatives and loved ones, members of the immediate community or surrounding area, and of course may include relief workers and persons who respond to the incident and people who experience the trauma through the media (Perry, 2006).

2.2.7.3 Types of trauma

Simple: This type of trauma is usually caused by a single incident. The incident is usually one that involves life threatening events and/or events that have the potential to cause serious injury. Examples: Car Accident, Fire Cyclone, Shooting.

Complex: This type of trauma usually is longer in duration and involves multiple incidents. The incidents are usually ones that involve interpersonal violence or violation and as a result are almost always associated with a sense of shame and stigma. Examples: All forms of child abuse , Bullying, Experiences of War , Imprisonment (Meichenbaum, 1994).

2.2.7.4 Categories of traumatic events

There have been many attempts to categorize trauma. These categorization of traumatic occurrences generally are organized by: who or what is responsible for the trauma, the cause of the trauma, or categorizations as well as the factors which impact the severity of trauma and traumatic responses.

a. Responsibility categorizations

Crises may be viewed as either natural, or human-made. Natural crises include those disasters that are created by the forces of nature such as tornados, hurricanes, and floods. When the cause is viewed as human made, the reactions may be more emotionally devastating. Human made tampering, chemical attacks/dispersement, ethnic cleansing, riots and wars, suicide, murder, and crime and violence. This is likely because the disaster is viewed as within the control of individual persons, and Therefore avoidable. It is not only the acts themselves, but the threat of these acts which may have psychologically traumatizing impact (Yule and Williams, 1990).

b. Cause categorizations

Events that lead to trauma may be expected, such as the death of a family member who is terminally ill, or unexpected, such as the terrorist attack. Trauma can additionally be categorized as part of normal development such as when children leave their parents' home, or they can be specific to an unanticipated situation(Yule and Williams, 1990).

c. Nature of event categorization

Categorization by the nature of the event varies, but in general researchers attempt to group specific traumatic incidences into categories that reflect the pervasive shared elements of particular trauma. Thus, while most trauma involves loss, specific types of loss are viewed as having some common elements which impact upon the severity of the trauma and the severity of the reaction to the trauma. Factors which may increase traumatic severity include: predictability, controllability and intensity. Additionally, the reaction to trauma is

impacted by the prolonged, repeated or nature of the event or situation (Yule and Williams, 1990).

2.2.7.5 Effects of traumatic experiences

When people find themselves suddenly in danger, sometimes they are overcome with feeling of fear, helplessness, or horror. These events are called traumatic experiences. Some common traumatic experiences include being physically attacked, being in a serious accident, being in combat, being sexually assaulted, and being in a fire or a disaster like a hurricane or a tornado. After traumatic experiences, people may have problems that they didn't have before the event. If these problems are severe and the survivor does not get help for them, they can begin to cause problems in the survivor's family.

People who go through traumatic experiences often have symptoms and problems afterward. How serious the symptoms and problems are depends on many things including a person's life experiences before the trauma, a person's own natural ability to cope with stress, how serious the trauma was, and what kind of help and support a person gets from family, friends, and professionals immediately following the trauma (Yule and Williams, 1990).

What are the common effects of trauma?

During a trauma, survivors often become overwhelmed with fear. Soon after the traumatic experience, they may re-experience the trauma mentally and physically. Because this can be uncomfortable and sometimes painful, survivors tend to avoid reminders of the trauma. These symptoms create a problem that is called PTSD. PTSD is a specific set of problems resulting from a traumatic experience and is recognized by medical and mental-health professionals (De Silva, 1999).

2.2.7.6 Re-experiencing symptoms

Trauma survivors commonly re-experience their traumas. This means that the survivor experiences again the same mental, emotional, and physical experiences that occurred during or just after the trauma. These include thinking about the trauma, seeing images of the event, feeling agitated and having physical sensations like those that occurred during the trauma. Trauma survivors find themselves feeling as if they are in danger, experiencing panic sensations, wanting to escape, getting angry, and thinking about attacking or harming someone else. Because they are anxious and physically agitated, they may have trouble sleeping and concentrating. The survivor usually can't control these symptoms or stop them from happening. Because trauma survivors have these upsetting feelings when they feel stress or are reminded of their trauma, they often act as if they are in danger again (De Silva, 1999).

2.2.8 Disorders of mental health

2.2.8.1 Depression

Depressive disorders have been with mankind since the beginning of recorded history. Hippocrates referred to depression as melancholia, which literally means black bile. Black bile, along with blood, phlegm, and yellow bile were the four humors (fluids) that described the basic medical physiology theory at that time. Depression, also referred to as clinical depression, has been portrayed in literature and the arts for hundreds of years, but what do we mean today when we refer to a depressive disorder? In the 19th century, depression was seen as an inherited weakness of temperament. In the first half of the 20th century, Freud linked the development of depression to guilt and conflict. John Cheever, the author and a modern sufferer of depressive disorder, wrote of conflict and experiences with his parents as influencing his development of depression.

In the 1950s and 60s, depression was divided into two types, endogenous and neurotic. Endogenous means that the depression comes from within the body, perhaps of genetic origin, or comes out of nowhere. Neurotic or reactive depression has a clear environmental precipitating factor, such as the death of a spouse, or other significant loss, such as the loss of a job. In the 1970s and '80s, the focus of attention shifted from the cause of depression to its effects on the afflicted people (MedicineNet.com, visited on 11.2.2011).

2.2.8.2 Anxiety

Anxiety is a psychological and physiological state characterized by somatic, emotional, cognitive, and behavioral components. The root meaning of the word anxiety is "to vex or trouble"; in either the absence or presence of psychological stress, anxiety can create feelings of fear, worry, uneasiness and dread (Bouras and Holt, 2007). Anxiety is considered to be a normal reaction to stress. It may help a person to deal with a difficult situation by prompting one to cope with it. When anxiety becomes excessive, it may fall under the classification of an anxiety disorder. The intensity and reasoning behind anxiety determines whether it is considered a normal or abnormal reaction (Barker, 2009).

Anxiety is a generalized mood condition that can often occur without an identifiable triggering stimulus. As such, it is distinguished from fear, which is an emotional response to a perceived threat. Additionally, fear is related to the specific behaviors of escape and avoidance, whereas anxiety is related to situations perceived as uncontrollable or unavoidable (Ohman, 2000). An alternative view defines anxiety as "a future-oriented mood state in which one is ready or prepared to attempt to cope with upcoming negative events", suggesting that it is a distinction between future vs. present dangers which divides anxiety and fear (Barlow, 2002).

Physical effects of anxiety may include heart palpitations, muscle weakness and tension, fatigue, nausea, chest pain, shortness of breath, stomach aches, or headaches. Anxiety does not only consist of physical effects; there are many emotional ones as well. They include "feelings of apprehension or dread, trouble concentrating, feeling tense or jumpy, anticipating the worst, irritability, restlessness, watching (and waiting) for signs (and occurrences) of danger, and, feeling like your mind's gone blank" as well as "nightmares/bad dreams, obsessions about sensations and feeling like everything is scary". Cognitive effects of anxiety may include thoughts about suspected dangers, such as fear of dying. You may fear that the chest pains [a physical symptom of anxiety] are a deadly heart attack or that the shooting pains in your head [another physical symptom of anxiety] are the result of a tumor or aneurysm. You feel an intense fear when you think of dying, or you may think of it more often than normal, or can't get it out of your mind (Anxietycenter.com, 2009). Behavior can be affected in the form of withdrawal from situations where unpleasant effects of anxiety have been experienced in the past, it can also be affected in ways which include changes in sleeping patterns, nail biting and increased motor tension, such as foot tapping (Barker, 2009).

2.2.8.3 Post-traumatic stress disorder (PTSD)

Post-traumatic Stress Disorder or PTSD is a severe anxiety disorder that can develop after exposure to any event that results in psychological trauma. This event may involve the threat of death to oneself or to someone else, or to one's own or someone else's physical, sexual, or psychological integrity, overwhelming the individual's ability to cope. As an effect of psychological trauma, PTSD is less frequent and more enduring than the more commonly seen acute stress response (American Psychiatric association, 1994; Brunet, 2007).

Diagnostic symptoms for PTSD include re-experiencing the original trauma through flashbacks or nightmares, avoidance of stimuli associated with the trauma, and increased arousal – such as difficulty falling or staying asleep, anger, and hypervigilance. Formal diagnostic criteria (both DSM-IV-TR and ICD-9) require that the symptoms last more than one month and cause significant impairment in social, occupational, or other important areas of functioning (American Psychiatric association, 1994).

2.2.8.4 International PTSD rates

The World Health Organization publishes estimates of PTSD impact for each of its member states; the latest data available are for 2004. Considering only the 25 most populated countries, ranked by overall age-standardized Disability-Adjusted Life Year (DALY) rate (WHO, 2004).

Table (2.1): International Rates of PTSD (2004)

Country	PTSD DALY rate, overall	Country	PTSD DALY rate, overall
Thailand	59	France	54
Indonesia	58	Germany	54
Philippines	58	Italy	54
USA	58	Russian Federation	54
Bangladesh	57	United Kingdom	54
Egypt	56	Nigeria	53
India	56	Dem. Republ. of Congo	52
Iran	56	Ethiopia	52
Pakistan	56	South Africa	52
Japan	55	China	52
Myanmar	55	Mexico	46
Turkey	55	Brazil	45
Viet Nam	55		

2.2.9 Impact of trauma on mental health

War has a catastrophic effect on the health and well being of nations. Studies have shown that conflict situations cause more mortality and disability than any major disease. War destroys communities and families and often disrupts the development of the social and economic fabric of nations. The effects of war include long-term physical and psychological harm to children and adults, as well as reduction in material and human capital. Among the consequences of war, the impact on the mental health of the civilian population is one of the most significant. Studies of the general population show a definite increase in the incidence and prevalence of mental disorders. Women are more affected than men. Other vulnerable groups are children, the elderly and the disabled. Prevalence rates are associated with the degree of trauma, and the availability of physical and emotional support (Murthy and Lakshminarayana, 2006).

A Study examined the impact of exposure to war trauma and PTSD among parents and children in the Gaza strip revealed that both children and parents reported a high number of experienced traumatic events, and high rates of PTSD and anxiety scores above previously established cut-offs. Among children, trauma exposure was significantly associated with total and subscales PTSD scores, and with anxiety scores. In contrast, trauma exposure was significantly associated with PTSD intrusion symptoms in parents. Both war trauma and parents' emotional responses were significantly associated with children's PTSD and anxiety symptoms (Thabet, et al., 2008). Death as a result of wars is simply the "tip of the iceberg". Other consequences, besides death, are not well documented. They include endemic poverty, malnutrition, disability, economic/ social decline and psychosocial illness. Only through a greater understanding of conflicts and the myriad of mental health problems that arise from them, coherent and effective strategies for dealing with such problems can be developed. Though there have not been any world wars since the Second

World War, there have been wars and conflicts throughout the last 60 years. For example, in the 22 countries of the Eastern Mediterranean region of the World Health Organization, over 80% of the population either is in a conflict situation or has experienced such a situation in the last quarter of century (Ghosh, et al., 2004). The WHO estimated that, in the situations of armed conflicts throughout the world, "10% of the people who experience traumatic events will have serious mental health problems and another 10% will develop behavior that will hinder their ability to function effectively. The most common conditions are depression, anxiety and psychosomatic problems such as insomnia, or back and stomach aches" (WHO, 2001). A study investigated trauma, poverty and mental health among Somali and Rwandese refugees living in an African refugee settlement showed that 32% of the Rwandese and 48.1% of the Somali refugees were found to suffer from PTSD, and mental health consequences of conflict remain long after the events are over (Onyut, et al., 2009).

In Palestine, during the last decade a large number of studies have reported high levels of psychosocial problems among children and adolescents, women, refugees and prisoners in Palestine. A study conducted by the Gaza Community Mental Health Program among children and adolescents aged 10-19 years revealed that 32.7% suffered from PTSD symptoms requiring psychological intervention, 49.2% from moderate PTSD symptoms, 15.6% from mild PTSD symptoms, and only 2.5% had no symptoms. Boys had higher rates 58% than girls 42%, and children living in camps suffered more than children living in towns 84.1% and 15.8% respectively (Sarraj and qouta, 2005). Another study on Palestinian perceptions of their living conditions during the Second Intifada found that 46% of parents reported aggressive behavior among their children, 38% noted bad school results, 27% reported bed wetting, while 39% stated that their children suffered from nightmares. The study also revealed that more refugee 53% than non-refugee 41% children

behaved aggressively. About 38% of the respondents said that shooting was the main influence, 34% stated that it was violence on TV, 7% cited confinement at home and 11% reported that it was the arrest and beating of relatives and neighbors. Also, 70% of refugees and non-refugees stated that they had not received any psychological support for the problems of their children (Mousa and Madi, 2003). In a series of studies during the last 10 years from the Gaza Community Mental Health Centre, the most prevalent types of trauma exposure for children were witnessing funerals 95%, witness to shooting 83%, seeing injured or dead strangers 67% and family member injured or killed 62%. Among children living in the area of bombardments, 54% suffered from severe, 33.5% from moderate and 11% from mild or doubtful levels of PTSD. Girls were more vulnerable (Qouta, 2003).

2.2.10 Impact of trauma on quality of life

Traumatic events affects individual's life from physical and psychological aspects. It will have an impact on the ability to function and being productive member in the community, ability to socialize and the well-being of the affected person. The degree to which the person will be affected depends on the severity and duration of traumatic event, sustained injuries, losses – especially a loved one – and the supportive aids received from community facilities. A study conducted to examine PTSD and functioning and QOL outcomes revealed that suffering associated with combat related-PTSD extends beyond the signs and symptoms of the disorder to broader areas of functional and social morbidity. The significantly higher risk of impaired functioning and diminished quality of life uniquely attributable to PTSD suggests that PTSD may well be the core problem in this group of difficult to treat (Zatzick, et al., 1997). Another study investigated the Impact of War on Health Related Quality of Life in Croatia. The results showed that war affects self-perceived health, physical ability, emotional and mental health of the entire population

affected by war, especially younger age groups, those with lower education and lower income (Banaszak, et al., 2002). The strict siege on the Gaza Strip added extra difficulties on Gaza inhabitants beside the high rate of inflation and the mass destruction as a result of CLO. These difficulties were manifested in a study conducted to examine the impact of siege on quality of life among Gaza inhabitants. The results revealed that deterioration in quality of life is expected if people did not have access to medical and health services, unavailability of basic needs and dependence on aids offered by Non-governmental Organizations (Thabet, et al., 2008).

2.2.11 Summary

The concept of quality of life is multidimensional and so far there is no generally accepted definition available. The QOL is either interpreted as "conditions of life" or as "experience of life" (Meeberg, 1993). WHO defines QOL as an individual's perception of his or her position in life within the context of the culture and value systems in which the individual lives and in relation to his or her goals, expectations, standards and concerns (WHOQOL, 1995). QOL can be understood through the way the person reacts to different events or situations being exposed to. Several factors may affect QOL including physical, social, financial and psychological factors. In this study, the researcher focuses on the psychological factor. The experience of losing the husband is a major traumatic event the wife may face during her life, and may lead to developing symptoms of mental health disorders and in consequence may affect life style and QOL.

In this study, the researcher tangled these two variables – QOL and mental health – in regard to some demographic variables. Several studies reported a correlation between mental health and QOL especially after exposure to traumatic events. The CLO against Gaza Strip two years ago, with the mass destruction of infrastructure and community

facilities, beside the siege which was enforced since 2006, all added extra pressure and difficulties on life from all circumstances.

The researcher believes that adequate social and financial support will decrease the negative impact on mental health and improves the QOL among those who were suffering as a result of the war.

Chapter Three

Methodology

3.1 Study design

The researcher used descriptive, cross-sectional design in this study, which is useful for describing variables of the study as they naturally occur without interference from the researcher. Cross sectional studies are generally carried out on a population at a point of time or over a short period (Coggon et al, 1993). Also, cross sectional designs examine the correlation between variables; they are economical, quick and managed easily (Polit and Hungler, 1999).

3.2 Study population

The study population consisted of all martyrs' wives of the CLO (2008-2009) who are living in Gaza governorates. Their total number was 640 wives as shown in table 3.1.

Table (3.1): Distribution of the Study population According to Provinces

No.	Province	Frequency
1	North Gaza	203
2	Gaza city	286
3	Middle Area	84
4	Khan Younis	46
5	Rafah	21
	Total	640

3.3 Study sample and sampling

The study sample consisted of 212 martyrs' wives. This figure represents 30% of the total population of the study, 199 of them accepted to participate in the study with a response rate of 94%.

Table (3.2): Distribution of the Study Sample According to Provinces

No.	Province	Frequency
1	North Gaza	60
2	Gaza city	90
3	Middle Area	27
4	Khan Younis	15
5	Rafah	7
	Total	199

3.4 Setting of the study

The study was conducted in Gaza provinces by visiting each participant at home.

3.5 Ethical consideration

An approval letter was obtained from Helsinki committee in the Ministry of Health to allow the researcher to carry out the study. Also a cover letter describing the study aim and its purpose and a guarantee that the study was for scientific research and didn't carry any threats or harm to martyrs' wives was attached with each questionnaire.

3.6 Study Instruments

The researcher used the following questionnaires to measure quality of life and mental health of the study sample:

3.6.1 Quality of life questionnaire

The questionnaire was developed by WHO on 1997 and translated by Dr. Abed El-Aziz Thabet. It is composed of 26 items. Of them 24 items distributed on four dimensions. Added to that one item measures the overall quality of life and one item for general health. The scale scores are 1 = not at all 2 = little 3 = moderate 4 = much and 5 = too much.

Table (3.3): Dimensions of QOL Scale

Dimension	Items
Overall quality of life	1
General health	2
Physical	3 – 4 – 10 – 14 – 15 – 16
Psychological	5 – 6 – 7 – 11 – 22 – 23
Social	13 – 17 – 18 – 24 – 25 – 26
Environmental	8 – 9 – 12 – 19 – 20 – 21

3.6.2 Davidson PTSD check list Arabic Version (Thabet et al 2004)

This scale was developed by Davidson 1987, translated and validated by Dr. Abed El-Aziz Thabet (2004). The scale composed of 17 items related to traumatic events. The scale scores are Never (zero), Seldom (1), Sometimes (2), Often (3), and Always (4). The scores of the scale range between zero to 68 scores. Zero – 12 : no stress symptoms; 13 – 24 : mild symptoms; 25 – 39 : moderate symptoms; and 40 and above: severe symptoms

The scale is divided into three dimensions as follows:

Table (3.4): Dimensions of Davidson PTSD Scale

No.	Dimension	Items
1	Intrusion	1 – 2 – 3 – 4 – 17
2	Avoidance	5 – 6 – 7 – 8 – 9 – 10 – 11
3	Hyperarousal	12 – 13 – 14 – 15 – 16

3.6.3 Taylor Anxiety scale

The scale was translated by Mustafa Fahmey and Mohammad Ahmed Ghaley, Cairo University. The scale is composed of 50 items describing events that may evoke anxiety. The scale scores are yes (1) and No (zero). The total score ranges between zero and 50 as

follows: Zero – 16 : very mild anxiety; ; 17 – 19 : mild anxiety; 20 – 24 : moderate anxiety; 25 – 29 : above moderate anxiety; 30 – 34 : severe anxiety; and 35 – 50 : very severe anxiety. This scale was used in Palestinian culture and showed high validity (Thabet, Abu tawahina et al, 2006).

3.6.4 Aaron Beck Depression Inventory

The inventory was translated by Ahmed Abed El-Khaleg, modified by Asma Al-Hussein 2002. The scale is composed of 21 items, scoring of each item between zero to 4 scores. The total scores range between zero and 37 and divided as follows: Zero – 9: no depression; 10 – 15: mild depression; 16 – 23: moderate depression; 24 – 36: severe depression; and 37 and above: very severe depression

3.7 Pilot study

For the purpose of ensuring validity and reliability of study tools, the researcher conducted a pilot study on a sample of 30 martyrs' wives, selected randomly from Gaza provinces. The researcher distributed the questionnaires by himself, gave instructions to participants regarding the questionnaires and objectives of the study. Those women who participated in the pilot study were not included in the actual study.

3.7.1. Validity add Reliability

3.7.1.1 Validity of Quality Of Life (QOL) scale (Internal consistency)

To compute the internal consistency of the QOL scale; the researcher calculated the correlation coefficients of every item (according to dimensions items) of the scale with the total scores of every scale, as shown in table (3.5).

Table (3.5): Internal consistency of QOL scale

Subscale	Item No.	Corr. Coeff. ®	Subscale	Item No.	Corr. Coeff. ®
Physical	3	0.559 **	Psychological	5	0.535 **
	4	0.447 **		6	0.574 **
	10	0.400 **		7	0.639 **
	14	0.272 //		11	0.426 **
	15	0.713 **		22	0.326 *
	16	0.662 **		23	0.405 **
Social relations	13	0.367 **	Environment	8	0.644 **
	17	0.268 //		9	0.466 **
	18	0.415 **		12	0.598 **
	24	0.728 **		19	0.764 **
	25	0.685 **		20	0.560 **
	26	0.704 **		21	0.573 **

** = significant at 0.01

* = significant at 0.05

As shown in table 3.5, the items of the scale had good levels of internal consistency.

Table (3.6): Correlation Between domains and total score of QOL scale

No.	Subscale	Corr. Coeff. ®
1.	Physical	0.564 **
2.	Social relations	0.622 **
3.	Psychological	0.568 **
4.	Environmental	0.693 **

As shown in table 3.6, all of the sub-scales had significant correlation with the total score of the QOL scale.

3.7.1.2 Reliability of the QOL scale

Cronbache alpha equation

The researcher calculated the reliability of the QOL scale by using the equation of Cronbache alpha; where the value of alpha = 0.725. The QOL scale is valid and reliable for measuring .

3.7.1.3 Validity of Aaron Beck Depression Inventory (Internal consistency)

To compute the internal consistency of the Aaron Beck Depression Inventory; the researcher calculated the correlation coefficients of every item of the scale with the total scores of every scale, as shown in table (3.7).

Table (3.7): Internal Consistency of Aaron Beck Depression Inventory Items with the Total Score

Item No	Corr. Coeff. ®	Sig. Level	Item No	Corr. Coeff. ®	Sig. Level	Item No	Corr. Coeff. ®	Sig. Level
1.	0.622	0.000	7.	0.503	0.000	13.	0.522	0.000
2.	0.549	0.000	8.	0.453	0.000	14.	0.386	0.000
3.	0.494	0.000	9.	0.387	0.000	15.	0.539	0.000
4.	0.526	0.000	10.	0.502	0.000	16.	0.408	0.000
5.	0.435	0.000	11.	0.409	0.000	17.	0.520	0.000
6.	0.459	0.000	12.	0.488	0.000	18.	0.536	0.000
19.	0.267	0.000	20.	0.434	0.000	21.	0.467	0.000

As shown in table 3.7, all the items had good level of Internal consistency validity.

3.7.1.4 Reliability of the Aaron Beck Depression Inventory scale

To calculate the reliability of the Aaron Beck Depression Inventory, the researcher used the following two methods:

1- Split half method

The researcher calculated the reliability of the Aaron Beck Depression Inventory by using split half method (part1 = 11 items & part2 = 10 items); where the Pearson's correlation coefficient was ($R_1 = 0.609$) and by using the Spearman-Brown equation to correct the length of the scale ($R_2 = 0.757$).

2- Cronbache alpha equation

The researcher estimated the reliability of the Aaron Beck Depression Inventory by using the equation of Cronbache alpha (No. of items = 21); where the value of alpha = (0.822).

The Aaron Beck Depression Inventory measurement device is valid and reliable for measuring depression.

3.7.1.5 Validity of Taylor Anxiety Scale (Internal consistency)

To compute the internal consistency of the anxiety scale, the researcher calculated the correlation coefficients of every item of the scale with the total scores of every scale, as shown in table (3.8).

Table (3.8): Internal Consistency of Anxiety Scale Items with the Total Score

Item No	Corr. Coeff. ®	Sig. Level	Item No	Corr. Coeff. ®	Sig. Level	Item No	Corr. Coeff. ®	Sig. Level
1.	0.384	0.000	18.	0.368	0.000	35.	0.057	0.326
2.	0.256	0.000	19.	-0.169	0.003	36.	0.257	0.000
3.	0.118	0.041	20.	0.346	0.000	37.	0.309	0.000
4.	0.019	0.745	21.	0.345	0.000	38.	0.367	0.000
5.	0.423	0.000	22.	0.361	0.000	39.	0.248	0.000
6.	0.242	0.000	23.	0.261	0.000	40.	0.476	0.000
7.	0.438	0.000	24.	0.301	0.000	41.	0.447	0.000
8.	0.235	0.000	25.	0.255	0.000	42.	0.341	0.000
9.	0.223	0.000	26.	0.404	0.000	43.	0.319	0.000
10.	0.151	0.009	27.	0.318	0.000	44.	0.054	0.356
11.	0.387	0.000	28.	0.391	0.000	45.	0.076	0.191
12.	0.222	0.000	29.	0.350	0.000	46.	0.377	0.000
13.	-0.146	0.012	30.	0.400	0.000	47.	0.145	0.012
14.	-0.090	0.120	31.	0.022	0.709	48.	0.192	0.001
15.	0.180	0.002	32.	0.313	0.000	49.	0.277	0.000
16.	0.263	0.000	33.	0.267	0.000	50.	0.113	0.052
17.	-0.030	0.611	34.	0.346	0.000			

3.7.1.6 Reliability of the Taylor Anxiety scale

To calculate the reliability of the Anxiety scale; the researcher used the following two methods:

1- Split half method

The researcher calculated the reliability of the Anxiety scale by using split half method where the Pearson's correlation coefficient was ($R_1 = 0.520$) and by using the Spearman-Brown equation to correct the length of the scale ($R_2 = 0.684$).

2- Cronbache alpha equation

The researcher estimated the reliability of the Aaron Beck Depression Inventory by using the equation of Cronbache alpha (No. of items = 50); where the value of alpha = (0.675). The anxiety scale measurement device is valid and reliable for measuring anxiety.

3.7.1.7 Validity of Davidson PTSD check-list (Internal consistency)

To compute the internal consistency of the PTSD scale, the researcher calculated the correlation coefficients of every item of the scale with the total scores of every scale, as shown in table (3.9).

Table (3.9): Internal Consistency of PTSD Scale Items with the Total Score

Item No	Corr. Coeff. ®	Sig. Level	Item No	Corr. Coeff. ®	Sig. Level	Item No	Corr. Coeff. ®	Sig. Level
1.	0.466	0.000	8.	0.492	0.000	15.	0.655	0.000
2.	0.572	0.000	9.	0.572	0.000	16.	0.418	0.000
3.	0.433	0.000	10.	0.431	0.000	17.	0.618	0.000
4.	0.481	0.000	11.	0.428	0.000			
5.	0.333	0.000	12.	0.504	0.000			
6.	0.536	0.000	13.	0.633	0.000			
7.	0.282	0.000	14.	0.573	0.000			

As shown in table 3.9, all of the items had good levels of Internal consistency validity.

Table (3.10): Correlation between domains and total score of PTSD

No.	Domain	Corr. Coeff. ®	Sig. Level
1	Recall of previous traumatic events	0.808	0.000
2	Avoidance of traumatic events	0.810	0.000
3	Stimulation	0.843	0.000

As shown in table 3.10, all of the sub-scales had good levels of Internal consistency validity with total scores, were the correlation coefficients (R) ranged from 0.808 to 0.843 and significance level at 0.001.

3.7.1.8 Reliability of the Davidson PTSD check-list

To calculate the reliability of the PTSD scale, the researcher used the following methods:

1- Split half method

The researcher calculated the reliability of the PTSD scale by using split half method (part1 = 9 items & part2 = 8 items), where the Pearson's correlation coefficient was ($R_1 = 0.656$) and by using the Spearman-Brown equation to correct the length of the scale ($R_2 = 0.793$).

2- Cronbache alpha equation

The researcher calculated the reliability of the PTSD scale by using the equation of Cronbache alpha (No. of items = 17); where the value of alpha = (0.808). The PTSD scale is valid and reliable for measuring PTSD among study participants.

3.8 Period of data collection

Data was collected during the period from June to December 2010.

3.9 Data entry and analysis

After data collection, the researcher used SPSS (version, 17) (SPSS Inc, 2009) Statistical Package for the Social Sciences, in which the researcher consulted SPSS specialist to obtain accurate and precise results.

The researcher used descriptive statistics including frequencies for the socio-demographic variables and data to present the entire sample for this study; t-test was used to examine the differences related to some variables; one-way ANOVA for comparing between the study variables; and Pearson correlation to identify the relationship between the study variables.

3.10 Limitation of the study

During the study, the researcher faced the following obstacles:

- Difficulty in reaching study subjects.
- Shortage of financial support.
- Few number of previous studies regarding quality of life.

Chapter Four

Results and discussion

4.1 Sample characteristics

Table (4.1): Sample Characteristics

Demographic variable	Frequency	Percent %
Age		
less than 30 years	78	39.19
30 – 40 years	69	34.67
41 – 50 years	38	19.09
51 – 60 years	14	7.03
Total	199	100.00
Number of marital years		
1 – 5 years	57	28.64
6 – 10 years	48	24.12
11 – 15 years	40	20.10
16 years and more	54	27.13
No. of children		
no children	78	39.19
1 – 3	76	38.19
4 – 6	31	15.57
7 and more	14	7.03
Level of education		
Basic	48	24.12
Secondary	91	45.72
University	60	30.15
Housing		
Independent	98	49.24
with her family	40	20.10
with husband family	61	30.65
Residency		
North Gaza	60	30.15
Gaza	90	45.22
Mid-zone	27	13.56
Khanyounis	15	7.53
Rafah	7	3.51
Work / employment		
Yes	22	11.1
No	177	88.9
Monthly income		
less than 1500 IS	145	72.9
1500 – 3000 IS	46	23.1
more than 3000 IS	8	4.0
Second marriage		
Yes	43	21.6
No	156	78.4

The study sample consisted of 199 martyrs' wives, their age ranged between less than 30 – 60 years old, the years of marriage varied from 1 to 16 years, number of children ranged between 0 to more than 7 children. The study participants have different levels of education; basic (24.12%), secondary (45.72%) and university degree (30.15%), most of them (49.24%) were living in an independent house and some of them live with their family or with their husband family. Most of the women are house keepers (88.9%) and some of them are working or employed. Most of them (72.9%) have low income (less than 1500 IS monthly) and most of them (78.4%) did not marry again after their husbands' death.

4.2 Study results

4.2.1 Quality of life level

To answer the question "What would be the quality of life among the martyrs' wives after CLO in Gaza strip?", the researcher calculated means and percentage scores. The results are illustrated in table 4.2.

Table (4.2): Response of study participants regarding overall QOL

Overall quality of life	Frequency	Percent
Very poor	13	6.5
Poor	67	33.7
Moderate	106	53.3
Good	10	5.0
Excellent	3	1.5
Total	199	100.0

Table 4.2 show that 6.5% of martyrs' wives reported that their overall quality of life was very poor, 33.7% reported that it was poor, 53.3% reported that it was moderate, only 5.0% reported that it was good and 1.5% reported that it was excellent.

Table (4.3): Response of study participants regarding general health

Satisfaction regarding general health	Frequency	Percent
Not at all	15	7.5
Little	58	29.1
Moderate	85	42.7
Much	35	17.6
Very much	6	3.0
Total	199	100.0

Table 4.3 showed that 7.5% of martyrs' wives are not satisfied with their general health, 29.1% have little satisfaction, 42.7% moderately satisfied. Only 17.6% are much satisfied and 3.0% are very much satisfied.

Table (4.4): Quality of Life Among Study Participants

QOL dimensions	M	SD	%
Physical	16.25	2.81	54.16
Social relations	15.72	3.93	52.40
Psychological	16.80	3.06	56.00
Environmental	15.60	3.83	52.00
Total score	64.39	9.57	53.65

Table 4.4 showed that the highest score was in the psychological dimension with mean score 16.80 ± 3.06 and weighted percent 56.0, followed by physical dimension with mean

score 16.25 ± 2.81 and weighted percent 54.16, followed by social relations with mean score 15.72 ± 3.93 and weighted percent 52.40, and the lowest score was in the environmental dimension with mean score 15.60 ± 3.83 and weighted percent 52.0. On the total scores of the scale, the mean score was 64.39 ± 9.57 and weighted percent 53.65.

4.2.2 Quality of life and age

To answer the question "Are there significant differences in quality of life related to age?", the researcher performed One-way ANOVA test. The results are illustrated he

Table (4.5): Differences in QOL Related to Age

QOL dimensions	Category	Sum of Squares	df	Mean Square	F	P value
Physical	Between groups	91.347	3	30.449	4.027	.008 *
	Within groups	1474.582	195	7.562		
	Total	1565.930	198			
Social relations	Between groups	242.591	3	80.864	5.594	.001 *
	Within groups	2818.756	195	14.455		
	Total	3061.347	198			
Psychological	Between groups	97.105	3	32.368	3.575	.015 *
	Within groups	1765.639	195	9.055		
	Total	1862.744	198			
Environmental	Between groups	50.573	3	16.858	1.149	.331 //
	Within groups	2861.065	195	14.672		
	Total	2911.638	198			
Total score	Between groups	1504.880	3	501.627	5.880	.001 *
	Within groups	16636.758	195	85.317		
	Total	18141.638	198			

* = significant at 0.05 // = not significant

Table 4.5 show that there was statistically significant differences at 0.05 in quality of life related to age of martyrs' wives in the following dimensions; physical (F = 4.027 and P value = 0.008), social relations (F = 5.594 and P value = 0.001), psychological (F = 3.575 and P value = 0.015) and the total score (F = 5.880 and P value = 0.001). differences were not significant in the environment dimension.

To find out the direction of these differences, the researcher performed Post hoc Scheffe test. The results are illustrated in tables 4.6 and 4.7.

Table (4.6): Mean Scores for QOL and Age

QOL subscales	Age group	N	Mean
Physical	less than 30	78	16.576
	30 – 40	69	16.391
	41 – 50	38	14.947
	51 - 60	14	17.357
Social relations	less than 30	78	16.666
	30 – 40	69	15.956
	41 – 50	38	13.657
	51 - 60	14	15.000
Psychological	less than 30	78	17.000
	30 – 40	69	17.289
	41 – 50	38	15.394
	51 - 60	14	17.214
Environmental	less than 30	78	16.192
	30 – 40	69	15.362
	41 – 50	38	14.894
	51 - 60	14	15.428
Total score	less than 30	78	66.435
	30 – 40	69	65.000
	41 – 50	38	58.894
	51 - 60	14	65.000

Table (4.7): Mean Differences in QOL Related to Age

QOL subscales	Age groups	Mean difference	P value
Physical	(less than 30) – (41 – 50)	1.629	0.032 *
Social relations	(less than 30) – (41 – 50)	3.008	0.001 *
	(30 – 40) – (41 - 50)	2.298	0.032 *
Psychological	(30 – 40) – (41 - 50)	1.895	0.023 *
Total score	(less than 30) – (41 – 50)	7.541	0.001 *
	(30 – 40) – (41 - 50)	6.105	0.015 *

* = significant at 0.05

From table 4.6 and 4.7 the results show that:

- Martyrs' wives who are less than 30 years old have a better Physical status (m = 16.576) compared to those aged between 41 – 50 years (m = 14.947), mean difference = 1.629 and *P*-value = 0 .032.

- Martyrs' wives who are less than 30 years old have a better social relations (m = 16.666) compared to those aged between 41 – 50 years (m = 13.675), mean difference = 3.008 and P value = 0.001.
- Martyrs' wives aged between 30 – 40 have a better social relations (m = 15.956) compared to those aged between 41 – 50 years (m = 13.675), mean difference = 2.298 and P value = 0.032.
- Martyrs' wives aged between 30 – 40 have a better psychological status (m = 17.289) compared to those aged between 41 – 50 years (m = 15.394), mean difference = 1.895 and P value = 0.023.
- Martyrs' wives aged less than 30 years and those aged between 30 – 40 years (m = 66.435 and 65.000) have a better quality of life compared to those aged between 41 – 50 years.

4.2.3 Quality of life and number of marital years

To answer the question "Are there significant differences in quality of life among martyrs' wives related to number of marital years?", the researcher performed One-way ANOVA test. The results are illustrated in table 4.8.

Table (4.8): QOL and number of marital years

QOL dimensions	Category	Sum of Squares	df	Mean Square	F	Sig.
Physical	Between groups	62.143	3	20.714	2.686	.048 *
	Within groups	1503.786	195	7.712		
	Total	1565.930	198			
Social relations	Between groups	195.328	3	65.109	4.430	.005 *
	Within groups	2866.018	195	14.698		
	Total	3061.347	198			
Psychological	Between groups	53.246	3	17.749	1.913	.129 //
	Within groups	1809.498	195	9.279		
	Total	1862.744	198			
Environmental	Between groups	95.556	3	31.852	2.206	.089 //
	Within groups	2816.082	195	14.441		
	Total	2911.638	198			
Total scores	Between groups	1436.333	3	478.778	5.589	.001 *
	Within groups	16705.305	195	85.668		
	Total	18141.638	198			

* = significant at 0.05 // = not significant

From table 4.8, the results show that there are statistically significant differences at 0.05 related to number of marital years in physical dimension, social relations and the total scores of the scale.

To find the direction of these differences, the researcher performed Post Hoc Scheffe test.

The results are illustrated in tables 4.9 and 4.10.

Table (4.9): Mean scores for QOL and marital years

QOL dimensions	Marry years	N	Mean
Physical	1 – 5	57	17.087
	6 – 10	48	15.791
	11 – 15	40	16.275
	16 and more	54	15.777
Social relations	1 – 5	57	16.894
	6 – 10	48	15.708
	11 – 15	40	16.050
	16 and more	54	14.277
Psychological	1 – 5	57	17.473
	6 – 10	48	16.875
	11 – 15	40	16.750
	16 and more	54	16.092
Environmental	1 – 5	57	16.578
	6 – 10	48	15.458
	11 – 15	40	15.550
	16 and more	54	14.740
Total score	1 – 5	57	68.035
	6 – 10	48	63.833
	11 – 15	40	64.625
	16 and more	54	60.888

Table (4.10): Mean differences in QOL related to marital years

QOL subscales	Marry years difference	Mean difference	P value
Social	(1 – 5) – (16 and more)	2.616	0.006 *
Total score	(1 – 5) – (16 and more)	7.146	0.001 *

* = significant at 0.05

From table 4.9 and 4.10, the results show that:

- Martyrs' wives who were married for 1 – 5 years have a better social relations (m = 16.894) compared to those married for 16 years and more (m = 14.277), mean difference = 2.616 and *P*-value = 0 .006.
- Martyrs' wives who were married for 1 – 5 years have generally better quality of life (m = 68.035) compared to those married for 16 years and more (m = 60.888), mean difference = 7.146 and *P*-value = 0 .001.

4.2.4 Quality of life and number of children

To answer the question "Are there significant differences in quality of life among martyrs' wives related to number of children?", the researcher performed One-way ANOVA test. The results are illustrated in table 4.11.

Table (4.11): QOL and number of children

QOL subscales	Category	Sum of Squares	df	Mean Square	F	Sig.
Physical	Between groups	78.123	3	26.041	3.413	.019 *
	Within groups	1487.807	195	7.630		
	Total	1565.930	198			
Social relations	Between groups	214.539	3	71.513	4.898	.003 *
	Within groups	2846.808	195	14.599		
	Total	3061.347	198			
Psychological	Between groups	99.556	3	33.185	3.670	.013 *
	Within groups	1763.187	195	9.042		
	Total	1862.744	198			
Environmental	Between groups	56.104	3	18.701	1.277	.283 //
	Within groups	2855.534	195	14.644		
	Total	2911.638	198			
Total score	Between groups	1545.167	3	515.056	6.052	.001 *
	Within groups	16596.471	195	85.110		
	Total	18141.638	198			

* = significant at 0.05

// = not significant

From table 4.10, the results show that there are significant differences at 0.05 in QOL related to number of children among martyrs' wives in physical, social relations,

psychological dimensions and the total score of the scale, but there are no significant differences in the environmental dimension.

To find the direction of these differences, the researcher performed Post Hoc Scheffe test.

The results are illustrated in table 4.12 and 4.13.

Table (4.12): Mean scores for QOL and number of children

QOL dimensions	No. of children	N	Mean
Physical	no children	78	16.410
	1 – 3	76	16.763
	4 – 6	31	15.129
	7 and more	14	15.142
Social relations	no children	78	16.717
	1 – 3	76	15.723
	4 – 6	31	14.290
	7 and more	14	13.428
Psychological	no children	78	17.307
	1 – 3	76	17.013
	4 – 6	31	15.935
	7 and more	14	14.857
Environmental	no children	78	16.038
	1 – 3	76	15.684
	4 – 6	31	14.935
	7 and more	14	14.214
Total score	no children	78	66.474
	1 – 3	76	65.184
	4 – 6	31	60.290
	7 and more	14	57.642

Table (4.13): Mean differences in QOL related to number of children

QOL subscale	No. of children difference	Mean difference	P value
Physical	(1 – 3) – (4 – 6)	1.634	.056 //
Social relations	(no children) – (4 – 6)	2.427	.035 *
	(no children) – (7 and more)	3.289	.032 *
Psychological	(no children) – (7 and more)	2.450	.052 //
Total score	(no children) – (4 – 6)	6.184	.021 *
	(no children) – (7 and more)	8.831	.014 *

* = significant at 0.05

// = not significant

From table 4.12 and 4.13, the results show that:

- Martyrs' wives who have 1 – 3 children have a better physical status (m = 16.763) compared to those who have 4 – 6 children (m = 15.129), mean difference = 1.634 and P value = 0.056.
- Martyrs' wives who have no children have a better social relations (m = 16.717) compared to those who have 4 – 6 children (m = 14.290), mean difference = 2.427 and P value = 0.035.
- Martyrs' wives who have no children have a better social relations (m = 16.717) compared to those who have 7 and more children (m = 13.428), mean difference = 3.289 and P value = 0.032.
- Martyrs' wives who have no children have a better psychological status (m = 17.307) compared to those who have 7 and more children (m = 14.857), mean difference = 2.450 and P value = 0.052.
- Martyrs' wives who have no children have generally better quality of life (m = 66.474) compared to those who have 4 – 6 children (m = 60.290), mean difference = 6.184 and P value = 0.021.
- Martyrs' wives who have no children have generally better quality of life (m = 66.474) compared to those who have 7 and more children (m = 57.642), mean difference = 8.831 and P value = 0.014.

4.2.5 Quality of life and education level

To answer the question "Are there significant differences in quality of life among martyrs' wives related to educational level?", the researcher performed One Way ANOVA test. The results are illustrated in table 4.14.

Table (4.14): Differences in QOL related to education level

QOL subscales	Category	Sum of Squares	df	Mean Square	F	Sig.
Physical	Between groups	28.270	2	14.135	1.802	.168 //
	Within groups	1537.660	196	7.845		
	Total	1565.930	198			
Social relations	Between groups	21.802	2	10.901	.703	.496 //
	Within groups	3039.544	196	15.508		
	Total	3061.347	198			
Psychological	Between groups	85.146	2	42.573	4.694	.010 *
	Within groups	1777.597	196	9.069		
	Total	1862.744	198			
Environmental	Between groups	37.986	2	18.993	1.295	.276 //
	Within groups	2873.652	196	14.661		
	Total	2911.638	198			
Total score	Between groups	533.919	2	266.960	2.972	.054 //
	Within groups	17607.719	196	89.835		
	Total	18141.638	198			

* = significant at 0.05 // = not significant

From table 4.14, the results show that there are no significant differences related to education level in physical, social relations, environmental dimensions and total score of the scale. Differences were significant in psychological dimension as $F = 4.694$ and P value = 0.010.

To find the direction of these differences, the researcher performed Post Hoc Scheffe test.

The results are illustrated in table 4.15 and 4.16.

Table (4.15): Mean scores for QOL and level of education

QOL subscales	Education level	N	Mean
Physical	Basic	48	16.458
	secondary	91	15.857
	university	60	16.700
Social relations	Basic	48	15.229
	secondary	91	15.725
	university	60	16.133
Psychological	Basic	48	16.166
	secondary	91	16.505
	university	60	17.783
Environmental	Basic	48	15.270
	secondary	91	15.340
	university	60	16.266
Total score	Basic	48	63.125
	secondary	91	63.428
	university	60	66.883

Table (4.16): Mean differences in QOL related to education level

QOL subscales	Education level	Mean difference	P value
Psychological	(university) – (basic)	1.616	.023 *
	(university) – (secondary)	1.277	.041 *

* = significant at 0.05

Table 4.15 and 4.16 show that martyrs' wives who have university education have a better psychological status ($m = 17.783$) compared to those who have basic education ($m = 16.166$) and those who have secondary education ($m = 16.505$).

4.2.6 Quality of life and housing

To answer the question "Are there significant differences in quality of life among martyrs' wives related to housing?", the researcher performed One Way ANOVA test. The results are illustrated in table 4.17.

Table (4.17): Differences in QOL related to housing

QOL subscales	Category	Sum of Squares	df	Mean Square	F	Sig.
Physical	Between groups	22.280	2	11.140	1.414	.246 //
	Within groups	1543.650	196	7.876		
	Total	1565.930	198			
Social relations	Between groups	90.029	2	45.014	2.969	.054 //
	Within groups	2971.318	196	15.160		
	Total	3061.347	198			
Psychological	Between groups	12.619	2	6.310	.668	.514 //
	Within groups	1850.124	196	9.439		
	Total	1862.744	198			
Environmental	Between groups	36.851	2	18.426	1.256	.287 //
	Within groups	2874.787	196	14.667		
	Total	2911.638	198			
Total score	Between groups	174.034	2	87.017	.949	.389 //
	Within groups	17967.605	196	91.671		
	Total	18141.638	198			

// = not significant

Table 4.17 show that there are no statistically significant differences in all dimensions and total score of QOL scale related to type of housing among martyrs' wives.

4.2.7 Quality of life and income

To answer the question "Are there significant differences in quality of life among martyrs' wives related to income?", the researcher performed One-way ANOVA test. The results are illustrated in table 4.18.

Table (4.18): Differences in QOL related to income

QOL		Sum of Squares	df	Mean Square	F	Sig.
Physical	Between groups	29.126	2	14.563	1.857	.159 //
	Within groups	1536.804	196	7.841		
	Total	1565.930	198			
Social relations	Between groups	35.814	2	17.907	1.160	.316 //
	Within groups	3025.533	196	15.436		
	Total	3061.347	198			
Psychological	Between groups	4.099	2	2.049	.216	.806 //
	Within groups	1858.645	196	9.483		
	Total	1862.744	198			
Environmental	Between groups	105.567	2	52.783	3.687	.027 *
	Within groups	2806.071	196	14.317		
	Total	2911.638	198			
Total score	Between groups	471.170	2	235.585	2.613	.076 //
	Within groups	17670.468	196	90.155		
	Total	18141.638	198			

* = significant at 0.05 // = not significant

Table 4.18 show that there are no significant differences related to monthly income in physical, social relations, psychological dimensions and also in the total score of QOL scale. Differences were significant only in the environmental dimension.

To find the direction of these differences, the researcher performed Post hoc Scheffe test. The results are illustrated in table 4.19

Table (4.19): Mean scores for QOL and income

QOL subscales	Income IS	N	Mean
Physical	Less than 1500	145	16.172
	1500 – 3000	46	16.195
	More than 3000	8	18.125
Social relations	Less than 1500	145	15.482
	1500 – 3000	46	16.282
	More than 3000	8	17.000
Psychological	Less than 1500	145	16.724
	1500 – 3000	46	17.065
	More than 3000	8	16.875
Environmental	Less than 1500	145	15.193
	1500 – 3000	46	16.478
	More than 3000	8	18.000
Total score	Less than 1500	145	63.572
	1500 – 3000	46	66.021
	More than 3000	8	70.000

Table 4.19, show that differences in QOL between different groups of income were not statistically significant, although there were mathematical differences.

This result means that different levels of income did not make differences in QOL among martyrs' wives. QOL could be affected by other factors including age, social support and family support.

4.2.8 Quality of life and work

To answer the question "Are there significant differences in quality of life among martyrs' wives related to work?", the researcher performed independent sample t-test. The results are illustrated in table 4.20.

Table (4.20): Differences in QOL related to work

QOL subscales	Work	N	Mean	S. Deviation	t	P
Physical	Yes	22	16.909	2.616	1.155	.249 //
	No	177	16.175	2.832		
Social relations	Yes	22	19.136	3.907	4.516	.000 *
	No	177	15.305	3.733		
Psychological	Yes	22	19.227	2.428	4.072	.000 *
	No	177	16.508	3.009		
Environmental	Yes	22	18.090	3.038	3.307	.001 *
	No	177	15.293	3.817		
Total score	Yes	22	73.363	7.575	4.925	.000 *
	No	177	63.282	9.215		

* = significant at 0.05

From table 4.20, the results show that:

- There are no statistical significant differences in physical status between martyrs' wives who are working (m = 16.909) and those who are not working (m = 16.175), t value = 1.155 and P value = 0.249.
- Martyrs' wives who are working have a better social relations (m = 19.136) compared to those who are not working (m = 15.305), t value = 4.516 and P value = 0.000.
- Martyrs' wives who are working have a better psychological status (m = 19.227) compared to those who are not working (m = 16.508), t value = 4.072 and P value = 0.000.
- Martyrs' wives who are working have a better environmental conditions (m= 18.090) compared to those who are not working (m = 15.293), t value = 3.307 and P value = 0.001.
- Martyrs' wives who are working have generally better quality of life (m = 73.363) compared to those who are not working (m = 63.282), t value = 4.925 and P value = 0.000.

4.2.9 Quality of life and second marriage

To answer the question "Are there differences in QOL between martyrs' wives who married again and those who did not marry?", the researcher performed independent sample t-test. The results are illustrated in table 4.21.

Table (4.21): Differences in QOL related to second marriage

QOL subscales	Second marriage	N	Mean	S. Deviation	t	P
Physical	Yes	43	15.814	2.937	-1.166	.245 //
	No	156	16.378	2.773		
Social relations	Yes	43	16.837	4.029	2.106	.036 *
	No	156	15.423	3.862		
Psychological	Yes	43	17.604	2.664	2.124	.037 *
	No	156	16.589	3.141		
Environmental	Yes	43	16.395	3.133	1.536	.126 //
	No	156	15.384	3.987		
Total score	Yes	43	66.651	7.831	2.004	.048 *
	No	156	63.775	9.931		

* = significant at 0.05

// = not significant

Table 4.21 show that:

- There are no statistical significant differences in physical status and environmental conditions between martyrs' wives who married again and those who did not marry again.
- Martyrs' wives who married again have a better social relations (m = 16.837) and those who did not marry again (m = 15.423), t value = 2.106 and P value = 0.036.
- Martyrs' wives who married again have a better psychological status (m = 17.604) and those who did not marry again (m = 16.589), t value = 2.124 and P value = 0.037.

- Martyrs' wives who married again have generally better quality of life ($m = 66.651$) and those who did not marry again ($m = 63.775$), t value = 2.004 and P value = 0.048.

4.2.10 Mental health

To answer the question "What would be the mental health status among martyrs' wives after the CLO", the researcher calculated frequency and weighted percent. The results are illustrated in table 4.22.

Table (4.22): Mental health among study participants

Scale	frequency	%
Aaron Beck Depression Inventory		
no depression (0 – 9)	19	9.54
mild depression (10 – 15)	23	11.55
moderate depression (16 – 23)	62	31.15
severe depression (24 – 36)	80	40.20
very severe depression (37 and more)	15	7.53
Total	199	100.0
Taylor Anxiety scale		
very mild anxiety (0 – 16)	32	4.02
mild anxiety (17 – 19)	29	3.01
moderate anxiety (20 – 24)	80	13.06
above moderate anxiety (25 – 29)	41	42.21
severe anxiety (30 – 34)	11	25.12
very severe anxiety (35 – 50)	6	12.56
Total	199	100.0
Davidson PTSD scale		
no stress (0 – 12)	5	2.51
mild symptoms (13 – 24)	39	19.59
moderate symptoms (25 – 39)	110	55.27
severe symptoms (40 and more)	45	22.61
Total	199	100.0

From table 4.22, the results show that:

- **Regarding depression**, 9.54% of martyrs' wives do not have depression, 11.55% have mild depression, 31.15% have moderate depression, 40.20% have severe depression and 7.53% have very severe depression.

- **Regarding anxiety**, 4.02% of martyrs' wives have very mild anxiety, 3.01% have mild anxiety, 13.06% have moderate anxiety, 42.21% have above moderate anxiety, 25.12% have severe anxiety and 12.56% have very severe anxiety.
- **Regarding PTSD**, 2.51% of martyrs' wives do not have stress symptoms, 19.59% have mild symptoms, 55.27% have moderate symptoms and 22.61% have severe symptoms.

4.2.11 Mental health and age

To find the answer for the question "Are there significant differences in mental health related to age?", the researcher performed One-way ANOVA test. The results are illustrated in table 4.23.

Table (4.23): Differences in mental health related to age

Mental health scales	Category	Sum of Squares	df	Mean Square	F	Sig.
Depression	Between groups	35.809	3	11.936	.115	.951 //
	Within groups	20301.739	195	104.111		
	Total	20337.548	198			
Anxiety	Between groups	224.583	3	74.861	2.325	.076 //
	Within groups	6278.010	195	32.195		
	Total	6502.593	198			
PTSD	Between groups	121.617	3	40.539	.376	.771 //
	Within groups	21043.750	195	107.917		
	Total	21165.367	198			

Table (4.24): Mean scores of mental health in relation to age

Mental health scales	Age in years	N	Mean
Depression	Less than 30	78	23.179
	30 – 40	69	23.000
	41 – 50	38	23.552
	51 – 60	14	21.714
Anxiety	Less than 30	78	20.859
	30 – 40	69	22.956
	41 – 50	38	22.078
	51 – 60	14	24.071
PTSD	Less than 30	78	31.551
	30 – 40	69	31.710
	41 – 50	38	33.052
	51 – 60	14	29.785

Table 4.23 and 4.24 show that there are no significant differences in depression, anxiety and PTSD between martyrs' wives in relation to their age.

4.2.12 Mental health and number of marital years

To answer the question "Are there significant differences in mental health related to marital years?", the researcher performed One-way ANOVA test. The results are illustrated in table 4.25.

Table (4.25): Differences in mental health related to number of marital years

Mental health scales	Category	Sum of Squares	df	Mean Square	F	Sig.
Depression	Between groups	275.203	3	91.734	.892	.446 //
	Within groups	20062.344	195	102.884		
	Total	20337.548	198			
Anxiety	Between groups	116.012	3	38.671	1.181	.318 //
	Within groups	6386.581	195	32.752		
	Total	6502.593	198			
PTSD	Between groups	453.757	3	151.252	1.424	.237 //
	Within groups	20711.610	195	106.213		
	Total	21165.367	198			

// = not significant

Table (4.26): Mean scores of mental health in relation to marital years

Mental health scales	Marital years	N	Mean
Depression	1 – 5	57	21.754
	6 – 10	48	23.979
	11 – 15	40	22.100
	16 and more	54	24.425
Anxiety	1 – 5	57	21.508
	6 – 10	48	21.145
	11 – 15	40	22.625
	16 and more	54	22.981
PTSD	1 – 5	57	29.421
	6 – 10	48	33.083
	11 – 15	40	32.300
	16 and more	54	32.685

Table 4.25 and 4.26 show that there are no significant differences in depression, anxiety and PTSD between martyrs' wives in relation to number of marital years.

4.2.13 Mental health and number of children

To find the answer for the question "Are there significant differences in mental health related to number of children?", the researcher performed One-way ANOVA test. The results are illustrated in table 4.27 and 4.28.

Table (4.27): Mental health and number of children

Mental health scales	Category	Sum of Squares	df	Mean Square	F	Sig.
Depression	Between groups	171.887	3	57.296	.554	.646 //
	Within groups	20165.660	195	103.414		
	Total	20337.548	198			
Anxiety	Between groups	31.251	3	10.417	.314	.815 //
	Within groups	6471.342	195	33.186		
	Total	6502.593	198			
PTSD	Between groups	688.793	3	229.598	2.186	.091 //
	Within groups	20476.573	195	105.008		
	Total	21165.367	198			

// = not significant

Table (4.28): Mean scores of mental health in relation to number of children

Mental health scales	Number of children	N	Mean
Depression	No children	78	22.012
	1 – 3	76	23.802
	4 – 6	31	24.225
	7 and more	14	22.642
Anxiety	No children	78	21.576
	1 – 3	76	22.223
	4 – 6	31	22.548
	7 and more	14	22.571
PTSD	No children	78	29.859
	1 – 3	76	32.697
	4 – 6	31	34.935
	7 and more	14	30.357

Table 4.27 and 4.28 show that there are no significant differences in depression, anxiety and PTSD between martyrs' wives in relation to number of children.

4.2.14 Mental health and level of education

To find the answer for the question "Are there significant differences in mental health related to level of education?", the researcher performed One-way ANOVA test. The results are illustrated in table 4.29.

Table (4.29): Differences in mental health related to level of education

Mental health scales	Category	Sum of Squares	df	Mean Square	F	Sig.
Depression	Between groups	1156.668	3	578.334	5.910	.003 *
	Within groups	19180.880	195	97.862		
	Total	20337.548	198			
Anxiety	Between groups	108.749	3	54.375	1.667	.192 //
	Within groups	6393.844	195	32.622		
	Total	6502.593	198			
PTSD	Between groups	145.720	3	72.860	.679	.508 //
	Within groups	21019.647	195	107.243		
	Total	21165.367	198			

Table 4.29 show that there were statistically significant differences at 0.05 in depression related to level of education. Differences were not significant in anxiety and PTSD.

To find the direction of these differences, the researcher performed Post hoc Scheffe test.

The results are illustrated in table 4.30 and 4.31.

Table (4.30): Mean scores of mental health in relation to level of education

Mental health scales	Level of education	N	Mean
Depression	Basic	48	24.750
	Secondary	91	24.626
	University	60	19.416
Anxiety	Basic	48	22.645
	Secondary	91	21.241
	University	60	22.783
PTSD	Basic	48	31.458
	Secondary	91	32.648
	University	60	30.683

Table (4.31): Mean differences in mental health related to education level

Mental health scales	Education level	Mean difference	P value
Depression	(basic) – (university)	5.333	.022 *
	(secondary) – (university)	5.209	.008 *

Table 4.30 and 4.31 show that:

- Martyrs' wives who have basic education have a higher level of depression (m = 24.750) compared to those who have university education (m = 19.416), mean difference = 5.333 and P value = 0.022.
- Martyrs' wives who have secondary education have a higher level of depression (m = 24.626) compared to those who have university education (m = 19.416), mean difference = 5.209 and P value = 0.0.

4.2.15 Mental health and housing

To answer the question "Are there significant differences in mental health related to housing?", the researcher performed One-way ANOVA test. The results are illustrated in table 4.32.

Table (4.32): Differences in Mental Health Related to Housing

Mental health scales	Category	Sum of Squares	df	Mean Square	F	Sig.
Depression	Between groups	320.987	2	160.49	1.572	.210 //
	Within groups	20016.56	195	102.12		
	Total	20337.54	198			
Anxiety	Between groups	511.77	3	255.88	8.372	.000 *
	Within groups	5990.82	195	30.56		
	Total	6502.59	198			
PTSD	Between groups	754.73	3	377.36	3.624	.028 *
	Within groups	20410.63	195	104.13		
	Total	21165.36	198			

* = significant at 0.05 // = not significant

From table 4.32, the results show that:

- There are no significant differences in depression among martyrs' wives related to housing (F = 1.572 and P-value = .210).
- There are statistically significant differences at 0.05 in anxiety among martyrs' wives related to housing (F = 8.372 and P-value = 0.000).

- There are statistically significant differences at 0.05 in PTSD among martyrs' wives related to housing ($F = 3.624$ and $P\text{-value} = .028$).

To find the direction of differences in anxiety and PTSD, the researcher performed Post Hoc Scheffe test. The results are illustrated in table 4.33 and 4.34.

Table (4.33): Differences in mean scores related to housing

Mental health scales	Housing	N	Mean
Depression	Independent	98	21.846
	with wife family	40	23.675
	with husband family	61	24.688
Anxiety	Independent	98	23.316
	with wife family	40	19.075
	with husband family	61	21.950
PTSD	Independent	98	30.224
	with wife family	40	35.375
	with husband family	61	31.885

Table (4.34): Mean differences in mental health related to housing

Mental health scale	Housing	Mean difference	P value
Anxiety	(independent) – (with wife family)	4.241	.000 *
	(with husband family) – (with wife family)	2.875	.040 *
PTSD	(with wife family) – (independent)	5.150	.029 *

From table 4.33 and 4.34, the results show that:

- Martyrs' wives who live in an independent house have a higher level of anxiety ($m = 23.316$) compared to those live with their family in the same house ($m = 19.075$), mean difference = 4.241 and $P\text{ value} = 0.000$.
- Martyrs' wives who live with their husband house have a higher level of anxiety ($m = 21.950$) compared to those live with their family in the same house ($m = 19.075$), mean difference = 2.875 and $P\text{ value} = 0.040$.

- Martyrs' wives who live with their family in the same house have a higher level of PTSD ($m = 35.375$) compared to those who live in an independent house ($m = 30.224$), mean difference = 5.150 and P value = 0.029.

4.2.16 Mental health and income

To answer the question "Are there significant differences in mental health related to income?", the researcher performed One-way ANOVA test. The results are illustrated in table 4.35..

Table (4.35): Differences in mental health related to income

Mental Health scales	Category	Sum of Squares	df	Mean Square	F	Sig.
Depression	Between groups	541.09	2	270.55	2.679	.071 //
	Within groups	19796.44	196	101.00		
	Total	20337.54	198			
Anxiety	Between groups	67.14	2	33.57	1.022	.362 //
	Within groups	6435.45	196	32.83		
	Total	6502.59	198			
PTSD	Between groups	476.31	2	238.15	2.256	.107 //
	Within groups	20689.05	196	105.55		
	Total	21165.36	198			

// = not significant

The results show that there are no significant differences in depression, anxiety and PTSD related to income among martyrs' wives related to income..

4.2.17 Mental health and work

To answer the question "Are there significant differences in mental health related to work?", the researcher performed independent sample t-test. The results are illustrated in table 4.36.

Table (4.36): Differences in mental health related to work

Mental health scales	Work	N	Mean	S. Deviation	t	P
Depression	Yes	22	18.272	11.522	-2.390	.018 *
	No	177	23.683	9.821		
Anxiety	Yes	22	26.590	7.007	-1.185	.238 //
	No	177	28.124	5.552		
PTSD	Yes	22	29.500	13.429	-1.092	.276 //
	No	177	32.050	9.900		

* = significant at 0.05 // = not significant

From table 4.36, the results show that:

- Martyrs' wives who are not working have a higher level of depression (m = 23.683) compared to those who are working (m = 18.272), t value = - 2.390 and P value = 0.018.
- There are no significant differences in anxiety and PTSD between martyrs' wives who are working and those who are not working.

4.2.18 Mental health and second marriage

To answer the question "How would second marriage affect mental health of martyrs' wives?", the researcher performed independent sample t-test. The results are illustrated below.

Table (4.37): Differences in mental health related to second marriage

Mental health scales	Second marriage	N	Mean	S. Deviation	t	P
Depression	Yes	43	24.232	10.451	.838	.403 //
	No	156	22.769	10.057		
Anxiety	Yes	43	20.302	5.325	-2.276	.024 *
	No	156	22.525	5.761		
PTSD	Yes	43	33.325	11.072	1.116	.266 //
	No	156	31.339	10.122		

* = significant at 0.05 // = not significant

From table 4.37, the results show that:

- There are no significant differences in depression and PTSD between martyrs' wives who married again and those who did not marry again.
- Martyrs' wives who married again have lower level of anxiety ($m = 20.302$) compared to those who did not marry again ($m = 22.525$), t value = - 2.276 and P value = 0.024.

4.2.19 Relationship between quality of life and mental health

To answer the question "Is there a relationship between quality of life and mental health among martyrs' wives after CLO?", the researcher performed Pearson correlation test. The results are shown in table 4.38.

Table (4.38): Relationship between QOL and mental health

QOL dimensions		Depression	Anxiety	PTSD
Physical	R	-.050	-.203	-.096
	S	.481 //	.004 **	.177 //
Social relations	R	-.145	.101	-.148
	S	.041 *	.155 //	.037 *
Psychological	R	-.177	-.046	-.115
	S	.013 *	.520 //	.105 //
Environmental	R	-.358	-.321	-.402
	S	.000 **	.000 **	.000 **
Total score	R	-.274	-.245	-.287
	S	.000 **	.000 **	.000 **

** = significant at 0.01

// = not significant

From table 4.38, the results show that:

- There is statistically significant negative relationship at 0.01 between QOL and depression ($r = - 0.274$). This result indicates that as QOL decrease, depression level increase.

- There is statistically significant negative relationship at 0.01 between QOL and anxiety ($r = - .245$). This result indicates that as QOL decrease, anxiety level increase.
- There is statically significant negative relationship at 0.01 between QOL and PTSD ($r = - .287$). This result indicates that as QOL decrease, PTSD increase.

The above results indicated that there is a negative relationship between quality of life and mental health status (depression, anxiety and PTSD). This result means that as quality of life decrease, mental disorders will increase.

4.3 Discussion

Quality of life

The results of the study showed that the majority of martyrs' wives evaluated their quality of life in general as poor to moderate. The traumatic experience of losing the husband could be the cause. This result agreed with study results of Araya (2007) which showed that the effects of trauma reduced quality of life directly.

Also, the results showed that physical and psychological trauma resulted from war usually affect general health and wellbeing of those experienced the war. These results agreed with a study conducted in the US after the second Gulf War (GW) 1990 – 1991, showed that GW-deployed veterans reported lower functional health status compared to general US population norms. Within the group of GW-deployed veterans, several current medical and psychological conditions predictive of lower physical functioning levels were identified (Proctor, et al., 2001).

The results indicated that generally martyrs' wives have moderate quality of life and that all domains of life – physical, social relations, psychological and environmental - were affected by the trauma of war. This result agreed with the results of a study conducted in

Croatia which showed that war affects self-perceived health, physical ability, and emotional and mental health of the entire population affected by war (Banaszak, et al., 2002). Another study showed that Korean War veterans reported significantly lower percentage life satisfaction and quality of life scores on WHOQOL-Bref domains, compared with similarly aged men (Ikin, et al: 2009). Another study examined the HRQL of military personnel deployed to the Gulf War compared with those not deployed. Non-deployed participants reported excellent health more often than deployed participants (31% vs. 21%, $p < 0.01$). Deployed veterans reported poorer HRQL even after the adjustment for other risk factors (Voelker, et al., 2002). Another study included 126 Croatian women with status of either wife of war veteran suffering from PTSD, wife who lost her husband in war circumstances or wife of war veteran with physical disabilities resulting from war activities. Results indicated that assumed intensity of secondary trauma is not associated with quality of life. Namely, the highest level of satisfaction was found in wives of the most seriously affected invalids of war, followed by the wives of deceased soldiers, while the lowest quality of life results were found in wives of veterans suffering from PTSD (Zdjelarević, et al., 2011). In another study conducted in Poland, twenty-one per cent described their physical health and seven per cent their emotional health as poor (Evert, 2007).

The results indicated that generally younger martyrs' wives less than 40 years old have a better quality of life compared to older ones. Also, generally martyrs' wives who were married for 1 – 5 years have a better quality of life compared to those who are married for 16 years and more. These results are supported by the fact that among those martyrs' wives who married again, 93.0% of them were less than 40 years old and 83.72% were married for less than 10 years.

The results indicated that martyrs' wives who have smaller number of children have a better quality of life compared to those who have more children. This result could be attributed to the fact that big families with many children need more resources to meet life demands and expenses.

These results indicated that martyrs' wives who have university education are psychologically satisfied compared to those with lower level of education. This result is considered a logic result as higher level of education give the person status and will increase the chance for the woman to find a job which will help in meeting family needs.

Martyrs' wives who live in an independent house or living with her family or her husband's family have equal status of quality of life. This result could be logic because martyrs' wives usually get support from their families and from community institutions. On the other hand, martyrs' families will not be left a lone regardless of their place of residency.

The results indicated that martyrs' wives who are working have a better social relations, psychological status, environmental conditions and generally better quality of life compared to those who are not working. This result could be logic as employed women will have consistent monthly salary which will enable her to meet the daily needs of her children without relying on the financial support from charity organizations.

The above results indicated that martyrs' wives who married again after the death of their husband have better quality of life compared to those who did not marry again. This result could be attributed to the fact that those who married again will feel more secured and safe and receive support from their second husband.

Mental health

The study results revealed that mental health status was affected negatively as a result of the trauma of war and loss of husband as 47.73% of martyrs' wives have severe to very severe depression, 79.89% have above moderate to very severe anxiety and 77.88% experiences moderate to severe symptoms of PTSD. This result agreed with a study conducted in Gaza which reported that exposure to trauma was significantly associated with PTSD intrusion symptoms (Thabet, et al., 2008). Another study indicated that among the consequences of war, the impact on the mental health of the civilian population is significant and there was a definite increase in the incidence and prevalence of mental disorders. Women are more affected than men (Murthy and Lakshminarayana, 2006). Another study conducted in Bosnia found that women who experienced the trauma of war had significantly higher prevalence of PTSD compared to women who did not experience the trauma of war, the number of traumatic events experienced during the war was positively associated with postwar stressful events. Postwar stressful events contributed both to the number and intensity of PTSD symptoms and all general psychological symptoms (Klaric, 2007). Another study conducted to examine trauma, poverty and mental health among Somali and Rwandese refugees as a result of armed conflict showed that 32% of the Rwandese and 48.1% of the Somali refugees were found to suffer from PTSD, and mental health consequences of conflict remain long after the events are over (Onyut, 2009). Another study conducted in Lebanon showed that exposure to war traumatic events increased the risk for developing mental disorders (Karam, et al., 2008). Another study conducted in Gaza showed that subjects reported a mean number of 7.7 ± 2.21 traumatic events, mean PTSD items were 50.45 and 54.4% of participants had symptoms of potential clinical significance of PTSD, 26.5% of subjects reported severe to a very severe anxiety (Thabet, et al., 2009).

The results showed that there were no significant differences in depression, anxiety and PTSD between martyrs' wives in relation to their age. This result disagree with the results of a study conducted in Yugoslavia which showed that older age was associated with higher rates of PTSD (Priebe, 2009).

Also, the results indicated that martyrs wives with lower level of education (basic and secondary) have a higher level of depression compared to those with university education. This result could be attributed to the fact that martyrs' wives who have university education have better chance to find a job that may help them in meeting life demands and as a consequence decrease level of depression. This result is supported by the finding that among martyrs' wives who are working, 77% of them have a university degree. This result agreed with the results of a study conducted in Yugoslavia which showed that lower education, was associated with higher rates of PTSD (Priebe, 2009).

The results showed that martyrs' wives who live with their families in the same house have a lower level of anxiety compared to those who live in an independent house or live with their husband family. On the other hand, those who live in an independent house have a lower level of PTSD compared to those who live with their family in the same house. In an interview survey conducted in Gaza, some martyrs' who live with their families complained of many restrictions including refusal to continue their university education, controlling their money and prohibited to go out without permission from their brothers or parents (Women's Affairs Center – Gaza, 2005).

The results indicated that there was a negative relationship between quality of life and mental health status (depression, anxiety and PTSD). This result means that as quality of life decrease, mental disorders will increase. These results are supported by a study conducted in Ethiopia which reported that mental distress mediated the effects of trauma in reducing the quality of life and some trauma also reduced quality of life directly (Araya, et al., 2007). Another study reported that combat experience, more war-related traumatic events and current PTSD were all associated with lower QOL (Stefan, et al., 2009). Another study examined PTSD and functioning and QOL outcomes revealed that suffering associated with combat related-PTSD extends beyond the signs and symptoms of the disorder to broader areas of functional and social morbidity and diminished quality of life (Zatzick, et al., 1997). Another study conducted in Serbia showed that persons in whom some stress related disorders were diagnosed had a lower quality of life (Colovic, 2009). The results of another study indicated that subjects who are suffering from chronic PTSD have a lower subjective perception of their quality of life (Bravo-Mehmedbasić, 2010). Another study conducted in Bosnia revealed a strong negative relationship between quality of life and PTSD manifestations (Bransteter, 2010).

Chapter five

Conclusion and Recommendations

5.1 Conclusion

The CLO against Gaza on December 2008 left about 1400 martyrs, thousands of injured and disabled individuals. The vast majority of casualties were civilians, adding to that the mass destruction of infrastructure and demolishing of houses and lands. The loss of beloved persons leaves emotional and mental disturbances, which may affect the function of the affected ones in the community.

This study examined the quality of life and mental health among martyrs' wives after the CLO in relation to some variables including age, marital years, number of children, work and level of education.

These results of this study revealed that the majority of martyrs' wives (87%) believed that their overall quality of life was generally poor to moderate and about (79%) of them were not satisfied or have little to moderate satisfaction with their general health.

The results also indicated that generally martyrs' wives have moderate level of quality of life and when comparing quality of life in relation to demographic variables, level of quality of life was higher among younger age martyrs' wives, those who were married for 1 – 5 years, those who do not have children, those who are working / employed and those who married again.

The results indicated that the trauma of war and loss of husband have negative impact on mental health as 47.73% of martyrs' wives have severe to very severe depression, 79.89% have above moderate to very severe anxiety and 77.88% experiences moderate to severe symptoms of PTSD. There were no differences in mental health status in relation to age, marital years, number of children and income. Martyrs' wives with lower level of education have a higher level of depression. Those who were living in an independent

house or living with their husband family have a higher level of anxiety compared to those who live with their own family. Those who were working / employed have a lower level of depression and those who married again have a lower level of anxiety.

Generally, the results indicated that there was negative relationship between quality of life and mental health (depression, anxiety, PTSD).

These result raised the need to pay attention toward martyrs' wives and their families to continue their life and enabling them to face the challenges with dignity.

5.2 Recommendations

In the light of the study results, the researcher recommends the following:

- Establishing programs for regular assessment of mental health status of martyrs' wives and offer interventions to enable them to cope with their current status.
- The need to increase social support from community institutions, governmental and nongovernmental to enable the affected women to cope with the trauma of losing their husbands.
- Establishing vocational training programs to enable the martyrs' wives to work and earn adequate income to meet the life demands.
- The Palestinian National Authority should consider the martyrs' wives in employment schedules and finding suitable jobs for them.
- The ministry of social affairs should adopt martyrs' wives and their families and provide them with adequate financial support to meet life demands.

5.3 Suggestions for further research

- Conduct longitudinal studies to examine long term effects of loss on martyrs' wives
- Study the long term impact of war on different target groups
- Study the quality of life and mental health among Palestinian prisoners' wives, who are in jail for many years.

References

- *About.com*. (2006): What is mental health?. Retrieved June 1, 2007.
- Antonovsky, A. (1987): *Unraveling the Mystery of Health*. Jossey-Bass, San Francisco.
- *Anxiety Center*, (1987 - 2008): Anxiety Attack Symptoms (Panic Attack Symptoms), Symptoms of Anxiety. Retrieved March 3, 2009, Web site: <http://www.anxietycentre.com/anxiety-symptoms.shtml>.
- *American Psychiatric Association (APA)*, (2000): Diagnostic and statistical manual of mental disorders, 4th ed. Washington DC.
- *American Psychiatric Association (APA)*, (1994): Diagnostic and statistical manual of mental disorders: DSM-IV. Washington, DC: American Psychiatric Association.
- Araya, M. et al., (2007): Effect of trauma on quality of life as mediated by mental distress and moderated by coping and social support among post conflict displaced Ethiopians, *Qual Life Res.*,16(6):915-27.
- Bananno, G. et al., (2006): Psychological resilience after disaster. New York city in the after of the September 11th. terrorist attack. *Psychological science J*, 17 (3): 181-186.
- Banaszak, A. et al. (2002): Impact of war on health related quality of life in Croatia: Population study . *Journal of Croatian Medical*, 43(4):396 - 402.
- Barker, P. (2009): *Psychiatric and mental health nursing: The craft of caring*. *Oxford University Press*, USA. pp. 166–167.
<http://books.google.com/books?id=KsExGQAACAAJ>
- Barlow, H. (2002): Unraveling the mysteries of anxiety and its disorders from the perspective of emotion theory. *APA*: 1247–1263. [PMID 11280938](https://pubmed.ncbi.nlm.nih.gov/11280938/).
<http://psycnet.apa.org/journals/amp/55/11/1247.pdf>.

- Bennett, P. (2003): *Abnormal and clinical psychology: An introductory textbook*. Open University. Jan; 172: 95-96.
- Bhat, A. (2008): The situation in Gaza, *The Lancet Student*, (<http://www.thelancetstudent.com/2008/03/06/the-situation-in-gaza/> 08.06.2009).
- Bouras, n. and Holt, G. (2007). *Psychiatric and behavioral disorders intellectual and developmental disabilities*; 2nd ed. , Cambridge University Press: UK.
- Bowling, A. (1995b): *Measuring disease*. Buckingham Open University Press.
- Bransteter, I. (2010): Gender Differences in Severity and Symptoms of Post War Trauma and the Effects of Persisting Psychological Trauma on Quality of Life Among Bosnian Refugees Living in the United States. *Master of Arts in Psychology*, Cleveland State University, College of Science.
- Bravo-Mehmedbasić, A. (2010): Impact of chronic Posttraumatic Stress Disorder on the Quality of life of war survivors. *Psychiatr Danub*. 22(3): 430-435.
- Brunet, A. et al., (2007): Don't throw out the baby with the bathwater (PTSD is not overdiagnosed). *Can J Psychiatry*; 52(8): 501–502; discussion 503. PMID 17955912. <http://publications.cpa-apc.org/media.php?mid=490>. Retrieved 2008-03-12.
- Cella, D. and Tulsky, D. (1993): Quality of life in cancer: definition, purpose, and method of measurement. *Cancer Invest*. Vol. 11(3): 327–336.
- Coggon, D. et al., (1993): *Epidemiology for the uninitiated*. London British Medical Journal Publishing Group.
- Colovic, O. (2009): The impact of stress related disorders on quality of life, *Psychiatr Danub*, 21(2): 199 – 205.
- Csikszentmihalyi, M. (1993): *The Psychology of Optimal Experience*. Harper Collins, New York.

- De Silva, P. (1999): Cultural aspects of post traumatic stress disorder. In: Yule W, editor. *Post Traumatic Stress Disorder: Concept and therapy*. Chichester: John Wiley and Sons, pp 116 – 117.
- Evert, H. (2007): War experiences: the emotional health and wellbeing of Polish elderly immigrants. *PhD thesis*, Department of Psychiatry, Medicine, Dentistry & Health Sciences , The University of Melbourne.
- Fall, K. et al., (2003): *Theoretical Models of Counseling and Psychotherapy*. Brunner-Routledge. New York. pp. 66-72.
- Fitzpatrick, R. et al., (1992): Quality of life measures in health care: Applications and issues in assessment, *BMJ*, 305(6861):1074-1077.
- Garcia, G. and Mezzich, JE. (1995): Culture and urban mental health. *Psychiatr Clin North Am*, 24: 81-93.
- Ghosh, N. et al., (2004): Mental health promotion in post-conflict countries. *J Roy Soc Promot Health*, 124:268–270.
- Gregory, D. (2009): *Quality of Life, Dictionary of Human Geography*, 5th ed. Oxford: Wiley-Blackwell. ISBN 978-1-4051-3287-9.
- Hamad, B. (2009): Managerial Challenges Facing Health System: Focus on Human Resources Management in Gaza, *The Administration Reform and Development conference*, 30 April 2009, General Personal Council, Gaza, Palestine.
- Hansen, J. (2006): Humanism as moral imperative: Comments on the role of knowing in the helping encounter. *Journal of Humanistic Counseling, Education and Development*, 45: 401.
- Hattie, J.A. et al., (2004): A factor structure of wellness: Theory, assessment, analysis and practice. *Journal of Counseling and Development*, 82: 354-364.

- Haug, MR. and Fomar, SJ. (1986): Longevity, gender and life quality. *Journal of health Social Behavior*, 27: 332-345.
- Holtz, TH. (1998): Refugee trauma versus torture trauma: A retrospective controlled cohort study of Tibetan refugees. *Journal Nervous and Mental Disorders*, 186: 24-34.
- Kajita, M. (2002): Self-esteem and mental health characteristics especially among lean students surveyed by University Personality Inventory. *Psychiatry and Clinical Neurosciences*, 56 (2): 123-129.
- Karam, AN. et al., (2008): Lifetime prevalence of mental disorders in Lebanon: first onset, treatment and exposure to war, *Plos med*, 5(4): e61. doi:10.1371/journal.pmed.0050061.
- Kastrup, M. and Arcel, LT. (2004): War, women and health. *Nordic Journal of Women's Studies*, 12:40–47.
- Keyes, C. (2002): The mental health continuum: from languishing to flourishing in life, *Journal of Health and Social Behaviour*, 43: 207–222.
- Klaric, M. et al., (2007): Psychological consequences of war trauma and postwar social stressors in women in Bosnia and Herzegovina, *Croat Med J*, 48(2): 167–176.
- Kliempt, P. et al., (2000): Measuring the outcome of care in older people: A non-critical review of patient-based measures. 1. General health status and quality of life instruments, *Review in Clinical Gerontology*, 10: 33-42.
- McDowell, I. and Newell, C. (1987): *Measuring health: A guide to rating scales and questionnaires*. New York, NY: Oxford University Press.
- Meeberg, G. (1993): Quality of Life: A concept analysis, *Journal of Advanced Nursing*, 18: 32-38.

- Meichenbaum, D. (1994): *A clinical handbook: Practical therapist manual for assessing and treating.*
- Mercer, (2006): *Mental health: A report of the surgeon general.*
<http://www.surgeongeneral.gov/library/mentalhealth/chapter2/sec4.html>.
- MOH, (2006): Health status in Palestine, Ministry of health. Annual Report 2005, PNA: Palestinian Health Information Center.
- MOH, (2004): Health Status in Palestine. Annual Report, Gaza.
- MOSA, (2010): Ministry of Social Affairs annual official document.
- Mousa, F. and Madi, H. (2003): *Impact of the humanitarian crisis in the occupied Palestinian territory on people and services.* Gaza, UNRWA.
- Murthy and Lakshminarayana (2006): Mental health consequences of war: a brief review of research findings, *World Psychiatry*, 5(1): 25–30.
- Nordenfelt, L. (1991): *Quality of Life and Health. Theory and Critique.* Almqvist & Wiksell, Stockholm. Sweden.
- Ohman, A. (2000): *Fear and anxiety: Evolutionary, cognitive, and clinical perspectives.* In M. Lewis & J. M. Haviland-Jones (Eds.). Handbook of emotions. pp.573-593. New York: The Guilford Press.
- Onyut, LP. (2009): Trauma, poverty and mental health among Somali and Rwandese refugees living in an African refugee settlement - An epidemiological study. *Confl Health*, 26; 3-6.
- PASSIA, (2008): Palestinian Academic Society for the Study of International Affairs, (<http://www.passia.org>, 18.04.2009).
- PASSIA, (2007): Palestinian Academic Society for the Study of International Affairs, (<http://www.passia.org/> 1. 03. 2009).

- *PCBS*, (2010): Palestinian Central Bureau of Statistics report on the eve of population day, July 2010, Pimacare, Ramallah.
- *PCBS*, (2009): Palestinian Central Bureau of Statistics, (<http://www.pcbs.gov.ps/cencus2007/default.aspx?lang=ar-jo>, 31.09.2009).
- *PCHR*, (2009): Palestinian Center for Human Rights. Annual report.
- Perry, B. (2006): *Effects of traumatic events on children*. <http://www.Childrentrama.org/ctamaerial/interdis.asp>. Retrieved May 15,2007
- Polit, D. (2004): *Nursing research: principles and methods*, 7th Ed., Lippincott, New York, USA.
- Priebe, S. et al., (2009): Consequences of untreated posttraumatic stress disorder following war in former Yugoslavia: morbidity, subjective quality of life, and care costs, *Croat Med J*, 50(5): 465 - 475.
- Proctor, SP. (2001): Health-related quality of life in Persian Gulf War veterans, *Mil Med*,166(6): 510 – 519.
- Qouta, S. (2003): Trauma, violence and mental health: the Palestinian experience. *Doctoral dissertation*; Amsterdam: Vrije Universiteit.
- Raphael, M. (1996): Political widowhood in South Africa. The embodiment of ambiguity. In: Kleinman A, Das V, Lock M, editors. *Social suffering*. Berkeley: *University of California Press*; 1997. pp. 99–117.
- Sarraj, E. and Qouta, S. (2005): *The Palestinian experience*. In: Lopez-Ibor JJ, Christodoulou G, Maj M, editors. *Disasters and mental health*. Chichester: Wiley; 229–238.
- Stefan, P. et al., (2009): Consequences of Untreated Posttraumatic Stress Disorder Following War in Former Yugoslavia: Morbidity, Subjective Quality of Life, and Care Costs, *Croat Med J*, 50(5): 465 – 475.

- Taylor, F. et al., (2002): Effectiveness of teaching GPs skills in brief cognitive behavior therapy to treat patients with depression: Randomized controlled trial. *BMJ*, 324: 947-950.
- Thabet, A. et al., (2008): Exposure to war trauma and PTSD among parents and children in the Gaza Strip, *Eur Child Adolesc Psychiatry*, 17(4):191-119.
- Thabet, A. et al., (2009): Effects of political violence on Palestinians in the Gaza Strip, *Arabpsynet E Journal*, 21.22: 250 – 254.
- UNEP (2003): Desk study on the Environment in the Occupied Palestinian Territories. Geneva: UNEP PCDMB.
- University of Toronto, (2009): Quality of life: How good is life for you?. Quality of Life Research Unit, . <http://www.utoronto.ca/qol/>. Retrieved October 14, 2009.
- Ventegodt, S. (1994): *The connection between quality of life and disease*. In The Foundation “A Complete Life”: Back to Work. Federation of Social Insurance Officers, Stockholm, Sweden.
- Ventegodt, S. (2003): The life mission theory: a theory for a consciousness-based medicine. *Int. J. Adolesc. Med. Health*, 15(1): 89–91.
- Ventegodt, S. et al., (2003): Quality of life theory II. Quality of life as the realization of life potential: a biological theory of human being. *The Scientific World Journal*, 3: 1041-1049.
- Ventegodt, S. (1995): *Quality of life in Denmark: Results from a population survey*. Forsknings centrets Forlag, Copenhagen.
- WHO, (2009): Gaza Strip Initial Health Needs Assessment.
- WHO, (2005): Promoting Mental Health: Concepts, Emerging evidence, Practice: A report of the World Health Organization, Department of Mental Health and

- Substance Abuse in collaboration with the Victorian Health Promotion Foundation and the University of Melbourne. WHO, Geneva.
- WHO, (2004): Mortality and Burden of Disease Estimates for WHO Member States: Females, all ages.
http://www.who.int/entity/healthinfo/global_burden_disease/gbddeathdalycountryestimates_female_2004.xls. Retrieved 2009-11-12.
 - WHO, (2001): www.euro.who.int/AboutWHO/Policy/20010827_3 (accessed October 2009).
 - WHO, (2001): World health report - Mental health: new understanding, new hope. Geneva.
 - WHO, (1996): WHOQOL-BREF introduction, administration, scoring and generic version of the assessment. Geneva, Switzerland.
 - WHOQOL Group, (1995): The World Health Organization quality of life assessment. Position paper from WHO, Social Science and Medicine; **vol. 41**: 1403-1409.
 - Women's Affairs Center – Gaza, (2005): Family violence against women in Gaza Strip: Women perspective. Gaza, Palestine.
 - World Bank, (2004). Palestinian Economic Crisis Assessment, World Bank.
 - www.MedicineNet.com, visited on 11.2.2011.
 - Yule, W. and Williams, R. (1990): Post traumatic stress reaction in children. *Journal of Traumatic stress*, 3: 279-295.
 - Zatzick, D. et al (1997): Posttraumatic stress disorder and functioning and quality of life outcomes in a nationally representative sample of male Vietnam veterans. *American Journal of Psychiatry*, 154(12): 1690–1695.

Annexes

بسم الله الرحمن الرحيم

أختي الفاضلة : السلام عليكم ورحمة الله وبركاته ،،،

أمامك استبانته لقياس " جودة الحياة والصحة النفسية لدى زوجات الشهداء بعد الحرب على غزة" وهي جزء من بحث لنيل درجة الماجستير في الصحة العامة "صحة مجتمعية ونفسية" في جامعة القدس ، لذلك نأمل منك بعد قراءة فقرات الإستبانته قراءة متأنية أن تحيبي عليها بما يناسبك مع مراعاة ما يلي:

1. قراءة العبارات جيدا قبل البدء بالإجابة.

2. لا توجد إجابات صحيحة وأخرى خاطئة.

3. الإجابة على جميع الفقرات.

4. وضع (×) علامة في الخانة التي تناسبك .

العمر بالسنة:- أقل من 30 30-40 41-50 51-60 أكثر من 60

عدد سنوات الزواج: 1-5 6-10 11-15 16 فأكثر

عدد الأبناء:

المستوى العلمي: ثانوي فأقل جامعي

نمط السكن: مستقلة مع أهل الزوج مع أهل الزوج

مكان السكن: شمال غزة غزة الوسطى خان يونس رفح

المهنة: تعمل لا تعمل

الزواج بعد استشهاد الزوج: نعم لا

الباحث
عماد الرقب

Annex (1)

Quality of Life Scale (QOL)

مقياس الجودة النوعية للحياة

مسطر أدناه بعض الأسئلة حول شعورك تجاه نوعية حياتك، صحتك وجوانب أخرى من حياتك . أرجوك أن تتذكر معاييرك، آمالك، مسراتك وهمومك. كل الأسئلة تتعلق بالسنة الأخيرة.
اقرئي البرود التالي واخترتي أنسب خانة لوصف إحساسك الحالي

الإجابات

5	4	3	2	1	1- ليس على الإطلاق
5	4	3	2	1	1. كيف تقيمي نوعية حياتك؟
5	4	3	2	1	2. كم أنت راضية عن صحتك؟

الأسئلة التالية تتعلق بمدى تعرضك لأشياء معينة في الأسابيع الأربعة الأخيرة

5	4	3	2	1	3- بقدر معتدل
5	4	3	2	1	3. إلى أي مدى تشعرين بأن الألم (الجسماني) يحول دون قيامك بما ينبغي عليك عمله؟
5	4	3	2	1	4. إلى أي حد تحتاجين علاجاً طبياً في حياتك اليومية؟
5	4	3	2	1	5. إلى أي حد تستمتعين بالحياة؟
5	4	3	2	1	6. إلى أي حد تشعرين بأن حياتك ذات معنى؟
5	4	3	2	1	7. إلى أي حد تستطيعين التركيز جيداً؟
5	4	3	2	1	8. إلى أي حد تشعرين بالأمان في حياتك اليومية؟
5	4	3	2	1	9. ما مدى صحة محيطك المادي؟

الأسئلة التالية تتعلق بمدى تجربتك أو قدرتك على عمل أشياء معينة في الأسابيع الأربعة الأخيرة

5	4	3	2	1	4- كثيراً جداً
5	4	3	2	1	10. لديك طاقة كافية للحياة اليومية؟
5	4	3	2	1	11. هل تستطيعين تقبل مظهرك الجسماني؟
5	4	3	2	1	12. لديك مال كاف لمواجهة احتياجاتك؟
5	4	3	2	1	13. ما مدى توفر المعلومات التي نحتاجين إليها في حياتك اليومية؟
5	4	3	2	1	14. إلى أي حد تتوفر لك فرصة أنشطة ترويحوية؟

الأسئلة التالية تتطلب منك أن تذكر مدى كونك راضي، سعيدة أو مرتاحة بشأن جوانب متعددة من حياتك خلال الأربعة

الأسابيع الماضية

5	4	3	2	1	15 . كم أنت راضي عن نومك؟
5	4	3	2	1	16 . كم أنت راضي عن قدرتك على أداء أنشطتك اليومية؟
5	4	3	2	1	17 . كم أنت راضي عن قدرتك على العمل؟
5	4	3	2	1	18 . كم أنت راضي عن نفسك؟
5	4	3	2	1	19 . كم أنت راضي عن علاقاتك الشخصية؟
5	4	3	2	1	20 . كم أنت راضي عن حياتك الجنسية؟
5	4	3	2	1	21 . كم أنت راضي عن الدعم الذي تتلقينه من صديقائك وأقربائك؟
5	4	3	2	1	22 . كم أنت راضي عن أحوال المكان الذي تعيشين فيه؟
5	4	3	2	1	23 . كم أنت راضي عن توفر الخدمة الصحية لك؟
5	4	3	2	1	24 . كم أنت راضي عن تنقلاتك؟
5	4	3	2	1	25 . ما مدى استطاعتك التنقل؟

الأسئلة التالية تشير إلى مدى تكرار شعورك أو تعرضك لأشياء معينة مثل دعم عائلتك أو أصدقائك أو تجاربك السلبية مثل

الشعور بعدم الأمان.

5	4	3	2	1	26 . كم يتكرر شعورك بمشاعر سلبية مثل الكآبة، اليأس، القلق، الإحباط؟
5	4	3	2	1	27 . كم يتكرر شعورك بأن الناس الذين عاشوا هنا في هذا البيت لا يعاملوك معاملة حسنة؟
5	4	3	2	1	28 . كم أنت راضي عن إمكانية الدراسة؟
5	4	3	2	1	29 . كم أنت راضي عن إمكانية ممارستك شعائرك الدينية أو القيام بطقوسك الخاصة؟
5	4	3	2	1	30 . كم أنت راضي عن توفر وظيفة لك
5	4	3	2	1	31 . إلى أي حد يتوفر لك الاتصال بمنظمة حقوق إنسان؟

5	4	3	2	1	32 . إلى أي حد تستطيعين المشاركة في تنظيم مخيمك/ مأواك/ مجتمعك؟
5	4	3	2	1	33 . إلى أي حد تستطيعين العمل في مهنتك السابقة؟

Annex (2)

Aaron Beck Depression Inventory

مقياس أرون بيك للاكتئاب

يتكون هذا المقياس من 21 مجموعة من الأسئلة، وكل مجموعة تصف أحد أعراض الاكتئاب. يرجى قراءة كل عبارة من كل مجموعة وأن تضعي دائرة حول رقم العبارة التي تنطبق عليك.

لا أشعر بالحزن	0	1 - الحزن
أشعر بالحزن والكآبة	1	
الحزن والانقباض يسيطران علي طوال الوقت، واعجز عن الفكاك منهما	2	
أشعر بالحزن والتعاسة لدرجة مؤلمة	3	
أشعر بالحزن والتعاسة لدرجة لا تحتمل	4	
لا أشعر بالقلق أو التشاؤم من المستقبل	0	2 - التشاؤم من المستقبل
أشعر بالتشاؤم من المستقبل	1	
لا يوجد ما أتطلع إليه في المستقبل	2	
لا أستطيع أبداً أن أتخلص من متاعبي	3	
أشعر باليأس من المستقبل، وأن الأمور لن تتحسن	4	
لا أشعر بأني فاشلة	0	3 - الإحساس بالفشل
أشعر أن نصيبي من الفشل أكثر من الناس العاديين	1	
أشعر أنني لم أحقق شيئاً له معنى أو أهمية	2	
عندما أنظر إلى حياتي في السابق أجدها مليئة بالفشل	3	
أشعر أنني إنسانة فاشلة تماماً	4	
لست ساخطة	0	4 - السخط وعدم الرضا
أشعر بالملل أغلب الوقت	1	
لا أستمتع بالأشياء كما كنت من قبل	2	

لم أعد أجد شيئاً يحقق لي المتعة (أو الرضا)	3	
إنني غير راضيه وأشعر بالملل من أي شيء	4	
يصيبني إحساس خاص بالندم أو الذنب على شيء	0	5 - الإحساس بالندم أو الذنب
أشعر بأنني سيئة أو نافهة أغلب الوقت	1	
يصيبني إحساس شديد بالندم أو الذنب	2	
أشعر أنني سيئة ونافهة أغلب الأوقات تقريباً	3	
أشعر أنني سيئة ونافهة للغاية	4	
لا أشعر بأن هناك عقاباً يحل بي	0	6 - توقع العقاب
أشعر بأن شيئاً سيئاً سيحدث أو سيحل بي	1	
أشعر بأن عقاباً يقع علي بالفعل	2	
أستحق أن أعاقب	3	
أشعر برغبة في العقاب	4	
لا أشعر بخيبة الأمل في نفسي	0	7 - كراهية النفس
يخيب أمني في نفسي	1	
لا أحب نفسي	2	
أشمئز من نفسي	3	
أكره نفسي	4	
لا أشعر بأنني أسوأ من أي شخص آخر	0	8 - إدانة الذات
أنتقد نفسي بسبب نقاط ضعفي أو أخطائي	1	
ألوم نفسي لما ارتكبت من أخطاء	2	
ألوم نفسي على كل ما يحدث	3	
لا تنتابني أي أفكار للتخلص من نفسي	0	9 - وجود أفكار انتحارية
تراودني أفكار للتخلص من حياتي ولكن لا أنفذها	1	
أفضل لي أن أموت	2	
أفضل لعائلتي أن أموت	3	

لدي خطط أكيدة للانتحار	4	
سأقتل نفسي في أي فرصة متاحة	5	
لا أبكي أكثر من المعتاد	0	10 - البكاء
أبكي أكثر من المعتاد	1	
أبكي هذه الأيام طوال الوقت ولا أستطيع أن أتوقف عن ذلك	2	
كنت قادرة على البكاء ولكنني أعجز الآن عن البكاء حتى لو أردت ذلك	3	
لست منزعة هذه الأيام عن أي وقت مضى	0	11 - الاستثارة وعدم الاستقرار النفسي
أنزعج هذه الأيام بسهولة	1	
أشعر بالانزعاج والاستثارة دوماً	2	
لا تثيرني ولا تغضبني الآن حتى الأشياء التي كانت تسبب ذلك سابقاً	3	
لم أفقد اهتمامي بالناس	0	12 - الانسحاب الاجتماعي
أنا الآن أقل اهتماماً بالآخرين عن السابق	1	
فقدت معظم اهتمامي وإحساسي بوجود الآخرين	2	
فقدت تماماً اهتمامي بالآخرين	3	
قدرتي على اتخاذ القرارات بنفس الكفاءة التي كانت عليها من قبل	0	13 - التردد وعدم الحسم
أؤجل اتخاذ القرارات أكثر من قبل	1	
أعاني من صعوبة واضحة في اتخاذ القرارات	2	
أعجز تماماً عن اتخاذ أي قرار بالمرّة	3	
لا أشعر بأن شكلي أسوأ من قبل	0	14 - تغير صورة الجسم والشكل
أشعر بالقلق من أنني أبدو أكبر سناً وأقل جاذبية	1	
أشعر بوجود تغيرات دائمة في شكلي تجعلني أبدو منفرة وأقل جاذبية	2	
أشعر بأن شكلي قبيح ومنفرة	3	

أعمل بنفس الكفاءة كما كنت من قبل	0	15 - هبوط مستوى الكفاءة والعمل
أحتاج إلى مجهود خاص لكي أبدأ شيئاً	1	
لا أعمل بنفس الكفاءة التي كنت أعمل بها من قبل	2	
أدفع نفسي بمشقة لكي أعمل أي شيء	3	
أعجز عن أداء أي عمل على الإطلاق	4	
أنام جيداً كما كنت من قبل	0	16 - اضطرابات النوم
أستيقظ مرهقاً في الصباح أكثر من قبل	1	
أستيقظ من 2 - 3 ساعات أبكر من ذي قبل وأعجز عن استئناف يومي	2	
أستيقظ مبكراً جداً ولا أنام بعدها حتى إن أردت	3	
لا أتعب بسرعة أكثر من المعتاد	0	17 - التعب والقابلية للإرهاق
أشعر بالتعب والإرهاق أسرع من ذي قبل	1	
أشعر بالتعب حتى لو لم أعمل شيئاً	2	
أشعر بالتعب الشديد لدرجة العجز عن عمل أي شيء	3	
شهيتي للطعام ليست أسوأ من قبل	0	18 - فقدان الشهية
شهيتي ليست جيدة كالسابق	1	
شهيتي أسوأ بكثير من السابق	2	
لا أشعر برغبة في الأكل بالمرة	3	
وزني تقريباً ثابت	0	19 - تناقص الوزن
فقدت أكثر من 3 كيلو غرام من وزني	1	
فقدت أكثر من 6 كيلو غرام من وزني	2	
فقدت أكثر من 10 كيلو غرام من وزني	3	
لم ألاحظ أي تغيرات حديثة في رغبتني الجنسية	0	20 - تأثر الطاقة الجنسية
أصبحت أقل اهتماماً بالجنس من قبل	1	
قلت رغبتني الجنسية بشكل ملحوظ	2	

فقدت تماماً رغبتني الجنسية	3	21 - الانشغال عن الصحة
لست مشغولاً عن صحتي أكثر من السابق	0	
أصبحت مشغولاً على صحتي بسبب الأوجاع والأمراض، أو اضطرابات المعدة والإمساك	1	
أنشغل بالتغيرات الصحية التي تحدث لي لدرجة أنني لا أستطيع أن أفكر في أي شيء آخر	2	
أصبحت مشغولاً تماماً بأموري الصحية	3	

Annex (3)

Taylor Anxiety Scale

مقياس القلق لتايلور

ضعي علامة (x) في الخانة التي تناسبك

الرقم	العبرة	نعم	لا
1	نومي مضطرب و منقطع .		
2	مرت بي أوقات افتقدت فيها النوم بسبب القلق .		
3	لدى قليل جداً من المخاوف إذا قورنت بأصدقائي .		
4	أعتقد أنني لست أكثر عصبية من معظم الناس .		
5	تتنابني أحلام مزعجة (أو كوابيس) من حين لآخر .		
6	عندي قدر كبير من المتاعب في معدتي .		
7	غالباً ما ألاحظ أن يداي ترتجفان عندما أحاول القيام بعمل من الأعمال .		
8	أعاني من نوبات الإسهال .		
9	المال والعمل يثيران القلق عندي .		
10	أصاب أحياناً بنوبات من الغثيان (غميان النفس) .		
11	كثيراً ما أخشى أن يحمر وجهي خجلاً .		
12	أشعر بجوع في ليل الأوقات تقريباً .		
13	أنني أثق بنفسي تماماً .		
14	لا أتعب بسرعة .		
15	إن الانتظار يجعلني عصبياً .		
16	أشعر أحياناً بالإثارة لدرجة أن النوم يتعذر عليّ .		
17	أشعر دائماً بالهدوء .		
18	تمر بي فترات من عدم الاستقرار لدرجة أنني لا أستطيع أن أمكث طويلاً في مقعدي		
19	أنني سعيدة في معظم الوقت .		
20	أجد من الصعب عليّ تركيز ذهني في عمل ما .		
21	أشعر بالقلق على شيء ما وشخص ما طول الوقت تقريباً .		
22	أخاف من مواجهة أزمة أو شدة .		
23	أود أن أصبح سعيدة كما يبدو الآخريين		
24	كثيراً ما أجد نفسي قلقاً على شيء ما .		
25	من المؤكد أنني أشعر أحياناً بأن لا فائدة لي .		
26	أشعر أحياناً بأنني أكاد أتمزق ارباً .		
27	أعرق بسهولة حتى في الأيام الباردة .		

		الحياة عسيرة بالنسبة لي في أغلب الأوقات .	28
		يقلقني ما يحتمل أن أواجهه من حظ سيئ.	29
		أنني حساسة بنفسني لدرجة غير عادية.	30
		لا أظن أنني لاحظت أبداً أن قلبي يخفق بشدة ويندر أن تنهج أنفاسي.	31
		أبكي بسهولة .	32
		لقد خشيت أشياء أو أشخاص أعرف أنهم لا يستطيعون إيدائي .	33
		عندي استعداد لان توثؤ في أحداث الحياة تأثيراً شديداً .	34
		قلماً أصاب بالصداع .	35
		لا بد أن أعترف بأنني شعرت أحياناً بالقلق الشديد على أشياء لا قيمة لها.	36
		لا أستطيع أن أركز تفكيري في شيء واحد.	37
		أنا أرتبك بسهولة .	38
		في بعض الأحيان أعتقد أنني لا أصلح لشيء أبداً.	39
		أنني شخص متوتر جداً.	40
		أحياناً عندما أتضابق يتساقط مني العرق بصورة تضايقتني جداً .	41
		وجهي يحمر خجلاً بدرجة أكثر مما يحدث للآخرين	42
		أنا أكثر حساسية من غالبية الناس .	43
		لا يكاد وجهي يحمر من الخجل أبداً .	44
		مرت بي أوقات كنت أشعر خلاله بأن الصعاب تتراكم فوق بعضها البعض بحيث لا أستطيع التغلب عليها .	45
		عندما أقوم بعملتي أكون في حالة توتر شديد .	46
		يدياى وقدماي دافنتان في العادة .	47
		أحلم كثيراً بأمور أفضل الاحتفاظ بها لنفسني .	48
		تنقصني الثقة بالنفس .	49
		يندر جداً أن أصاب بالإمساك .	50

Annex (4)

Davidson PTSD Scale

مقياس كرب ما بعد الصدمة لدافيدسون

ضعي علامة (X) في الخانة التي تناسبك

الرقم	عبارات كرب ما بعد الصدمة	أبداً	نادراً	أحياناً	غالباً	دائماً
1	هل تتنابك صور متكررة، وذكريات، وأفكار عن الخبرة الصادمة التي تعرضت لها؟					
2	هل تتنابك أحلام مزعجة وكوابيس عن الخبرة الصادمة؟					
3	هل تتنابك مشاعر جياشة وفجائية بأن ما حدث لك سوف يحدث مرة أخرى؟					
4	هل تتضايق عند مشاهدة الأشخاص، و الأماكن التي تذكرك بالخبرة الصادمة؟					
5	هل تتجنب الأفكار، و المشاعر التي تذكرك بالحدث الصادم؟					
6	هل تتجنب المواقف و الأشياء التي تذكرك بالحدث الصادم؟					
7	هل لديك فقدان للذاكرة للأحداث الصادمة التي تعرضت لها (فقدان ذاكرة نفسي محدود)					
8	هل لديك صعوبة في الاستمتاع بالحياة والنشاطات اليومية التي تعودت عليها؟					
9	هل تشعر بالعزلة، وبأنك بعيد عن الآخرين، و لا تشعري بالحب، و الانبساط؟					
10	هل فقدت القدرة على الإحساس بمشاعر الحزن، و الحب و أنك متلهة الإحساس					
11	هل تجد صعوبة في تخيل أنك ستعيش لفترة طويلة لتحقيق أهدافك في العمل، الزواج إنجاب أطفال؟					
12	هل لديك صعوبة في النوم أو البقاء نائمة كالمعتاد؟					
13	هل تتنابك نوبات من التوتر، و الغضب الشديد الفجائية؟					
14	هل تعاني من صعوبات في التركيز؟					
15	هل تشعر بأنك على حافة الانهيار (واصلة معاك على الآخر)، ومن السهل تشتيت انتباهك؟					
16	هل تستثارين لأتفه الأسباب و دائماً تشعرين بأنك متحفزة					

					هل الأشياء أو الأشخاص الذين يذكرونك بالخبرة الصادمة تجعلك في نوبة من ضيق التنفس، الرعشة، العرق الغزير وسرعة في ضربات القلب؟	17
--	--	--	--	--	---	----

شكرا على حسن تعاونك

Annex (5)

Al-Quds University
Jerusalem
School of Public Health



جامعة القدس
القدس
كلية الصحة العامة

2010/4/25

حضرة السيد / فتحي شاهين المحترم
مدير مؤسسة رعاية أسر الشهداء والجرحى
منظمة التحرير الفلسطينية
تحية طيبة وبعد ،،،

الموضوع: مساعدة الطالب عماد الرقب

يقوم الطالب المذكور أعلاه بإجراء بحث بعنوان:

" جودة الحياة والصحة النفسية لدى زوجات الشهداء بعد الحرب على غزة "

كمطلب للحصول على درجة الماجستير في الصحة النفسية المجتمعية ،وعليه نرجو التكرم والايجاز لمن
ترونه مناسب لتسهيل مهمة الطالب في جمع البيانات من فروع مؤسساتكم الموقرة .
علما بأن المعلومات ستكون متوفرة لدى الباحث والجامعة فقط .

شاكرين لكم حسن تعاونكم ودعمكم للمسيرة التعليمية .

وتفضلوا بقبول وافر الاحترام والتقدير ،،،

د.عبد العزيز موسى ثابت

منسق برنامج الصحة النفسية المجتمعية

جامعة القدس - غزة



الأخوة مدراء المخابر المحترمين
تحية طيبة وبعد
برجاء تسهيل مهمة الطالب المذكور أعلاه بتزويده بالاسماء والصناعات لشهداء الحرب على غزة المبرورين منها
ونسئمة عازدته مناسباتكم
نسخة: أ.ل.ل.ف



Jerusalem Branch/Telefax 02-24799234
Gaza Branch/telefax 08-2884422-2884411

Sphealth@admin.alquds.edu

فرع القدس/تلفاكس 02-2799234-2884411

فرع غزة/تلفاكس 08-2884422-2884411

ص.ب/51000-القدس

Annex (6)

Palestinian National Authority
Ministry of Health
Helsinki Committee



37
السلطة الوطنية الفلسطينية
وزارة الصحة
لجنة هلسنكي

التاريخ 7/6/2010

Name:

الاسم: عماد برهم الرقب

I would like to inform you that the committee
has discussed your application about:

نفيدكم علماً بأن اللجنة قد ناقشت مقترح دراستكم

حول:-

**Quality of life and mental health of martyrs
wives after war on Gaza.**

In its meeting on June 2010
and decided the Following:-

و ذلك في جلستها المنعقدة لشهر 6 2010

To approve the above mention research study.

و قد قررت ما يلي:-

الموافقة على البحث المذكور عاليه.



Member

Member

Chairperson

عضو

عضو

Conditions:-

- ❖ Valid for 2 years from the date of approval to start.
- ❖ It is necessary to notify the committee in any change in the admitted study protocol.
- ❖ The committee appreciate receiving one copy of your final research when it is completed.

Annex (7)

Al-Quds University
Jerusalem
School of Public Health



جامعة القدس
القدس
كلية الصحة العامة

2010/8/7

الأخ / مصطفى البحصي المحترم
مدير جمعية الصلاح الإسلامية
تحية طيبة وبعد ،،،

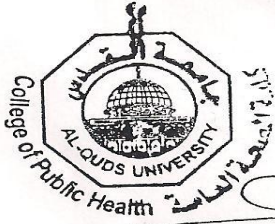
الموضوع :مساعدة الطالب عماد الرقب

يقوم الطالب المذكور أعلاه بإجراء بحث بعنوان:

"جودة الحياة والصحة النفسية لدى زوجات الشهداء بعد الحرب على غزة "

كمطالب للحصول على درجة الماجستير في الصحة النفسية المجتمعية ،وعليه نرجو التكرم والايجاز لمن ترونه مناسب لتسهيل مهمة الطالب في جمع البيانات من فروع مؤسساتكم الموقرة .
علما بأن المعلومات ستكون متوفرة لدى الباحث والجامعة فقط .

شاكرين لكم حسن تعاونكم ودعمكم للمسيرة التعليمية .



وتفضلوا بقبول وافر الاحترام والتقدير ،،،

د.بسام أبو حمد

منسق عام برامج الصحة العامة
جامعة القدس - غزة



بسم الله الرحمن الرحيم
كلناح لريتا
10-8-2010
نسخة:اللف

Jerusalem Branch/Telefax 02-24799234
Gaza Branch/telefax 08-2884422-2884411

Sphealth@admin.alquds.edu

السكرتارية ٠١/٥
02-2799234 فرع القدس/تلخاكس
08-2884422-2884411 فرع غزة/تلخاكس
ص.ب/51000-القدس

Annex (8)

بِسْمِ اللَّهِ الرَّحْمَنِ الرَّحِيمِ

التاريخ : 2016.../.../... م

الرقم: .../.../...

حفظه الله

الأخ الفاضل / رئيس مجلس إدارة جمعية الصلاح الإسلامية

السلام عليكم ورحمة الله وبركاته

بداية نسال الله أن يوفقنا وإياكم لما تحب ويرضى،،،

نرفع لسيادتكم كتاب مقدم من د. بسام ابو حمد منسق عام برامج الصحة العامة بجامعة القدس - غزة يطلب فيه مساعدة الطالب عماد الرقب في جمع بيانات من فروع الجمعية والتي تخدم رسالة الماجستير التي يجريها .

برجاء تكليف من ترونه مناسباً لتسهيل حصول الباحث على المعلومات .

وتفضلوا بقبول فائق الاحترام

أختكم / سلوى معمر
رئيس قسم السكرتارية

بسم الإسلام
مما جرت به عادة الجمعية لتقديم
ملاحظات مع التيسير للجمعية
بمعدة مؤلفات من الأهل والزملاء
2016.../.../...



الأهولة / مدير الترويج -
لا مانع لدينا من التيسير مع الأخ الفاضل
2016.../.../...

لا مانع من مساعدة الطالب في التيسير
2016.../.../...

Annex (9)

Al-Quds University
Jerusalem
School of Public Health



جامعة القدس
القدس
كلية الصحة العامة

2010/4/24

حضرة السيد / فتحي رضوان المحترم
وكيل وزارة الشئون الاجتماعية - غزة
تحية طيبة وبعد ،،،

الموضوع :مساعدة الطالب عماد الرقب

يقوم الطالب المذكور أعلاه باجراء بحث بعنوان :

Quality of life and mental health of martyrs wives after war on Gaza

كمتطلب للحصول على درجة الماجستير في الصحة النفسية المجتمعية ،وعليه نرجو التكرم والايجاز لمن ترونه مناسب لتسهيل مهمة الطالب في جمع البيانات من فروع مؤسساتكم الموقرة .
علما بأن المعلومات ستكون متوفرة لدى الباحث والجامعة فقط .

شاكرين لكم حسن تعاونكم ودعمكم للمسيرة التعليمية .

وتفضلوا بقبول وافر الاحترام والتقدير ،،،



د. عبد العزيز موسى ثابت

منسق برنامج الصحة النفسية المجتمعية

جامعة القدس - غزة

د. عبد العزيز موسى ثابت
استشاري الطب النفسي
ترخيص رقم ٨٢/٨٩

نسخة:الملف

Annex (10): Response of study participants on QOL scale

Response of study participants on physical domain

Physical domain	Not at all	Little	Moderate	Much	Very much
To which extent the pain prevent you from doing things you suppose to do	6.0	35.2	27.1	26.1	5.5
To which extent you need medical advice	12.1	39.7	25.6	15.6	7.0
Adequate energy for daily life	4.5	34.2	37.2	20.6	3.5
Satisfaction from sleeping	13.1	44.7	37.2	5.0	0
Satisfaction regarding ability to perform activities of daily living	10.6	31.7	33.7	19.1	5.0
Satisfaction regarding ability to work	16.1	25.1	31.7	22.1	5.0

Response of study participants on social relations domain

Social relations domain	Not at all	Little	Moderate	Much	Very much
Availability of recreational activities / leisure time	13.6	50.8	26.1	9.0	0.5
Satisfaction regarding personal relationships	4.5	27.1	34.2	23.1	11.1
Satisfaction regarding support from friends / relatives	12.1	29.6	31.7	17.6	9.0
Satisfaction regarding availability of job / career	27.6	17.1	17.6	21.6	16.1
Communication with human rights organizations	41.2	33.7	14.6	6.0	4.5
Participation in social activities in the community	17.1	31.7	23.1	21.1	7.0

Response of study participants on psychological domain

Psychological domain	Not at all	Little	Moderate	Much	Very much
To which extent you enjoy your life	23.6	38.7	27.6	8.5	1.5
To which extent you feel that your life has a meaning	10.6	32.2	35.7	15.6	6.0
To which extent you are able to concentrate	4.5	29.1	42.2	17.1	7.0
Acceptance of body image / appearance	8.5	20.6	30.7	4.5	5.0
Frequency of negative feelings	8.0	18.6	22.1	38.2	13.1
Feeling that people you lived with do not treat you well	24.1	36.7	18.6	13.1	7.5

Response of study participants on environment domain

Environmental domain	Not at all	Little	Moderate	Much	Very much
Safety feeling	15.6	37.2	28.1	15.6	3.5
Safe and healthy of surrounding environment	5.5	38.2	41.7	10.1	4.5
Adequacy of money to meet life demands	14.6	45.2	30.7	4.5	5.0
Satisfaction regarding your home conditions	23.6	27.1	27.1	18.1	4.0
Satisfaction regarding health services offered to you	6.0	35.7	34.2	21.1	3.0
Satisfaction regarding movement / transport	15.1	30.2	33.7	17.1	4.0

ملخص الدراسة

أجريت هذه الدراسة بهدف التعرف على جودة الحياة والصحة النفسية لدى زوجات شهداء عملية الرصاص المصبوب في ضوء بعض المتغيرات. تكون مجتمع الدراسة من 640 زوجة شهيد و تكونت عينة الدراسة من 199 زوجة شهيد تم اختيارهن بشكل عشوائي حسب عدد أفراد مجتمع الدراسة في كل محافظة.

استخدم الباحث مقياس جودة الحياة الذي ترجمه للعربية د. عبد العزيز ثابت، ومقياس الاكتئاب لأرون بيك وترجمه للعربية د. أحمد عبد الخالق، مقياس القلق لتايلور وترجمه للعربية د. مصطفى فهمي ومقياس كرب ما بعد الصدمة لدافيدسون وترجمه للعربية د. عبد العزيز ثابت، وقد تم التأكد من صدق وثبات أدوات الدراسة من خلال دراسة استطلاعية أجريت على 30 زوجة شهيد تم اختيارهن بشكل عشوائي.

لتحليل البيانات استخدم الباحث التكرارات، المتوسطات والنسب المئوية، كما تم استخدام اختبار ت واختبار تحليل التباين الأحادي واختبار شيفيه للمقارنات المتعددة.

أظهرت الدراسة النتائج التالية:

- 33.7% من زوجات الشهداء يعتقدن أن المستوى العام لجودة حياتهن كان سيء و 53.3% يعتقدن أن المستوى العام متوسط، كما أظهرت النتائج أن 7.5% من زوجات الشهداء غير راضيات تماماً عن صحتهم، 29.1% كن راضيات بشكل قليل و 42.7% كن راضيات بشكل متوسط.

- كانت استجابات زوجات الشهداء على أبعاد مقياس جودة الحياة كالتالي: في البعد الجسدي بلغ متوسط الدرجات 16.25 ± 2.81 ، وفي بعد العلاقات الاجتماعية 15.72 ± 3.93 ، وفي البعد النفسي 16.80 ± 3.06 وفي البعد البيئي بلغ متوسط الدرجات 15.60 ± 3.83

- كانت استجابات زوجات الشهداء على مقياس الاكتئاب كالتالي: 9.54% لم يعانين من الاكتئاب، 11.55% عانين من الاكتئاب بدرجة قليلة، 31.15% بدرجة متوسطة، 40.20% بدرجة عالية و 7.53% عانين من الاكتئاب بدرجة عالية جداً.

- بالنسبة لاستجابات زوجات الشهداء على مقياس القلق: 42.21% كان مستوى القلق لديهن فوق المتوسط، 25.12% كان مستوى القلق لديهن مرتفع و 12.56% كان مستوى القلق لديهن مرتفع جداً.

- بالنسبة لاستجابات زوجات الشهداء على مقياس كرب ما بعد الصدمة: 2.51% لم تظهر عليهن أعراض كرب ما بعد الصدمة، 19.59% ظهرت لديهن أعراض بسيطة، 55.27%

ظهرت لديهن أعراض بدرجة متوسطة و 22.61% ظهرت لديهن أعراض كرب ما بعد الصدمة بدرجة عالية.

- أظهرت النتائج وجود علاقة سلبية بين جودة الحياة والصحة النفسية، بمعنى أنه كلما قلت جودة الحياة ارتفعت درجة ظهور أعراض الاضطرابات النفسية.

وبشكل عام تبين نتائج هذه الدراسة الحاجة إلى مزيد من الاهتمام بزوجات الشهداء الفلسطينيين حتى تتمكن أسرهم من مواصلة الحياة بكرامة وأمان.