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Faculty of Graduate Studies

**Family Burden among Caregivers of Mentally Ill
Patients in Nablus District**

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الإقرار

أنا الموقع أدناه مقدم الرسالة التي تحمل العنوان :

**Family Burden among Caregivers of Mentally Ill Patients in
Nablus District**

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Declaration

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**Family Burden among Caregivers of Mentally Ill Patients in the
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Abstract

Aim: The aim of this study was to assess family burden of caregivers of mentally ill patients and find out whether there is any relation between the perceived burden of caregivers of patients with mental illness and independent variables such as age, sex, education, economic status, and type of mental illness in Nablus District.

Methodology: Descriptive, cross sectional design was used to achieve the aim of the study. Convenient sampling method was used to select the subject during the period from November 2012 – January 2013; it was distributed using quota method; 50 patients for each one of the following diagnosis: schizophrenia, mood disorder, and mental retardation, who were attending psychiatric outpatient clinics in Nablus district. The Zarit burden interview and the objective burden section from the Montgomery Borgatta caregiver burden scale were used to assess the burden.

Result: The mean of subjective burden was mild to moderate (28.84), while objective was low (17.93). Also, the mean of psychological, social, and economic burden was low, and physical burden was low to moderate. The results showed that burden scores were significantly

correlated with gender, educational level, and economic status. No significant differences were found between participants according to their age and type of mental illness.

Conclusion: Higher subjective burden scores were correlated to being female, low educational level, and low economic status. While higher objective burden scores were correlated to being male, high educational level, and high economic status.

Taking care of mentally ill patients affects the family negatively, so psychiatric nursing intervention should be focused on the need of the caregivers and an emphasis placed on community care for mentally ill patients as well as family intervention.

Chapter 1

Introduction

Mental illness is distressing for the people affected and their family members (Heller et al., 1997). It is a leading cause of global burden of disease (WHO, 2008). These family members are often inadequately prepared to be the main caregiver for their ill relative (Knudsen et al., 1996).

There are different mental disorder categories; some examples of mental illness are schizophrenia, depression, anxiety, and mental retardation (WHO, 2013).

Schizophrenia is a severe mental disorder, characterized by profound disruptions in thinking, affecting language, perception, and the sense of self. It often includes psychotic experiences, such as hearing voices or delusions. It can impair functioning through the loss of an acquired capability to earn a livelihood, or the disruption of studies (WHO, 2013). It is estimated that 1% of the population develops schizophrenia during their lifetime (Mental Health Research Association, 2006).

Mood disorder Refer to disturbance in mood, inappropriate, exaggerated, or limited range of feelings. It include bipolar disorder, cyclothymic disorder, dysthymic disorder, major depressive disorder (APA, 2000)

Bipolar affective disorder “characterized by repeated (i.e. at least two) episodes in which the patient's mood and activity levels are significantly

disturbed, this disturbance consisting on some occasions of an elevation of mood and increased energy and activity (mania or hypomania), and on others of a lowering of mood and decreased energy and activity (depression)”.(WHO, 1992) .

Mental retardation is concurrent deficits or impairments in adaptive functioning in at least 2 of the following areas: communication, self-care, home living, social/interpersonal skills, use of community resources, self-direction, functional academic skills, work, leisure, health, and safety. It is also characterized by significantly sub average intellectual functioning, an intelligence quotient (IQ) of approximately 70 or below, and onset before the age of 18 years (APA, 2000).

Until the mid-1950s hospitalization of mentally patients was the routine approach to manage mental illness. One of the major changes in the care of people with serious mental illness in the twentieth century was that the process of deinstitutionalization which shifted the treatment of these people from state institutions to community care centers. This process had a substantial impact on the mental health system and on the families of the people with mental illness as well (Thompson & Doll, 1982).

Numerous studies have demonstrated that family caregivers of persons with severe mental illness suffer from significant stress, experience moderately high levels of burden and often receive inadequate assistance from mental health professionals (Saunders, 2003).

1.1 Problem Statement

According to a health report by Palestinian Health Information Center the number of new reported cases of all mental disorders in mental health clinics in primary health care facilities was 958(MOH, 2012). The number of mentally ill patients in Palestine is increasing which mean putting more burden on their care givers and their families because these patients need help in their daily activity either completely or partially. Those families are being expected to assume care giving responsibilities toward those members with mental illness although they have no formal training or support, in addition and they often find burdensome and they face emotional, physical, social, and financial problems and other difficulties.

Moreover these families have to meet patient need and to face stigma that might indicate to the need to training to be able to fulfill these needs and to take care of them.

While there are many studies assessing the burden of caregivers of patients with mental illness (Prafulla et al.(2010); Rudnick,(2004); (Ukpong, 2012) , there are no studies in Palestine assessing this issue.

This study aimed to assess family burden of caregivers of mentally ill patients and find out whether there is any relation between the perceived burden of caregivers of patients with mental illness and age, sex,

education, socioeconomic status, and type of mental illness in Nablus district.

1.2 Significance of the Study

After discharged from the hospital, mentally ill patients are followed-up outside of the hospital setting, and family members assume responsibility for those patients in addition to their responsibilities. Therefore , and in addition to the lack of studies in Palestine discussing this issue, it is crucial to evaluate the impact of caring for mentally ill patients on caregiver burden in order to better understand which factors produce the most stress for caregivers. The results of this study will provide some insights and information on the problems and difficulties that result from caring for or living with a mentally ill patient. Also it will help health policy makers to involve families in patients care.

Moreover, this study will provide recommendations to focus on the needs of these caregivers and emphasize community care for mentally ill patients, and family intervention.

1.3 Aim

The aim of this study was to assess family burden of caregivers of mentally ill patients.

Specific objective:

- To find out whether there is any relation between the perceived burden of caregivers of patients with mental illness and caregiver's age caregiver.
- To find out whether there is any relation between the perceived burden of caregivers of patients with mental illness and caregiver's gender.
- To find out whether there is any relation between the perceived burden of caregivers of patients with mental illness and educational level of caregiver.
- To find out whether there is any relation between the perceived burden of caregivers of patients with mental illness and economic status of caregiver.
- To find out whether there is any relation between the perceived burden of caregivers of patients with mental illness and type of mental illness.

1.4 Hypothesis

- There is a relationship between the caregivers' gender and family burden?
- There a relationship between the caregivers' age and family burden?
- There is a relationship between educational level of caregivers and family burden?
- There is a relationship between economic status of caregivers and family burden?
- There is a relationship between type of mental illness and family burden?

1.5 Conceptual Definition

“**Mental disorders** comprise a broad range of problems with different symptoms. However, they are generally characterized by some combination of abnormal thoughts, emotions, behavior and relationships with others. Examples are schizophrenia, depression, mental retardation and disorders due to drug abuse” (WHO, 2013).

Family caregivers provide a complex array of support tasks that extend across physical, psychological, spiritual, and emotional domains (Honea et al., 2008).

Family caregiver burden may be defined as the problems, difficulties, and negative life events influencing the life of family members caring for a loved one with a mental illness (Platt, 1985). Also (Natalie et

al.,2003) defined caregiver burden as the negative feelings and subsequent strain experienced as a result of caring for a chronically sick person.

Objective burden is the existence of problems and changes in family life (household routine, relationships, and leisure time) (Ivarsson et al., 2004). Also Montgomery, (2002) defined it as perceived infringement or disruption of tangible aspects of a caregiver's life.

Subjective burden is the emotional feelings and mental health status (guilt, feelings of loss, and anxiety) of family caregivers (Ivarsson et al., 2004).

Self care: according to Orem theory, self care is “practice of activities that individual initiates and perform on their own behalf in maintaining life , health and well being”. In other hand, self-care deficit delineates when nursing is needed. Nursing is required when an adult is incapable of or limited in the provision of continuous effective self-care. Orem identifies three components to the Self-care nursing model, the compensatory system, the partial compensatory system and the educative-developmental system(Orem, 1991).

The Compensatory system is when the nurse provides total care for the patient. This patient cannot do anything for themselves including but not limited to activities of daily living and ambulation. This patient is totally dependent of the nurse for survival, such as an acute Stroke patient. The second of Orem’s systems is the Partial Compensatory. The nurse

must assist in the care of the patient but the patient can assist as well (Orem, 1991).

Depending on Orem theory the researcher used:

- Complete help in self care: patient can't do self care .
- Partial help in self care: patient can do self care but need help.

1.6 Operational Definition

The study measured the family burden by:

- Zarit Burden Interview (subjective burden).

The ZBI was developed to assess caregiver burden in relatives of patients with dementia, but it has also been used to assess burden in relatives of patients with schizophrenia in previous studies (Hanzawa et al., 2008).

The ZBI is one of the most widely used scales for burden assessment in caregivers of elderly patients with dementia. Therefore, the ZBI has been used to assess the burden of caregivers of elderly patients with dementia and of elderly people and adults with other mental and physical diseases.

- Montgomery Borgatta Caregiver Burden Scale (objective burden)

It is measured by six items: amount of time one has for one's self; amount of personal privacy one retains; time available for

recreational activities; restrictions on vacations and trips; amount of time available to do one's own work and daily chores; and amount of time for friends and relatives (Montgomery, 2002).

Chapter 2

Literature Review

In May 1994, the Palestine Council of Health, formed in July 1992, began its implementation of an Israeli/Palestinian agreement on health care in the West Bank and Gaza. In regard to mental health services some of its objectives included reduction in disability associated with mental illness, decrease in mortality and disability associated with interpersonal and self-directed violent behavior and the revitalization of the psychiatric hospitals in the West Bank and Gaza, as well as of the community psychiatric health clinics in various Palestinian cities(Palestine Council of Health, 1994).

In the West Bank there is one psychiatric hospital in Bethlehem, which has 320 beds, of which 178 are for males and 142 for females. Wards are gender segregated but male and female patients can meet in the social club. Mental health services are provided in community psychiatric clinics in Jenin, Tulkarm, Nablus, Qalqilia, Ramallah, Hebron and Jericho.

Mental health disorders constitute one of the largest health problems in Palestine, nearly a third of Palestinians are in need of mental health interventions. The Palestinians have been exposed to a series of traumatic events, like torture, human rights abuses, house demolitions, and movement restrictions. Adults who are exposed to house demolitions show a higher level of anxiety, depression and paranoia (Afana et al., 2004).

Taking care of people with mental health problems at home is often a particular hardship with enduring strain for the family (Loukissa, 1995). Since the 1950s the adverse consequences of taking care of relatives with severe mental illnesses have been studied (Chan et al., 2000; Reine et al., 2003).

Montgomery et al. (1985) defined burden as objective burden and subjective burden. They stated that subjective burden is caused by an emotional reaction impacted by care giving experience, while objective burden is the disruption or change in many aspects of caregiver's household or life.

From the 1970s to 1980s, the term caregiver's burden has been used to describe the adverse consequences of mental disorders for family caregivers, but now it is more widely used to refer to the physical, psychological, or emotional, social and financial problems that are experienced by family members caring for a chronically ill, or impaired family members (Chow, 2000).

2.1 Family burden

Family refers to two or more individuals who depend on one another for emotional, physical, and /or financial support (Hanson, 2001). The family may range from traditional notions of the nuclear and extended family to such post-modern family structures as single-parent, step-, and same-gender families, family structure were categorized to three types:

married family (e.g. traditional nuclear family, Dual career family, and stepfamily); single-parent family (e.g. widow with children, and divorced with children); and multiadult household (e.g. affiliated family and extended family)(Stanhope & Lancaster, 2004).

Nuclear family is a new family that is created by husband and wife, while extended family is the family network beyond the family into which a person is born, it includes grandparent, aunts, uncles, cousins, nephews, and grandchildren.(Bowen, 1978; Heno and grose, 1985; Nichols and Everett,1986).

Family function are: to achieve financial survival, to produce the species, to provide protection from hostile forces, passing along the culture, family educate their young, and confer status in society (Hanson, 2001). Duvall (1977) has described six functions as family; generating affection, providing personal security and acceptance, giving satisfaction and sense of purpose, assuring continuity of a companionship, guaranteeing social placement and socialization, and calculating controls and what is right. When chronic illness occurs and home care is required, the family caregiver system can be at risk for crisis. Family can respond in many ways to chronic illness. Ideally, primary intervention occurs as a response to accurate assessment of underlying factors that could precipitate a crisis.

Hanson, (2001) define family health as “a dynamic changing relative state of well-being which includes the biological, psychological, spiritual, sociological, and cultural factors of the family system”. An individual’s health (the wellness and illness continuum) affects the functioning of entire family, and in turn the family’s functioning affects the health of individuals.

The adverse consequences of mental disorders for relatives have been studied by several scholars. Platt (1985) defined family caregiver burden as the problems, difficulties and negative life events that influence the life of family members caring for a loved one with a mental illness. According to Natalie et al.(2003), caregiver burden refers to the negative feelings and subsequent strain experienced as a result of caring for a chronically sick person.

Also, different types of burden have been discussed in several studies. Schene (1990) recognized two types of family caregiver burden: objective and subjective burden. Lefley (1996) identified three types of burdens faced by family caregivers; first: objective burdens in coping with the mental illness (financial burden, time and effort in care giving, disruption of daily routine and social life); second: subjective burdens in facing the mental illness (feelings of loss, shame, worry, anger and hopelessness towards the client with mental illness);and third: burdens in management of problem behaviors of clients with mental illness (assault, mood swing, unpredictability, and negative symptoms).

To distinguish between the objective and subjective burden, Reine et al. (2003) identified objective burden as those related to the patient's symptoms, behavior, and socio-demographic characteristics, and factors such as changes in household routine, family or social relations, work, leisure time, and physical health. Subjective burden is the mental health and subjective distress among family members.

According to Ivarsson et al. (2004), objective burden is the existence of problems and changes in family life (household routine, relationships, and leisure time) that occur because a family member requires care due to an illness, while subjective burden is the emotional feelings and mental health status (guilt, feelings of loss, and anxiety) of family caregivers.

2.2 Factors related to burden of family caregiver

Caregiver burden is influenced by several factors; patient characteristics, caregiver characteristics, social support, and coping skills.

2.2.1 Patient's characteristics

In relation to patient's characteristics, Ochoa (2008) assessed the relationship between the patients' needs especially those needs related to daily activities (food, looking after home, self-care, company, child care, money...) and other clinical and disability variables and the level of family burden. Results showed that the number of patients' needs was correlated with higher levels of family burden in daily life activities, disrupted

behavior and impact on caregiver's daily routine. A higher number of needs, higher levels of psychopathology and disability, being male and older all accounted for higher levels of family burden. The presence of patients' needs (daytime activities, alcohol and drugs) and the severity of psychotic symptoms and disability are related to higher levels of family burden.

According to the age of patients, studies found that caregivers who had patients with schizophrenia displayed a very high degree of burden, especially while taking care of younger patients (Caquezo-Urizar & Gutierrez-Maldonado, 2006). Younger patients with schizophrenia had not been able to take care of themselves, and they might be in early stage of disease. Therefore, caregivers feel burden when they take care of the younger patients (Juvang et al. 2007). Higher burden subscale scores were variously associated with patient's younger age as well (Zahid & Ohaeri, 2010).

Regarding gender, patient gender can affect the burden of care (Awad & Voruganti, 2008). Higher burden subscale scores were variously associated with patient's female gender (Zahid & Ohaeri, 2010).

Other factors affecting family burden are the clinical symptoms, according to Perlick et al. (2006); clinical symptoms were predictors of caregivers' burden. Also, the severity of patient symptoms affects the burden of the caregiver (Shu-Ying H. et al., 2008). Grandon et al. (2008)

found that positive symptoms can predict caregiver's burden more than the negative symptoms.

In relation to type and duration of mental illness, Sreeja et al. (2009) found that the longer duration of illness might have contributed to the increased burden of the caregivers and Solomon & Draine (1995) found that a greater degree of subjective family burden is related to a greater severity of mental illness in relatives with less availability of social support and fewer coping resources of family members. Both objective and subjective burden was significantly more in relatives of schizophrenics when compared with an affective disorder either bipolar disorder or recurrent major depression (Chakrabartiet al., 1995). Also, relatives of schizophrenics presented a tendency for a higher degree of both objective and subjective burden in some area when compared with relatives of people with mental retardation (Pariante&Carpiniello, 1996).

Other studies that compared burden of depression and burden of schizophrenia reported similar amounts of burden (van Wijngaarden et al., 2009).While van Wijngaardenet al. (2004) found that the burden of depression is less and care giving consequences occur less often than in schizophrenia.

On the other hand, another study among partners of people suffering from anxiety disorders, depression or schizophrenia did not find any

relationship between strength of burden and type of diagnosis or duration of the illness (Wittmund et al., 2002).

Similarly, Sreeja et al. (2009) conducted a study to assess the burden between sixty family caregivers of patients having schizophrenia and epilepsy (30 caregivers of patients having schizophrenia and another 30 caregivers of epilepsy). They found that the caregivers of both long term physical illness like intractable epilepsy and a mental illness like schizophrenia experience a high level of burden in the areas of: patient care, finance, physical and emotional burden, family relations and occupation. There was no significant difference in both groups of caregivers. The reason for this result might be related to the mean duration of illness of schizophrenia which was 6 years whereas that of epilepsy was 12 years. The longer duration of illness of Epilepsy might have contributed to the increased burden of the caregivers. Another possible reason for the equal burden could be the fact that most of the patients having Schizophrenia were not having active positive symptoms.

2.2.2 Burden and its relation with caregiver's characteristics:

A comparative study of Euro-Americans and Latinos suggested that the types and levels of family burden could be correlated to contextual factors including gender, ethnicity, diagnosis, and living situation of caregivers (Jenkins & Schumacher, 1999).

2.2.2.1 Burden and its relation to caregiver's age

Baronet (1999), in his study, highlighted different findings regarding the association between caregiver's age and burden. It was suggested that these differences might be due to differences in the intensity of the relative's illness so that crisis conditions may produce a greater burden regardless of age, whereas stable conditions may not produce a great burden in elderly caregivers due to more experience in dealing with the illness.

Also a study by Juvang (2007) was conducted to investigate the relationship between demographic characteristics of caregiver's burden when providing care for a member with schizophrenia in China. A purposive sampling technique was used to recruit 96 subjects from 3 hospitals. Findings showed that the age of caregiver had a positive correlated to the burden of the caregiver; increase caregivers age (older age) led to increase burden. Similarly, Chan et al. (2009) and Chien et al. (2007) found that caregivers' burden score was positively correlated with their age.

In contrast, a study of Mexican Americans found that a younger caregiver age was predictive of higher levels of caregivers' depressive symptoms (Magaña et al., 2007).

2.2.2.2 Burden and its relation to caregiver's gender

Women are more likely to be regarded as natural caregivers and to assume major responsibility for the care of family members, especially for individuals with mental illness (Huang, 2004). About (58%) of caregivers in the United Kingdom were women (Nolan, 2001). The World Federation of Mental Health (WFMH) (2010) estimated that globally, about (80%) of caregivers are women, which could be the mother, wife, or daughter of the clients. Studies showed that middle aged and older women who provided care for an ill spouse or a spouse with disability were almost six times as likely to have depressive or anxious symptoms as were those who had no care-giving responsibilities (WFMH, 2010).

To determine gender difference Hsiao (2010) conducted a study to assessed gender effects on family demands, social support and caregiver burden, and examined the contributing factors of caregiver burden in caring for family members with mental illnesses. The results found that female family caregivers perceived less social support and experienced higher degrees of caregiver burden compared to male family caregivers.

Also Schneider et al. (2010) found in their study that women had a higher score in burden of care giving when compared to men. The same results were found in study in Turkey by Akpınar et al. (2011), which was conducted to determine the effects of gender on caregiver burden among caregivers of persons with Alzheimer's disease. Results of this study

suggest that female caregivers are subjected to a higher level of caregiver burden than male caregivers. In subscales, female caregivers experienced more burden than male caregivers in the time dependence, developmental, physical, and social burdens. Emotional burden was similar in both genders. Similarly, Kumari et al. (2009) conducted a study to assess and compare patterns of subjective burden on spouses of schizophrenic patients using a socio-demographic data sheet and the Family Burden Interview Schedule. The sample was comprised of 50 spouses (25 male and 25 female spouses of schizophrenic patients). The results were that both male and female spouses of schizophrenic patients showed a moderate level of subjective burden, and no significant difference was found between male and female spouses of schizophrenic patients with regard to the level of subjective burden.

2.2.2.3 Burden and its relation to caregiver's educational level

Juvang et al.(2007) conducted a study to investigate the relationship between demographic characteristics of caregivers and family caregiver's burden when providing care for a member with schizophrenia in China. Findings showed that the education level has a negative correlation with caregiver's burden. It was assumed that the increased level of education led to an increase in the salary, and a high salary would decrease financial problems related to providing care for the ill family member. A high level of education of the caregiver also tends to indicate more knowledge to deal with stressful events.

2.2.2.4 Burden and its relation to economic status

Folkman & Lazarus (1979) suggested that utilitarian resources, such as money, greatly increase the coping options available to any person. Financial difficulties were associated with poorer well-being in the caregivers (Schofield et al., 1998). Similarly, Quine & Pahl (1991) reported that being middle class with few financial worries appeared to buffer the effect of stressful behavior for mothers of children with severe learning difficulties.

Another study conducted by Andren & Elmstahl (2007) in Sweden examined the relationship between income, subjective health and caregiver's burden in people with dementia. Findings showed that low income was associated with a higher degree of burden on the caregivers. In addition, caregivers' burden score was negatively correlated with their income; families with lower socioeconomic status experienced a higher level of burden (Chien et al., 2007; Martens & Addington, 2001; Ohaeri, 2001).

A review of research on the quality of life of caregivers in schizophrenia by Caqueo-Uribe et al. (2009) showed that the burden of care increases and caregiver quality of life decreases with inadequate social support, family dysfunction, and a negative prognosis. Moreover, economic burden can negatively affect the quality of life of caregivers in developing

countries, in which there is a limited number of healthcare professionals and healthcare centers, and the cost of schizophrenia's treatment is high.

2.2.2.5 Burden and its relation to ethnicity:

Stueve et al. (1997) conducted a study to examine the effect of ethnicity on perceived caregiving burden. The results showed that African caregivers reported less burden than did western caregivers. There was no significant difference in perceived burden between Hispanic and western caregivers. Another study was conducted by Horwitz & Reinhard (1995) to examine the effect of ethnicity on caregiver duties and caregiver burden. There was no ethnic difference in caregiving duties between western and African parents, but ethnicity had the strongest impact on sibling caregiving duties. Western parents and siblings reported significantly more burden than did Africans.

2.2.2.6 Burden and its relation to patient-caregiver relationship:

In a study by Zahid & Ohaeri (2010), caregivers who were either children or spouses of patients had a tendency to have higher burden scores than other relationship groups.

2.2.3 Social support:

Chii et al. (2009) conducted a study on 301 caregivers in Taiwan to examine the correlation between caregivers' burdens and perceived and received social support. They found that the perceived social support had a

negative correlation with the burden of caregiver. Caregiver's burden increased when informal support could not meet the caregiver's need. Magliano et al. (2000) also found that a reduction of family burden over a time was found among relatives who received more practical support from their social network. A review of research on the quality of life of caregivers of schizophrenics (Caqueo-Uribe et al., 2009) showed that the burden of care increases and caregiver quality of life decreases with inadequate social support.

2.2.4 Coping strategies:

Hassan et al.(2011) studied the burden and coping strategies in caregivers of schizophrenic patients and identified the relationship between burden and coping strategies among them. 100 caregivers of schizophrenic patients from psychiatric inpatient and outpatient clinics of Neuropsychiatry Department at Assiut University Hospital were assessed by utilizing the caregiver burden self-report and ways of coping questionnaires. They found that the level of burden reported by caregivers of schizophrenic patients was high. The most coping strategies used by caregivers of schizophrenic patients were self controlling, positive reappraisal and escape avoidance. Burden was positively and not significantly correlated with self controlling, accepting responsibility, escape-avoidance and problem solving. There were no significant associations between socio-demographic variables and burden and coping strategies; burden was not significantly correlated with coping strategies.

Another study was conducted by Creado et al. (2006) to evaluate the burden and coping of caregivers in relation to the level of functioning in patients with chronic schizophrenia. 100 patients with their primary caregivers were assessed; the Global Assessment of Functioning (GAF) scale was used for patients, and caregivers were assessed by the Burden Assessment Schedule (BAS) and Mechanisms of Coping (MOC) scale. The findings were that fatalism and problem-solving were the two most preferred ways of coping. Problem-focused coping, i.e. problem-solving and expressive-action, decreased the burden of caregivers, while emotion-focused coping, i.e. fatalism and passivity, increased it. As the level of functioning of the patient decreased, the burden increased. The use of problem-solving coping by caregivers showed a significant correlation with a higher level of functioning in patients. Coping mechanisms such as problem-solving can decrease the burden of illness on caregivers and may even improve the level of functioning of patients.

Several studies were conducted to assess family burden in different countries;

Prafulla et al.(2010) conducted a study to assess the burden faced by the families and the needs for rehabilitation among the beneficiaries of a rural mental health camp in South India in which 50 caregivers were interviewed. The results indicated mild to moderate objective burden experienced by the families. All participants had some kind of need pertaining to the rehabilitation of the ill family member. Similar results

were found in Israel, where the mean burden of Israeli family members of mentally ill individuals was moderate in 53 family members. Also, it was found that caregiver age was not associated with burden, and females were significantly more burdened than males (Rudnick, 2004). On the other hand, Papastavrou et al. (2010) examined the burden and emotional well-being experienced by Cypriot families caring for a member suffering from schizophrenia. A total of 113 caregivers were assessed using the family burden scale (FBS) and a socio-demographic data sheet. The findings showed a high level of burden among family caregivers; (43%) of the participants scored above 24/42 in the Family Burden Scale.

Also, Ukpong (2012), in his study of burden and psychological distress among 101 Nigerian family caregivers of schizophrenic patients, found that about one third of caregivers (33.7%) were experiencing moderate to severe levels of burden even though there was a mean burden score of 32.6 ± 14.1 in the Zarit Burden Interview (ZBI); more than half of the caregivers were females (58.4%). High caregiver burden scores were also associated with the patient being unemployed and the caregiver having a lower education. Also, the 30-Item General Health Questionnaire (GHQ-30) was used to measure psychological distress; the results showed that high levels of emotional distress in the caregiver was related to the patient being female and the patient having a lower education level.

A Brazilian study, Torres et al. (2008) evaluated the emotional burden, psychological morbidity, and level of family accommodation in 50

caregivers of Brazilian obsessive-compulsive disorder (OCD) patients. Caregivers and patients were evaluated using the Family Accommodation Scale, the Zarit Burden Interview (ZBI), the Self-Report Questionnaire (caregivers), the Yale- Brown Obsessive-Compulsive Scale, and the Beck Depression Inventory. The burden was mild to moderate: their mean ZBI score was 28.9, while most caregivers (80%) were between 30 and 59 years of age and lived with the patient (88%). 42% presented a common mental disorder. Family accommodation was moderate in 26% and severe or very severe in 24%. Caregivers' levels of psychological morbidity, accommodation and emotional burden were associated with each other and with the severity of the patient's obsessive-compulsive and depressive symptoms.

In 2009, Nasr and Kausar studied the impact of psycho-education on the burden of schizophrenia on the family in a randomized controlled trial. The sample size was 108 patients and their family members from the outpatient department of a teaching hospital in Lahore, Pakistan. All patients received psychotropic drugs but one group received psycho-education in addition. Family burden was assessed at the time of recruitment and at 6 months post intervention by the Family Burden Interview Schedule (FBIS). 99 patients and their relatives completed the treatment. There was significant reduction in burden at post intervention assessment in the psycho-education group based on an intention to treat analysis.

Another study was conducted to investigate the effect of a designed psycho-educational program on improving patient symptoms and reducing caregiving burdens among family caregivers with chronic schizophrenic patients. The study was conducted in an outpatient department at Abassia hospital in Egypt. Four developed tools were used to collect data: socio-demographic and medical data sheet, assessment of negative symptoms for schizophrenic patient, socio-demographic data sheet for caregivers, and family burdens assessment sheet to measure burdens among caregivers. 40 chronic schizophrenic patients with their family caregivers were divided into the control and the experimental group. 10 sessions (one session every other week) were done in this program for a study group for 45-60 minutes for each one. The results revealed that there were no statistically significant differences among groups; the designed program had an effective impact on reducing caregivers burdens in relation to recreational family activity, family interaction within and outside the family, physical health and psychological health of the family members. In addition, family burden decreased in relation to the improvement of patient's symptoms. This study concluded that, when relatives of patients with schizophrenia have enough knowledge and efficient skills to deal with patient problems, it is possible for burden to be reduced and patient symptoms improved (Abd-el-Aziz, 2011).

El-Tantawy et al. (2010) evaluated depressive disorders among caregivers of schizophrenic patients and their relationship with burden of

care and perceived stigma. Sixty primary caregivers of patients with schizophrenia, and 30 healthy non-caregivers who served as a control group were screened for depressive symptoms using the Center of Epidemiological Studies for Depression Scale. Diagnosis of depressive disorders was made according to DSM-IV-TR criteria. The Caregiver Strain Index and the Discrimination-Devaluation Scale were administered to the caregivers. They found that depressive disorders were higher among caregivers (18.33%) than the control group (3.33%) with ($p < 0.05$). The most common depressive disorders among the caregivers group was adjustment disorder with mixed anxiety and depressed mood (6.67%). Depressive disorders were correlated with burden of care and perceived stigma. Depressive symptoms were associated with increased number of hours per week spent providing care, older age of the caregiver and duration of care giving.

Another study was conducted to determine the prevalence of depressive disorders among caregivers of patients with schizophrenia, its association with patient's and caregiver's socio-demographic characteristics and family functioning. A total of 232 caregivers of patients with schizophrenia at the outpatient clinic completed the self-administered socio-demographic questionnaire, the General Health Questionnaire (GHQ-30) and the McMaster Family Assessment Device. A total of 33 caregivers with the GHQ-30 cut-off point of 7/8 were assessed further by the Mini International Neuropsychiatric Interview to diagnose depressive disorders.

The prevalence of psychological distress was 14% ($n = 33$) and that of depressive disorders was 6% ($n = 14$). There was no association between patients' and caregivers' socio-demographic characteristics and depressive disorders, but there were significant associations between depressive disorders and family functioning dimensions in terms of communication and roles. Depression had a significant association with family functioning among caregivers of patients with schizophrenia (Osman et al., 2010).

Similarly, another study of depressive symptoms and family functioning in the caregivers of recently hospitalized patients with chronic/recurrent mood disorders was conducted by Heru & Ryan (2002) to determine the relationship between family dysfunction and depression in caregivers. 16 caregivers of patients with chronic recurrent mood disorders were assessed during the period that their relatives were in-patient and completed self-reports instruments including the Center for Epidemiologic Studies Depression Scale (CESD), Family Assessment Device (FAD) and measures of burden. Results showed that caregivers were mostly males (56%) and spouses (69%) while (72%) of the caregivers scored positively for depressive symptoms. Caregivers who reported poor family functioning had dysfunction in all areas of family functioning and were significantly more likely to report depressive symptoms. Family functioning and depression are closely associated in the caregivers of patients with chronic recurrent mood disorders.

Also, Perlick et al. (2007) conducted a longitudinal study to present the design and preliminary data on the costs and consequences of caring for the primary caregivers of 500 patients enrolled in the Systematic Treatment Enhancement Program for Bipolar Disorder. 89%, 52%, and 61% of caregivers, respectively, experienced moderate or high burden in relation to patient problem behaviors, role dysfunction, or disruption of household routine. High burden caregivers reported more physical health problems, depressive symptoms, health risk behavior and health service use, and less social support than less burden caregivers. They also provided more financial support to their bipolar relative. Burdens experienced by family caregivers of people with the bipolar disorder are associated with problems in health, mental health, and cost.

Another study was conducted by Fan & Chen (2011) explored the factors associated with care burden and quality of life among caregivers of the mentally ill in Chinese society. Ninety caregivers of patients with mental illness who were attending outpatient clinic services in Taipei City Psychiatric Centre were assessed using a burden questionnaire and the brief questionnaire of the World Health Organization Quality of Life instrument (WHOQOL-BREF). The results showed that burden scores were significantly correlated with the number of care hours the caregivers spent daily with the patient, irrespective of their age, gender, kinship and educational level. Caregivers of patients with different psychiatric illnesses had similar levels of burden. Higher burden scores were correlated with a

lower quality of life and retained unique predictive variance in multiple regressions in all four domains of the WHOQOL-BREF. The findings indicate that care burden has a significant impact on caregivers' quality of life.

Schmid et al. (2006) studied the sibling role as caregivers of patients with schizophrenia. 37 narrative interviews with siblings of schizophrenic patients were analyzed using a summarizing content analysis. The global statements and categories were quantitatively analyzed to assess their relative importance. Analysis of the 492 individual statements of the siblings revealed 26 global types of statements, which were assigned to five categories. 1: burden arising in the daily contact with the sibling (36.2 %); 2: burden with respect to the healthy sibling's privacy (26.8 %); 3: burden with respect to the contact with the family (15.7 %); 4: burden with respect to the contact with institutions and professionals (14.2 %); 5: burden with respect to the siblings' own social contacts (friends and public) (7.1 %). The three types of burden most reported by the healthy siblings are: handling the symptoms of illness (100 %), emotional burden due to the illness of the sibling (100 %) and uncertainty in judging what amount of stress the schizophrenic patient can cope with (81.1 %).

2.3 Theoretical framework:

Family burden was classified into objective burden and subjective burden, as illustrated in Figure (1) which explained the frame work of

family caregiving burden. Many predictors of caregiver burden have been identified; these include the ill relative's characteristics, such as age, gender, duration of illness, and symptoms; and caregiver characteristics, such as gender, age, socioeconomic status, ethnicity, and relationship, while reported mediating factors include social support and coping skills. This framework was adopted in this study, but educational level was added to caregiver's characteristics.

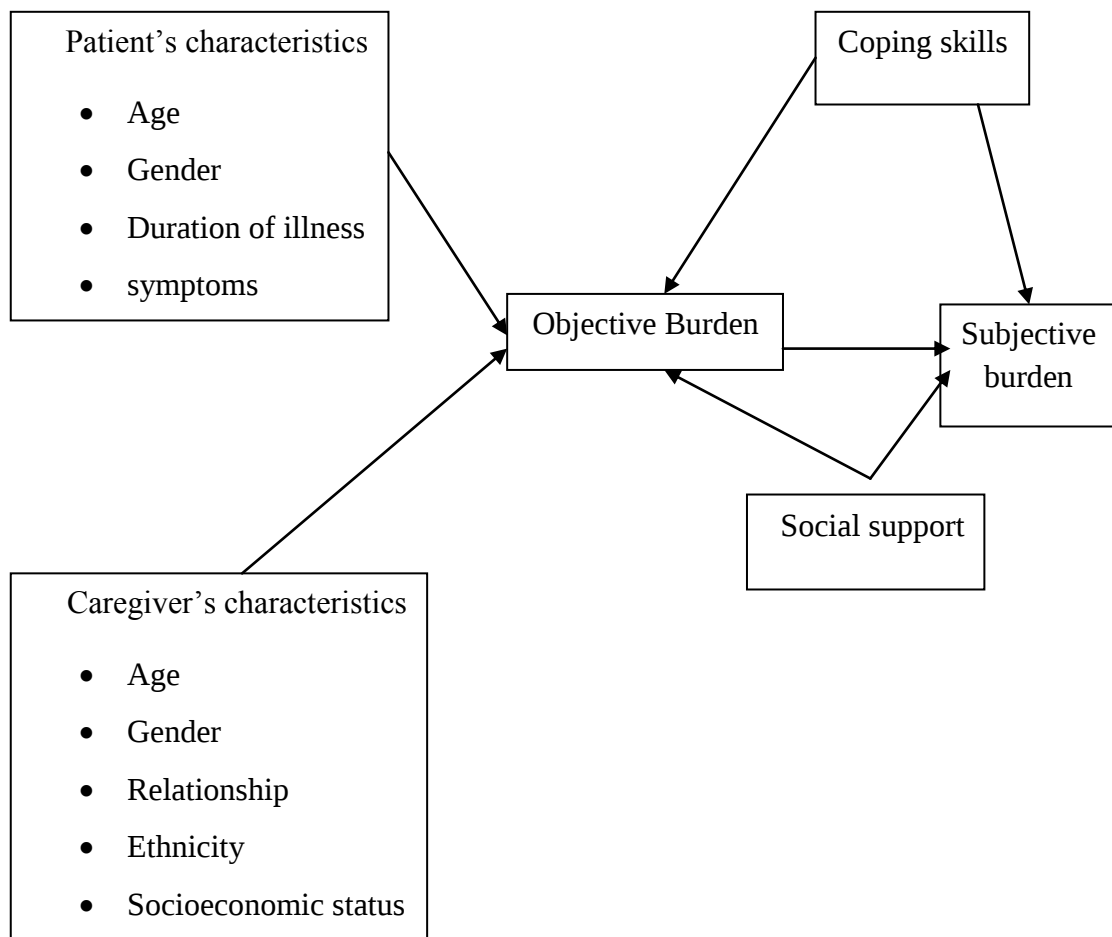


Figure1: Family Care giving Burden Framework (Rungreangkulkij & Gilliss, 2000).

Families of people with serious mental illnesses have major responsibility for providing care and support to their ill relatives. Many of these families experience substantial levels of stress and burden that adversely affect the health of individual members, as well as the health of the family.

Burden can be physical, psychological, or emotional, social and financial problem. Caregiver burden are influenced by several factor; patient characteristics, caregiver characteristics, social support, coping skills.

Families may take on the role of day-to-day care. This often happens with little training or support, or acknowledgment of their own needs and mental health. When families are accepted as partners in care and do receive training and support, there is strong evidence that this leads to better outcomes for patient and family.

Chapter 3

Methodology

This chapter presents in details the methodology that was used to in the study. It includes design, setting, sample and sampling method, assessment tool, administrative parts, ethical considerations, reliability and validity, field work, and statistical and analyzing methods.

3.1 Design

A descriptive, cross-sectional design was used to achieve the aim of the study, because it is simple, easy, inexpensive, and quick data collection.

3.2 Setting

The data was collected from the Community Mental Health Center – Nablus (Al-Makhfeia), which is the first mental health clinic in Nablus. It was created tracking Bethlehem Hospital in 1967 and worked for one day because of the war and occupation, which caused a postponement in functioning until 1974. It was the only center for mental health for the Northern West Bank until other clinics were opened. In 2009 the clinic was developed into the Center for Mental Health to provide integrated services. The project was implemented with funding from the French Agency for Development and the UN Development Program (UNDP). The

Department of Occupational Therapy was developed to provide rehabilitation services to patients (MOH, 2013).

3.3 Sample and Sampling Method

3.3.1. Population size:

The population of this study was the caregivers of mentally ill patients who followed up at the mental health clinic in Nablus district during the period from November 2012 – January 2013.

3.3.2. Sampling & Sample size:

Convenient sampling method was used to select the subject during the period from November 2012 – January 2013; it was distributed using **quota** method; 50 patients for each one of the following diagnosis: schizophrenia, mood disorder, and mental retardation, who were attending psychiatric outpatient clinics in Nablus district. Caregivers of patients with these illnesses were selected because these were the most common illnesses of patients who follow up at the clinic during the period of data collection.

3.3.3. Inclusion criteria:

- Families living with and caring for one relative with mental illness.
- The caregiver does not suffer from mental illness.

3.3.4. Exclusion criteria:

- Participants who are taking care of more than one patient, because taking care of more than one patient may increase burden.
- Participants who are younger than 18 years old, because usually who are younger than 18 not able to take care of other and themselves are in need for caring.

3.4 Assessment Tools

A structured questionnaire was used to collect the data through face to face interviews with the caregiver by the researcher herself.

The questionnaire consisted of two parts:

1- Patient part

Demographic data for the patient which includes: gender, age, educational level, diagnosis of mental illness, employment, marital status, and psychiatric history. (Appendix 1).

2- Caregiver part (consisted of 3 sections):

A) Demographic data for the family caregiver, which included gender, age, educational level, economic status, health status, employment, marital status, number of family members, and relationship between patient and caregivers. (Appendix 2).

- Economic status refers to food consumption divided by total consumption. It is distributed into three categories:

First: better-off (food consumption to total consumption less than 30%)

Second: middle range (food consumption to total consumption between 30-44%).

Third: worse-off (food consumption to total consumption between 45-100%) (United Nation UN + Palestinian Central Bureau of Statistics PCBS, 2012).

- Full time: 24 hours with patient.
- Partial time: less than 24 hours (2, 3, 4,...).
- Having medical disease: complain of medical disease like HTN, DM, etc.

B) Zarit Burden Interview (ZBI) (Appendix 3)

The ZBI is a list of (22) statements, (ratings are on a 5-point Likert scale), and scores range from 0-88, with higher scores indicating increased burden.

The scale levels of burden are categorized as little or no burden (0-20), mild/moderate (21-40), moderate/severe (41- 60), and severe burden (61-88).

Based on literature the scale was classified according to type of items to subscale by the researcher, which included psychological, social, physical, and economic burden.

Psychological burden is measured by six items: feelings of stress (item 3), feelings of anger (item 5), fear of the future (item 7), feelings of strain (item 9), feelings of loss of control of one's life (item 17), and feelings of uncertainty about what to do (item 19). The levels of burden are categorized as low or no burden (0-8), moderate (9-16), and high burden (17- 24).

Social burden is measured by three items: effects on relationships with other family members or friends (item 6), effects on social life (item 12), feeling uncomfortable about having friends (item 13). The levels of burden are categorized as low or no burden (0-4), moderate (5-8), and high burden (9- 12).

Physical burden is measured by two items: effects on health (item 10), feeling of burden or tired (item 22). The levels of burden are categorized as low or no burden (0-2), moderate (3-5), and high burden (6- 8).

Economic burden is measured by: feeling of not having enough money (item 15). The levels of burden are categorized as low or no burden (0-1), moderate (2-3), and high burden (4).

C) The Montgomery Borgatta Caregiver Burden Scale (Montgomery, Borgatta, & Borgatta, 2000). (Appendix 4).

This scale consists of 14 items, and these items contain 3 subscales: objective burden, subjective demand burden, and subjective stress burden.

Only objective burden was used in this study, because the previous scale (ZBI) was used to measure both kinds of subjective burden. In addition, this scale (objective) measures others items that are not included in the subjective burden.

Objective burden: Is defined as perceived infringement or disruption of tangible aspects of a caregiver's life. It is measured by six items: amount of time one has for one's self; amount of personal privacy one retains; time available for recreational activities; restrictions on vacations and trips; amount of time available to do one's own work and daily chores; and amount of time for friends and relatives.

Scores on this measure have range from 6 to 30. Previous research indicates that mean scores for large samples of caregivers range between 19.3 (standard deviation = 3.8) and 19.5 (standard deviation = 3.15). (Montgomery, 2002). Based on this information scores above 23 could be considered quite high burden.

3.5 Validity

After the study tools were developed, they were translated to Arabic by a translator from the Academy of Languages and Translation, and then content validity was used, the tool was reviewed by 2 nursing academic staff, 2 psychologists, one social worker, and one psychiatric nurse.

3.6 Reliability

ZBI: Studies of the original scale version, which include the assessment of its internal consistency with different subjects, obtained good results, with Cronbach's alpha index varying from 0.79 to 0.91 (Zarit SH. et al., 1987).

The test-retest of the scale's original version was conducted and obtained a good result ($\alpha=0.71$) (Gallagher et al., 1985).

The Montgomery Borgatta Caregiver Burden Scale: The internal consistency (Cronbach Alpha) for this measure has ranged from .87 to .90.

The internal consistency (Cronbach Alpha) in this study for ZBI was 64.2, and for objective burden from The Montgomery Borgatta Caregiver Burden Scale was 62.1

Pilot study:

The pilot study was accomplished after developing the questionnaire on 10% of the sample (which was the caregivers of mentally ill patients

who followed up at the mental health clinic in Nablus district), aiming to ensure subjects understanding of the questionnaire, time needed for completing it. As a result of the piloting, no modification was made.

3.7 Ethical Considerations

Institutional Review Board (IRB) was obtained from the Faculty of Graduate Studies (Appendix 5), then approval letters were attained from the Ministry of Health (Appendix 6), and request letters were sent to the primary health care center in Nablus (the Mental Health Clinic at Al-Makhfeia Clinic).

Permission and consent forms (Appendix 7) were taken from participants before starting the study.

3.8 Field work

After having the acceptance from the Mental Health Center in Nablus and the data collection tool and consent form were developed, the study was conducted at the Mental Health Center during the period from November 2012 to January 2013.

The psychologist who was the director of the center was met with to explain aim of the study. Then subjects of the study were met with in the waiting room, where the study aim, related questionnaire, ethical issues and consent form were explained to them. When the subjects agreed to

participate in the study, a consent form was taken from them, and then they were interviewed by the researcher to complete the questionnaire.

3.9 Statistical and Analyzing Methods

Data was entered and analyzed using Statistical Package for Social Science (SPSS). Chi-square test was used for categorical variables; T-test and ANOVA were used to test the relationship between burden types and demographical characteristics. Fisher's Least Significant Difference (LSD) was used to measure the differences.

Chapter 4

Results

This chapter presents in details the results of the study. It includes a description of the sample, demographic characteristics of caregivers and patients, means of burden types, association between burden types (psychological, social, physical, economical subjective and objective) and the demographic characteristics of caregivers, association of burden types and type of patient mental illness, measures of the differences between mean score of burden and demographic characteristics of caregivers and diagnosis of patient, and measures of the relationship between the burden types.

The number of caregivers who met the inclusion criteria was 150 caregivers; 50 caregivers of patients with schizophrenia, 50 caregivers of patients with mood disorder, and 50 caregivers of patient with mental retardation. The data of patients themselves were taken from their caregivers.

Socio-Demographic Data

Table (1): Distribution of percentage of participants regarding their socio-demographic

Variable		No.	(%)
Gender	Male	46	30.7
	Female	104	69.3
Age Category	18-24	6	4
	25-34	14	9.3
	35-44	50	33.3
	45-54	60	40
	55-65	6	4
	More than 65	14	9.3
Economic status	High	1	0.7
	Medium	94	62.6
	low	55	36.7
Educational Level	Bachelor's degrees(BA)	8	5.3
	Diploma	12	8
	Secondary	50	33.3
	Other (Below secondary)	80	53.4
Health Status	Not having medical disease	120	80
	Having medical disease	30	20
Employment	Employed	42	28
	Unemployed	108	72
Marital Status	Single	20	13.3
	Married	116	77.3
	Other(divorced, widowed/widower)	14	9.4
Family Size (no. of family members)	1-3	15	10
	4-7	109	72.7
	8 and more	26	17.3
Relationship with the patient	Father	14	9.3
	Mother	32	21.4
	Brother	29	19.3
	Sister	23	15.3
	Wife	38	25.4
	Husband	2	1.3
	Son	1	0.7
	Daughter	6	4
	Other relatives	5	3.3
Time spent with patient	Full time	71	47.3
	Partial	79	52.7
The performed activities in helping patient	Complete help in self-care	50	33.3
	Partial help in self care	100	66.7

Table (1) shows the distribution of demographic characteristics of caregivers. It illustrates that most participants were female (69.3%), and (30.7%) were male. (40%) of participants were in the age group of (45-54), and (62, 6%) of them had medium economic status, and (36.7%) were at a low. Regarding educational level, (53.4%) had an educational level below secondary, while (5.3%) had BA.

It also shows that (80%) of participants do not have medical diseases, and (72%) of them were unemployed. Also, (77.3%) of participants were married, and (72.7%) had a family size of (4-7) family members.

Most of participants were wives and mothers of patients (25.4%, 21.4%); regarding the time that participants spent with patients (42.7%) spent partial time, and (66.7%) of them helped their relative partially in self care.

Table (2): Distribution of demographical characteristics of patients

Variable		No.	(%)
Gender	Male	81	54
	Female	69	46
Age Category	18-24	22	14.7
	25-34	25	16.7
	35-44	48	32
	45-54	41	27
	55-65	10	6.7
	More than 65	4	2.7
Educational Level	B.A	10	6.7
	Diploma	3	2
	Secondary	35	23.3
	Other(Below secondary)	102	68
Employment	Employed	14	9.3
	Unemployed	136	90.7
Marital Status	Single	89	59.4
	Married	50	33.3
	Other	11	7.3
Type of mental illness	schizophrenia	50	33.3
	affective disorder	50	33.3
	mental retardation	50	33.3
Illness History (time of diagnosis)	Less than 5 years	13	8.7
	5-10	21	14
	11-15	30	20
	More than 15	86	57.3
Drugs Used	One	22	14.7
	Two	75	50
	Three	42	28
	More than three	11	7.3
Treatment cost	Less than 50	118	78.7
	50-100	21	14
	More than 100	11	7.3

Table (2) shows the distribution of demographical characteristics of patients. It depicts that (54%) of patients were male, (32%) of them were in the age group (35-44), and (68%) of them had an educational level below secondary. Also, it shows that (90.7%) of patients were unemployed, and (59.4%) were single. In terms of illness history, (57.3%) had been diagnosed as having a mental illness 15 years or more ago, and (50%)

were using two types of medication, while (78.7%) of patients have to pay less than 50 shekels monthly for medication.

Types of burden:

Table (3): Distribution of percentage and means of burden.

Category		Criteria	Degree	No.	%	Mean± Std. Deviation
Subjective Burden	Psychological Burden	0-8	Low/no	99	66.0	7.5067 ±
		9-16	Moderate	40	26.6	5.11577
		17-27	High	11	7.4	
	Social Burden	0-4	Low/no	112	74.6	2.7467 ±
		5-8	Moderate	30	20.0	3.12209
		9-12	High	8	5.4	
	Physical Burden	0-2	Low/no	80	53.4	2.7733 ±
		3-5	Moderate	33	22.0	2.44715
		6-8	High	37	24.6	
	Economical Burden	0-1	Low/no	67	44.7	1.6933 ±
		2-3	Moderate	73	48.7	1.41396
		4	High	10	6.6	
Subjective Burden		0-20	Little/ no burden	59	39.3	28.8400 ± 16.12080
		21-40	Mild –Moderate	49	32.6	
		41-60	Moderate– severe	35	23.1	
		61-88	Severe	7	5.0	
Objective Burden		≥23	High burden	18	12.0	17.9267 ±
		<23	Low/no burden	132	88.0	4.03191

Table (3) shows the mean values; standard deviation and the response degree of the study sample responses were calculated. The results show the distribution of burden types; it illustrates that the mean score of subjective burden was (28.84), while (39.3%) had little or no burden, (32.6%) had mild to moderate, and (5%) had severe burden.

According to subtypes of subjective burden, the mean score of psychological burden was (7.5067) and (34%) of caregivers had moderate to high burden. The mean score of social burden was (2.7467) and (25.4%) of caregivers had moderate to high burden. While (46.6%) of caregivers were experiencing moderate to high physical burden with a mean score of (2.7733), (55.3%) of them had moderate to high economic burden with a mean score of (1.6933).

Regarding objective burden, the mean score was (17.9267), and (88%) had low or no burden, while (12%) had high burden.

Relationship between burden types and the demographic characteristics of caregivers

Table (4): Distribution of burden types in regard to gender.

Burden type		Male		Female		t	P value
		no	mean±std. deviation	no	mean±std. deviation		
Subjective Burden	Psychological Burden	46	5.8478± 4.31518	104	8.2404± 5.28690	-2.696	0.008*
	Social Burden	46	1.9783± 2.65405	104	3.0865± 3.26235	-2.025-	0.045*
	Physical Burden	46	1.5217± 1.82256	104	3.3269± 2.49053	-4.417	0.000*
	Economical Burden	46	1.6522± 1.40186	104	1.7115± 1.42565	-.236	0.813
Subjective Burden		46	22.8261± 13.30214	104	31.5000± 16.59337	-3.127	0.002*
Objective Burden		46	19.1304± 3.53779	104	17.3942± 4.13702	2.473	0.015*

Table (4) shows t – test results of the relation between the burden and the caregiver's gender; the mean score of subjective burden for males was (22.83 ± 13.30), and for females was (31.50± 16.59) with significant differences between males and females; for females (*P value* 0.002).

The mean scores of psychological and physical burden for females were (8.24± 5.29) and (3.33± 2.49) respectively, with significant differences for females (*P value* (0,008), (0)) respectively.

Also, there were significant differences between males and females in regard to social burden and these differences were for females (*P value*

0.045). On the other hand, significant differences were not found between males and females in their economical burden (*P value* 0.813).

According to objective burden the mean score for males was (19.13 ± 3.54), while for females it was (17.39 ± 4.14) with significant differences for males (*P value* 0.015).

Table (5): Distribution of burden types in regard to economic status.

Burden type		Medium		Low		t	P value
		no	mean $\pm$ std. deviation	no	mean $\pm$ std. deviation		
Subjective Burden	Psychological burden	94	6.3617 $\pm$ 4.51247	55	9.4727 $\pm$ 5.56062	-3.722	0.000*
	Social Burden	94	2.1809 $\pm$ 2.98369	55	3.7091 $\pm$ 3.17206	-2.947	0.004*
	Physical Burden	94	2.0213 $\pm$ 2.22391	55	4.0909 $\pm$ 2.27932	-5.432	0.000*
	Economical Burden	94	1.1489 $\pm$ 1.31948	55	2.6364 $\pm$ 1.04285	-7.152	0.000*
Subjective Burden		94	24.6064 $\pm$ 14.12100	55	36.1091 $\pm$ 16.98766	-4.447	0.000*
Objective Burden		94	18.7660 $\pm$ 3.56031	55	16.3818 $\pm$ 4.32260	3.640	0.000*

Table (5) shows t – test results of the relation between the burden and the caregiver's economic status: it shows that the mean score of subjective burden for those who had a medium level of economic status was (24.60 ± 14.12), and for those with low level economic status the score was (36.1091 ± 16.98766), with significant differences for the low level (*P value* 0).

It also shows that the mean score of physical burden for those who had a medium level was (2.02 ± 2.22), and for those with low level was (4.0909 ± 2.27932), with significant differences for the low level (*P value* 0).

There were significant differences in the mean score of psychological, social, and economic burden and the level of the economic status (medium and low), and these differences were for the low level.

Regarding the objective burden, the mean score for those had a medium level of economic status was (18.77 ± 3.56), and for those with a low level was (16.38 ± 4.32), with significant differences for the medium level (*P value* 0).

Table (6): Distribution of burden types in regard to health status.

Burden type		Does not have medical disease		Has medical disease		t	P value
		no	mean±std .deviation	No	mean±std.dev iation		
Subjective Burden	Psychological Burden	120	7.4917± 4.98906	30	7.5667± 5.68533	-0.072	0.943
	Social Burden	120	2.8083± 3.09593	30	2.5000± 3.26687	0.483	0.630
	Physical Burden	120	2.6167± 2.38406	30	3.4000± 2.63400	-1.576	0.117
	Economical Burden	120	1.7583± 1.35966	30	1.4333± 1.61210	1.127	0.262
Subjective Burden		120	28.9583± 15.43182	30	28.3667± 18.91448	0.179	0.858
Objective Burden		120	18.1750± 3.73190	30	16.9333± 5.00988	1.515	0.132

Table (6) shows t – test results of the relation between the burden and the caregiver's health status of participants: the mean score of subjective burden for those who did not have a medical disease was (28.95± 15.43) and for those who had a medical disease was (28.37± 18.91), with no significant differences (*P value* 0.858).

According to subtypes of subjective burden, the mean score of psychological burden among those who had a medical disease was (7.57± 5.69), and the mean score of physical burden was (3.40± 2.63). No significant differences were found between those who had a medical disease and those who did not have a medical disease in relation to psychological, social, physical, and economical burden; $p > 0.05$.

Regarding objective burden, the mean score for those who had a medical disease was (18.18 ± 3.73) and for those who did not have a medical disease was (16.93 ± 5.01), with no significant differences (*P value* 0.132).

Table (7): Distribution of burden types in regard to employment.

Burden type		Employed		Unemployed		t	P value
		no	mean±std. deviation	no	mean±std. deviation		
Subjective Burden	Psychological Burden	42	6.0952± 5.16465	108	8.0556± 5.01369	-2.132-	0.035*
	Social Burden	42	2.1190± 3.02995	108	2.9907± 3.13704	-1.542-	0.125
	Physical Burden	42	1.5238± 1.97840	108	3.2593± 2.44709	-4.102-	0.000*
	Economical Burden	42	1.5000± 1.31130	108	1.7685± 1.45079	-1.045-	0.298
Subjective Burden		42	23.6429± 15.87116	108	30.8611± 15.83174	-2.506-	0.013*
Objective Burden		42	19.0476± 3.68883	108	17.4907± 4.09124	2.149	0.033*

Table (7) shows t – test results of the relation between the burden and the caregiver's employment status. The mean score of subjective burden for the employed participants was (23.6429± 15.87116), and for unemployed participants was (30.86± 15.83), with significant differences for unemployed caregivers (*P value* 0.013).

The mean score of psychological and physical burden for the unemployed participants were (8.06± 5.01) and (3.26± 2.45) respectively, with significant differences between employed and unemployed participants for the unemployed. While in relation to social and economical burden, no significant differences were found between employed and unemployed caregivers.

According to objective burden the mean score for employed participants was (19.05 ± 3.69), and for those who were unemployed was (17.49 ± 4.09), with significant differences for the employed (P value 0.033).

Table (8): Distribution of burden types in regard to time spent with patient.

Burden type		Partial		Full		t	P value
		no	mean $\pm$ std. .deviation	no	mean $\pm$ std. .deviation		
Subjective Burden	Psychological Burden	71	5.3380 $\pm$ 4.29599	79	9.4557 $\pm$ 5.03016	-5.361	0.000*
	Social Burden	71	1.7042 $\pm$ 2.52074	79	3.6835 $\pm$ 3.32259	-4.075	0.000*
	Physical Burden	71	1.4648 $\pm$ 1.72238	79	3.9494 $\pm$ 2.41204	-7.187	0.000*
	Economical Burden	71	1.4225 $\pm$ 1.34867	79	1.9367 $\pm$ 1.43529	-2.254	0.026*
Subjective Burd		71	21.5634 $\pm$ 13.82103	79	35.3797 $\pm$ 15.28054	-5.783-	0.000*
Objective Burden		71	19.2254 $\pm$ 3.64573	79	16.7595 $\pm$ 4.02624	3.916	0.000*

Table (8) shows t – test results of the relation between the burden and the time that the participants were spending with their patients. The mean score of subjective burden for those who were spending partial time with the patient was (21.5634 ± 13.82103) and for those who were spending full time was (35.38 ± 15.28), with significant differences for full time (P value 0).

According to subtypes of subjective burden, the mean score of psychological burden for those who were spending partial time with the

patient was (5.34 ± 4.29) and for those who were spending full time was (9.46 ± 5.03), with significant differences for full time (P value 0). Regarding social burden, the mean score for those who were spending partial time with the patient were (1.70 ± 2.52) and for those who were spending full time was (3.68 ± 3.32), with significant differences for full time (P value 0). Also, in regard to physical and economical burden there were significant differences for those who spending full time with patient, with mean score of burden for those who were spending full time (3.95 ± 2.41), and (1.94 ± 1.44) respectively. Regarding objective burden, the mean score for those who were spending partial time with the patient was (19.23 ± 3.65), and for those who were spending full time was (16.76 ± 4.03), with significant differences for partial time (p value 0).

Table (9): Distribution of burden types in regard to the performed activities in helping the patient.

Burden type		Complete help		Partial help		T	P value
		no	mean±std. deviation	no	mean±std. deviation		
Subjective Burden	Psychological Burden	50	9.0000± 5.23333	100	6.7600± 4.91364	2.575	0.011*
	Social Burden	50	3.2000± 3.48173	100	2.5200± 2.91800	1.260	0.210
	Physical Burden	50	3.0600± 2.54278	100	2.6300± 2.39804	1.015	0.312
	Economical Burden	50	1.6600± 1.31878	100	1.7100± 1.46539	-0.204	0.839
Subjective Burden		50	33.6600± 16.15184	100	26.4300±15.63359	2.641	0.009*
Objective Burden		50	16.8200± 4.70644	100	18.4800±3.54617	-2.415	0.017*

Table (9) shows t – test results of the relation between the burden and the performed activities in helping the patient. The mean score of subjective burden for those who helped the patient completely was (33.66± 16.15), and for those who helped the patient partially was (26.43±15.63), with significant differences for complete help in self-care (*P value* 0.009).

The result also shows that there were significant differences in psychological burden and these differences were for those who helped their relative completely in self-care (*P value* .0011), with a mean score of (9.00± 5.23). According to objective burden, the mean score for those who helped the patient completely was (16.82± 4.71), while for those who helped the patient partially was (18.48±3.55), with significant differences for partial help in self-care (*P value* 0.017).

Table (10): Distribution of burden types in regard to age.

Burden Type		Age Categories						(F)	Sig.*
		18-24	25-34	35-44	45-54	55-64	65 and more		
Subjective Burden	Psychological Burden	5.6667	6.0000	8.2400	7.4667	5.8333	8.0714	0.761	0.580
	Social Burden	3.6667	1.9286	2.5600	2.9833	3.1667	2.6429	0.418	0.836
	Physical Burden	2.0000	1.8571	2.8600	3.0500	2.8333	2.5000	0.707	0.619
	Economical Burden	1.3333	1.5000	2.1400	1.5000	1.1667	1.5000	1.603	0.163
Subjective Burden		22.6667	20.9286	31.0200	29.6333	26.3333	29.2857	1.097	0.365
Objective Burden		18.1667	20.0714	18.2000	17.3667	17.5000	17.2857	1.165	0.330

Table (10) shows ANOVA tests of the relation between burden and caregiver's age group. It illustrates that the mean score for subjective burden was (31.02) for age group (35-44), and (29.63) for age group (45-54), and it was (20.93) for age group (25-34) with no significant differences (*P value* 0.365).

Regarding subtypes of subjective burden, the mean score of psychological and economical burden were (8.24) and (2.14) respectively for age group (35-44). In regard to social burden, the mean score for age group (18-24) was (3.67), while for physical burden the mean score was (3.05) for age group (45-54), with no significant differences.

According to objective burden, the mean score for age group (25-34) was (20.07), and (17.29) for age group (65 and more), with no significant differences (*P value* 0.330).

Table (11): Distribution of burden types in regard to education level.

Burden Type		Education level				(F)	Sig.*
		University (B.A)	Diploma	Secondary	Other (Below secondary)		
Subjective Burden	Psychological Burden	3.7500	8.0000	6.2200	8.6125	4.004	0.009*
	Social Burden	1.0000	3.5833	2.0800	3.2125	2.553	0.058
	Physical Burden	.5000	2.8333	2.3200	3.2750	4.259	0.006*
	Economical Burden	.0000	1.6667	1.6200	1.9125	4.862	0.003*
Subjective Burden		13.7500	31.5000	24.2400	32.8250	5.976	0.001*
Objective Burden		20.0000	18.0000	19.0800	16.9875	3.709	0.013*

Table (11) shows ANOVA tests of the relation between burden and caregiver's educational level. It illustrates that the mean score of subjective burden for participants who had an education level below secondary was (32.83), and for those who had a B.A was (13.75), with significant differences for educational level below secondary (*P value* 0.001).

The mean score of psychological, physical, and economic burden for those who had an educational level below secondary were (8.61), (3.28), and (1.91) respectively, with significant differences between levels of education for the below-secondary level (*P value* (0.009), (0.006),(0.003)) respectively.

Regarding objective burden, the mean score for those who had a B.A was (20), and for those who had an educational level below secondary was (16.99), with significant differences for B.A (*P value* 0.013).

Table (12): Distribution of burden types in regard to marital status.

Burden type		Marital status			(F)	Sig.*
		Single	Married	Other (divorced, widow, widower)		
Subjective Burden	Psychological Burden	7.8500	7.2759	8.9286	0.701	0.498
	Social Burden	2.9500	2.6034	3.6429	0.739	0.480
	Physical Burden	2.5000	2.7241	3.5714	0.891	0.412
	Economical Burden	1.7000	1.6983	1.6429	0.010	0.990
Subjective Burden		27.8500	28.5776	32.4286	0.397	0.673
Objective Burden		20.0000	17.7328	16.5714	3.699	0.027*

Table (12) shows ANOVA tests of the relation between burden and caregiver's marital status of participants. It shows that the mean score of subjective burden for divorced, widow, and widower caregivers was (32.43), and for single caregivers was (27.85), with no significant difference (*P value* 0.673).

According to subtypes of subjective burden, the mean score of psychological, social, and physical burden for divorced, widow, and widower caregivers was (8.93), (3.64) and (3.57) respectively, with no significant differences between marital status of caregivers.

It also shows that the mean score of objective burden for single participants was (20), and for divorced, widow and widower participants was (16.57), with significant differences for single caregivers (*P value* 0.027).

Table (13): Distribution of burden types in regard to family size (number of family members).

Burden type		Family size			(F)	Sig.*
		1-3	4-7	8 and more		
Subjective Burden	Psychological Burden	9.0667	6.9266	9.0385	2.619	0.076
	Social Burden	3.1333	2.5229	3.4615	1.078	0.343
	Physical Burden	3.1333	2.5780	3.3846	1.327	0.269
	Economical Burden	1.4667	1.6972	1.8077	0.275	0.760
Subjective Burden		30.2000	27.6239	33.1538	1.300	0.276
Objective Burden		17.9333	18.3028	16.3462	2.522	0.084

Table (13) shows ANOVA tests of the relation between burden and the number of family members. It illustrates that the mean score of subjective burden was (33.15) for participants who had family size of 8 or more, and (27.62) for those had family size (4-7), with no significant differences (*P value* 0.276).

Regarding social, physical, and economic burden, the mean score for those who had a family size of 8 or more were (3.46), (3.38), and (1.81), respectively, with no significant differences.

According to objective burden, the mean score was (18.3028) for those who had family size (4-7), and (16.35) for those had family size of 8 or more, with no significant differences (*P value* 0.084).

Table (14): Distribution of burden types in regard to caregiver-patient relationship.

relationship	Burden type					
	Subjective Burden				Subjective Burden	Objective Burden
	Psychological Burden	Social Burden	Physical Burden	Economical Burden		
Father	4.9286	1.5000	1.0714	1.2857	19.8571	19.8571
Mother	9.0645	3.3548	3.8710	1.3226	34.1935	17.0645
Brother	6.7586	2.3103	1.8276	1.6897	24.6207	19.0345
Sister	8.1304	2.6522	2.8696	1.7391	29.9130	20.0000
Wife	8.4737	3.1316	3.6842	2.1842	33.1053	15.8684
Husband	0.0000	0.0000	0.0000	3.0000	17.0000	18.0000
Son	7.6667	3.3333	2.6667	1.0000	21.6667	16.0000
Daughter	5.5000	4.3333	1.6667	2.0000	25.0000	18.5000
Other relatives	3.7500	1.0000	1.0000	0.5000	19.7500	18.0000
(F)	2.141	1.137	4.176	1.750	2.091	3.319
Sig*	0.036*	0.342	0.000*	0.092	0.040*	0.002*

Table (14) shows ANOVA tests of the relation between burden and patient-caregiver relationship. It shows that the mean score of subjective burden was (34.19) for mothers and (33.11) for wives, with significant differences for mothers (*P value* 0.04).

According to subtypes of subjective burden, the mean score of psychological burden for mothers was (9.06), for wives (8.47), and for sisters (8.13) with significant differences for mothers (*P value* 0.036). In regard to social burden the mean score was (4.33) for daughters without significant differences. The mean score of physical burden for mothers was (3.87), and (3.68) for wives, with significant differences for mothers (*P value* 0), while the mean score of economic burden for husbands was (3), with no significant differences (*P value* 0.092). Regarding objective burden, the mean score for sisters was (20) and for fathers was (19.86), with significant differences for sisters (*P value* 0.002).

Relationship between burden types and type of mental illness of patient

Table (15): Distribution of burden types in regard to diagnosis of mental illness.

Burden type		Diagnosis			(F)	Sig.*
		Schizophrenia	Mood Disorder	Mental Retardation		
Subjective Burden	Psychological Burden	7.4200	8.1600	6.9400	0.719	0.489
	Social Burden	3.3000	2.6800	2.3400	2.005	0.138
	Physical Burden	2.7200	3.3600	2.1600	1.871	0.158
	Economical Burden	1.9800	1.8800	1.2200	4.463	0.013*
Subjective Burden		30.1600	30.1000	26.2600	0.960	0.385
Objective Burden		16.9000	18.2400	18.6400	2.610	0.077

Table (15) shows ANOVA tests of the relation between burden and type of mental illness. It illustrates that the mean score for subjective burden for caregivers of schizophrenic patients was (30.16) and for caregivers of mentally retarded patients was (26.26), without significant differences (*P value* 0.385).

The mean score of psychological and physical burden for care givers of patients with mood disorder were (8.16) and (3.36) respectively, with no significant differences between types of mental illness in psychological and physical burden. On the other hand, there were significant differences in economic burden between types of mental illness for schizophrenia (*P value* .013) with a mean sore of (1.9800).

According to objective burden, the mean score for caregivers of mentally retarded patients was (18.64), and for caregivers of schizophrenic patients was (16.9), without significant differences (*P value* 0.077).

Measures of the differences between mean score of burden and demographic characteristics of caregivers and diagnosis of patient:

In order to measure these differences, LSD test (Fisher's Least Significant Difference) was used and the results are in the following tables:

Table (16): LSD results of education levels

Burden type	Educational Level		
	Other (Below secondary)	University (B.A)	Secondary
Psychological Burden		2.39250*	4.86250*
Physical Burden		2.77500*	0.95500*
Economical Burden		0.191250*	—————
Subjective Burden		19.07500*	8.58500*
Objective Burden	University (B.A)	Other(Below secondary)	
		3.012500*	
	secondary	2.092500*	

Table (16) shows the differences between caregivers who had a B.A and those who had an educational level below secondary in subjective burden and its subtypes (psychological, physical, and economic burden), and there were differences for the level of below secondary. (Those who had below secondary level were experiences 2.4 times more than who had B.A).

It also shows that there were differences between caregivers who had a secondary level of education and those who had a below-secondary level

in subjective, psychological, and physical burden, and these differences are for the level of below secondary. (Those who had below secondary level were experiences 4.8 times more than who had secondary level).

According to objective burden, the differences were for those who had a B.A; they were experiencing higher burden 3 times more than those who had an educational level of below secondary.

Table (17): LSD results of relationship levels.

Burden type	Relationship				
		Father	Husband	Other relatives	
Psychological Burden	Mother	4.13594*	9.06454*	5.3145*	
	Sister	_____	8.13043*	_____	
	Wife	3.54511*	8.47368*	_____	
Physical Burden		Father	Husband	Daughter	Other
	Mother	2.79954*	3.87097*	2.20430*	2.87097*
	Sister	1.79841*	_____	_____	_____
	Wife	2.61278*	3.68421*	2.01754*	2.68421*
Subjective Burden		Father	Brother	Son	Other
	Mother	14.33641*	_____	_____	_____
	Wife	13.24812*	_____	_____	_____
Objective Burden		Father	Brother	Sister	Other
	Mother	2.79263*	_____	_____	_____
	Wife	3.98872	_____	_____	_____

Table (17) shows the differences between burdens in regard to the patient-caregiver relationship. It illustrates that mothers and wives had higher subjective burden than fathers (mothers were experiencing burden 4 times more than fathers, and wives were experiencing burden 3 times more than fathers) .

According to subtypes of subjective burden, mothers, sisters, and wives had higher psychological and physical burden than fathers, husbands, and other relatives.

Regarding objective burden, fathers had a higher burden(2.7 times) than mothers and (3.9 times) than wives.

Table (18): LSD results of marital status.

Objective Burden	Marital status		
	Single	Married	Other(divorced/ widowed)
		2.26724*	3.42857*

Table (18) shows that there were differences in objective burden between single participants and married, divorced, or widowed participants and these differences were for the single caregivers.(single caregivers were experiencing burden 2.2 times than married caregivers, and 3.4 times than others.

Table 19: LSD results of type of mental illness.

Economic Burden	Diagnosis		
	Mental retardation	schizophrenia	Mood disorder
		0.7600*	0.6600*

Table (19) shows the differences in the economic burden among caregivers of mentally ill patients and these differences were for schizophrenia and affective illnesses (caregivers of patients with schizophrenia were experiencing economic burden .76 more than those with mental retardation and those with mood disorder .66 more than those with mental retardation).

Chapter 5

Discussion

This chapter discusses the main finding of testing hypothesis

Socio-Demographic characteristics

According to demographic characteristics of caregivers (Table 1) more than two-thirds of caregivers were female and they were wives and mothers of patients, more than one third of them were in the age group of (45-54) which reflects the age that are taking the caring responsibility in our society, and most of them had an educational level below secondary, so most of them were unemployed and more than third were having low economic status level.

Regarding to patients, (Table 2) more than half of patients were male, and most of them (90.7%) were unemployed, and depending on their caregivers. According to an MOH report in 2012, the distribution of new reported cases of mental disorders was 170 patients were with schizophrenia, nearly two-thirds (62.3%) of them were male, and half of them (50.5%) were in the age group (30-59). According to the report, there were 150 patients with affective disorder (62%) of them were male, and (47.3%) of them in the age group (30-59). Regarding mentally retarded patients, there were 151 patients, (60.2%) of them were male, (23.8%) were in the age group (30-59), and more than two-thirds (73,5%) of them were in the age group (0-29).

Types of burden

According to burden types (Table 3), nearly one third of caregivers (32.6%) were experiencing mild to moderate levels of subjective burden and (23.1%) of them were experiencing moderate to severe level of burden. While in regard to objective burden more than (10%) of caregivers were experiencing a quite high level. This finding reflect that the caregivers of mentally ill clients are in high level of burden, which should realized the need of psycho-education, advice, information, counselling. Also the mental health professionals should pay attention to the needs of caregivers of patients with mental illness.

Palestine is regarded as a regional pioneer in the development of a national mental health strategy that encourages community-based mental health services. Nevertheless the development of community mental health services in Palestine is still in progress and needs further support and long-term commitment to ensure the provision of comprehensive services and support to sufferers and their families(Abu Sway, 2011).

Similar findings were found in Israel by (Rudnick, 2004); the mean burden of Israeli family members of mentally ill individuals was moderate. Also Ukpong (2012) in his study about burden and psychological distress among Nigerian family caregivers of schizophrenic patients found that about one third of caregivers (33.7%) were experiencing a moderate to severe level of burden. In another study by Papastavrou et al. (2010) about

burden and emotional well-being among Cypriot families' caregivers of schizophrenic patients illustrated a high level of burden among family caregivers where (43%) of the participants scored above 24/42 in the Family Burden Scale. Also Prafulla et al. (2010) conducted a study to assess the burden faced by families and the needs for rehabilitation among the beneficiaries of a rural mental health camp in South India; they found that families had mild to moderate level of objective burden.

Regarding subtypes of subjective burden(Table 3) nearly one third (34%)of caregiver were experiencing moderate to high level of psychological burden, and nearly one quarter(25.4%) of them were experiencing moderate to high level of social burden, (46.6%) of them were experiencing moderate to high level of physical burden. According to the level of economic burden, more than half (55.3%)of caregivers were experiencing moderate to high burden, which might be related to economic status of caregivers; more than one third (36.7%) of caregivers had low socioeconomic status and (72%) of them were unemployed. In addition, they are responsible for their patients and they have to meet their needs of food, medication, and transportation.

Different studies discussed these subtypes; Magliano et al. (2005) illustrated in their study the consequences of care giving in families of patients with schizophrenia or a long-term physical disease, which were constraints in social activities, negative effects on family life, and a feeling of loss. Also, Ostman & Kjellin (2002) found that the majority of relatives

of people with mental illnesses experienced psychological distress in relation to stigma, and these consequences were reflected in the social and psychological burden. Lafely (1987) found that caring for chronic patients affect the psychological and sometimes the physical health of caregivers.

Relationship between burden types and the demographic characteristics of caregivers

Relationship between the caregivers' gender and the family burden

The mean score of subjective burden (Table 4) was higher among female caregivers (31.50 ± 16.59) than male caregivers which was (22.82 ± 13.30), with significant differences between males and females for females (P value 0.002). These results were in agreement with Schneider, et al. (2010), who found that there was a significant difference in gender in term of their burden, which was explained by social gender role and hormonal factors. Women were predominant in caregiving and spent more time in caregiving than men. In terms of hormonal, oxytocin hormone contributed in distress and women's need to nurture. When caring for patient women experienced distress, her oxytocin level and nurture need will increase, but at the same time she had to pay more attention to the patient. Therefore women felt more burden than men. Also Hsiao (2010) and Akpınar et al. (2011) found that caregiver burden is highly prevalent among females. Some of the reasons that led to the males' lower reporting

of burden may be that males are more likely to hide their real emotions and may not admit to the difficulties they face.

In relation to subtypes of subjective burden (Table 4), the mean scores of psychological, social, and physical burden for females were (8.24 ± 5.29) , (3.0865 ± 3.26235) and (3.33 ± 2.49) respectively, with significant differences for females. Similarly, Ostman & Kjellin (2002) found that women experience more psychological distress.

According to objective burden (Table 4), the mean score for male caregivers was higher (19.13 ± 3.54) than female caregivers, with significant differences for males (*P value* 0.015). Adeyemi et al. (2012) found that males appeared to experience more than average burden than females which is possibly be due to negative caregiving appraisals coming from men who traditionally are not involved in caregiving roles. The result of this study might be because in Palestinian society men usually are responsible for earning a living for the family, so caring for the mentally ill affects their time for themselves and other activities. Also women's behaviors and thoughts were influenced by their primary role as child caretakers, thereby resulting in a greater coping with the caregiving roles.

Relationship between the caregivers' age and the family burden

The mean score for subjective burden (Table 10) was higher among the age group (35-44) at (31.02) while the mean score of objective burden

was higher among age group (25-34) at (20.07), with no significant differences (P value 0.33).

In disagreement to this study, several studies found that the age of caregiver was positively correlated to the burden of caregiver (Chan et al., 2009; Chien et al., 2007; Juvang, 2007). Baronet (1999) suggested that the different findings in the literature regarding the association between caregiver's age and burden might be due to differences in the intensity of the relative's illness in each study so that crisis conditions may produce a greater burden regardless of age. Another study found that younger caregiver ages were predictive of higher levels of caregivers' depressive symptoms and psychological distress. (Magana et al., 2007).

The result of subjective burden might be due to that most of sample were female and studies showed that middle-aged women who provided care for an ill spouse or a spouse with disability were almost six times as likely to have depressive or anxious symptoms as were those who had no caregiving responsibilities (World Federation of Mental Health, 2010). According to the result of objective burden might be related to small sample size.

Relationship between the educational level caregivers and the family burden

A significantly negative association was found between educational level and subjective burden (Tables 11 and 16). Caregivers with lower

levels of education experienced higher subjective burden (32.83). Similarly, Zahid & Ohaeri (2010); Juvang et al. (2007) and Chien et al.(2003) found that the education level has a negative correlation with caregiver's burden. It was assumed that higher the level of education, higher the salary will be. High salary would decrease financial problem related to providing care for ill family member. Level of education of the caregiver also tends to have more knowledge to deal with the stressful event. Therefore caregiver's education level influences burden of the caregiver .

The mean score of psychological, physical, and economic burden for those who had an educational level below secondary were (8.61), (3.28) and (1.91), respectively, with significant differences for the below-secondary level. In agreement, Magana et al. (2007) found that caregivers with low educational level experienced higher psychological distress. Low levels of education, which are related to lower socioeconomic status, may mean that fewer resources are available to caregivers who are faced with challenging behaviors and other caregiver-related stressors

Regarding objective burden, the mean score for those who had a B.A was (20), and for those who had an educational level below secondary was (16.99), with significant differences for those who had a B.A. (*P value* 0.013). Ayinde & Lasebikan (2013) found a significant association between high level of education and caregiver's burden, which is possible that higher level education was responsible for greater perception of the

complexities involved in care giving. Family caregivers with a higher education level may be engaged in employment that could be more demanding, resulting in a higher level of stress in combination with caregiving responsibilities, therefore reporting a higher level of caregiving burden (Farkas, 1996; Stolley et al., 2002).

Relationship between economic status and family burden

Caregivers' subjective burden score was negatively correlated with their economic status; the mean score of subjective burden (Table 5) for those who had a medium level of economic status was (24.61 ± 14.12), and for those who had a low level the mean score was (36.11 ± 16.99), with significant differences for the low level (*P value* 0). This result is in agreement with several studies (Chien et al., 2007; Martens &Addington, 2001; Ohaeri, 2001), which found that caregivers' burden score has a negative association with their household income; caregivers with lower socioeconomic status experienced higher levels of burden.

The increased stress and burden among caregivers might be related to low income so they are unable to meet their families' needs.

According to subtypes of subjective burden, (Table 5) the mean score of physical burden for those with a medium level of economic status was (2.02 ± 2.22), and for those with a low level was (4.09 ± 2.28), with significant differences for the low level (*P value* 0). Also, there were significant differences in the mean score of psychological, social, and

economic burden and the level of the economic status (medium and low); $p < 0.05$ and these differences are for the low level.

The problem of lower socioeconomic status is further compounded by the fact that most countries do not provide financial support for the care services that family provide for their mentally ill relative (World Federation of Mental Health, 2010). The poor financial status in the family may further increase the risk or vulnerability for perceiving burden and the resulting distress and negative consequences such as mental health problems (Chien et al., 2007).

Regarding objective burden, the differences were for those with a medium level of economic status (P value 0). The mean score for those with a medium level (18.77 ± 3.56) of economic status was higher than those with a low level (16.38 ± 4.32). This might be because those participants had to work, so they did not have time for themselves, recreational activity and other work. Objective burden calculates changes in household routine, family or social relations, work, and leisure time, so they had higher objective burden. Another possible reason was that nearly two third of the sample were had medium level of economic status (62,6%). Also might be due to differences in severity of illness and different responsibility.

Relationship between type of mental illness and family burden

According to the relationship between type of mental illness and family burden (Tables 15 and 19), the higher mean score of subjective

burden was for caregivers of schizophrenic patients (30.16), while for the objective burden, the higher mean score was among caregivers of mentally retarded patients (18.64), with no significant differences (*P value* 0.077).

In agreement to these finding most recent studies found that subjective burden was higher among caregivers of schizophrenic patients. Chakrabartiet al. (1995) and van Wijngaarden et al. (2004) found that burden was significantly more in relatives of schizophrenics when compared with an affective disorder. Also Solomon & Draine (1995) found in their study that a greater degree of subjective family burden is related to greater severity of mental illness. In contrast Wittmund et al. (2002), and Van Wijngaarden et al. (2009) found no significant differences between types of mental illness and burden; caregivers of people with different diagnosis of mental illness experienced the same amount of burden. Also Sreeja et al.(2009) found no significant differences between caregivers of patients with schizophrenia and patients with epilepsy. The mean duration of illness of schizophrenia was 6 years whereas that of epilepsy was 12 years. The longer duration of illness of Epilepsy might have contributed to the increased burden of the caregivers, in addition most of the patients having Schizophrenia were not having active positive symptoms.

The result of subjective burden could be due to the lower level of functioning and longer duration of illness and treatment. While in objective burden might be related to the dependency of mentally retarded patients as

they need help in their daily activities and self-care, which affects the caregivers' time for themselves and other activities.

Regarding to subtypes of subjective burden, there were no differences between types of mental illness and burden in psychological, social, and physical burden. In contrast, Ostman & Kjellin (2002) found that relatives of patients with an affective disorder experienced less psychological distress, while the economic burden mean score was higher among caregivers of schizophrenic patients than other caregivers (1.98), with significant differences (*P value* .013). It might be related to the fact that schizophrenia is a continuous, chronic illness in which a patient is unable to achieve economic independence, it required long-term treatment, also the productivity is impaired in the schizophrenia, in addition to that the longer duration of illness of schizophrenia might have contributed to the increased financial burden of the key caregivers. Similarly Chandrashekar et al. (2008) highlighted that the family burden and financial burden were significantly higher in persons with schizophrenia when compared with other mental disorders, such as obsessive-compulsive disorder, the greatest burden was felt for disruption in family routine and leisure activities. Longer the illness higher the financial burden. Schizophrenia is an expensive illness to treat even in developing countries (Knapp, 2004). It imposes a disproportionately large economic burden due to expenditures for hospitalization, treatment and rehabilitation, and lost productivity (Rice, 1999). Also Jingbing et al. (2013) found that schizophrenia cause a

substantial economic burden to healthcare systems, community, other caregivers and society, cost due to lost working days and disability were the great majority. Schizophrenia is correlated to loss of working days, lack of well-being and poor levels of social functioning.

Relationship between burden types and health status of caregivers

The comparison of health status (Table 6) illustrated that the mean score of subjective burden for those who did not have a medical disease was (28.95 ± 15.43) and for those who did have a medical disease was (28.37 ± 18.91), with no significant differences (*P value* 0.858). In contrast, Mengdan et al. (2007) conclude that the best predictor of caregiver's burden is the health status; a caregiver with a good health status experiences lower levels of subjective burden. This difference might be related to differences in severity of mental illness, so the burden was different.

Relationship between burden types and employment status of caregivers

The mean score of subjective burden (Table 7) was higher among unemployed caregivers (30.86 ± 15.83) than those who were employed (23.64 ± 15.87), with significant differences for unemployed (*P value* 0.013). while the mean score of objective burden for employed caregivers was (19.05 ± 3.69), with significant differences (*P value* 0.033). These findings were in agreement with Chien & Norman (2003) found that unemployed

caregivers had higher burden than employed ones, in contrast to Holikatti et al. (2008), who found that employed caregivers had higher (71.4%) subjective burden than unemployed caregivers. Srivastava(2005)found that being employed had little correlation with the burden scores.

The reason for these result might be because being unemployed means having a lower socioeconomic status and thus being unable to meet their needs, so that subjective burden increases. In other hand those who are employed did not have time for themselves and for other activities.

Relationship between burden types and time spent with patients

A comparison of time spent with the patient per day (Table 8) showed that the mean score of subjective burden was higher among caregivers who were spending full time with the patient (35.38 ± 15.28), than those who were spending partial time (21.56 ± 13.82), with significant differences for full time (P value 0.000). Also in regard to subtypes of subjective burden (Table 8)the mean score of psychological, social, physical and economic burden was higher among those who were spending full time (9.46 ± 5.03), (3.68 ± 4.29) and (3.95 ± 2.41) respectively, with significant differences. Similarly, Chii et al. (2009) found that there was a significant positive correlation between hours of care per day and caregiver burden; if the number of hours that caregivers spent on providing care increased, the caregivers' burden increased.

This result might be related to stress and negative feelings like anger and hopelessness that is felt by those caregivers who spent full time with patients. Most of their time is spent in caring for patients, so they have no ability to have social activities or work, which can cause financial problems.

Regarding objective burden (Table 8), the mean score for those who were spending partial time with the patient were (19.23 ± 3.65), and for those who were spending full time (16.76 ± 4.03), with significant differences for partial time (*P value* 0). In contrast to this result, Juvang et al. (2007) showed that there were positive correlations between the amount of time that caregivers spent with their family member and objective burden. The more the time spent with the ill family member, the more the objective burden is felt by the caregiver.

This might be related to the other responsibilities for those caregivers who spent partial time with their ill family member, like working so they did not have time for their daily activities at home and for themselves. Those who spent full time with the patient also spent most of their time at home and they were mostly women.

Relationship between burden types and the performed activities in helping the patient

According to the performed activities in helping the patient (Table 9), the mean score of subjective burden was higher among

caregivers who helped the patient completely (33.66 ± 16.15), than those who helped the patient partially (26.43 ± 15.63), with significant differences for complete help in self-care (P value 0.009), also the mean score of psychological burden was higher among those who helped their relative completely in self-care (9.00 ± 5.23), with significant differences (P value .0011). While the mean score of objective burden for those who helped the patient partially was (18.48 ± 3.546), which was higher than those who helped the patient completely (16.82 ± 4.71), with significant differences for partial help in self-care (P value 0.017).

In agreement to these results Fujino & Okamura (2009) found that patient's disability in daily life or community function was associated with caregiver burden. A disturbance in patient's behavior and long-time illness resulted in dependency of patients on caregivers to carry out their daily activities, so that burden increased. In contrast, Shihabuddeen et al. (2012) found that the level of disability does not affect the intensity or the severity of the family burden or distress experienced among their caregivers.

These finding might be related to increase stress among caregivers because of the complete dependency of patients on their relatives increases their responsibilities, so that the psychological burden increase. In regard to objective burden this result might be related to the nature of Palestinian society; those who helped the patients completely were usually the mother and wife and they considered this care as their responsibility and it did not affect their time, while those caregivers who helped their relative partially

had other responsibilities, so caring for their relatives affected their time for themselves and other activities.

Relationship between burden types and marital status of caregivers

Comparison of marital status (Tables 12 and 18) showed that there were significant differences for single participants regarding to objective burden (P value 0.027). The mean score of objective burden for single participants was (20), and for divorced, widow and widower participants was (16.57). the family members of married patients.

In contrast to this result Angermeyer et al.(2007) found no significant difference between burden and caregivers' marital status. They highlighted that the burden was lower among caregiver who are married with patients , this may reflect the fact that, for the most part, these patients married before they fell ill. Their spouses may consequently sense a heavier burden on their life and on their future plans than partners who got to know the patient after the illness began.

The result of this study might be because married participants usually spent most of time at home, especially women, and caregiving did not affect their time as much as single participants, who had other responsibilities and interests outside the home.

Relationship between burden types and relationship between caregivers and patients.

Regarding the relationship between patients and caregivers (Tables 14 and 17), mothers and wives had higher subjective burden than other relatives, with a mean score of (34.19) for mothers and (33.11) for wives with significant differences for mothers. According to objective burden, sisters had a higher mean score (20), with significant differences (*P value* .002). In agreement to these findings The World Federation of Mental Health (2010) estimated that globally about (80%) of caregivers are women, which could be the mother, wife, or daughter of the clients(WFMH, 2010). Also (Huang, 2004) found that women are more likely to be regarded as natural caregivers and to assume major responsibility for the care of family members, especially for individuals with mental illnesses. Zahid & Ohaeri (2010), found that caregivers who were either children or spouses of patients had a tendency to have higher burden scores than other relationship groups.

This diagram illustrates the factors that had significant relationship with the family burden in this study.



Conclusions

- The mean of subjective burden was mild to moderate, while objective was low; also, the mean of psychological, social, and economic burden was low, and physical burden was low to moderate.
- There were significant differences between females and males; females had higher subjective burden and males had higher objective burden.
- No significant differences were found between participants according to their age in all burden types.
- A significantly negative association was found between educational level and subjective burden, but in objective burden those who had a B.A had higher burden.
- According to socioeconomic status; those of a low socioeconomic status had higher subjective burden, while on the other hand those with a medium level had higher objective burden.
- No significant differences were found between types of mental illness and burden, but the higher mean score of subjective burden was for caregivers of schizophrenic patients while in objective burden the higher mean score was for caregivers of mental retarded patients.

Limitation

- There were difficulties in collecting data due to a lack of regular registration and classification of cases and diagnoses in the health records, so the diagnosis of service users who follow up the clinic were mainly used in study.
- There were also difficulties due to strikes and the closure of the health center during the period in which the sample was collected.

Recommendations

- Psychiatric nursing intervention should be focused on the need of the caregivers and an emphasis placed on community care for mentally ill patients as well as family intervention.
- Mental health professionals should increase attention to the caregivers in addition to the patients and develop more programs for families; they should be provided social support, especially by healthcare professionals, and they should be also provided psycho-education.
- Further studies should examine the association between patients' characteristics and level of burden, and to explore models of family interventions.

Summary

Mental illness is distressing for the patients and their families. Caregiving of a mentally ill patient causes significant stress and a negative impact on the family, which is known as family burden.

There are two types of burden; objective and subjective. Objective burden is the existence of problems and changes in family life (household routine, work, social relationships, and leisure time), while subjective burden is the existence of certain emotions and mental health status (guilt, feelings of loss, shame, and anger) of family caregivers.

Caregiver burden is influenced by several factors; patient characteristics, caregiver characteristics, social support, and coping skills.

The number of mentally ill patients in Palestine is increasing according to a health report by the Palestinian Health Information Center (PHIC,2012) and they are putting some burden on their families. The families of those with mental illnesses are being expected to assume care giving responsibilities for which they have no formal training and which they often find burdensome. They face emotional, physical, social, and financial problems and difficulties. Thus, these families need educational program about their relatives' illness, and how to take care of them.

While there is a dearth of studies assessing the burden of caregivers of patients with mental illness, there are no studies in Palestine assessing this issue.

This study aims to assess family burden of caregivers of mentally ill patients and find out whether there is any relation between the perceived burden of caregivers of patients with mental illness and age, sex, education, economic status, and type of mental illness in the West Bank.

A descriptive, cross-sectional design was used to achieve the aim of the study. The data were collected from the Community Mental Health Center – Nablus (Al-Makhfeia) and a quota sampling method was used to select the subjects during the period from November 2012 to January 2013. The sample size was 150 caregivers of patients with one of the following diagnosis: schizophrenia, affective, and mental retardation, who were attending psychiatric outpatient clinics in Nablus district. The Zarit burden interview and the objective burden section from the Montgomery Borgatta caregiver burden scale were used to assess the burden.

The findings showed that the mean of subjective burden was mild to moderate, while objective was low; the mean of psychological, social, and economic burden was low, and physical burden was low to moderate. There were significant differences between females and males; females had higher subjective burden and males had higher objective burden. A significantly negative association was found between educational level and

subjective burden, but in objective burden those who had a B.A had higher burden. Regarding socioeconomic status, those who had a low level economic status had higher subjective burden, while on other hand those with a medium level had higher objective burden. No significant differences were found between participants according to their age, and no significant differences were found between different types of mental illness.

Taking care of mentally ill patients affects the family negatively, so psychiatric nursing intervention should be focused on the need of the caregivers and an emphasis placed on community care for mentally ill patients as well as family intervention. They should be provided social support and psycho-education.

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Appendix (1)

أرجو من حضرتكم اختيار الخيار المناسب

1. معلومات خاصة بالمريض

الجنس

1. ذكر 2. أنثى

العمر

1. 24-18 2. 34-25 3. 44-35 4. 54-45 5. 64-55 6. 65 وأكثر

مستوى التعليم

1. جامعي 2. دبلوم 3. ثانوي 4. غير ذلك

التشخيص

1. انفصام عقلي 2. اضطراب المزاج 3. اضطراب الشخصية 4. مرض عضوي
5. تخلف عقلي

الحالة الاجتماعية.....

الوظيفة.....

التاريخ المرضي

سنة تشخيص المرض.....

الادوية التي يستخدمها المريض.....

تكاليف العلاج.....

تكاليف النقل.....

التأمين الصحي.....

عدد الزيارات لمركز الصحة خلال الشهر.....

هل يحتاج الى عناية خاصة (اذا نعم ماهي
طبيعة العناية)

Appendix (2)

أرجو من حضرتكم اختيار الخيار المناسب

2. معلومات خاصة بالذي يقدم الرعاية للمريض النفسي:

الجنس					
1. ذكر					
2. أنثى					
العمر					
1. 24-18	2. 34-25	3. 44-35	4. 54-45	5. 64-55	6. 65 وأكثر

مستوى المعيشة

1. عالي
2. متوسط
3. متدني

مستوى التعليم

1. جامعي
2. دبلوم
3. ثانوي
4. غير ذلك

الوضع الصحي

الوظيفة

الحالة الاجتماعية

عدد أفراد الأسرة

التاريخ المرضي للعائلة (إذا كان هناك أي فرد من الأسرة يعاني من مشكلة صحية, وماهي)

.....

صلة القرابة بينك وبين المريض

الرجاء الاجابة على السؤالين التاليين :

1-كم من الوقت تمضي مع قريبك المريض يوميا ؟

.....

2-ما هي الاعمال والأنشطة التي تساعد المريض بالقيام بها؟

.....

Appendix (3)

العبء الذاتي والشخصي :

أرجو من حضرتكم اختيار الاجابة المناسبة التي تصف شعوركم

1. هل تعتقد أن قريبك\ قريبتك يطلب مساعدة تفوق حاجته\ حاجتها؟

1. أبدا 2. نادرا 3. أحيانا 4. كثيرا 5. دائما

2. هل تشعر أن الوقت الذي تكرسه لقريبك\ قريبتك يجعل وقتك لنفسك محدودا وغير كاف؟

1. أبدا 2. نادرا 3. أحيانا 4. كثيرا 5. دائما

3. هلا تشعر بالضغط بسبب اهتمامك بقريبك \ قريبتك وتأدية مسؤوليات أخرى متعلقة بالعمل أو الأهل؟

1. أبدا 2. نادرا 3. أحيانا 4. كثيرا 5. دائما

4. هل تشعر بالاحراج بسبب تصرف معين لقريبك\ قريبتك؟

1. أبدا 2. نادرا 3. أحيانا 4. كثيرا 5. دائما

5. هل يمتلكك الغضب عندما تكون بجوار قريبك\ قريبتك؟

1. أبدا 2. نادرا 3. أحيانا 4. كثيرا 5. دائما

6. هل تشعر أن قريبك\ قريبتك يؤثر حاليا على علاقتك بأفراد عائلتك واصدقائك بصورة سلبية؟

1. أبدا 2. نادرا 3. أحيانا 4. كثيرا 5. دائما

7. هل تشعر بالخوف مما قد يخبئ المستقبل لقريبك\ قريبتك؟

1. أبدا 2. نادرا 3. أحيانا 4. كثيرا 5. دائما

8. هل تشعر أن قريبك\ قريبتك كثير الاعتماد عليك؟

1. أبدا 2. نادرا 3. أحيانا 4. كثيرا 5. دائما

9. هل تشعر بالتوتر عندما تكون بصحبة قريبك\ قريبتك؟

1. أبدا 2. نادرا 3. أحيانا 4. كثيرا 5. دائما

10. هل تعتقد أن صحتك تتأثر بسبب علاقتك مع قريبك\ قريبتك؟

1. أبدا 2. نادرا 3. أحيانا 4. كثيرا 5. دائما

11. هل تشعر أنك لا تتمتع بالكثير من الخصوصية بسبب وجود قريبك\ قريبتك؟

1. أبدا 2. نادرا 3. أحيانا 4. كثيرا 5. دائما

12. هل تعتقد أن حياتك الاجتماعية تأثرت بسبب اهتمامك بقريبك\ قريبتك؟

1. أبدا 2. نادرا 3. أحيانا 4. كثيرا 5. دائما

13. هل تشعر بعدم الراحة عند دعوتك لأصدقائك بسبب وجود قريبك\ قريبتك؟

1. أبدا 2. نادرا 3. أحيانا 4. كثيرا 5. دائما

14. هل تشعر أن قريبك\ قريبتك يتوقع منك أن تعتني به\ بها وكأنه ليس هناك شخص غيرك يمكنه القيام بذلك؟

1. أبدا 2. نادرا 3. أحيانا 4. كثيرا 5. دائما

15. هل تعتقد أنه ليس لديك المال الكاف لتعتني بقريبك\ قريبتك بالإضافة إلى مصاريفك الأخرى؟

1. أبدا 2. نادرا 3. أحيانا 4. كثيرا 5. دائما

16. هل تشعر أنه لن يكون بإمكانك الاعتناء أكثر بقريبك\ قريبتك؟

1. أبدا 2. نادرا 3. أحيانا 4. كثيرا 5. دائما

17. هل تشعر أنك فقدت السيطرة على حياتك منذ مرض قريبك\ قريبتك؟

1. أبدا 2. نادرا 3. أحيانا 4. كثيرا 5. دائما

18. هل تتمنى أن يقوم أحد غيرك بالاعتناء بـقريبك\ قريبتك؟

1. أبدا 2. نادرا 3. أحيانا 4. كثيرا 5. دائما

19. هل تشعر بالحيرة ولست متأكدا بما يجب عمله تجاه قريبك\ قريبتك؟

1. أبدا 2. نادرا 3. أحيانا 4. كثيرا 5. دائما

20. هل تعتقد ان من المفروض أن تبذل جهدا اكبر تجاه قريبك\ قريبتك؟

1. أبدا 2. نادرا 3. أحيانا 4. كثيرا 5. دائما

21. هل تعتقد أنه بإمكانك أن تقوم بما هو أفضل تجاه قريبك\ قريبتك؟

1. أبدا 2. نادرا 3. أحيانا 4. كثيرا 5. دائما

22. بشكل عام، إلى أي درجة تشعر أنك مرهق بسبب اعتنائك بـقريبك\ قريبتك؟

1. أبدا 2. نادرا 3. أحيانا 4. كثيرا 5. دائما

Appendix (4)

العبء الموضوعي :

عندما بدأت تقديم الرعاية لقريبك المريض، كيف كانت مساعدة أو وجود اتصال مع الشخص الذي تقدم له الرعاية تأثير على الجوانب التالية من حياتك؟

1-الوقت لنفسك

- قليلا جدا - قليلا - نفس الشيء - كثيرا - كثيرا جدا

2-الخصوصية الشخصية؟

- قليلا جدا - قليلا - نفس الشيء - كثيرا - كثيرا جدا

3-قضاء الوقت في الأنشطة الترويحية؟

- قليلا جدا - قليلا - نفس الشيء - كثيرا - كثيرا جدا

4-الأنشطة الترويحية والرحلات والعطل؟

- قليلا جدا - قليلا - نفس الشيء - كثيرا - كثيرا جدا

5-الوقت للقيام بعملك الخاص والأعمال اليومية؟

- قليلا جدا - قليلا - نفس الشيء - كثيرا - كثيرا جدا

6-الوقت للأصدقاء والأقارب الآخرين؟

- قليلا جدا - قليلا - نفس الشيء - كثيرا - كثيرا جدا

Appendix (5)

An-Najah National University Faculty of Medicine	بسم الله الرحمن الرحيم 	جامعة النجاح الوطنية كلية الطب
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IRB Approval letter

Study title:
Family Burden Among Caregivers of Mentally Ill patients

Submitted by:
 Haneen Hashem To'meh

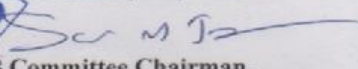
Date Reviewed:
 June 10, 2012

Date approved:
 July 4, 2012

Your study titled " **Family Burden Among Caregivers of Mentally Ill patients** "
 Was reviewed by An-Najah National University IRB committee & approved on July
 4, 2012

IRB

Samar Musmar, MD, FAAFP



IRB Committee Chairman,
 An-Najah National University

نابلس - ص.ب ٧٠٧٧ هاتف: ٩٧٢(٠٩)٢٣٤٢٩٠٢/٤/٧/٨/١٤، فاكسميل ٩٧٣٩٧٣٩(٠٩)٩٧٢
 Nablus - P.O.Box 7,707 - Tel. (972)(09)2342902/4/7/8/14 - Facsimile (972)(09)2349739
 Web Site: www.najah.edu

Appendix (6)

08 Oct 2012 7:23 PM FAX

Palestinian National Authority
Ministry of Health - Nablus
General Directorate of Health Education
Human Resources Development Dept.



السلطة الوطنية الفلسطينية
وزارة الصحة نابلس
الإدارة العامة للتعليم الصحي
دائرة تنمية القوى البشرية

Ref.:
Date:

الرقم: ٢٠١٢ / ١٦٦١ / ١٦٦٢
التاريخ: ٢٠١٢ / ١٠ / ٠٨

الأخ مدير عام الرعاية الصحية الأولية والصحة العامة المحترم،،،

تعبئة واعتناء...

الموضوع: تسهيل مهمة طلاب

تماشياً مع سياسة وزارة الصحة المتعلقة بتعزيز التعاون مع الجامعات والمؤسسات الأكاديمية بابتاحة فرص التدريب أمام الطلبة والخريجين والباحثين في المؤسسات الوطنية وإسهاماً في تنمية قدراتهم.

يرجى تسهيل مهمة الطالبة حنين طعمة/ ماجستير تمريض الصحة النفسية المجتمعية- جامعة النجاح الوطنية بالحصول على معلومات من خلال استبانة لاجراء بحث بعنوان "العبء والمسؤولية التي تقع على الأهل الذين يقومون برعاية المرضى النفسيين" وذلك في مديرية صحة نابلس - المخفية.

مع الاحترام...



/ نسخة منقذة برنامج ماجستير تمريض الصحة النفسية المجتمعية المحترمة- جامعة النجاح الوطنية

P.O .Box: 14
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تلفاكس: 09-2333901

Appendix (7)



جامعة النجاح الوطنية
كلية الدراسات العليا
نموذج موافقة على المشاركة في بحث

الباحثة: حنين هاشم طعمة, طالبة في كلية الدراسات العليا ,ماجستير صحة نفسية مجتمعية،
جامعة النجاح الوطنية
المشرفة: د.مريم الطل
الجهة المشرفة: جامعة النجاح الوطنية / كلية الدراسات العليا / قسم التمريض / الصحة النفسية
المجتمعية.
عنوان البحث:

"Family Burden among Caregivers of Mentally Ill Patients in Nablus District"

يحتوي هذا الملف على :

1. معلومات وتفاصيل البحث
2. شهادة الموافقة على المشاركة في البحث

(سيقدم لكل مشارك نسخة كاملة عن ورقة الموافقة على المشاركة في البحث)

معلومات وتفاصيل البحث

مقدمة

أخي/ أختي المشارك/ة:

انا الباحثة حنين طعمة طالبة ماجستير صحة نفسية مجتمعية في جامعة النجاح

الوطنية يسرني ان ادعوك الى المشاركة في بحثي المتعلق ب " العبء والمسؤولية

التي تقع على الأهل الذين يقدمون العناية للمرضى النفسيين في محافظة نابلس " .

لك كامل الحرية والارادة في المشاركة في هذا البحث ولك الحق في سؤال الباحث أوالتحدث لاي شخص او جهة عن هذا البحث.

كما يمكنك الاستفسار عن اي جزء يتعلق في البحث الان او فيما بعد واذا كانت هناك كلمات او اجزاء غير مفهومة بإمكانك سؤال الباحث.

يضمن البحث سرية المعلومات المتعلقة بالمشارك/ة.

الهدف من البحث

يهدف هذا البحث الى قياس العبء والمسؤولية التي تقع على الأهل الذين يقدمون العناية للمرضى النفسيين. و كذلك يهدف الى التعرف على العوامل الديموغرافية و الاجتماعية المرتبطة بالعبء والمسؤولية التي تقع على الأهل الذين يقدمون العناية للمرضى النفسيين.

طبيعة المشاركة في البحث

بعد الموافقة على المشاركة في البحث سنطلب من المشارك تعبئة نموذج البحث (اداة القياس) لقياس العبء والمسؤولية التي تقع على الأهل الذين يقدمون العناية للمرضى النفسيين تليها مقابلة شفوية لاخت معلومات تتعلق بالعوامل الاجتماعية والديموغرافية.

اختيار المشاركين

سيتم اختيار المشاركين من الـاهل الذين يقدمون العناية للمريض النفسي بشكل ملائم لاغراض البحث.

المشاركة طوعية واختيارية وبامكان المشارك الانسحاب من البحث في اي وقت ودون الحاجة لابداء الاسباب وبدون اي تبعات.

المدة المتوقعة لانتهاء اجراءات البحث

عشرة دقائق لكل مشارك.

شهادة الموافقة على المشاركة في البحث

اقرار من المشارك في البحث:

قمت بقراءة المعلومات الواردة في ورقة معلومات البحث واتيحت لي الفرصة ان اسال اي سؤال وقد تمت الاجابة على كافة اسئلتي بشكل كاف، وبناءا على ذلك اوقع طوعيا على المشاركة في هذا البحث.

اسم المشارك.....

توقيع المشارك.....

التاريخ.....\.....\.....

اقرار من الباحث:

قمت بقراءة المعلومات الواردة في ورقة معلومات البحث بطريقة صحيحة وواضحة، وبذلت جهدي ان يعي المشارك ان البحث سيتضمن:

1. مقابلة المشارك في البحث في عيادة الصحة النفسية في مدينة نابلس

2. التحدث الى المشارك شفويا لاختذ المعلومات المتعلقة بالعوامل الاجتماعية والديموغرافية.

أكد على ان المشارك اخذ الفرصة الكافية للاجابة على اسفاراته بشكل واضح وصحيح وبذلت ما بوسعي لتحقيق ذلك.

أكد ان المشارك لم يجبر على التوقيع على الورقة وان مشاركته كانت بمحض ارادته وكامل اختياره.

الباحثة حنين طعمة

توقيع الباحث.....

التاريخ.....\.....\.....

(يتم عمل نسختين من هذه الشهادة واحدة للباحثة واخرى للمشارك/ة ان رغب/ت بذلك)

جامعة النجاح الوطنية
كلية الدراسات العليا

العبء والمسؤولية التي تقع على الـاهل الذين يقدمون العناية للمرضى النفسيين في محافظة
نابلس

إعداد
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إشراف
د. مريم الطل

قدمت هذه الأطروحة استكمالاً لمتطلبات درجة الماجستير لتخصص تـمريض الصحة النفسية
المجتمعية بكلية الدراسات العليا في جامعة النجاح الوطنية في نابلس - فلسطين .

2013

ب

العبء والمسؤولية التي تقع على الاهل الذين يقدمون العناية للمرضى النفسيين في محافظة

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الملخص

الهدف: تقييم العبء الذي يقع على افراد الأسرة الذين يقدمون الرعاية للمرضى المصابين بأمراض نفسية ومعرفة ما إذا كان هناك أي ارتباط بين هذا العبء وبين العمر والجنس والتعليم والحالة الاجتماعية والاقتصادية، ونوع من المرض العقلي في محافظة نابلس .

المنهجية: كانت الدراسة وصفية، وتم استخدام convenient sampling لاختيار العينة في الفترة الزمنية الواقعة بين نوفمبر 2012- يناير 2013 ، وكان توزيعها باستخدام quota sample method بحيث تكونت العينة من 50 فرد من الاسر الذين يقدمون الرعاية للمرضى النفسيين لكل مرض من الأمراض التالية: (انفصام عقلي، اضطراب المزاج، تخلف عقلي) والذين يتابعون في العيادات الخارجية للأمراض النفسية في محافظة نابلس. وتم استخدام Zarit Burden interview, Montgomery Borgatta Caregiver burden scale مقياس لتقييم العبء.

النتيجة: كان متوسط العبء الشخصي قليل الى متوسط (28.84)، في حين كان متوسط العبء الموضوعي منخفض (17.93) هذا وكان متوسط العبء النفسي والاجتماعي والاقتصادي منخفض، وكان العبء الجسدي منخفض إلى متوسط. وأظهرت النتائج أن متوسط العبء كان مرتبط بشكل كبير مع الجنس، والمستوى التعليمي، والحالة الاجتماعية والاقتصادية. لم يوجد فروق ذات دلالة احصائية بين المشاركين وفقا لسنهم ونوع من المرض النفسي.

الاستنتاج: كان العبء الشخصي عاليا عند الاناث مقارنة مع الذكور، وكان عاليا ايضا عند المشاركين ذوي مستوى التعليم المنخفض وذوي مستوى المعيشة المنخفض . في حين كان العبء الموضوعي مرتفعا عند الذكور وعند المشاركين ذوي مستوى التعليم العالي وذوي مستوى المعيشة العالي.

رعاية المريض النفسي تؤثر سلبا على الأسرة لذلك ينبغي تقديم خدمات من قبل مراكز الصحة النفسية تركز على احتياجات الاسرة التي تقدم الرعاية للمريض النفسي.

