



# Work and Family Stressors, Depression, and Anxiety among Working Women in Gaza Strip

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## Abstract

**Aim:** The aim of the study was to find types and severity of work and family and relationship to depression, anxiety, and other socioeconomic factors. **Method:** In order to achieve this aim, we selected a randomly sample of 180 working women from Ministry of Health. We used quantitative way of data collection using the following self-administered tool: socio-demographic status form, work stressors, stressors due to siege of gaza, gaza, beck depression inventory, and hamilton anxiety scale.

**Results:** The results showed that the work stressors ranged from 15-68 with mean of 42.95 (SD =10.54). There were statistically significant differences in work stressful situations according to marital status toward married working women than single. There were statistically significant differences in work stressful situations according to number of siblings toward working women who had 5-7 children than having less than 4 children. There were statistically significant differences in work stressful situations according to education level toward working women who less educated than secondary level. For siege stressors, the results showed that there were significant differences toward working women in feeling being in big prison, and there were significant differences toward working women in inability to finish some construction and repair work in house due to shortage of building materials. The result showed that 22 of working women had moderate to severe anxiety (6.1%). The study showed that 22 of working women had severe depression (6.1%). There was statistically significant positive relationship between stressors due to work, depression and anxiety symptoms. There was statistically significant positive relationship between stressors due to siege of Gaza and depression, anxiety.

## Implication

This study provides evidence that work and family stress are strongly associated with depression and anxiety in a sample of Palestinian working women. Future longitudinal studies and intervention studies are needed to understand and improve women's psychosocial work environment and their psychosomatic health in Gaza Strip. Also, community-based study will help in planning larger studies for evaluating stress and anxiety, depression among women. The information about prevalence of stress, depression, and anxiety in women will also aid in spreading awareness about mental health, particularly in homemakers.

**Keywords:** Working women, Hospitals, Gaza strip, stress, Depression, Anxiety

## Introduction

### Working women's in Gaza Strip

Gaza's population suffers from a multitude of problems, including high levels of unemployment, poverty and polluted water sources. Gazan women in particular have to struggle to support their families because of few job options available to them. Many women have business ideas that could bring in revenue. They just lack support and financial backing to get started. In the fourth quarter of 2012, women's participation in the labor market reached to 17.9% of labor market (PCBS, 2012) [1]. About 66.5% of Palestinian women do not participate in the work

market because of homework duties, home or education-related reasons. Women work in several areas such as administrative, technical and service sectors. The majority of working women are employed by the health and education sectors (75.35%) followed by the agriculture sector (25.9%) and the trade and services sector (7.9%). Only a small portion (0.1%) of women works at the building and construction sectors. The proportion of women in the labor government institutions constitutes 40% of the total workers and the proportion of women's participation in private company's public in institutions was estimated to be about 18.3% in 2012. In Gaza Strip, the public sector is the main

employer, providing 54% of jobs. Working women in Palestine accounts only for about one fifth of the total workforce (19% in West Bank and 12% in Gaza Strip). Besides that, women are paid less than men (PCBS, 2012) [1]. Working women take part in helping their families especially during these days characterized by hard economy and high inflation rate due to the Israeli restrictions which affected all the aspects of life in Gaza Strip. The working women in Gaza face various stressors because they are taking the main responsibility of home-work, taking care of children, cooking, and washing, besides being employed or a worker. All these circumstances adds extra pressure on women and may complicate their lives and leading to emotional disturbances if could not have proper adaptation. In this study the researcher is going to examine the mental health problems that may provoke among working women in Gaza Strip and factors that may inter-relate to its occurrence.

### Work (job) stressors

Lazarus & Folkman [2] described job stress as “the stress produced during interaction between the individual and his work environment when the demands of work exceed the individual’s resources or abilities.” Broadly defined, work stress is the ‘harmful physical and emotional responses that occur when the requirements of the job do not match the capabilities, ‘I’m So Stressed!’ 1077 resources, or needs of the worker’ [3]. Occupational role stress emerges as individuals experience conflict, ambiguity or overload in work related roles [4]. Work–family conflict is conceptually defined as inter-role conflict resulting from an incompatibility in work and family responsibilities [5].

### Impact of stress on working women

A study conducted in Palestine by Joudeh [6] aimed to identify the degree of job stress and its sources among Palestinian nurses working in northern West Bank district hospitals. A sample of 276 nurses were randomly selected for the study. The results revealed that the total degree of general average of job stress sources was moderate. The psychological stress domain was the most common job stress sources domains (73.8%). Also, Arafa et al. [7] in Alexandria (Egypt), assessed psychological well-being of 412 nurses in five hospitals in Alexandria. Prevalence of psychological distress was 21.67%. Melchior et al. [8] examined the influence of work stress on young working adults diagnosed with depression and anxiety. Participants were enrolled in the Dunedin study, a 1972-1973 longitudinal birth cohort assessed most recently in 2004-2005, at age 32 (n=972, 96% of 1015 cohort members still alive). Participants exposed to high psychological job demands (excessive workload, extreme time pressures) had a twofold risk of (Major Depression Disorder (MDD) or Generalized anxiety disorder (GAD) compared to those with low job demands. Besides this Evans et al. (2006) examined the prevalence of stress and burnout, and job satisfaction among mental health social workers (MHSWs) in England and

Wales. Results of eligible respondents (n= 237) reported high levels of stress and emotional exhaustion and low levels of job satisfaction. The study results revealed that 47% of participants showed significant symptomatology and distress, which is twice the level reported by similar surveys of psychiatrists. Feeling undervalued at work, excessive job demands, limited latitude in decision-making, and unhappiness about the place of MHSWs in modern services contributed to the poor job satisfaction and most aspects of burnout. Those who had approved social worker status had greater dissatisfaction. Also Zarra M et al. [9] in a study assessed the relationships between occupational stress and family difficulties in working women. A sample of 250 married workingwomen in one of the largest city of Iran, Hvaez. Results suggested that there was significant positive relationship between levels of occupational stress and family difficulties in working women. While Purcell et al. [10] indicated that staffing and scheduling as the sources of stress among 197 American registered nurses. USA. Also in Palestine, Al Hajar [11] in a study aimed to determine the prevalence of occupational stress among hospital nurses in Gaza-Palestine and explore possible causal occupational stressors. The results revealed a high prevalence of psychological distress (63%) and depression (59.7%). The most severe occupational stressors were: Not enough staff to adequately cover the unit, lack of drugs and equipment required for nursing care” and unpredictable staffing and scheduling respectively. Psychological distress was significantly associated with gender, age, experience, night shifts and extra-work.

The aims of the study were:

1. To find types and severity of work and family stressors among working women.
2. To examine the differences of mental health problems (Depression, and Anxiety) in relation to the study variables (age, type of work, marital status, monthly income, level of education).

### Method

#### Participants

The study sample included 180 Palestinian working women randomly selected from the five areas of the Gaza Strip aged from 24 to 60 years. We selected the sample according to the population sample of total working women in Ministry of Health (N=2609). Working women from North area were chosen from (AlAwda Hospital); from Gaza governorate from (Al-Shifa Hospital); from Middle area from (Al-Aqsa-hospital), from Khan Younis area (Gaza European Hospital); and from Rafah area (Abu Yosef Elnajar Hospital).

#### Measures

##### Demographic and occupational characteristics:

Demographic data were collected on the women’s including age, number of children, place of residence, education, marital status,

occupational status occupation (physician, nurse, technician, administration, and if married husband's occupation.

**Work stressful situations checklist:** Work stressful situation experiences were done by checklist depend on previous checklist using in Gaza Strip. The checklist consisted of 24 items including stressors at work (11 items) and stress at home (13 items) with answer strongly agree (3), agree (2), disagree (1) and strongly disagree (0). The scoring of the scale is considered by summing all the answers. In this study, Chronbach's alpha was high ( $\alpha = 0.91$ ) and split half was 0.89.

**Beck Depression Inventory (BDI) 13 items:** The Beck Depression Inventory (BDI) is one of the most widely used instruments to assess depression. The main aim of Beck Depression Inventory is to measure depression symptoms and severity in persons age 13 and older. This inventory was validating in Palestine culture by [12-14]. The Beck Depression Inventory (BDI) has gone through multiple revisions, include BDI-I (1), BDI-IA (2), BDI-II (3), and BDI for Primary Care (BDI-PC), now known as BDI Fast Screen for Medical Patients (BDI-FS). A 13-item short form is more recent was used in this study. The severity of depression is classified on the basis of the total score; in a normal community sample, a BDI score  $<4$  suggests no or minimal depression, 5 to 7 represents mild to moderate depression, 8 to 15 is moderate to severe, and  $\leq 16$  indicates a severe level of depression. It is a universal scale; its validity and reliability are already tested. The BDI demonstrates high internal consistency, with alpha coefficients of .86 and .80 for psychiatric and non-psychiatric populations respectively [15]. The internal consistency of the scale was calculated using Chronbach's alpha was high ( $\alpha = 0.86$ ) and split half was 0.80.

**Hamilton anxiety rating scale Hamilton M [16]:** The HAM-A was one of the first rating scales developed to measure the severity of anxiety symptoms, and is still widely used today in both clinical and research settings. The scale consists of 14 items, each defined by a series of symptoms, and measures both psychic anxiety (mental agitation and psychological distress) and somatic anxiety (physical complaints related to anxiety). Although the HAM-A remains widely used as an outcome measure in clinical trials, it has been criticized for its sometimes-poor ability to discriminate between anxiolytic and antidepressant effects, and somatic anxiety versus somatic side effects. The HAM-A does not provide any standardized probe questions. The items are rated on a five-point scale and summed to provide a score ranging from 0 to 56. A score of 17 or less represents mild anxiety, a score between 18 to 24 mild to moderate anxiety, and a score of 25 and above moderate to severe anxiety. The Arabic version was used in this area and showed high reliability [14]. The internal consistency of the scale was calculated using Chronbach's alpha ( $\alpha = 0.89$ ) and split half was 0.86.

### Study Procedure

Before we conducted the study we obtained official letter of approval to conduct the study from Helsinki Committee in

the Gaza Strip. Also, an official approval letter was obtained from the MOH to conduct the study in the health centers and hospitals. Participants were given full explanation both verbally and written about the purpose and the nature of the study and were reassured about confidentiality of the information. When the questionnaire was given to each participants, researcher explained to each of them that the participation is optional and don't answer any question she doesn't want to answer it.

Data was collected by the research and 4 nurses who were trained for 3 hours on how to collect the data and the list of hospitals and number of sample were given. The data collectors interviewed the working women inside the hospital. The data collectors explained the purpose of the study and the researcher gave them the questionnaire by hand and set with them to explain some points to any women and returned it back after filling it. Women signed a consent form to participate in the study after explanation about the objectives of the study and that the data will be kept with the researcher. The data collection was carried out October 2014.

### Data Analysis

The researcher used Statistical Package of Social Science (SPSS) for data entry and analysis (SPSS ver. 23). Frequency tables that showed sample characteristics were done including the stressors, anxiety, and depression. One way ANOVA test, Post hoc Turkey's test was conducted to find differences between socioeconomic variables and stressors, anxiety, and depression. Furthermore Pearson correlation test was done for finding relationships between work and family stressors, depression, and anxiety. Prediction of anxiety and depression of women was tested by series of stepwise multiple linear regression analyses was conducted, with each stressors as the predictor and total depression and anxiety the dependent variable. A two-tailed  $p$  value  $<0.05$  was considered statistically significant.

### Results

#### Socio-demographic characteristics of the study sample

The sample consisted of 180 working women. The age ranged from 24-60 years (Mean =34.45, SD= 7.63). Regard type of employment, 37.8% were nurse, 20.9% were administrative, and 10.01% were physicians.

#### Types and frequency work and family stressful situations

The most common work stressors were: I feel exhausted at the end of the day (32.8%), I wish if there were someone to support and help me (30%), I am bothered by the lack of rest periods (28.9%), and I feel that the family income is not enough for our daily life (28.9%). Mean stressors ranged from 12-68 with mean 38.64 (SD = 10.94). Our study showed that mean work stressors were 18.66 (SD =5.3) and family stressors mean was 19.97 (SD =6.19).

## Socio-demographic variables and work and family stressors

In order to find the differences between socioeconomic variables such as place of residence, type of education, number of children, etc..., One-way ANOVA was conducted in which each total work and family stressors in working women was entered as dependent variable and other socio-demographic variables as independent variables (place of residence, education, family monthly income, and number of children).

Post hoc Tukey's test showed that there were no statistically significant differences in work stressors according to number of children ( $F(2/179) = 1.75, p = 0.17$ ). However, working women with children number 8 and more scored more family stressors than those with less number of children in the family ( $F(2/179) = 2.93, p = 0.05$ ). Regarding family monthly income, Post hoc test showed that there were no statistically significant differences in work stressors according to monthly income ( $F(3/179) = 1.22, p = 0.30$ ). While, Post hoc test showed that there were statistically significant differences in family stressors in families with low monthly income (Less than \$350) ( $F(3/179) = 2.85, p = 0.03$ ).

## Prevalence of anxiety in working women

As shown in table (3), 115 of working women had no anxiety (63.9%), 30 had mild anxiety (16.7%), and 35 of women had moderate to severe anxiety (19.4%).

## Socio-demographic variables and depression

Post hoc Tukey's test showed that there were no statistically significant differences in depression according to number of children ( $F(2/179) = 2.38, p = 0.09$ ). Regarding family monthly income, post hoc test showed that there were statistically significant differences in depression according to monthly income in families with monthly income less than \$350 ( $F(3/179) = 4.86, p = 0.003$ ).

## Relationship between work and family stressors, depression, and anxiety

Pearson correlation test showed in table showed that there were statistically significant positive relationship between work stressors and family stressors ( $r = 0.81, p < 0.001$ ), depression ( $r = 0.24, p < 0.001$ ), and anxiety ( $r = 0.23, p < 0.001$ ). Also, there were statistically significant positive relationship between family stressors and depression ( $r = 0.24, p < 0.001$ ), and anxiety ( $r = 0.28, p < 0.001$ ).

## Prediction of women's anxiety by stressors

In a multivariate regression model, total anxiety score was entered as dependent variables and each stressor as independent variables. Total anxiety was predicted by my husband cannot understand and tolerate my work circumstances ( $\beta = 0.24, t(178), p < 0.001$ ) and I find it difficult to receive relatives and friends for lack of money or time ( $\beta = 0.17, t(178), p < 0.001$ ),  $R^2 = .09, F(2/178) = 10.73, p = 0.001$ .

## Prediction of women's depression by stressors

In a multivariate regression model, in a multivariate regression model, total depression scores was entered as dependent variables and each stressor as independent variables, Total depression was predicted by stressors: I feel that the family income is not enough for our daily life ( $\beta = 0.32, t(179), p < 0.001$ ), I find it difficult to receive relatives and friends for lack of money or time ( $\beta = 0.19, t(179), p < 0.01$ ), and for multiple health reason my performance is bad in my duties ( $\beta = 0.18, t(179), R^2 = 0.17, F(2/178) = 10.58, p = 0.001$ ).

## Discussion

The aim of this study was to examine the association between work and family stress and depression and anxiety symptoms, in a sample of Palestinian working women. This study showed that working women commonly reported stressors such as I feel exhausted at the end of the day, I wish if there were someone to support and help me, I am bothered by the lack of rest periods, and I feel that the family income is not enough for our daily life. Which were mostly work stressors and not family stressors? Mean stressors ranged from 12-68 with mean 38.64 our study showed that mean work stressors were 18.66 and family stressors mean was 19.97. However, working women with 8 and more had more family stressors than those women with 7 and less children in the family. Regarding family monthly income family stressors in families with low monthly income (Less than \$350) were more than in families with higher family monthly income. Our study showed that 19.4% of women had moderate to severe anxiety. Anxiety was more prevalence in families with monthly income less than \$ 350. For depression, 23.3% of with low monthly income (Less than \$350) were more than in families with higher monthly income women had severe depression. Regarding family monthly income, depression was more in women with low monthly income (Less than \$350) than in families with higher monthly income. There was positive relationship between work stressors and family stressors, depression and anxiety and positive relationship between family stressors and depression and anxiety. Our results were consistent with other studies that have indicated similar prevalence rates of anxiety and depression [17]. Other studies have also speculated whether the widespread and increasing rates of stress may be due to such factors as differences and changes in lifestyle, being female unemployment, socio-economic strata, marital status, underweight, and obesity [18]. Similarly, the U.S. National Comorbidity Survey, showed that the lifetime prevalence rates for any anxiety disorders were 19.2% for men and 30.5% for women [19]. Moreover, socio-cultural factors, such as social responsibilities and family, influence women's coping capacity and may lead to anxiety, stress, and depression-related illness [18,20,21] in a cross-sectional study conducted in Finland among 732 female employees from ten work units in 2014, found that anxiety (31.3%), work stress (30.7%) and type D personality (26.1%) were the most prevalent of the psychosocial risk factors.

Patel et al. [22] in a cross-sectional study was performed on women (aged 18–50 years) randomly selected from different occupations in Gujarat, India. Among all participants, 35% of women showed high anxiety levels. One-fourth of the total population (26%), were most prone to stress, and two-thirds (66%) were more prone. Prevalence of stress was highest in homemakers: 37% of homemakers were most prone to stress, followed by students.

Further, women contend with increased exposure to the social risk factors associated with depression, including chronic stress, family care giving responsibilities, and experiences of trauma, with 20% of the U.S. population living in rural areas, rural women are disproportionately affected by depression [23]. Gafarov V [24] under the third screening of the WHO “MONICA- psychosocial” program random representative sample of women aged 25–64 years (n = 870) were surveyed in Novosibirsk. The prevalence of high family stress level in women aged 25–64 years was 20.9%. High family stress was higher in age groups 25–34 years and 45–54 years: 27.6% and 30.5%, respectively. Among women with family stress, 58.7% had high level of trait’s anxiety. Women with stress at family had high rate of major depression (11%). There were tendencies of higher prevalence of hostility and vital exhaustion in those with stress (41.1% and 27.4%, respectively). Among those in female population with stress at family, 60.6% had sleep disturbances. Furthermore, Snell-Rood et al. [25] in study of 28 low-income women living in southeastern Kentucky and screened them for depression using the Center for Epidemiological Studies Depression scale (CES-D). The study showed that mean CES-D score was 32 among the women they interviewed, suggesting moderate to severe depression.

## Study Limitations

There are many limitations in our study, first, due to the cross-sectional design and the subjective measures of both independent and dependent variables, common method bias cannot be ruled out, and it is impossible to infer causality for the observed associations. Second, the sample size included in this study was only from Ministry of Health hospitals, our results therefore cannot be generalized to all working women in Palestine.

## Conclusion

In conclusion, this study provides evidence that work and family stress are strongly associated with depression and anxiety in a sample of Palestinian working women. Future longitudinal studies and intervention studies are needed to understand and improve women’s psychosocial work environment and their psychosomatic health in Gaza Strip. Also, community-based study will help in planning larger studies for evaluating stress and anxiety, depression among women. The information about prevalence of stress, depression, and anxiety in women will also aid in spreading awareness about mental health, particularly in homemakers

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