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Exploring the Work Related Stress Sources and Its Effect among the Palestinian Nurses at the Governmental Hospitals

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Abstract
Background: Nursing is a highly stressful occupation. Nurses are particularly at risk from stress-related problems, with high rates of turnover, absenteeism, and burnout. At the same time, it should be noted that stress is unavoidable and may even be desirable to a certain degree. At moderate levels, stress is a motivator and improves a worker's participation in his or her job. However, when stress becomes excessive, it may become distracting, de-motivating, and even hazardous. **Aim of the Study**: The study aimed to explore the work related stress sources and its effects on the physical and mental health among Palestinian nurses working at intensive care units and neonatal units at ministry of health hospitals Rafedia, Thabet Thabet, and Khalil Solaiman hospitals at North West Bank Cities. **Design:** Descriptive, cross sectional design utilized in the current study. **Sample:** 82 Palestinian nurses were included and working in the 3 hospitals affiliated to ministry of health. **Procedure:** Data collected through nurses' socio-demographic characteristic, work related stress, physical and mental health problems Scale which is developed by the researchers. Validity and pilot study were examined .
Results: Study results have shown that the most common type of work-related stress for Palestinian nurses was due to dealing with death and dying followed by workload. Nearly half of nurses were suffering from physical and mental illnesses. Our study proved a highly statistically significant relation between mental problems and working stress and statistically significant relation between working stress, physical problems. **Conclusion and recommendation**: Work related stress affect physical and mental health of Palestinian nurses, so they need to provide continued administrative support, appropriate training programs to deal with potentially stressful conditions in the health facility.
Keywords: work related stress, intensive care unit, neonatal unit

1. Introduction

According to the U.S. National Institute of Occupational Safety and Health, job stress is a harmful response physically and emotionally when the employee's skills, resources, and needs could not fulfill the requirement of the job **(**Welker -Hood, 2006).
Given the widespread impact of workplace stressors on working people's health, substantial health and economic costs, both related to absenteeism and decreased productivity, should not be surprising (Schnall, Dobson, and Rosskam, 2009). Stress is also a significant contributing factor to organizational inefficiency, high staff turnover, absenteeism because of occupational stress, increased costs of health care, and decreased job satisfaction (Abu AlRub, 2004).
Nursing is a highly stressful occupation (Kawano, 2008). Nurses are particularly at risk from stress-related problems, with high rates of turnover, absenteeism, and burnout (Antigoni, Pediaditaki, and Dimitrios, 2011; Mark and Smith, 2011). At the same time, it should be noted that stress is unavoidable and may even be desirable to a certain degree (Alves, 2005). At moderate levels, stress is a motivator and improves a worker's participation in his or her job. However, when stress becomes excessive, it may become distracting, de-motivating, and even hazardous. In 2004, the Canadian Federation of Nurses Union reported that 86% of nurses experienced their workplaces as stressful; 86% reported their workplace as understaffed; 88% said they were under-resourced at work; and 91% reported heavy workloads (Greenslade and Paddock, 2007).
Numerous studies have focused on work stress in nurses because they work in high-stress environment, which has detrimental effects both on their mental and physical health, productivity and efficacy at work, absenteeism, as well as on patients' outcomes such as increased mortality and patient dissatisfaction (Vahey, Aiken, Sloane, Sochalski, Busse, & Clarke, 2004). Stress-related health problems and issues can include: gastrointestinal problems, sleep disturbances, mood fluctuations, headaches, as well as acrimonious relationships with family and friends (Edwards, 2003; Hurrel and Aristeguieta, 2005). A growing body of evidence supports the assertion that workplace stress plays an important role in several types of chronic health problems, in particular, cardiovascular disease, diabetes (Kroenke, 2007), and chronic low back pain (Mitchell, 2009).
A large number of studies on stress in nurses have been conducted in Western clinical settings. The common sources of stress at work identified include shift work, long working hours, lack of control and conflicting demands, bad relations with colleagues, low pay, and poor working environments (Edwards, Burnard, Hannigan, Cooper, Adams, Juggessur, & Coyle, 2006; Kawano, 2008; Toh, Ang & Devi, 2012). Considering that cultural factors can play an important role in stress, it is important to be cautious when applying results obtained in

Western societies to different cultures (Yau, Xiao, Lee, Tsang &Wong, 2012). In addition to cultural differences, there are also local effects on WRS. For example, even nurses working in different hospital units are exposed to different types of WRS (Kawano, 2008).

A Norwegian study by Begat, Ellefsen, & Severinsson (2005) surveyed 71 nurses on how the stress levels they experienced at work correlated with job satisfaction and perception of psychosocial work environment. The study found that there were six factors that had a high correlation to job stress and anxiety. Factor 1 measured job stress/anxiety which accounted for (15.05%) and factor one attributed increased stress to nurses feeling they had too much to do and being stressed out on the job. Factor 2 explored relationships with colleagues which accounted for (13.66%). In Factor 3, collaboration/communication was responsible for (11.2%). Factor 4 (10.7%) showed nurse felt more job motivation when they were engaged at work and found the work interesting and stimulating. Factor 5 looked at work demands (7.8%), specifically planning, and noted a correlation between stress and no job description and lack of planning or routines. Lastly, Factor 6 found a positive correlation with professional development (5.9%) and nurses being encouraged to develop new skills. Overall, these 6 factors explained 64.3% of the principal components of nurses perceptions of their psychosocial work environment .

Chang, Daly, Hancock, Bidewell, Johnson, and Lambert (2006) in a cross sectional survey examined the environmental occupational stressors of Australian hospital nurses in Sydney where participants completed four questionnaires that examined stress and quality of work life. Workload was identified as the chief stressor for Australian nurses working in public acute care hospitals. Statistically significant correlations between stressors (e.g., workplace supports, the number of years worked in the unit, and workload) and physical and mental health were observed. Stepwise multiple regressions revealed age to be the only significant factor of physical health.

In a study sought to determine the most common workplace stressors among Chinese hospital nurses showed that workplace stressors most frequently identified were workload and dealing with death and dying. The best predictors of physical health were psychological hardiness, conflict with other nurses, uncertainty about patient treatment, seeking social support and confrontive coping. The best predictors of mental health were psychological hardiness, conflict with other nurses, workload, seeking social support, and age (Lambert, Lambert, Petrini, Zhang, 2007)

A study investigated the effects of job stress on the physical health, mental health personal and work behaviors of nurses in public hospitals in Ibadan Metropolis, Nigeria. The study was carried out among 153 nurses working in two public hospitals in Ibadan Metropolis, Nigeria. A single questionnaire tagged “Stress Assessment Questionnaire for Hospital Nurses (SAQFHN) was developed and used for the study. It contains 72 items, measuring demographic variables, job stress, physical and mental symptoms, personal and work behavior. Findings from the study revealed that the highly stressed nurses (85 or 55.5%) exhibited personal and work behavioral problems like bullying, absenteeism, resignation or turnover. Due to being stressed or frustrated, some of the nurses engage in aggressive hostile or vindictive behavior on their wards .The study established that job stress has significant effect on physical and mental health of the nurses (Mojoyinola, 2008)

A quantitative study conducted by Preto and Pedrão (2009) to characterize nurses working at ICU and verify the presence of stress among them. A total of 21 ICU nurses from five hospitals located in the state of São Paulo answered a series of questions about the ICU and completed the Nurse Stress Inventory. Results showed that the nurses with no post-graduation education showed a higher level of stress than nurses with at least one specialization, 90% of 100 nurses mentioned that working in ICUs is stressful, wearying, and tiring.

Golubic, Milosevic, Knezevic, & Mustajbegovic (2009) cited six major groups of occupational stressors in a study of Croatian nurses. A cross-sectional study of 1086 nurses identified organization of work and financial issues, public criticism, hazards in the work place, interpersonal conflict, shift work and professional and intellectual demands as contributors to increased work stress. Specifically, organization of work and financial issues that were significant was: insufficient number of co-workers, unexpected situations, and paperwork. Public criticism showed significance in conflicts with patients, patients’ inadequate expectations , and professional and private life stress . In the areas of hazard in the workplace and shift work, all variables showed statistical significance. The researcher concluded that in Croatian nurses with higher education there were substantially decreased levels of low workability, 37% in those with secondary education versus 30% with higher education, indicating a need to further investigate the role higher education plays in decreasing factors causing work-related stress.

A clinical study conducted by Metzenthin, Helfricht, Loerbroks, Terris, Haug, Subramanian, & Fischer (2009) measured salivary cortisol levels in conjunction with a subjective stress tool in 82 pediatric and critical care nurses in Switzerland. The research revealed a statistically significant increase in cortisol levels when compared to subjective reported stress (p=0.04). Additionally, objective stress measured through a standardized hospital management tool did not show a statistical relationship to cortisol levels (p=.56).

A systematic review was examined of the sources and consequences of occupational stress on nurses’ adequacy, productivity, efficiency. A systematic review was made in “European Agency for Safety and Health at Work”, “National Institute for Occupational Safety and Health (NIOSH)”, “Job Stress Network “ web sites for various

publications and abstracts around the exact theme and the "Occupational and Environmental Medicine Journal" using as key words "stress, occupational stress, and Nursing". Results showed that a number of aspects of working life have been linked to stress. Aspects of the work itself can be stressful, namely work overload and role-based factors such as lack of power, role ambiguity, and role conflict. Threats to career development and achievement, including threat of redundancy, being undervalued and unclear promotion prospects are stressful. Stress is associated with reduced efficiency, decreased capacity to perform, a lack of concern for the organization and colleagues (Moustaka and Constantinidis, 2010)

In a study aimed at finding out the distribution of depression, anxiety and stress among nurses at Pantang hospital with regards to demographic characteristics such as age, gender, rank, duration and hospital unit worked. A sample of 57 Nurses of Pantang Hospital was randomly selected for the study. The results indicated that the higher the age of the Nurse the more he or she is exposed to these emotional (Atindanbila, Abasimi, and Anim, 2012)

A cross sectional study conducted by Mosadeghard (2013) to explore the status of occupational stress among hospital nurses in Isfahan, Iran. A validated questionnaire was used to collect data from 296 nurses. Respondents were asked to rate the intensity of 30 common occupational stressors using a five-point scale. The results revealed that third of hospital nurses rated their occupational stress high. The major sources of stress were inadequate pay, inequality at work, too much work, staff shortage, lack of promotion, job insecurity and lack of management support. More than 35% of nurses stated that they are considering leaving the hospital, if they could find another job opportunity.

In a recent a cross-sectional study aimed to assess the level of and the relationship between job satisfaction, job stress, and burnout symptoms. The study performed at ICUs at Oslo University Hospital on 145 of 196 (74%) staff members (16 physicians and 129 nurses). Results showed that the females scored higher than males on vulnerability, 3.3 (2.9–3.7) versus 2.0 (1.1–2.9) ($P < 0.05$), and experienced staff were less vulnerable, 2.7 (2.2–3.2), than inexperienced staff, 3.6 (3.0–4.2) ($P < 0.05$) (Myhren, Ekeberg & Stokland, 2013).

Another study conducted by Hasanzadeh and Atashpuor (2010) occupational Stress and Mental Health of Employees of a Petrochemical Company before and after Privatization to determine the level of occupational stress and mental health of employees of a petrochemical company in Isfahan, Central Iran, before and 3 months after privatization. Out of the 700 employees of the studied company, using a stratified random sampling technique, 140 persons were selected. Results showed that there was a significant ($p<0.001$) positive correlation between the mental health status score and job score ($r = 0.476$).

A recent Descriptive explorative study conducted by Al Hosis, Mersal & Keshk (2013), a purposive sample has been used, 152 Saudi nurses were included and working in the 4 hospitals affiliated to ministry of health in Qassim region. Data collected through; nurses' socio-demographic characteristic, work characteristics, occupational stress scale and work Stress Symptom Scale Effects of Job Stress on Health of Saudi Nurses Working in Ministry of Health Hospitals in Qassim Region in KSA. Results: Study results have shown that the most common type of work-related stress for Saudi nurses was due to job pressure followed by poor rapport with managers. Nearly half of nurses were suffering from physical and mental illnesses. The study proved a highly statistically significant relation between mental problems and working stress and statistically significant relation between working stress, physical problems and marital status.

2. Subjects and Method

2.1 Aim of the study

The study aimed to explore the work related stress sources and its effects of on the physical and mental health among Palestinian nurses working at intensive care units and neonatal units at ministry of health hospitals Rafedia, Thabet Thabet, and Khalil Solaiman hospitals at North West Bank Cities

2.2 Objectives of the study

1 - Assess of stress level of nurses working in ICU and Neonatal units.

2 - Explore the effect of stress on physical and mental health of Palestinian nurses in ICU and Neonatal units.

2.3 Research Questions

1. Are nurses working in ICU and Neonatal units suffering from work related stress?
2. Is there a relation among sources of work related stress and gender, past nursing experience, and level of education?
3. Is there a relation among sources of work related stress on physical and mental health of nurses?

2.4 Research Hypotheses

1. There will be work related stress among nurses in the selected hospitals.
2. There will be a significant difference between work related sources of stress and gender, past nursing experience, and level of education.
3. There will be a significant difference between sources of work related stress and physical health problems among the nurses in the selected hospitals.

4. There will be a significant difference between sources of work related stress and mental health problems among the nurses in the selected hospitals.

2.5 Study design: Descriptive cross sectional explorative study was used for conducting the study.

2.6 Study Setting: The data has been collected from intensive care units and neonatal units at three hospitals affiliated to ministry of health in North West Bank region, first; Rafedia Hospital in Nablus city, Second; Thabet Thabet Hospital in Tulkarem city, and third; Khalil Sulaiman Hospital in Jenin.

2.7 Study Sample: A purposive sample consisted of 93 nurses, who work in the previously mentioned settings invited to participate in the study. Five nurses refused to participate and 6 withdraw without unknown cause from the study. So, the final participants were 82 nurses.

2.8 The inclusion criteria: The inclusion criteria set for sample selection were as follows: Palestinian nurses and working in the intensive care units or neonatal units at Rafedia, Thabet Thabet, and Khalil Solaiman hospitals with full time employment.

2.9 A tool of data collection: For data collection a self-administrative questionnaire was developed by researchers and used to assess :

a) Nurses' socio-demographic characteristic as regards their age, gender, educational level, marital status, job position, total experience years and current experience in the selected units.

b) Sources of work stress as regards dealing with Death and dying, Conflict with physicians, Inadequate preparation, Lack of support, Conflict with other nurses, Work load, and Uncertainty concerning treatment. The questions used the 3-point Likert scale from very low stress to high level stress. The score were calculated for as follows: scores 1 = low level of stress, scores 2 = moderate level of stress and scores 3 = high level of stress.

c) Physical Health as regard Skin allergy, Pneumonia, Varicose vein, Fatigue, Headache, Fainting, Cramps, Stomachache, Acidity, Decrease in hearing adequacy, and Back pain. The questions used the 2-point dichotomous scale yes or no. The score were given 2 to yes answer and 1 score to no answer.

d) Mental health as regard Exhaustion, Difficulties to concentrate, Insomnia, and Nervousness. The questions used the 3-point Likert scale from very low stress to high level stress. The score were calculated for as follows: scores 1 = low level of stress, scores 2 = moderate level of stress and scores 3 = high level of stress.

3. Validity and reliability of the study

The questionnaire was revised and validated by panel of 5 experts in academic and psychological field; they agreed and no comments. Internal consistency estimate was using Cronbach's alpha. The initial findings with average 0.92 which is strongly reliable.

4. Pilot study

A pilot study was used to test the instrument. A pilot study was conducted with ten nurses in the intensive care unit from Al- Watani hospital which is governmental hospital and like the hospitals included in the study to determine the clarity of questions, effectiveness of instructions, completeness of response sets, time required to complete the questionnaire and success of data collection technique. Pilot subjects were asked to comment on the applicability and appropriateness (validity) of the questionnaire. All questions were answered no clarity of questions was required. The researchers determined that it would take twenty (20) minutes to complete the questionnaire.

5. Data analysis

The quantitative data were entered and analyzed using the SPSS (Statistical Package for Social Sciences version 20.0), and the level of significance (α) was set at 0.05. Demographic and baseline variables were analyzed using frequency, percentage, and bar chart. Hypothesis were tested and analyzed by using t. test and Anova one way test.

6. Ethical considerations

This study was approved by the nursing department, Arab American University. This emphasized by MOH agreement with their permission for the investigator to utilize the targeted hospitals. Approval from nurses were obtained. Several strategies were utilized to protect the nurse's rights who agreed to participate in this study. First, oral verbal consent of the nurses was obtained prior to the administration of the questionnaire. The nurses were informed of the purpose of the study, and that they had the right to refuse to participate. Also the voluntary nature of participation was stressed as well as confidentiality. Furthermore, the nurses were told that they can refrain from answering any questions and they can terminate at any time. Anonymity of the nurses was maintained at all times.

7. Results

The main findings of the study using descriptive and inferential analysis. The study targeted nurses working in

ICU and neonate units; 82 nurses participate in the study.

Description of the sample

Table 1. Assessment the base line characteristics of the studied sample

Parameters		No.	%
Age	Less than 25 years	37	45.1
	26-30 years	29	35.4
	More than 30 years	16	19.5
Hospital	Thabet Thabet	14	17.1
	Rafedia	41	50.0
	Khalil Solaiman	27	32.9
Gender	Male	31	37.8
	Female	51	62.2
Educational level	Diploma or less	18	22.0
	Bachelor	54	65.9
	Master	10	12.2
Job position	Practical nurse	32	39.0
	Staff nurse	45	54.9
	Head nurse	5	6.1
Marital status	Single	41	50.0
	Married	41	50.0
Past Experience	Less than 5 years	36	43.9
	5-10 years	31	37.8
	More than 10 years	15	18.3
Current job experience	Less than 5 years	43	52.4
	5 years and more	39	47.6

Table 1 showed that the large group age of the studied sample (45.1%) was less than 25 years, half of the studied sample (50%) were single, Around two thirds (62%) of nurses were females, and in relation to the educational level, it was found that the majority (65.9%) of them had nursing bachelor. Less than half (43.9%) of the nurses had an experience less than 5 years. This table illustrated that in relation to current job experience more than half (52.4 %) of nurses had less than 5 years experience, nearly half (50%) working in Rafedia hospital.

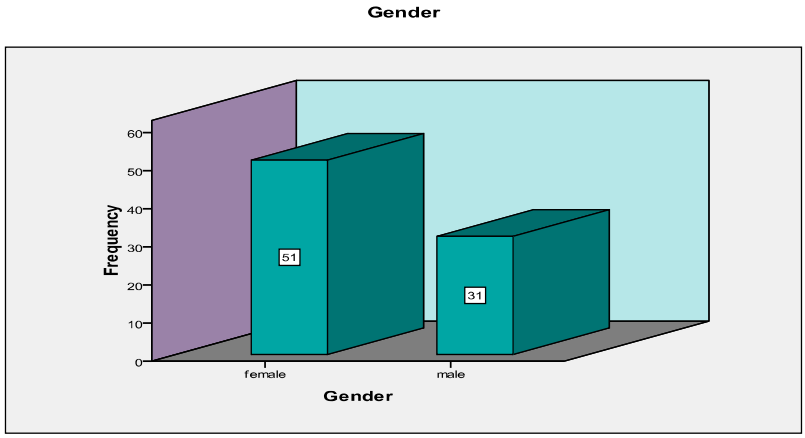

Figure 1. Distribution of nurses gender in the study sample.

Figure 1 showed that there was 51 female nurses and 32 male nurses among nurses in the study.

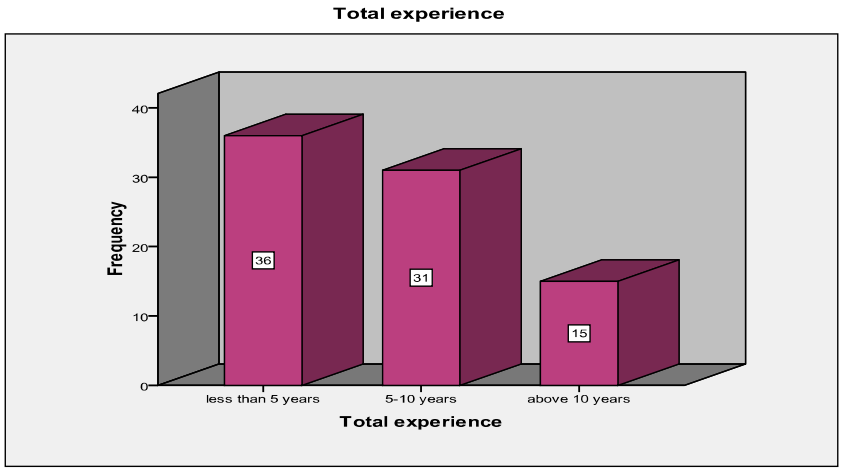

Figure 2. Distribution of nurses total experience in the study sample

Figure 2 showed that there was 36 had experience less than 5 years, 31 nurses between 5-10 years , and 15 nurses above 10 years

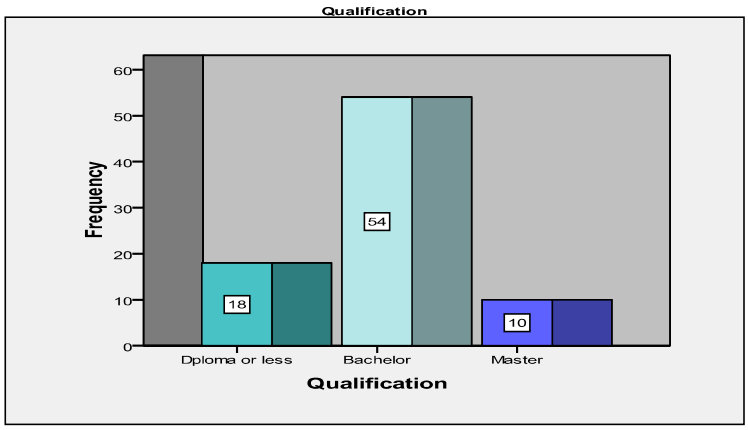

Figure 3. Distribution of nurses education level in the study sample

Figure 3 showed that there was 18 nurses had diploma or less, 54 nurses had bachelor, and 10 nurses had master degree.

Table 2. Number and percent distribution of nurses according to their exposure to work stressors

No.	Sources of work stress	Severe stress		Moderate stress		Low stress	
		No.	%	No.	%	No.	%
1	Dealing with Death and dying	16	19.5	44	53.7	22	26.8
2	Conflict with physicians	8	9.8	44	53.7	30	36.6
3	Inadequate preparation	9	11.0	46	56.1	27	32.9
4	Lack of support	5	6.1	45	45.9	32	39.0
5	Conflict with other nurses	4	4.9	37	45.1	41	50.0
6	Work load	14	17.1	48	58.5	20	24.4
7	Uncertainty concerning treatment	4	4.9	51	62.2	27	32.9

Table 2 illustrated that (19.5% and 53.7%) of nurses were suffering from severe stress and moderate stress respectively regarding dealing withdeath and dying, and (9.8% and 53.7%) of nurses were suffering from severe

stress and moderate stress respectively regarding conflict with physician. Regarding inadequate preparation, it was found that (11.0% and 56.1%) of nurses were suffering from severe stress and moderate stress respectively and it was found that (6.1% and 45.9%) of nurses were suffering from severe stress and moderate stress respectively regarding lack of support. For conflict with nurses, it was found that (4.9% and 45.1%) of nurses were suffering from severe stress and moderate stress respectively and it was found that (17.1% and 58.5%) of nurses were suffering from severe stress and moderate stress respectively. Regarding Uncertainty concerning treatment, it was found that (4.9% and 62.2%) of nurses were suffering from severe stress and moderate stress respectively

Table 3. Number & percent distribution of nurses' physical health problem (during work experience)

No.	Physical health	Yes		No	
		Yes	%	No.	%
1	Skin allergy	56	68.3	26	31.7
2	Pneumonia	65	79.3	17	20.7
3	Varicose vein	53	64.6	29	35.4
4	Fatigue	24	29.3	58	70.7
5	Headache	29	35.4	53	64.6
6	Fainting	53	64.6	29	35.4
7	Cramps	53	64.6	29	35.4
8	Stomachache	51	62.2	31	37.8
9	Acidity	56	68.3	26	31.7
10	Decrease in hearing adequacy	55	67.1	27	32.9
11	Back pain	21	25.6	61	74.4

Table 3 elaborated that more half (68.3 %, 79.3% , 64.6%, 64.6%, 64.6% , 62.2%, 68.3and 25.6%) of nurses were suffering from skin allergy, pneumonia, varicose veins, fainting, cramps, stomachache acidity, and decrease in hearing adequacy respectively and nearly one third (35.4 % and 29.3%) of nurses were suffering from headache and fatigue respectively. Also it was found that one quarter (25.6 %) of nurses were suffering from back pain.

Table 4. Number and percent distribution of nurses according to their mental illness to stressors

No.	Parameters	Severe		Moderate		Low	
		No.	%	No.	%	No.	%
1	Exhaustion	19	23.2	52	63.4	11	13.4
2	Difficulties to concentrate	17	20.7	47	57.3	18	22.0
3	Insomnia	21	25.6	44	53.7	17	20.7
4	Nervousness	28	34.1	39	47.6	15	18.3

Table 4 showed that around one quarter (23.2 %) of nurses were suffering from severe exhaustion and one fifth (20.7%) of nurses were suffering from severe difficulties to concentrate. One quarter of nurses suffering from severe insomnia. Regarding nervousness, it was found that around one third (34.1%) of nurses were suffering from severe nervousness.

Table 5. Relationship between mean of total sources of work related stress and, gender, marital status, job position, total experience, past experience, hospital, and educational degree

Items	Mean of stress	N	Std. Deviation	F	Sig
Gender					
Female	2.6459	51	0.50307		
Male	2.6338	31	0.54083	0.011	0.918
Marital status					
Married	2.6887	41	.51420		
Single	2.5940	41	.51652	0.692	.408
Job position					
Practical nurse	2.6471	32	.49408		
Staff nurse	2.6693	45	.53382	0.851	.431
Head nurse	2.3529	5	.46736		
Past Experience					
Less than 5 years	2.5588	36	.48655	0.859	0.428
5-10 years	2.7201	31	.56706		
above 10 years	2.6765	15	.46624		
Current job experience					
Less than 5 years	2.6566	43	.49751	0.079	0.779
5 years and more	2.6244	39	.53839		
Hospital					
Thabet Thabet	2.7773	14	.52178	4.587	.013
Rafedia	2.4770	41	.49389		
Khalil Solaiman	2.8203	27	.47658		
Educational level					
Diploma	2.5147	18	.43837	2.658	0.076
Bachelor	2.6236	54	.52776		
Master	2.9647	10	.47744		

Table 5 revealed that a highly statistically significant relation between hospitals and total mean of sources of stress (p□0.013). Also it was revealed that no statistical significant relation among total mean of sources of stress and years of past experience, current job experience, gender and educational level.

Table 6. The relationship between the sources of job stress and physical health problem and mental health problems

Items	Mean of stress	N	Std. Deviation	t. test	Sig
Sources of job stress	2.6413	82	0.51438	22.768	0.001
Physical health problems	1.4279	82	0.24094		
Sources of job stress	2.6413	82	0.51438	10.132	0.000
Mental health problems	2.0732	82	0. 50840		

Table 6 revealed that a highly statistically significant relation between physical health problems and total mean of sources of nursing job stress (p□0.001). Also it was revealed statistical significant relation among total mean of sources of nursing job stress and mental health problems (p□0.000) .

8. Discussion

This study was a cross section design. The sample of 82 nurses met the criteria for participation. Participants were working on selected units.

Eighty two participants (N=82) completed demographic data forms as well as the sources of job stress scale, physical health problems scale, and mental health problems scale.

According to the first hypothesis the study results have shown that the most common type of work-related stress for Palestinian nurses was due to death and dying followed by workload. These results were in accordance with Chang et al. (2006), Lambert *et al. (*2007), Moustaka and Constantinidis (2010), and Mosadeghrad (2013). Chang et al. (2006) added that statistically significant correlations between stressors and workload. Lambert *et al.* (2007) reported that a high level of workplace stressors is related to workload and dealing with death and dying. Moustaka and Constantinidis (2010) showed reported that aspects of the work itself can be stressful as work overload. Mosadeghrad (2013) concluded that the major sources of stress was too much work.

For the second hypothesis, the study revealed that there wasn't difference between male and female nurses according to job stress and this is inconsistent with (Myhren, Ekeberg & Stokland, 2013). Myhren, Ekeberg & Stokland (2013) showed that the females scored higher than males on vulnerability to job stress. This may due that half of the nurses is single and males take night shift instead of female nurses as the male nurses may work another work in morning shifts. Also, the study revealed that there wasn't difference between past experience levels of nurses and job stress and this is inconsistent with (Myhren, Ekeberg & Stokland, 2013). Myhren, Ekeberg & Stokland (2013) showed that the experienced staff were less vulnerable than inexperienced staff to job stress. This may due to despite of experience there wasn't training programs focuses on subjects related to critical issues in ICU and neonate. At the same time, the study revealed that there wasn't difference between educational level of nurses and job stress and this is inconsistent with Preto and Pedrão (2009). Preto and Pedrão (2009) showed that the nurses with no post-graduation education showed a higher level of stress than nurses with at least one specialization. This may due to no presence of specific job description for nurses.

According to the third hypothesis, the study revealed that there are relationship between sources of nursing job stress and physical health problem. This is consistent with previous studies (Chang et al., 2006; Mojoyinola 2008; Moustaka and Constantinidis, 2010; Al Hosis, Mersal and Keshk, 2013).

Also, for the fourth hypothesis the study revealed that there are relationship between sources of nursing job stress and mental health problem. This is consistent with previous studies (2006), Mojoyinola (2008), Hasanzadeh and Atashpuor (2010), Al Hosis, Mersal and Keshk (2013).

9. Conclusion

Study results have shown that the most common type of work-related stress for Palestinian nurses was due to dealing with death and dying followed by workload. Most of nurses were suffering from physical and mental illnesses. Our study proved a highly statistically significant relation between mental problems and working stress and statistically significant relation between working stress, physical problems

10. Recommendation

1. Recommendations related to research

Potential areas for future study include replicating this study using a larger sample. Qualitative research could be used to explore and describe the experiences of nurses in the work environment and future research on the effects of stress management.

2. Recommendations related to nursing practice

The findings of the study would appear that organizational interventions at reducing the impact of stressors such as workload (that is, providing more staff to adequately cover unit might be more appropriate and may benefit some staff more than stress management). Employing more nurses is an obvious potential remedy for reducing workload, increasing clerical staff to reduce non-nursing tasks.

3. Recommendations for health policy makers

1- Promoting prompt, constructive resolution of conflicts.

2- Psychological counseling and therapy should be easily accessible and available for troubled staff members.

3- Policies that reduce stress from shift work should be developed. These could include reducing the number of hours of the night shift, increasing the rest time between shifts, providing adequate meal times, and providing a fair distribution of weekend and holiday work.

4- Support group for nursing personnel is recommended

11. Acknowledgement:

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References

Abu Al-Rub, R.F., Job stress, job performance, and social support among hospital nurses. Journal of Nursing Scholarship, 2004. 36(1): p. 73-78.

Al Hosis Kh., Mersal F. and Keshk L. (2013), Effects of Job Stress on Health of Saudi Nurses Working in Ministry of Health Hospitals in Qassim Region in KSA. Life Science Journal 2013;10(1): 1036-1044

Alves S.(2005). A study of occupational stress, scope of practice, and collaboration in nurse anesthetists practicing in anesthesia care team settings. AANA Journal. Vol. 73(6): p. 443-452.

Antigoni F., Pediaditaki O., and Dimitrios T. (2011): Nursing staff under heavy stress: focus on Greece A critical review, International Journal of Caring Sciences, Vol. 4 (1): 11-12

Atindanbila S., Abasimi E., and Anim M., (2012). A Study of Work Related Depression, Anxiety and Stress of Nurses at Pantang Hospital in Ghana. Research on Humanities and Social Sciences,2,(9):1-8

Begat I., Ellefsen B., & Severinsson E. (2005). Nurses' satisfaction with their work environment and the outcomes of clinical nursing supervision on nurses' experiences of well-being -- a Norwegian study. Journal of Nursing Management, 13(3), 221-230.

Chang E, Daly J, Hancock K, Bidewell J, Johnson A, Lambert V and Lambert C (2006). The relationships among workplace stressors, coping methods, demographic characteristics and health in Australian nurses, J Prof Nurs; 22 (1): 30-8.
Edwards D. (2003). A systematic review of stress and stress management interventions for mental health nurses. Journal of Advanced Nursing. Vol. 42(2): p. 200.
Edwards D., Burnard P., Hannigan B., Cooper L., Adams J., JuggessurT., Coyle D. (2006). Clinical supervision and burnout: The influence of clinical supervision for community mental health nurses. Journal of Clinical Nursing, 15,1007–1015.
Golubic R., Milosevic M., Knezevic B., & Mustajbegovic J. (2009). Work-related stress, education and work ability among hospital nurses. Journal of Advanced Nursing, 65(10), 2056-2066.
Greenslade M. and Paddock K., Working conditions of nurses: A cause for concern., 2007, Health Canada: Ottawa, ON, Canada.
HasanzadehA. and AtashpuorA. (2010)Occupational Stress and Mental Health of Employees of a Petrochemical Company before and after Privatization. International Journal of Occupational and Environmental Medicine.Vol 1 Number 2: 75-79
Hurrel, J. and C. Aristeguieta, Occupational Stress, in Occupational and environmental health : recognizing and preventing disease and injury, B. Levy, et al., Editors. 2005, Oxford University Press: New York, NY. p. 382-396
Kawano Y. (2008). Association of job-related stress factors with psychological and somatic symptoms among Japanese hospital nurses: Effect of departmental environment in acute care hospitals. Journal of Occupational Health, 50, 79–85.
Kroenke, C.H. (2007). Work characteristics and incidence of type 2 diabetes in women. American journal of epidemiology 165 (2): p. 175-175.
Lambert V., Lambert M., Petrini, XMLi Y. Zhang (2007): Workplace and personal factors associated with physical and mental health in hospital nurses in China. Nursing & Health Sciences 9(2), 120-126.
Mark G. and Smith A. P. (2011): Occupational stress, job characteristics, coping, and the mental health of nurses, British Journal of Health Psychology, DOI:10.1111/j.2044- 8287.2011.02051.x,1:17.
Metzenthin P., Helfricht S., Loerbroks A., Terris D., Haug H., Subramanian S., & Fischer J. (2009). A one-item subjective work stress assessment tool is associated with cortisol secretion levels in critical care nurses. Preventive Medicine, 48(5), 462-466.
Mitchell T., et al., Biopsychosocial factors are associated with low back pain in female nursing students: a cross-sectional study. International journal of nursing studies, 2009. 46(5): p. 678- 688.
Mojoyinola J. (2008): Effects of Job Stress on Health, Personal and Work Behaviour of Nurses in Public Hospitals in Ibadan Metropolis, Nigeria, Ethno-Med., 2(2): 143-148
Moustaka and Constantinidis (2010). Sources and effects of Work-related stress in nursing. Health Science Journal. Vol. 4 (4): 210 – 216
Mosadeghrad A. (2013) occupational stress and turnover intention: implications for nursing management. Int J Health Policy Manag. 1(2): 169–176
Myhren H., Ekeberg O.,& Stokland O. (2013). Job Satisfaction and Burnout among Intensive Care Unit Nurses and Physicians. Critical Care Research and Practice. Vol.2013, P1-6
Preto1 V. and Pedrão L.(2009) Stress among nurses who work at the intensive care unit. Rev Esc Enferm USP 2009; 43(4):838-45
Schnall, P., Dobson M., and Rosskam E. (2009). Work, Psychosocial Stressors, and the Bottom Line, in Unhealth Work: Causes, Consequences, Cures, P. Schnall, M. Dobson, and E. Rosskam, Editors. Baywood Publishing Company, Inc.: Amityville, NY. p. 87.
Toh, S., Ang E.,& Devi, M. (2012). Systematic review on the relationship between the nursing shortage and job satisfaction, stress and burnout levels among nurses in oncology/ haematology settings. International Journal of Evidence-Based Healthcare, 10, 126–141.
Vahey D., Aiken L., Sloane D., Sochalski J., Busse R., Clarke H. (2004);Nurse burnout and patient satisfaction. Med Care. 42 Suppl: II-57-66. Medline:14734943
Welker-Hood, K. (2006): Does workplace stress lead to accident or error?: Many nurses feel the pressure. American Journal of Nursing 106(9), 104.
Yau S., Xiao X., Lee L., Tsang A., Wong S., &Wong K. (2012). Job stress among nurses in China. Applied Nursing Research, 25, 60–64. doi:10.1016/j.apnr.2011.07.001

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