Sources of Work-Related Stress among Nurses Working at Psychiatric Wards in Hospitals of Baghdad City

مصادر الأجهاد النفسي ذات العلاقة بالعمل لدى الممرضين العاملين في ردهات الأمراض النفسية والعقلية في مستشفيات مدينة بغداد

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المستخلص:

الأهداف: تهدف الدراسة الى التعرف على أهم مصادر الاجهاد النفسي التي قد يتعرض لها الممرضين العاملين في الرهات النفسية لمستشفيات الأمراض النفسية والعقاية في مدينة بغداد وكذلك لإيجاد العلاقة ما بين مستويات الاجهاد النفسي مع بعض الخصائص اليموغرافية لهؤلاء الممرضين.

المنهجية:دراسة وصفية تم أنجازها بين العاشر من كانون الاول، ٢٠١٣ والعاشر من آذار، ٢٠١٤. جمعت عينة البحث بالطريقة الغرضية غير الأحتمالية لـ ٩٤ ممرض وممرضة من العاملين في مستشفيات: ابن الرشد، الرشاد ومن الردهة النفسية مستشفى بغداد التعليمي. من اجل جمع معلومات البحث فقد استخدم أستبان خاص لهذا الغرض والذي يشمل: المعلومات الديموغرافية للممرضين والممرضات المشاركين؛ ومقياس معدل وبنسخته العربية لأبو الحصين (٢٠١٠)(٢٠) عن (Psychological Stress Inventory-PSI) والذي يتضمن ٧٩ فقرة لقياس مستويات الأجهاد النفسي. تم تحليل البيانات باستعمال الأحصاء الوصفي: التردد والنسبة المئوية والتوزيع، والأحصاء التحليلي.

النتائج: توصلت الدراسة الى ان ٣٧,٢% من المشاركين وجد عندهم مستوى عالي من الاجهاد؛ ٣٣,٠% لديهم مستوى متوسط و٢٩,٨% عندهم مستوى منخفض. وكانت الابعاد: المالي وبيئة العمل والسياسي قد حصلت على اعلى نسبة تأثير على الممرضين والممرضات. ووجدت الدراسة ان هنالك علاقة ما بين الاجهاد النفسي وجنس المشارك، المستوى العلمي، والعمل في الردهات النفسية.

التوصيات: توصي الدراسة بأستخدام الممرضين اكثر من الممرضات في تلك الردهات. إيجاد تخصص الممرض النفسي للعمل في تلك الردهات، محاولة تعيين نسب عالية من الحاصلين على درجة البكلوريوس في التمريض، وضع معايير خاصة للعلاقة فيما بين جميع منسبي تلك الردهات، وأخيرا حث الممرضين والممرضات على الحضور لجلسات التعامل مع الاجهاد.

Abstract:

Objectives: The study intends to identify the sources of work-related stress that might face the nurses working at psychiatric wards in Baghdad psychiatric hospitals and to find out a relationship between the levels of stress and some demographic characteristics.

Methodology: A descriptive study was achieved from the 10th of December, 2013 through the 10th of March, 2014. Non-probability purposive samples of 94 nurses who work in psychiatric wards of Baghdad psychiatric hospitals were recruited to meet the study objectives. Psychological Stress Inventory (PSI) the Arabic version, which was modified by Abu Al-Hussein (2010) (20), was used. Data were analyzed by using the statistical analysis program of SPSS 19th version. Descriptive analysis: frequencies, percentages and distribution; inferential analysis: Chi2 and correlation coefficient were applied.

Results: The results indicate that the levels of work-related stress was found as high (37.2%), intermediate (33.0%), and low (29.8%) and the highest level of work-related stress is found in regards to the monetary domain (50.0%), work environment domain (47.9%), and political domain (45.8%)..

Recommendations: The study recommends that: more male nurses to be appointed at psychiatric. To find real specialized psychiatric nurses. To put criteria to appoint a bachelor level in nursing at these wards; engaging nurses working at psychiatric wards in special sessions of stress management; and finally, fixing a professional criteria of the relation between nurses and doctors or/ and boss during the time of working at these wards.

Keywords: identifying, sources, work stress, nurses, psychiatric wards.

Introduction:

Stress classically explains a negative idea that may have a shock on individual's psychological and physical welfare, however it is not clear what accurately describes stress and whether it is a cause or an effect[1]. It is repeatedly supposed that stress is present when people tackle circumstances that surpass their ability to manage these circumstances [2, 3]. Stress can result from exposure, or threat of exposure, both to the more tangible workplace hazards and to the psycho-social hazards of work [4]. The experience of stress is one important outcome of exposure to the hazards of work and to hazardous situations. Those hazards of work which are associated with the experience of stress are often termed stressors [5, 6]. Occupational stress in nursing has been the focus of much research over the last 20 years. However, studies on stress in mental health nursing have been slower to emerge [7, 8]. A variety of causes are associated with occupational stress and studies indicate that, in addition to stressful causes central to nursing organizational management attributes influence work-related stress among nurses[9] and those sources of stress differ in both nature and frequency across nursing specialties[10]; stress related to: work environment[11]; Interpersonal relationships[12]; nature of nursing[13]; Organization-related Causes[14]; Role characteristics[15]; Individual characteristics [16 ,17 ,and 9]; Stress Consequences[18]; and Problems in staff's behaviour[19].

Methodology:

A descriptive-analytic study was conducted from the 10th of Dec, 2013 to the 10th of March., 2014. A purposive non-probability sample of 94 staff nurses who work in psychiatric Hospitals in the city of Baghdad: 42 nurses in Al-Rashad psychiatric hospital; 28 nurses in Ibn Rushid psychiatric hospital; and 20 nurses in psychiatric ward at Baghdad hospital. For the purpose of this study a self-administrative questionnaire was constructed to meet the objectives. The questionnaire took approximately 25 minute to be completed. This questionnaire consisted of two parts: firstly, six demographic characteristics which are age, gender, marital status, level of education, years of career in general wards, and years of career in psychiatric wards; and secondly, 79 items are a part of a scale called Psychological Stress Inventory (PSI)[20] which measure the levels of stress and has five domains: a- 11 items for psychological domain; b- 10 items for physiological domain; c- five items for political domain; D- work environment, this domain consists of seven sub-domains: 1- 11 items for workplace environment; 2- five items for the relation with other nurses; 3- seven items for relation with the doctors; 4- five items for relation with the patients; 5- seven items for relation with the visitors; 6- eight items for relation with the bosses; and 7- five items for medical instruments: and e- five items for financial domain. Each item is scored from (1) never, (2) sometimes, and (3) always, so the total score ranged from 79 to 237 for the stress scale. These items were measured, scored, and rated on 3-level rating scale[21]; low with cut-off point ranged (100-159) that indicates that the level of stress is low; medium with cut-off point ranged (160-167) that indicates that the level of stress is medium; and high with cut-off point ranged (168-219) that indicates that level of stress is high. Data were analyzed by using statistical package for social science (SPSS) version 19. Data analysis was employed through the application of descriptive and inferential statistical approaches which were performed through the computation of the following: Descriptive: Frequencies and percentages; and inferential: Chi-square.

Results:

Table 1. Demographic characteristics of the nurses participated in the study

Gender			Marital Status		
Gender	f	%	Status	f	%
Male	68	72.3%	Unmarried	16	17.1%
Female	26	27.7%	Married	78	82.9%
Total	94	100.0%	Total	94	100.0%
Age			Level of Education		
year	f	%	Level	f	%
≤25	13	13.8%	Nursing School	24	25.5%
26-35	36	38.3%	Diploma	42	44.7%
≥36	45	47.9%	Bachelor & postgraduate	28	29.8%
Total	94	100.0%	Total	94	100.0%
Career in General Nursing Wards			Career in Psychiatric Ward		
Year	f	%	Year	f	%
≤ 6	19	20.2%	≤ 6	42	44.7%
7-11	31	33.0%	7-11	35	37.2%
≥12	44	46.8%	≥12	17	18.1%
Total	94	100.0%	Total	94	100.0%

F=frequency, %=percentage

Table 1 reveals that about three fourth of participants are male (72.3%); 88.2% of those nurses are more than 26 years old; the vast majority of those nurses are married (82.9%); approximately half of them are with level of education of diploma in nursing (44.7%), less than half of them has ≥12years of working in general nursing (46.8%), and finally, most of them has ≤ 6 years of working in psychiatric units (44.7%).

Table 2. Distribution of levels of stress of main domains according to sample

Main Domains of stress	Levels of Stress						Total	
	Low		Intermediate		High			
	f	%	f	%	f	%	f	%
Psychological	27	28.7%	43	45.8%	24	25.5%	94	100.0
Physical	31	32.9%	42	44.7%	21	22.3%		
Political	22	23.4%	29	30.9%	43	45.8%		
Monetary	15	15.9%	32	34.1%	47	50.0%		
Work Environment	21	22.3%	28	29.8%	45	47.9%		

F=frequency, %=percentage

Table 2 shows that the highest level of work-related stress is found in regards to the monetary, work environment, and political domains: 50.0%; 47.9%; and 45.8% respectively.

Table 3. Distribution of levels of stress of work environment according to the sample

	Sub-domains		Levels of Stress							
			Low		Intermediate		High		Total	
			f	%	f	%	f	%	f	%
Environment Domain	1	Place Environment	29	30.9%	31	32.9%	34	36.2%	94	100.0%
	2	Relation with Staff	41	43.6%	30	31.9%	23	24.5%		
	3	Relation with Doctors	20	21.3%	34	36.2%	40	42.6%		
	4	Relation with Patients	39	41.5%	35	37.2%	20	21.3%		
	5	Relation with Visitors	42	44.7%	31	32.9%	21	22.3%		
	6	Relation with Boss	25	26.6%	32	34.1%	37	39.4%		
	7	Medical Instruments	39	41.5%	28	29.8%	27	28.7%		

F=frequency, %=percentage

Table 3 shows that the highest level of work-related stress, regarding the environment domain, is in relation with doctors, relation with boss, and place environment; 42.6%, 39.4% and 36.2% respectively.

Table 4. Distribution of the levels of total domains of stress according to the sample

Stress	No.	Levels of Stress							
		Low		Intermediate		High		Total	
		f	%	f	%	f	%	f	%
	94	28	29.8%	31	33.0%	35	37.2%	94	100.0%

F=frequency, %=percentage

Table 4 shows that all nurses participated in the study have varying severity of work-related stress; high, intermediate, and low: 37.2%, 33.0%, and 29.8% respectively.

Table 5. Distribution of levels of work-related Stress according to Demographic Characteristics

Demographics		Stress levels							
		Low		Intermediate		High		Total	
		f	%	f	%	f	%	f	%
Gender	Male	26	27.7%	28	29.8%	14	14.9%	68	72.3%
	Female	2	2.1%	3	3.2%	21	22.3%	26	27.7%
	Total	28	29.8%	31	33.0%	35	37.2%	94	100.0%
Age	≤25	4	4.3%	3	3.2%	6	6.4%	13	13.8%
	26-35	10	10.6%	12	12.8%	14	14.9%	36	38.3%
	≥36	14	14.9%	16	17.0%	15	15.9%	45	47.9%
	Total	28	29.8%	31	33.0%	35	37.2%	94	100.0%
Marital Status	Unmarried	7	7.5%	5	5.3%	4	4.3%	16	17.1%
	Married	21	22.3%	26	27.7%	31	32.9%	78	82.9%
	Total	28	29.8%	31	33.0%	35	37.2%	94	100.0%
Level of Education	Nursing School	5	5.3%	9	9.6%	10	10.6%	24	25.5%
	Diploma	13	13.8%	15	15.9%	14	14.9%	42	44.7%
	Bachelor & Postgraduate	10	10.6%	7	7.5%	11	11.7%	28	29.8%
	Total	28	29.8%	31	33.0%	35	37.2%	94	100.0%
Career in General Wards	≤ 6	7	7.5%	5	5.3%	7	7.5%	19	20.2%
	7-11	9	9.6%	12	12.8%	10	10.6%	31	33.0%
	≥12	12	12.8%	14	14.9%	18	19.2%	44	46.8%
	Total	28	29.8%	31	33.0%	35	37.2%	94	100.0%
Career in Psychiatric Wards	≤ 6	19	20.2%	17	18.1%	6	6.4%	42	44.7%
	7-11	4	4.3%	7	7.5%	24	25.5%	35	37.2%
	≥12	5	5.3%	7	7.5%	5	5.3%	17	18.1%
	Total	28	29.8%	31	33.0%	35	37.2%	94	100.0%

F=frequency, %=percentage

Table 5 describes the distribution in the levels of work-related stress (all domains) according to the demographic characteristics of the nurses who participated in the study.

For the age, 14.9% (n= 14) of the whole males (72.3%) (n= 68) have high level of stress but 22.3% (n= 21) of whole females (27.7%) (n= 26) have high level of work-related stress. Regarding the age 15.9% (n= 15) of the whole age group ≥36 years (47.9%) (n= 45) have a highest level of work-related stress, and 4.3% (n= 4) of the whole age group ≤25 (n= 4) have lowest level of work-related stress.

For the marital status 32.9% (n= 31) of the whole married nurses 82.9% (n= 78) have the highest level of stress and 4.3% (n= 4) of the whole unmarried nurses 17.1% (n= 16) have the lowest level of stress.

In regards to the level of education of nurses, 14.9% (n= 14) of the whole Diploma 44.7% (n= 42) have the highest level of stress and the lowest level of stress is found within nursing school level 5.3% (n= 5) of the whole level of school 10.6% (n= 14).

Regarding the years of career, table 3.5 shows that the highest level of stress is within the year group of ≥12 19.2% (n= 18) for general ward and 25.5% (n= 24) within year group 7-11 of psychiatric ward, of the whole career year in general ward 46.8% (n= 44), and of the whole career year in psychiatric ward 37.2% (n= 35).

Table 6. Association between Domains of work-related Stress and Demographic Characteristics

Demographic Characteristics		No.	df	Work-related Stress Domains										Total stress	
				Psychological		Physical		Political		Monetary		Work Environment			
				X^2	Sig.	X^2	Sig.	X^2	Sig.	X^2	Sig.	X^2	Sig.	X^2	Sig.
Gender		94	1	4.20	0.034	3.46	0.054	4.56	0.004	3.21	0.042	4.32	0.152	3.45	0.003
Age			2	6.45	0.003	7.33	0.004	5.31	0.042	5.46	0.004	7.21	0.273	6.87	0.373
Marital status			1	5.67	0.462	4.65	0.632	3.63	0.671	4.75	0.003	4.96	0.371	5.65	0.461
Level of Education			2	7.22	0.634	8.32	0.793	7.11	0.003	6.78	0.065	8.57	0.004	6.42	0.003
ward	General		2	8.31	0.623	7.89	0.652	6.77	0.057	6.94	0.563	7.24	0.471	6.46	0.376
	Psychiatric		2	6.96	0.002	6.87	0.064	6.87	0.059	7.47	0.037	8.45	0.002	7.64	0.002

Based on x^2= Chi-square test: Highly Sig. At P<0.01; and Non Sig. At P<0.05, No=Number, df=Degree of Freedom, sig. =Significant

Table 6 indicates that whether the nurse is male or female has the effect on the work-related stress in particular political domain of stress; age has a great impact on Psychological, physical, and monetary domains of stress; marital status has a wide effect on the monetary domain of stress; Level of education has associated to the work-related stress especially political and work environment domains; and worked at general wards has not associated to the work-related stress but working at psychiatric wards has a big effect on work-related stress in particular, psychological and work environment.

Table 7. Association between Domain of Work Environment Stress and Demographic Characteristics

Work Environment-related to stress		No.	Demographic Characteristics											
			df								2			
			1		2		1		2		Career in (ward)			
			Gender		Age		Marital Status		Level of Education		General		Psychiatric	
			X^2	Sig.	X^2	Sig.	X^2	Sig.	X^2	Sig.	X^2	Sig.	X^2	Sig.
Place Environment		94	3.35	.004	6.43	0.251	4.15	0.173	7.42	0.103	8.11	0.612	6.87	0.163
Relation with	Staff		4.74	0.043	8.62	0.734	5.71	0.196	6.45	0.004	9.34	0.841	8.43	0.661
	Doctors		3.87	0.001	7.44	0.034	3.29	0.766	6.82	0.002	7.54	0.769	9.72	0.004
	Patients		4.52	0.572	6.38	0.549	4.72	0.044	8.55	0.632	6.99	0.337	7.45	0.612
	Visitors		5.12	0.728	6.49	0.664	4.22	0.691	7.32	0.778	5.84	0.533	7.59	0.547
	Boss		3.76	0.005	5.91	0.002	4.67	0.554	6.88	0.012	6.79	0.610	8.50	0.722
Medical Instruments			3.52	0.361	7.23	0.690	4.39	0.318	7.17	0.066	7.88	0.855	6.91	0.221

Based on x^2= Chi-square test: Highly Sig. At P<0.01; and Non Sig. At P<0.05, No=Number, df=Degree of Freedom, sig. =Significant

The results of table 7 indicate that gender of the nurses is well-associated with the place-related stress; relation with doctors and boss-related stress, age is associated with the relation of the nurses and their boss, marital status has no effect on the work environment-related stress, the more the level of nurses the more stress related to relation with other staff and with doctors, worked at general wards has no effect on the work-related stress but working at psychiatric wards is associated with the stress due to the relation with doctors.

Discussion:

1. Discussion of sample demographic characteristics

According to the results of table 1 72.3% of the study sample are male, this result was supported by Lee and Henderson who found in their study on psychiatric nurses that 70% of those nurses were male[22]. These results could be due the difficulties in working with psychiatric patients so the male nurses are more suitable in working in psychiatric hospitals.

More than half of participants are young (they are less than 25 to 36 years old); this might be as a result to the need for new staff nurse to work at psychiatric wards and also these ages are able to bear and tolerate the burdens of working with psychiatric patients. These results are supported by many studies such as Santos and his colleagues; Blegen; and Cross and Fallen [14, 23, and 24].

Regarding the levels of education of participants the results show that about half of the nurses have diploma in nursing which means two years after secondary school. This result is not supported by many studies because the standard level of education for nurses is the Bachelor in nursing [25, 13, and 26].

Most participants are married (82.9%); this situation is considered traditional commitment in Iraq to marry at early years of age, in addition the majority of the participants is 26-35 years old so it is normal to find this high percentage of married.

The majority of the sample (79.8%) is from career of 12 years and more at general nursing wards and 81.9% of them are working at psychiatric wards. These high percentages within period of more than 7 years might be due to newly appointments which might be related to monetary development in Iraq during the last few years.

2. Discussion of distribution in the levels of work-related stress of main domains according to the sample

The results of table 2 reveal that 50.0% of the participants have high level of stress due to the monetary-related problem and approximately the same percentage has high level as result to work environment- and political-related problems, for monetary domain it could be as a result to low payments for those nurses in a hand and the heightening in prices in another hand; for the political domain, it is clear that the turbulence and turmoil in political and security situation nowadays in Iraq have their great impact on people in Iraq; as for the work environment stress it seems that for the total the seven sub-domains of work environment there is a high effect of them on the nurses' situation regarding the daily stress during their hours at wards but as individual domains table 3.3 shows that relation with doctors and boss and place environment have specific effect on those nurses. This might be due to a bad coordination between the nurses and doctors and bosses [27].

3. Discussion of the association between the levels of work-related stress and Demographic Characteristics of the Nurses

According to results in table 6, there is a significant association between gender and work-related stress that means there is difference in the levels of stress regarding the gender (p= 0.003). This might be due to the natural differences between male nurses and female nurses in the ability to tolerate work difficulties [27, 28, and 29].

The results (table 6) also reveal that the age of the nurses does not have the effect on

the levels of work-related stress (p= 0.373) they may have during their work at psychiatric wards [28].

Regarding the differences in levels of stress related to whether the nurse is married or not, the study indicates (table 6) that to be married or unmarried has no effect of the levels of stress (p= 0.461). This could be the circumstances of the work are the same effect on both, married or unmarried.

The study finds (table 6) a significant association between the level of education and the levels of work-related stress the nurses may have during working at psychiatric wards (0.003). It is confirmed in a study that there was difference in the levels of stress according to nurses' level of education [29].

The results of table 6 reveal that there is no effect of years of employment at general wards but there is an effect of working at psychiatric wards on the levels of work-related stress the nurses may experience in during their work (p= 0.376; and 0.002). This fact might be because the sources of stress and difficulties at psychiatric wards are more likely to be at general wards.

Recommendations:

The study recommends that: more male nurses than female nurses to be appointed at psychiatric wards with engaging those nurses in psychiatric nursing courses for how to deal with psychiatric patients or to find real specialized psychiatric nurses; also putting a criteria to appoint a bachelor level in nursing at these wards; engaging nurses working at psychiatric wards in special sessions of stress management; and finally, fixing a professional criteria of the relation between nurses and doctors or/ and boss during the time of working at these wards.

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