



Relationship between nurse's general health and their personal occupational traits in Al-Zahra Hospital of Isfahan, 2015

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ABSTRACT

Health state is one of the most important factors in their life. Individuals may be subject to threatening factors in different ways. Nurses are one main group of community whose health may be threatened due to their occupational environment. Therefore, this study aimed at investigating general health of nurses and their personal occupational traits. Method: This study is correlation-descriptive research. Statistical population consists of 220 nurses working in Al-Zahra hospital selected by random sampling. Instrument of this study includes a demographic questionnaire and a standard Goldberg 28-question questionnaire. The data were analyzed by SPSS software. Findings: in this study, nurses are subject to occupational events, physical and chemical harmful materials, biologic harmful materials, mental/ ergonomic harmful occupational factors. And there exists relation between their general health and their age, number of children and marital status. But no relation has been seen with their surgery records, rate of sport they do, vaccination, the unit in which they work, their occupational environment, their occupational record and posts.

Keywords: general health, nurses, personal and occupational traits

INTRODUCTION

Health is the mental, corporeal and social wellbeing state but not mere absence of disease or maim and deformation. Paying no attention to general health is one of the significant factors in decreasing the efficiency, losing man power and occurrence of mental and physical problems especially in occupational services.

One of the most important and influential factors on individual's health is his occupation, which put his health in threat by making him subject to different factors. Some occupations threaten individual's health more than others through making him been subject to various physical, corporeal, psychological and social stressful factors. Herein nursing is one of the most risk and stressful professions which is included in first four most stressful occupations of world. Changing shifts, long working hours, consecutive awakening, insufficient rest, ongoing encountering with patients pains and soreness, see and do resuscitation, death, critical space of unit, occupational challenges with their colleagues and paradoxes of their tasks, facing to patients and their accompaniers, being subject to all kinds of chemical materials and dangerous diagnosing therapeutic rays, and infectious diseases are all some of stressful and threatening factors to nurses health. On one hand, absence of occupational safety, having not a salary proportional to

their occupational status and some other factors such as sex, especially influences nurses' health. According to reports by valid national and international organizations, a considerable percentage of nurses suffer from mental, spiritual disorders like depression, all types of physical problems such as muscular-osseous problems.

Salehipour (2011) states that staffs of health units especially nurses encounter so much health and safety dangers. Occupational harmful factors are divided to 5 main groups: physical, chemical, biological, ergonomic and mental factors. Concerning demographic traits, there exist a meaningful relation between mean of occupational exhaustion and organizational posts, sex and age as nurses have got the most mean and matrons the least. Occupational exhaustion was seen in females more than males and decreases by increase in age of them. But no meaningful relation has got with marital status of them. Concerning the type of character and mental health, there seen a meaningful relation with general health.

Haber man (1991, in his findings, points out that authorities' support, desirable relation of nurses' leaders and hospital managers with staffs of nursing directly influence occupational contentment and mental health of nurses. So, this study aimed at specifying the relationship between general health of nurse and their persona; and occupational traits.

MATERIALS AND METHODS

This study is correlation-descriptive research. Since the researcher considered evaluating two variables of general health and personal-occupational traits, this research is also a quantitative research with an analytical descriptive approach. The population of the present study consists of all nurses working in Alzahra hospital of Isfahan in 2015. Sampling of this study is a random one. Random sampling allows researcher to reach the desirable data by using fewer instruments and to spend little time, energy and costs. Therefore, after going to hospital and presenting the recommendation letter to authorities of hospital and explaining the objectives of her study, she was introduced to different units. Then after going to each unit (hospitalization or out-patients unit), including 20 units, she randomly selected 10 persons from each unit. Thus total of 220 nurses working in Alzahra hospital participated in this study out of which finally 205 ones answered to the questionnaires.

In order for collecting the data and answering to questions of this study, the researcher used a questionnaire which was in two parts; first part was researcher questions related to personal, occupational traits which were used to determine the content justifiability by Islamic Azad university of Khorasgan's nursing faculty members and after making the corrections ,it was confirmed. The second part was the Goldberg questionnaire of general health justifiability and stability of which was in different studies such as Taghavi (2001) studied and confirmed. The stability coefficient of all question was obtained by alpha Kronbach. Stability coefficient of partial questions tests were 0.70-0.91 Taghavi (ibid)

In this research, the researcher used a descriptive-deductive statistical method for analyzing the data. For descriptive data, she used frequency, mean, standard deviation, and for analytical data, t-test, ANNOVA coefficient of Spearman and Pearson.

RESULTS

In this study, questionnaires were given to 220 managers, nurses and paramedics of hospitalization and out-patient units. Among these participants, 205 individuals replied to questionnaires completely which are shown in the following tables. Concerning their personal traits, relationship between sex and general health of nurses, percentage of anxiety problems and sleep disorders of females and males were 8.41 and 6.53, respectively ($p < 0.50$).

As far as relation between general health of nurses and their marital state is concerned, physical problems in single nurses is 12.09% and in married nurses 11.47% ($p < 0.50$) and depression problems has got percentage of 3.89 in single nurses and 3.54 in married ones, which shows $p > 0.05$ but there exists no relationship between nurses general health and their educational level ($p > 0.0$)

And concerning relation between this general health of nurses and their age and number of children they have, the more years old they are and children they have, the more they physical health will be.

Table 1. Investigating the relationship between general health and nurses' marital status

Variables		Physical problems	Anxiety and sleep problems	Social problems	Depression problems	General health problems
Age	Pearson correlation coefficient	-0.477	0.156	0.016	-0.152	-0.064
	p/amount	<0.001	0.0121	0.871	0.131	0.528
Number of children	Pearson correlation coefficient	-0.338	0.112	-0.064	-0.025	-0.033
	p/amount	<0.001	0.169	0.431	0.763	0.683
Sex (male/female)	p>0.05	0.677	0.024	0.293	0.126	0.024
Education	p>0.05	0.398	0.459	0.606	0.176	0.129
Marital status(married/single/divorced)	p>0.05	0.006	0.643	0.595	0.043	0.188

Concerning occupational traits, the relation between occupational record and general health of nurses related to physical problems, $r=0.376$, $p<0.050$. Depression problems has shown $p<0.050$. Concerning general health and units of service, 11.48of nurses work in surgery unit $p<0.050$, which demonstrates that general health is meaningfully more in nurses of surgery units than nurses working in emergent unit. And concerning relation between general health and shifts of nurses, the rate of problems were more for in-change shift nurses than nurses who consecutively in morning work ($p<0.050$) and as far as the relation between general health and nursing post is concerned, physical, depression problems of nurses were most. $p<0.050$

Table 2. investigating the relationship between general health and nurses' occupational characteristics

Variables		Physical problems	Anxiety and sleep problems	Social problems	Depression problems	General health problems
Working record	Spearman correlation coefficient	**0.376-0.001<	0.118 0.114	0.065-0.380	*0.182-0.014	0.114-0.126
	p/amount					
Number of shifts	Spearman correlation coefficient	*0.172 0.039	0.101-0.229	0.089-0.290	0.064 0.445	0.019-0.817
	p/amount					
Working unit	p>0.05	0.276	0.89	0.432	0.083	0.009
Type of in change shift (morning-working)	p>0.05	0.24	0.797	0.888	0.216	0.531
Nurses posts	p>0.05	0.033	0.818	0.779	0.033	0.470

According to results of the table above, physical, social, anxiety, depression and in general, general health problems were studied and compared on the basis of dangers to which nurses are encountered. And the meaningful differences were as following:

According to the results of independent t-test, physical problems for nurses to whom it occurred an occupational event were meaningfully more than others. $p<0.050$

Also these physical problems were meaningfully more for nurses who were subject to biological occupational harmful factors than others. Also according to results obtained from Mann Whitney test, anxiety, social and general health problems were meaningfully more for nurses being subject to mental occupational harmful factors than other nurses. $p<0.050$ in other comparing factors, there seen no meaningful difference.

Table 1. Relationship between general health and occupational dangers of nurses

		Yes		No		p/amount
		No.	percentage	No.	percentage	
Has been there ever occurred an occupational event to you?	Physical problems	11.83	1.34	11.41	1.51	0.037
	Anxiety problems	8.74	3.96	7.62	4.36	0.058
	Social problems	12.01	2.79	12.37	2.53	0.331
	Depression problems	3.87	3.47	3.15	3.87	0.600
	General health problems	54.03	7.67	34.96	8.70	0.953
Are you subject to physical & occupational harmful factors?	Physical problems	11.68	1.44	11.19	1.29	0.120
	Anxiety problems	8.20	4.26	7.57	3.89	0.624
	Social problems	12.29	2.66	11.48	2.52	0.159
	Depression problems	2.99	3.75	3.29	3.10	0.451
	General health problems	35.16	8.27	33.52	7.75	0.500
Are you subject to chemical occupational factors?	Physical problems	11.72	1.44	11.35	1.39	0.122
	Anxiety problems	8.35	4.26	7.44	4.06	0.191
	Social problems	12.18	2.74	12.29	2.37	0.796
	Depression problems	3.01	3.66	3.06	3.80	0.927
	General health problems	35.25	8.11	34.15	8.60	0.415
Are you subject to biologic harmful occupational factors?	Physical problems	11.75	1.47	11.08	1.11	0.011
	Anxiety problems	8.22	4.28	7.75	3.95	0.546
	Social problems	12.37	2.50	11.44	3.22	0.113
	Depression problems	3.05	3.74	2.86	3.46	0.777
	General health problems	35.39	8.28	33.14	7.75	0.136
Are you subject to ergonomic harmful occupational factors?	Physical problems	11.65	1.46	11.43	0.94	0.514
	Anxiety problems	8.06	4.16	9.21	5.09	0.427
	Social problems	12.22	2.60	12.00	3.37	0.753
	Depression problems	2.86	3.56	5.36	4.63	0.064
	General health problems	34.77	7.86	38.00	12.05	0.381
Are you subject to mental harmful occupational factors?	Physical problems	11.62	1.43	11.77	1.42	0.697
	Anxiety problems	8.41	4.08	4.15	4.43	0.001<
	Social problems	12.26	2.54	9.85	3.31	0.004
	Depression problems	3.13	3.74	1.38	2.36	0.055
	General health problems	35.53	8.06	27.15	6.78	0.001<

DISCUSSION

This research attempted at investigating and determining the relationship between general health state and personal, occupational traits of nurses working in Al-Zahra hospital of Isfahan in 2015. As far as frequency distribution is concerned, there proceeded 93.2% ergonomic harmful factors and 93.75 mental harmful occupational factors as nurses encountered to occupational dangers. Salehpour (2011) shows that nurses encounter to five main harmful factors in their working environment : physical,, chemical. biological, ergonomic and mental factors which is in harmony with the above tables. Concerning type of the occupational event, needle stick has got 83.2% among nurses which is in agreement with the study of Ghasemi et al(2009). Working shifts and concentration disordering factors are needle stick factors. Concerning the physical occupational harmful factors,67.45 was noises which shares a meaningful relation with that of Arizi et al (2011) and rom chemical factors, antiseptic materials has got percentage of 74.5 which is meaningfully related to Salehpour (2011)

Among biologic factors, viruses have 8.6% , and among mental occupational harmful stressors have got 80.9%. this shows that stress is one of the most threatening factors to nurses health which is in agreement to findings of Shakeriniya and Mohammadpour (2000).

According to rate of physical, anxiety , depression , social and general health problems, anxiety and sleep disorders got the most amount; 4.4%

Quality of nurses sleep in Bagheri et al (2007) is weak and meaningfully decreases their life quality in understanding general health and mental-corporeal state.

Concerning these sleep and anxiety problems, the rate was in females 8.41 and 6.53 in males which shows, in agreement with Saheb zade et al.2010, that exhaustion is more in females than males. Physical problems in single were 121.9 and 11.47 in married . in the study of Kakhaki et al, (2009), there was no meaningful statistics related to marital status and different dimension of health state . and this was not in agreement with this study. Concerning age and number of children , the more the age and the number of nurses children are the more corporeal health in danger will be.

In study conducted by Vafaei et al (2007), there was seen a meaningful relation between number of children and stress rate of personnel. And a meaningful relation exists between age ,sex ,general health and exhaustion of nurses. And between general health of nurses with changing shift have more problems that morning shifts nurses. In Soleimani et al (2007), in change shift nurses have 2.63 %desirable general health , 2.26% nearly desirable and 5.11 %undesirable one which is in agreement with this research. Concerning the relation of posts of nurses and general health of them, 11.78% of physical problems and 3.37% depression problems were proceeded by nurses. In Saheb zade (2009), there was a meaningful relation between mean of exhaustion, organizational post ,sex and age of nurses as nurses have got the most and matrons the least mean.

CONCLUSION

In this study, 83.2% of nurses were subject to being needle stick and 37.9 % in sprinkling to their eyes and mouths, 89.8 % subject to physical occupational harmful factors, 76.6 subject to chemical factors , 82.4% to biologic factors , 93.2% subject to ergonomic factors and 93.7 % were subject to mental harmful occupational factors. And the general health of nurses has relation with their sex, age, marital status and number of children but no relation has it with their educational level. Also there exists a relationship between this general health and their record, surgery record and sport record of them.

Suggestion for further research

1. investigating the related factors of nurses mental health
2. investigating the related factors of nurses physical health
3. investigating nurses general health and their spiritual mental traits
4. investigating family health in-change shifts nurses and those with a stable morning shift
5. investigating nurses spiritual health and their personal occupational traits

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