DOI: 10.7860/JCDR/2014/8247.4835

Original Article

Psychiatry/Mental Health Section

Occupational Mental Health: A Study of Work-Related Mental Health among Clinical Nurses

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ABSTRACT

Objective: This paper reports a study performed to investigate and assess the mental health as well as the demographic characteristics of nurses to examine their mental health status based on four physical, anxiety, social-function and depression items.

Materials and Methods: This descriptive cross-sectional study was accomplished on 86 nurses working at three hospitals, affiliated to Iranian health ministry, in Ilam city(western Iran) all the cases were selected by purposeful sampling method.

Data was collected by a two-part questionnaire containing individual data and GHQ -28 Standardized Questionnaire.

The GHO-28 was developed by Goldberg, in 1978, as a screening tool to detect those likely to have or be at risk of developing psychiatric disorders. The GHQ-28 is a 28-item measure of emotional distress in medical settings. Analysis was done by SPSS 18 software.

Results: The majority of participants were females(50.6 vs.49.4) of 35-40 years old(27.2%), 84 percent were married(vs.16%), 35.8 percent with 10-15 years of record(vs.33.3% less than 5), 22.2% with 5-10, and 8.6% with more than 15-years of work record. The majority of participants have worked in surgical wards of hospitals. The analysis of GHQ results showed that 43.2%(n=35) of participants were suspected to suffer from mental disorders(vs.56.8% n=46 healthy participants); of all the suspected cases, 12.3% were supposed to have physical symptoms, 16% anxiety symptoms, 42% social dysfunction, and 6.2% symptoms of depression. In general, the participants demonstrated a Mean±SD of mental health score equal to 23.65±9.43.

Conclusion: Research results showed that the high prevalence of depression, anxiety and stress symptoms among nurses is alarming. It was concluded that providing efficient adequate and appropriate support services for this group can result in more healthy nurses as well as promotion of public health.

Keywords: Anxiety, Depression, Mental health, Occupation, Social function, Somatic symptoms

INTRODUCTION

Avoiding anxiety and depression is one of the most essential necessities of human beings [1]. However, in spite of all the progression in science and technology they have not been able to get rid of them. Accordingly, mental health is another significant element of social needs [2], since appropriate function of society calls for healthy individuals. So, improvement of social welfare is one of the aims of social system plans. To plan for preventive measures and health promotion, we first of all need a concept of health status of the society an aspect of which is the occupational environment that actually effects people's well- being, i.e., job and mental characteristics have dynamic interaction [3].

Occupational mental health (OMH) has considerably been growing remarkable in recent years, as evidenced by many studies over the last 20 years, remarkable conferences on the topic, special topic issues in journals, workshops focusing on various aspects of OMH, as well as a variety of employee assistance programs in major corporations, hospitals, schools and colleges [4].

Nurses play a vital role in the caring system of a country. They are considered the main working group of hospitals, serving as facilitators. The nurses' job assignment is very important, since as the health team members, their duty is to preserve and promote the quality of care to a standard level. Although they are fully trained not to ignore the care quality and patient's life, they rarely care about their own needs [5]. Nurses are a group of workers who experience mental problems [6]. This group experiences a stress that affects on their mood. Anxiety and depression are the most common mental problems of hospital personnel [2]. Considering physical and mental health of nurses is in direct relation with their providing of care; therefore, a healthy work place can result in prevention of depression, anxiety and stress among them and lead to promotion of their satisfaction and efficiency. Nursing is a helping profession requiring a high degree of commitment and involvement.

The purpose of the present study was to address certain aspects of occupational mental health among the nurses working in governmental hospitals of Ilam city(western Iran). It aims to realise the relationship between work and mental health. The aims were as follow:

- To investigate and assess the association between mental health and demographic characteristics of nurses
- To examine the mental health status based on the four physical, anxiety, social function and depression items.

MATERIALS AND METHODS

A survey design was adopted. The participants were a purposeful sample of full-time qualified nurses selected out of the staff lists of three hospitals affiliated to Iranian Health ministry, in Ilam city (western Iran). A total of 86 questionnaires were distributed, 81 were returned filled.

We designed a self-report questionnaire consisting of two main sections: demographic characteristics and GHQ-28(including somatization, anxiety and sleep disorders, social dysfunction and depression symptoms). The GHO-28 was developed by Goldberg in 1978 and has, so far, been translated into 38 languages. It has been developed as a screening tool to detect those likely to have or to be at risk of developing psychiatric disorders. The GHQ-28 is a 28-item measure of emotional distress in medical settings. Through

factor analysis, the GHQ-28 has been divided into four subscales. These are: somatic symptoms (items 1-7); anxiety/ insomnia (item 8-14); social dysfunction (item 15-21), and severe depression (item 22-28) [7].

In this study, a simple Likert scoring method had been used. The 28 item general health questionnaire (GHQ) was used to evaluate psychological state with total GHQ score dichotomized into low (<5) and high (>5) to apply the cut off for distress at clinical levels.

Reliability and validity: Numerous studies have investigated for reliability and validity of the GHQ-28 in various clinical populations. Sterling quoted that test-retest reliability has been reported to be high (0.78 to 0.90), interrater and intrarater reliability has both been shown to be excellent (cronbach's α 0.90-0.95). High internal consistency has also been reported. The GHQ-28 correlates well with the Hospital Depression and Anxiety Scale (HADS) and other measures of depression [7].

The GHQ-28 was developed to be a screening tool and for this reason responsiveness in terms of minimal Detectable Change (MDC) and Minimal Clinically Important Difference (MCID) have not been established.

Ethical considerations: For ethical issues, the researchers, after receiving a written verification by Ilam (western Iran) Medical University Research Committee as well as a written license approved by Head of Research Dept of Ilam University of Medical Sciences, referred to Shahid Mostafa Khomeini (PBUH) Hospital of Ilam ; besides, the human force administers of the hospitals were initially informed. The nature of the study and its importance were explained, then the researchers informed the participants about the research objectives and took their written agreement.

The collected data were analysed by SPSS18 Software and Chi-square and t–tests were used.

RESULTS

The majority of participants were female (50.6 vs.49.4) 49.4 of 35-40 years old(27.2%, Mean ± SD was 32.77 ± 6.06), 84 per cent were married(vs.16%), 35.8 percent had 10-15 years of work record(vs.33.3% less than 5, 22.2% had 5-10, and 8.6% more than 15-years of work precedence, (Mean ± SD was 9.42 ± 5.36). The majority of participants worked in surgical wards of the hospitals. The analysis of GHQ results showed that 43.2% (n=35) of participants were suspected to suffer from mental disorders (vs.56.8% n=46 healthy participants), of all the suspected participants, 12.3% were understood to show physical symptoms, 16% anxiety symptoms, 42% social dysfunction and 6.2% the symptoms of depression [Table/Fig-1]. In general participants had a Mean±SD of mental health score equal to 23.65±9.43 [Table/Fig-2].

Most changes in the subjects, mental health status were due to social dysfunction, while the least were due to depression.

The results of independent t-test analysis showed no significant difference between the male and female nurses in respect of mental health) p>0.05). As shown in [Table/Fig-3], mental health of women is more subject to threat than that of the men. Chi- square test results showed no significant correlation between age, work experience and mental state but the more aged the nurses became, the more deteriorated their mental health was understood to became; however the difference was not significant [Table/Fig-4].

The results also demonstrated significant differences among nurses based on their work place in the hospitals. Those working at the burn wards, CCU and ICU were more subject to threats than the others. Data analysis revealed significant differences in mental health between the married and unmarried. [Table/Fig-3] indicates that married individuals reported more mental health average than the unmarried, but in the mental health subscale, married individuals had more impairment in the social function compared to the unmarried ones.

DISCUSSION

In this study, 43.2% cases suspected of having mental disorders, which is a high figure compared with the general population. These findings indicate that clinical nurses in educational and health care centers are facing enormous challenges and lack of their health. Results of epidemiological studies of mental disorders in Iran indicate the prevalence of psychiatric disorders between 11.9 percent to 30.2 percent [8]. Retrospective studies indicate that the rate of mental disorders in the form of the GHQ 28 used from 21% to 26.9 percent has been variable [9]. The remaining 28.7 per cent prevalence of mental disorders obtained in this study compare to prevalence of mental disorders obtained by Zamanian and colleagues from the city of Shiraz in 2006 (28.7%) [10], Noorbala and his colleagues in 2009 (14. 9 percent) are higher [8]. In the Research conducted in other countries the prevalence of mental disorders among nurses population is 48.8% that compared to the general population (33.3%) have been reported further, for example, Jung has reported 48.8 per cent prevalence of mental disorders among nurses population compared to 33.3 percent of the general population [11]. Gerald reported a prevalence rate of 34 percent the nurses, Fine, 41 percent [11,12]. Mums study results has shown that mental health problems in individuals with occupational

Sub-scale / Mental Health Status	Physical symptoms		Anxiety		Social functions		Depression	
Healthy	71	87.7	68	84	47	58	76	83.7
Suspected	10	12.3	13	16	34	42	5	6.2
Total	81	100	81	100	81	100	81	100

[Table/Fig-1]: Frequency distribution of mental health status

Sub-scale	Mean ± SD	Min	Max
Physical symptoms	5.52±3.76	1	19
Anxiety	5.95±4.32	0	18
Social functions	9.80±4.49	0	18
Depression	2.38±3.54	0	15
Total mental health	23.65±9.43	6	59

[Table/Fig-2]: Mean ± SD of mental health variables

Variable Items / Healthy	Sex		Marital status		Residential location	
	Male	Female	Single	Married	Local	Not local
Mental health	22.27± 6.10	26± 10.21	25.08± 6.95	23.57± 9.34	23.25± 9.38	29.8± 8.9
Physical symptom	4.6± 3.22	7.41± 5.07	6.25± 2.43	5.1± 3.95	5.36± 3.65	8±5
Anxiety	5.73± 4.21	8.17± 5.93	6.31± 3.05	4.07± 4.89	5.72± 4.13	9.4± 6.19
Social function	9.17± 4.35	10.41± 4.59	12.38± 3.93	9.5± 5.56	9.67± 4.43	11.8± 5.5
Depression	2±2.77	2.78±4.18	2.6±3.78	1.23±1.36	2.5±3.62	0.6±0.89

[Table/Fig-3]: Mean ± SD of mental health status of participants regarding Sex, Marital status and residential location

Mental health status / Work record	Healthy		Suspected		Total	
	Frequency	Percent	Frequency	Percent	Frequency	Percent
<5	20	74.1	7	25.9	27	33.3
5-10	9	50	9	50	18	22.2
10-15	13	44.8	16	55.2	29	35.8
>15	4	57.1	3	42.9	7	8.6
sum	46	56.8	35	43.2	81	100

[Table/Fig-4]: Distribution of participants according to work record

Mental health status / Age	Healthy		Suspected		Total	
	frequency	percent	frequency	percent	frequency	percent
<25	10	76.9	3	23.1	13	100
25-30	12	57.1	9	42.9	21	100
30-35	8	42.1	11	57.9	19	100
35-40	13	59.1	9	40.9	22	100
>40	3	50	3	50	6	100
sum	46	56.8	35	43.2	81	100

[Table/Fig-5]: Distribution of participants according to age groups

burnout was significantly more [13]. He has been shown that the feelings of mastery and a sense of personal accomplishment and achievement comes when a person is able to affect the policies of the incorporated organization. Thereby its ability will display a positive attitude to self and patients [14]. Also, been shown that the ability to control of events in job is most important factors that influence personal efficacy [15]. Thus, it can be concluded that the majority of nurses are not able to demonstrate competence in the workplace, and this could be due to lack of positive conditions in the workplace.

The prevalence of psychiatric disorders have been reported 7.2 times more in women than men [16]. Our results are inconsistent with those alleged by Fakhari et al., showed that married people are affected with mental disorders 1.59 times more than single people [17], but in terms of impaired social function, Fakhari and Zamanian are in agreement with the result of our study.

Independent t-test showed no significant difference between nurses mental health in terms of being indigenous / non-indigenous [Table/Fig-3]. Although mental health among the non-native cases was more subject to threat compared to that of the natives, the difference was not statistically significant. It seems that being far from the family has a great impact on mental health status of individuals; however, but in this study, due to low frequency of indigenous peoples, such differences were not significant. Chi Square test revealed no significant correlation between work experience and mental health status of nurses. (p> 0.05). Many researchers believe that some interventions, such as encouraging the staff to teamwork, employees to participate in decision-makings, job support, reduction of job uncertainty and conflicts, providing more control of job events, as well as psychological interventions to reduce occupational stress and enforcement of adjustment in working environment should not only be done in the work place, but they also should be covered in the staff health services training programs [18]. Results showed that there were significant differences between mental health in terms of hospital units separately. The mental health statues of those nurses that working in Burn unit, ccu and ICU are more vulnerable than other units. The results of this study are consistent with those demonsterated by Taghinejad et al., study [19]. Chi-Square test showed that the association between age and health status of the subjects were not significantly different (p <0.05). Although mental health decreased with aging, but, in people of over 40 years, this trend has been downward, which is consistent with the finds of Zamanian et al., [10].

LIMITATIONS

Considering the data collected by questionnaires, honesty of respondents was kept covert to researchers; hence, before distribution of questionnaires to nurses the aims and significance of the study were justified and explained to them.

CONCLUSION

The research results concluded that the high prevalence of depression, anxiety and stress symptoms among nurses is alarming. Therefore, providing more efficient and appropriate support services for this group can cause more healthy nurses , a fact that can culminate in health promotion.

ACKNOWLEDGEMENT

The authors would like to thank the authorities of Imam Khomini, Shahid Mostafa Khomini and Taleghani Hospitals, the staff and also all the nurses of the mentioned hospitals, who sincerely assisted the researchers all through the study.

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FINANCIAL OR OTHER COMPETING INTERESTS: None.

Date of Submission: **Dec 17, 2013**
Date of Peer Review: **Apr 21, 2014**
Date of Acceptance: **May 13, 2014**
Month of Publishing: **September, 2014**