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Occupational injuries and psychological support in Chinese nurses: a cross-sectional study

Lesiones laborales y apoyo psicológico en enfermeras chinas: un estudio transversal

Lesões ocupacionais e apoio psicológico em enfermeiras chinesas: um estudo transversal

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ABSTRACT

Objective: To assess the occupational injuries and psychological support received by nurses and to investigate the relationship between the two. **Method:** This was a nationwide cross-sectional study of nurses working across 1858 hospitals in China. Data were collected using an online structured, self-administered questionnaire between 2016 and 2017. **Results:** Nearly half of respondents had experienced aggressive behavior from patients or their attendants; 13.4% respondents had experienced aggressive behavior on more than three occasions. 78.96% respondents had experienced needlestick injuries and 51.22% had experienced psychological trauma. 20.5% respondents believed that hospitals do not pay any attention to occupational safety. 86.1% respondents expressed the need for little or moderate psychological support. Nurses who had experienced aggressive behavior expressed a greater need for psychological support. Nurses working at hospitals that adequately addressed the occupational safety issues expressed the lowest need for psychological support. **Conclusion:** We found a high prevalence of psychological stress and occupational injuries among nurses. Nursing managers need to address this issue and implement interventions to prevent and reduce injuries.

DESCRIPTORS

Nursing, Team; Occupational Injuries; Job Stress; Occupational Health.

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INTRODUCTION

Occupational injuries are work-related injuries and accidents and represent a major occupational health hazard in most countries[1]. Occupational injuries is a generic term that encompasses all elements or conditions that may have an adverse effects on the health, safety, and work ability of the work force[2]. According to the General Organization for Social Insurance (GOSI), China, occupational injuries are classified as follows: (1) accidents occurring during work performance or because of work; (2) accidents occurring on the way to workplace or return; (3) accident occurring during movements which are part of work requirement; (4) any disease that is directly related to the work[3].

According to the Bureau of Labor Statistics in Iran, approximately 177000 cases of occupational injuries occurred in nursing and residential care facilities in Iran in 2017[4]; the incidence was considerably higher than that in other countries. In Ethiopia, approximately 0.452%–0.808% workers experience some form of injury every year; in addition, 147 per 1000 workers sustain occupational injuries every year[1,3]. In China, from 2008 to 2017, according to the health professionals in general, the total workforce-to-population ratio decreased from 1.47 to 1.42 per 10,000 population. The ratio has consistently been below the critical shortage threshold of 1.75 recommended by the National Health Commission (NHC)[4]. Shortage of labor is a serious occupational problem in China. In another way, owing to the rapid population growth and increase in elderly people, the Chinese government had established a primary care infrastructure which was largely based on the already established rural practices which lacked professional rigor in a Chinese study, Only 4.6% of nurses were found to have received primary care training, and these are typically exposed to enormous work-related stress, consequently, they have limited time and opportunities for training and continuing education, which increases the psychological pressure[4].

Occupational injuries can have a deleterious effect on the physical and psychological health of employees[5–7]. Occupational injuries sustained by Chinese nurses have received increasing attention in recent years. Early reports have documented a high incidence of physical assault on nurses by the patient's attendants. Approximately half of all health-care workers sustain body fluid-related occupational injuries each year[8]. In a study, 50% of newly-recruited operating room nurses reported experiencing occupational injuries[9]. The working conditions often contribute to occupational injuries[8]. Nurses working in hospitals that were understaffed and had a poor working environment reported a higher incidence of needle-stick injuries[9].

Occupational specialization of nurses exposes them to increased work pressure due to greater complexity of their work; this is often exacerbated by increased patient load and shortage of nurses[10]. The unique contemporary working environment of nurses and the service targets are likely to increase the risk of injuries: biological damage, chemical damage, physical damage, mental and other work occupational damage. Moreover, the increased work-related stress is likely to induce psychosocial problems leading to impaired work efficiency[11].

Therefore, characterizing the incidence of occupational injuries among Chinese nurses can help inform interventions to promote occupational safety of nurses and contribute to the professional development of the nursing community. With the help of the China Nursing Association, we established a nationwide network database to obtain basic information of nurses in China. The aim of this study was to characterize the occupational hazards faced by Chinese nurses and their perceived need for psychological support and their correlates.

METHOD

Study Design

This was a nationwide cross-sectional study of nurses working in hospitals across China. A structured, self-administered questionnaire was used for data collection between 2016 and 2017.

Population

The required sample size for this study was calculated using the formula: $N = (U\alpha\sigma/\delta)2$, where $\alpha = 0.05$, $U\alpha = 1.96$, $\sigma = 1.09$, and $\delta = 0.015$. A minimum sample size of 20364 was calculated using this formula. This study was conducted using a simple random sampling method with a random number table. A total of 51406 nurses working at 1,858 general hospitals in 311 cities across 30 provinces were randomly selected.

This study was designed by professors in the nursing department of the PLA general hospital and the Chinese Nursing Association, who determined the content and ensured the scientific basis and rationality of the questionnaire. The survey was conducted by senior nurses.

Selection Criteria

1) Nurses having a nurse qualification certificate (registered nurses);
2) Working on a full-time basis and posted in the current medical ward for at least 1 year;
3) Volunteering to participate in this research.

Nurses who provided incomplete questionnaires were excluded.

The above inclusion and exclusion criteria for selection of nurses were uniformly applied across all participating hospitals.

Data Collection

A nationwide online questionnaire survey was conducted through the Sojump, a professional online survey platform. The software generates an online link for participants to access and complete the questionnaire which is valid for only one respondent. The system is programmed to prevent repeat submission by the same individual. The respondents accessed the survey website and completed the

questionnaire using mobile phone or desktop computer. Incomplete questionnaires were automatically excluded from the analysis.

The survey consisted of three parts.

Part one: Demographic information, including age, number of working hours in a week, years of work experience, presence of siblings (brother or sister) in the family, and whether the family resides in the same city where the respondent works.

Part two: This part was used to assess occupational injuries. The nurses were also asked, "Did you experience aggressive behavior from patients or their attendants in the past 12 months?"

"What are the most common occupational injuries?" The occupational injuries were categorized as follows: needle-stick injury, psychological trauma, noise damage, ultraviolet (UV) damage, dust damage, and infection.

Part three: This section assessed the impact of the occupational injuries and the psychological support provided at the work place[10]. The responses to these questions were provided using 5-point ordinal scale (1 = Not at all, 2 = A little; 3 = Moderately, 4 = Quite, 5 = Extremely).

Data Analysis and Treatment

All data were entered into an Excel spreadsheet and data analyses were performed using IBM SPSS (SPSS 23.0 software; Authorization No. 6b4543b2xxxxf3c69a68). Descriptive data are presented as frequency (percentage) or mean (± standard deviation, SD). Multivariate logistic regression analysis was used to identify factors associated with occupational injuries and the need for psychological support. p values < 0.05 were considered indicative of statistical significance.

Ethical Aspects

Permission for conducting this study was obtained from the hospital director and manager of each of the participating hospitals. This research was initiated by the China Social Welfare Foundation Nurse Care Project "White Paper on the Development Status of Nurses in China" (No. 20160130). This study was facilitated by the Chinese Nursing Association (CNA); in particular, the CNA coordinated with the local nursing associations to inform the participants and obtain consent for participation. Ethics approval for this study was obtained from the China Social Welfare Foundation.

RESULTS

Characteristcs of the Nurses

The majority (78%) of respondents had no siblings, which was consistent with the domestic family planning policy in China. The majority (97.1%) of respondents were female; 77.2% of the respondents were residing with their family. Thus, a sizable percentage of respondents were living away from their families. Nurses with senior titles accounted for 5.8% of the study population; thus, a majority of nurses had a junior title. Approximately, 80.6% of respondents had to work 46–55 hours per week. Approximately 76.6% respondents reported a monthly income of <5,000 RMB Yuan (717 US dollars), implying a generally low wage level of nurses.

Characteristcs of Occupational Injury

In this survey, 41.2% of respondents reported suffering injuries during their career. 13.4% of nurses had experienced aggressive behavior from patients or their attendants on more than three occasions. With respect to occupational injury, 78.96% of respondents reported experiencing needle-stick injuries and 51.22% had experienced psychological trauma. The percentage of respondents reporting noise damage, ultraviolet damage, dust damage, and infection was 28.2%, 24.76%, 17.42%, and 17.03%, respectively.

Perception of Work-Place Psychological Support

In this survey, 61.9% (31826) of respondents believed that their work places provided them protective equipment, and 84.9% (43643) of respondents attached importance to their occupational safety; however, the majority of respondents believed that hospitals did not accord adequate importance to occupational safety. Of note, 20.5% of respondents believed that hospitals did not pay any attention to occupational safety. Only 13.6% of respondents believed that hospitals attached quite and extreme importance to occupational protection. 9.8% of respondents believed that hospitals totally disregarded the occupational health and safety of nurses, while only 2.3% of respondents believed that hospitals attach extreme importance to these aspects. It is worth noting that all respondents expressed the need for psychological support to variable degrees; 86.1% of respondents expressed the need for little or moderate psychological support, while 13.9% of respondents expressed the need for quite and extreme psychological support.

The perceptions of the respondents regarding the psychological support received are summarized in Table 1.

Relationship Between Psychological Support and Occupational Injury

On multivariate logistic regression analysis, aggressive behavior of patients or their attendants, the degree of importance attached by the hospital to nurse's safety, provision of safety tools by the hospital, the degree of importance attached by the hospital to nurses, and the degree of importance attached by nurses to occupational protection showed an independent association with psychological support among nurses. In this survey, nurses who were subjected to aggressive behaviors by patients or their attendants expressed a greater need for psychological support than nurses who did not experience aggressive behavior (p = 0.000). However, nurses exposed to a single episode of aggressive behavior showed the greatest need for

Table 1 – Perceptions of psychological support – Beijing, China, 2020.

Variables	Frequency	Percentage
Did hospital attach importance to your safety protection?		
Not at all	10549	20.5
A little	17988	35
Moderately	15951	31
Quite	4285	8.3
Extremely	2622	5.1
Did you need psychological support?		
Not at all	0	0
A little	18143	35.3
Moderately	26125	50.8
Quite	30280	6.4
Extremely	3858	7.5
Did the hospital provide safety protection tools to you?		
Yes	31826	61.9
No	19580	38.1
Did hospital attach importance to you?		
Not at all	5035	9.8
A little	12207	23.7
Moderately	22441	43.7
Quite	10517	20.5
Extremely	1206	2.3
Do you attach importance to occupational protection at work?		
Yes	43643	84.9
No	7763	15.1

Note: (n = 51406).

psychological support. We also found that the respondents expressed the lowest need for psychological support when the hospital provided them with adequate measures for occupational safety, and attached great importance to their well-being (p = 0.000).

The relationship between psychological support and occupational injury are summarized in Table 2.

Correlates of the Perceived Need for Psychological Support

On multivariate logistic regression analysis, presence of family in the same city where the respondents worked, number of working hours, and monthly income showed an independent association with psychological support among nurses. Stress associated with long working hours and lower income increased the need for psychological support (p = 0.000). Respondents whose family members resided in the same city showed a lower need for psychological support (p = 0.013).

The correlates between psychological support and the perceived need are summarized in Table 3.

DISCUSSION

The majority of nurses in this study had junior title and were in the low-income bracket. This suggests that most nurses in China have low wage level and are in the younger age-group. The income level of nurses in our study was higher than that reported from a study conducted in Shanghai[12], but lower than that in some other studies[13]. In our study, most respondents reported working for 46–55 hours per week and facing heavy work load. These results are similar to those reported from South Korea[14], but lower than those reported from Brazil[15]. Studies have shown that the working environment is a significant determinant of working hours[15]. Long working hours have a detrimental effect on health. It is imperative that hospital managers take cognizance of the detrimental health effects of long working hours. If long working hours are unavoidable due to any reason (such as the nature of department), other measures should be taken, such as recruitment of additional nurses.

Several studies have documented aggressive behavior of patients or their attendants towards nurses[16]. Our study also revealed a high prevalence of aggressive behavior against nurses in China. In an increasingly progressive China, the phenomenon of doctor-patient conflict has shown an increasing trend; in addition, the aggression against nurses has increased with increasing awareness of the legal aspects of patient care. Several variables such as socioeconomic status, age, gender, occupation, and education level affect the behavior of patients and their attendants during the treatment process[14]. Concerted workplace efforts are required to protect nurses in order to prevent serious shortage of nurses[17] and exit of nurses from the field because of increased stress caused by aggressive behavior[18]. Hospital managers should make efforts to prevent and adequately respond to instances of serious assault on nurses by the patients or their attendants.

In some departments, 51.3% of nurses sustain needle-stick injuries. Almost 3 million healthcare workers in China have experienced at least one needle-stick injury[19]. Approximately 1000 sharps injuries occur daily in China. In the present study, a majority of nurses reported needle-stick injuries at work, which were caused by a variety of reasons. Our results are similar to those reported from Northwest Ethiopia[1,7]. Many studies have shown that the occurrence of needle-stick injuries varies depending on the occupation. The professional ability and skills of nurses likely affects the occurrence of these injuries. This phenomenon may also be attributable to the lack of standardized training and safety guidelines in different cities[19].

A very high proportion of respondents in this study expressed the need for psychological support. Psychological support refers to the environmental and individual support system (internal and external) aimed at maintaining or promoting the mental health of population[20]. High workload, long working hours, and occupational hazards

Table 2 – Results of logistic regression analysis showing predictors of psychological support – Beijing, China, 2020[1].

Dependent variables	Independent variables	N	OR	95 CI%	p value
Psychological support: A little		51406	1.000		
	Aggressive behavior from patients or their attendants				0.003
	Never	30250	1.000		
	Once	10135	2.108	1.988–2.234	0.000
	Twice	4180	1.710	1.601–1.828	0.000
	≥Thrice	6841	1.504	1.385–1.633	0.000
	Did hospital attach importance to your safety?				0.000
	Not at all	10549	1.000		
	A little	17988	1.137	1.017–1.270	0.024
	Moderately	15951	1.235	1.118–1.364	0.000
	Quite	4285	1.038	0.942–1.144	0.451
	Extremely	2622	0.769	0.686–0.862	0.000
Psychological support: Moderately	Did the hospital provide safety protection tools to you?				0.000
	Yes	31826	1.000		
	No	19580	1.127	1.077–1.180	0.000
	Did hospital attach importance to you?				0.000
	Not at all	5035	1.000		
	A little	12207	0.796	0.676–0.936	0.006
	Moderately	22441	1.283	1.105–1.489	0.001
	Quite	10517	1.022	0.886–1.180	0.763
	Extremely	1206	0.707	0.610–0.819	0.000
	Do you attach importance to occupational protection at work?				0.255
	Yes	43643	1.000		
	No	7763	1.034	0.976–1.095	0.255
	Aggressive behavior from patients or their family				0.000
	Never	30250	1.000		
	Once	10135	3.747	3.212–4.371	0.000
	Twice	4180	1.833	1.536–2.187	0.000
	≥Thrice	6841	1.312	1.044–1.650	0.020
	Did hospital attach importance to your safety?				0.000
	Not at all	10549	1.000		
	A little	17988	1.325	1.057–1.660	0.015
	Moderately	15951	1.090	0.882–1.348	0.424
Psychological support: Quite	Quite	4285	0.809	0.654–1.000	0.050
	Extremely	2622	0.770	0.592–1.001	0.051
	Did the hospital provide safety protection tools to you?				0.000
	Yes	31826	1.000		
	No	19580	1.237	1.123–1.363	0.000
	Did hospital attach importance to you?				0.03
	Not at all	5035	1.000		
	A little	12207	1.356	0.981–1.876	0.066
	Moderately	22441	1.475	1081–2.012	0.014
	Quite	10517	0.977	0.721–1.324	0.882
	Extremely	1206	0.577	0.420–0.793	0.001

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Dependent variables	Independent variables	N	OR	95 CI%	p value
	Do you attach importance to occupational protection at work?				0.515
	Yes	43643	1.000		
	No	7763	1.045	0.915–1.194	0.515
	Aggressive behavior from patients or their family				0.003
	Never	30250	1.000		
	Once	10135	2.389	2.132–2.677	0.000
	Twice	4180	1.492	1.307–1.702	0.000
	≥Thrice	6841	1.162	0.980–1.378	0.084
	Did hospital attach importance to your safety protection?				0.000
	Not at all	10549	1.000		
	A little	17988	0.523	0.441–0.619	0.000
	Moderately	15951	0.548	0.475–0.663	0.000
	Quite	4285	0.485	0.422–0.557	0.000
	Extremely	2622	0.379	0.317–0.452	0.000
Psychological support: Extremely	Did the hospital provide safety protection tools to you?				0.651
	Yes	31826	1.000		
	No	19580	1.019	0.938–1.108	0.651
	Did hospital attach importance to you?				0.000
	Not at all	5035			
	A little	12207	0.321	0.256–0.402	0.000
	Moderately	22441	0.437	0.361–0.530	0.000
	Quite	10517	0.356	0.298–0.425	0.000
	Extremely	1206	0.325	0.271–0.391	0.000
	Do you attach importance to occupational protection at work?				0.000
	Yes	43643	1.000		
	No	7763	0.751	0.682–0.827	0.000

[1]The professional title of nurses was categorized according to the standards of the China's health professional and technical qualification examination. Based on the professional titles, the respondents were divided into: junior (nurse); intermediate (supervisor nurse), and senior (deputy chief nurse, chief nurse).

Table 3 – Results of logistic regression analysis showing the relationship between demographic characteristic and psychological support – Beijing, China, 2020.

Dependent variables	Independent variables	N	OR	95 CI%	p value
Psychological support: A little		51406	1.000		
	Do you have brothers or sister in your family?				0.013
	Yes	11288	1.000		
	No				0.000
	Does your family reside in the city where you work?	39684	1.000		
	Yes	11722	0.827	0.760–0.980	0.000
	No				0.597
Psychological support: Moderately	Job title				
	Junior title	38962	1.000		
	Intermediate title	9479	0.0640	0.397–1.030	0.640
	Senior title	2965	0.808	0.491–1.329	0.808
	Average working hours per week				0.02
	40–45	4923	1.000		
	46–55	41454	1.272	1.046–1.547	0.016

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Dependent variables	Independent variables	N	OR	95 CI%	p value
	≥56	5029	1.139	0.907–1.430	0.026
	Monthly income, RMB (US$)*				0.000
	<5000 (<717)	39349	1.000		
	≥5001 (≥717)	12075	0.821	0.715–0.931	0.000
Psychological support: Quite	Do you have brothers or sister in your family?				0.000
	Yes	11288	1.000		
	No	40118	3.747	3.212–4.371	0.000
	Does your family reside in the city where you work?				0.000
	Yes	39684	1.000		
	No	11722	1.312	1.044–1.650	0.000
	Job title				0.441
	Junior title	38962	1.000		
	Intermediate title	9479	1.090	0.882–1.348	0.424
	Senior title	2965	0.809	0.654–1.000	0.050
	Average working hours per week				0.000
	40–45	4923	1.000		
	46–55	41454	1.141	0.909–1.433	0.002
	>56	5029	1.237	1.123–1.363	0.000
	Monthly income, RMB (US$)*				0.000
	<5000 (<717)	39349	1.000		
	≥5001 (≥717)	12075	0.418	0.312–0.516	0.000
Psychological support: Extremely	Do you have brothers or sister in your family?				0.735
	Yes	11288	1.000		
	No	40118	1.019	0.912–1.139	0.735
	Does your family reside in the city where you work?				0.827
	Yes	39684	1.000		
	No	11722	0.918	0.844–1.064	0.827
	Job title				0.108
	Junior title	38962	1.000		
	Intermediate title	9479	0.433	0.246–0.763	0.433
	Senior title	2965	0.614	0.338–01.113	0.614
	Average working hours per week				0.000
	40–45	4923	1.000		
	46–55	41454	1.559	1.175–2.068	0.002
	>56	5029	1.405	1.044–1.801	0.025
	Monthly income, RMB (US$)*				0.000
	<5000 (<717)	39349	1.000		
	≥5001 (≥717)	12075	0.407	0.286–0.540	0.000

*U.S. dollars ($) are calculated at the exchange rate of 6.97.

may induce psychological stress among nurses, leading to a high need for psychological support[19]. We found that nurses with long working hours and lower income have a greater need for work-place psychological support. Nurses with family members residing in the same city showed a lower need for psychological support. Our results are similar to those of a previous study[19]. Lack of redressal of the psychological problems is likely to impair work efficiency and increase the intention to exit the profession; moreover, it also adversely impacts the physical and mental health of nurses, further increasing the risk of occupational injuries. All respondents in our study expressed the need for enhanced psychological support to certain extent, which is worthy of reflection and attention.

Attention accorded to the relevance of mental and physical health has increased in recent years[20–21]. Previous studies have demonstrated that the work environment has a strong influence on life satisfaction and psychological health[21]. Our study revealed that the degree of importance attached by the hospital to their employees has a huge impact on the psychological health of nurses. It is recommended to address the psychological problems, identify the influencing factors, and take action to relieve the psychological pressure. Our report may serve as a valuable reference for designing psychological health interventions for nurses in future.

The nationwide scope of the study and the large sample size are key strengths of our study. Our findings may reflect the actual situation of nurses in China. However, there are several limitations in this study. First, several factors such as hospital hierarchy, hospital location, and nursing departments were not taken into consideration. Additional objective tools are needed for more accurate assessment.

CONCLUSION

In conclusion, we found an extremely high frequency and degree of occupational injuries among nurses in China. 78.96% of respondents had experienced needle-stick injuries and 51.22% had experienced psychological trauma. Moreover, a majority of respondents reported inadequate emphasis of hospital management on occupational safety. Approximately 86.1% of respondents required some degree of psychological support. Nurses subjected to aggressive behaviors expressed a greater need for psychological support than nurses who did not experience aggressive behaviors. Nurses employed in hospitals that placed emphasis on occupational protection and safety expressed the lowest need for psychological support. Our findings indicate that nursing managers need to pay more attention to work-place safety. Moreover, our findings highlight the need for interventions to prevent and reduce various occupational hazards of nursing staff.

RESUMO

Objetivo: Avaliar os acidentes de trabalho e o apoio psicológico recebido pelos enfermeiros e investigar a relação entre os dois. **Método:** Este foi um estudo transversal nacional de enfermeiras que trabalham em 1858 hospitais na China. Os dados foram coletados por meio de um questionário online estruturado e autoaplicável entre 2016 e 2017. **Resultados:** Quase metade dos entrevistados experimentou comportamento agressivo por parte dos pacientes ou de seus acompanhantes; 13,4% dos entrevistados experimentaram comportamento agressivo em mais de três ocasiões. 78,96% dos entrevistados sofreram ferimentos com agulhas e 51,22% sofreram traumas psicológicos. 20,5% dos entrevistados acreditam que os hospitais não dão atenção à segurança do trabalho. 86,1% dos entrevistados expressaram a necessidade de pouco ou moderado apoio psicológico. Enfermeiros que vivenciaram comportamento agressivo expressaram maior necessidade de apoio psicológico. Os enfermeiros que trabalham em hospitais que abordam de forma adequada as questões de segurança do trabalho expressam a menor necessidade de apoio psicológico. **Conclusão:** Encontramos alta prevalência de estresse psicológico e lesões ocupacionais entre os enfermeiros. Os gerentes de enfermagem precisam abordar essa questão e implementar intervenções para prevenir e reduzir lesões.

DESCRIPTORES

Equipe de Enfermagem; Traumatismos Ocupacionais; Estresse Ocupacional; Saúde do Trabalhador.

RESUMEN

Objetivo: Evaluar las lesiones ocupacionales y el apoyo psicológico que reciben las enfermeras e investigar la relación entre ambos. **Método:** Este fue un estudio transversal a nivel nacional de enfermeras que trabajaban en 1858 hospitales en China. Los datos se recopilaron mediante un cuestionario autoadministrado estructurado en línea entre 2016 y 2017. **Resultados:** Casi la mitad de los encuestados había experimentado un comportamiento agresivo por parte de los pacientes o sus asistentes; El 13,4% de los encuestados había experimentado un comportamiento agresivo en más de tres ocasiones. El 78,96% de los encuestados había experimentado lesiones por pinchazos de aguja y el 51,22% había experimentado un trauma psicológico. El 20,5% de los encuestados cree que los hospitales no prestan atención a la seguridad laboral. El 86,1% de los encuestados expresó la necesidad de un apoyo psicológico escaso o moderado. Las enfermeras que habían experimentado un comportamiento agresivo expresaron una mayor necesidad de apoyo psicológico. Las enfermeras que trabajan en hospitales que abordaron adecuadamente los problemas de seguridad ocupacional expresaron la menor necesidad de apoyo psicológico. **Conclusión:** Encontramos una alta prevalencia de estrés psicológico y lesiones ocupacionales entre enfermeras. Los gerentes de enfermería deben abordar este problema e implementar intervenciones para prevenir y reducir las lesiones.

DESCRITORES

Grupo de Enfermería; Traumatismos Ocupacionales; Estrés Laboral; Salud Laboral.

REFERENCES

1. Eskezia D, Aderaw Z, Ahmed KY, Tadese F. Prevalence and associated factors of occupational injuries among municipal solid waste collectors in four zones of Amhara region, Northwest Ethiopia. BMC Public Health. 2016;16:862. http://dx.doi.org/10.1186/s12889-016-3483-1

2. Hosseinabadi MB, Khanjani N, Etemadinezhad S, Samaei SE, Raadabadi M, Mostafaee M. The associations of workload, individual and organisational factors on nurses' occupational injuries. J Clin Nurs. 2019;28(5-6):902-11. http://dx.doi.org/10.1111/jocn.14699

3. Mulugeta H,Tefera Y, Gezu M. Nonfatal occupational injuries among workers in microscale and small-scale woodworking enterprise in Addis Ababa, Ethiopia. J Environ Public Health. 2020;2020:6407236. http://dx.doi.org/10.1155/2020/6407236

4. Qiu LY, Hao C, Yan GH. Examining inequality in the public health workforce distribution in the Centers for Disease Control and Prevention (CDCs) System in China, 2008-2017. Biomed Environ Sci. 2020:33(5):374-83. http://dx.doi.org/10.3967/bes2020.051

5. Auta A, Adewuyi EO, Tor-Anyiin A, Aziz D, Ogbole E, Ogbonna BO, et al. Healthcare workers' occupational exposures to body fluids in 21 countries in Africa: systematic review and meta-analysis. Bull World Health Organ. 2017;95(12):831-41. http://dx.doi.org/10.2471/BLT.17.195735

6. Wilson DM, Devkota R. A study of nurse-based Injury Units in Ireland: an emergency care development for consideration worldwide. Int J Health Plann Manage. 2019;34(1):e72-e84. http://dx.doi.org/10.1002/hpm.2700

7. Choi LY, Torres R, Syed S, Boyle S, Ata A, Beyer TD, et al. Sharps and needlestick injuries among medical students, surgical residents, faculty, and operating room staff at a single academic institution. J Surg Educ. 2017;74(1):131-6. https://doi.org/10.1016/j.jsurg.2016.06.003

8. Rommel A, Varnaccia G, Lahmann N, Kottner J, Kroll LE. Occupational injuries in Germany: population-wide national survey data emphasize the importance of work-related factors. PloS One. 2016;11(2):e0148798. https://doi.org/10.1371/journal.pone.0148798

9. Dumas O, Wiley AS, Quinot C, Varraso R, Zock JP, Henneberger PK, et al. Occupational exposure to disinfectants and asthma control in US nurses. Eur Respir J. 2017;50(4):1700237. http://dx.doi.org/10.1183/13993003.00237-2017

10. Quinot C, Dumas O, Henneberger PK, Varraso R, Wiley AS, Speizer FE, et al. Development of a job-task-exposure matrix to assess occupational exposure to disinfectants among US nurses. Occup Environ Med. 2017;74(2):130-7. http://dx.doi.org/10.1136/oemed-2016-103606

11. Van den Broeck A, Elst TV, Baillien E, Sercu M, Schouteden M, Witte HD, et al. Job demands, job resources, burnout, work engagement, and their relationships: an analysis across sectors. J Occup Environ Med. 2017;59(4):369-76. http://dx.doi.org/10.1097/JOM.0000000000000096

12. Son YJ, Lee EK Ko Y. Association of working hours and patient safety competencies with adverse nurse outcomes: a cross-sectional study. Int J Environ Res Public Health. 2019;16(21):4083. http://dx.doi/org/10.3390/ijerph16214083

13. Fernandes JC, Portela LF, Griep RH, Rotenberg L. Working hours and health in nurses of public hospitals according to gender. Rev Saúde Pública. 2017;51:63. https://doi.org/10.1590/s1518-8787.2017051006808

14. Yang BY, Stone TE, Petrini MA, Morris DL. Incidence, type, related factors, and effectof workplace violence on mental health nurses: a cross-sectional survey. Arch Psychiatr Nurs. 2018;32(1):31-38. http://dx.doi.org/10.1016/j.apnu.2017.09.013

15. Rindi G, Klersy C, Albarello L, Baudin E, Bianchi A, Buchler MW. Competitive testing of the WHO 2010 versus the WHO 2017 grading of pancreatic neuroendocrine neoplasms: data from a large international cohort study. Neuroendocrinology. 2018;107(4):375-86. http://dx.doi.org/10.1159/000494355.

16. Ludwig-Beymer P. Violence in the workplace [editorial]. J Transcult Nurs. 2018;29(6):497. https://doi.org/10.1177/10436596188014O5

17. Shen X, Zou X, Zhong X, Yan J, Li L. Psychological stress of ICU nurses in the time of COVID-19. Crit Care. 2020;24(1):200. https://doi.org/10.1186/s13054-020-02926-2

18. Barrera M, Sandler IN, Ramsay TB. Preliminary development of a scale of social support: studies of college students. Am J Commun Psychol. 1981;9(4):435-47. http://dx.doi.org/10.1007/BF00918174

19. Deavin A, Greasley P, Dixon C. Children's perspectives on living with a sibling with a chronic illness. Pediatrics. 2018;142(2):e20174151. https://doi.org/10.1542/peds.2017-4151

20. Mao P, Cai P, Luo A, Huang P, Xie W. Burnout and related factors in organ donation coordinators: a cross-sectional study in China. Ann Transplant. 2018;23:647-53. http://dx.doi.org/10.12659/AOT.910409

21. Rapisarda V, Loreto C, Vitale E, Matera S, Ragusa R, Coco G, et al. Incidence of sharp and needlestick injuries and mucocutaneous blood exposure among healthcare workers. Future Microbiol. 2019;14:27-31. http://dx.doi.org/10.2217/fmb-2018-0239