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Hospital nurses' health and quality of life at work harms: a cross-sectional study

Danos à saúde e qualidade de vida no trabalho de enfermeiros hospitalares: um estudo transversal

Daños a la salud y calidad de vida en el trabajo por parte de las enfermeras del hospital: un estudio transversal

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ABSTRACT
Objective: to examine the association between health harm and quality of life in the work of hospital nurses. **Method:** this quantitative, descriptive, cross-sectional study, with 145 nurses, after approval by research ethics committee – protolcols 1.634.051 and 1.643.912. Descriptive statistics, bivariate analyses, chi-square test, odds ratio and confidence intervals were used. **Results:** the odds of nurses' quality of life at work being poor were found to be increased 2.31 times by work-related or -aggravated medicine consumption; 3.15 times by work-related or -aggravated sleep disorders; and 1.98 times by frequent work-related or -aggravated headache. **Conclusion:** working conditions impact on nurses' health and quality of life at work. Appropriate work environments favor personal and professional satisfaction and maintain the quality of the nurse's workforce.
Descriptors: Nursing; Disease; Quality of Life; Working Conditions; Occupational Health.

RESUMO
Objetivo: analisar a associação entre danos à saúde e qualidade de vida no trabalho de enfermeiros hospitalares. **Método:** estudo quantitativo, descritivo, transversal, com 145 enfermeiros, aprovado pela comissão de ética sob protocolos 1.634.051 e 1.643.912. Utilizaram-se estatísticas descritivas, análises bivariadas, teste qui-quadrado, cálculo da razão de chance e intervalos de confiança. **Resultados:** observou-se que o consumo de medicamentos provocado/agravado pelo trabalho aumentou em 2,31 vezes a chance de o enfermeiro ter baixa qualidade de vida no trabalho; transtornos do sono provocados/agravados pelo trabalho aumentou em 3,15 vezes a chance de ter baixa qualidade de vida no trabalho; cefaleia frequente provocada/agravada pelo trabalho aumentou a chance em 1,98 vezes de ter baixa qualidade de vida no trabalho. **Conclusão:** condições de trabalho impactam na saúde e qualidade de vida do trabalho do enfermeiro. Ambientes de trabalho adequados proporcionam satisfação pessoal e profissional, além de manterem a qualidade da força de trabalho do enfermeiro.
Descritores: Enfermagem; Doença; Qualidade de Vida; Condições de Trabalho; Saúde do Trabalhador.

RESUMEN
Objetivo: examinar la asociación entre daños a la salud y calidad de vida en el trabajo de enfermeras hospitalarias. **Método:** estudio cuantitativo, descriptivo, transversal, con 145 enfermeros, previa aprobación del comité de ética en investigación - protolcols 1.634.051 y 1.643.912. Se utilizó estadística descriptiva, análisis bivariados, prueba de chi-cuadrado, razón de probabilidades e intervalos de confianza. **Resultados:** se encontró que las probabilidades de que la calidad de vida de las enfermeras en el trabajo sea deficiente aumentaban 2,31 veces por el consumo de medicamentos relacionados con el trabajo o agravados; 3,15 veces por trastornos del sueño relacionados con el trabajo o agravados; y 1,98 veces por dolor de cabeza frecuente relacionado con el trabajo o agravado. **Conclusión:** las condiciones laborales repercuten en la salud y la calidad de vida de las enfermeras en el trabajo. Los entornos laborales adecuados favorecen la satisfacción personal y profesional y mantienen la calidad de la fuerza laboral de la enfermería.
Descriptores: Enfermería; Enfermidad; Calidad de Vida; Condiciones de Trabajo; Salud Laboral.

INTRODUCTION

Working conditions are understood as the physical, social and administrative factors related to the environment in which a worker performs his/her professional activity. Aware of the importance of studying nurse's working conditions and identifying such workers' precarious situation, the International Labor Organization (ILO) and the World Health Organization (WHO) have been studying the nursing profession[1].

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Nurses experience a hard work process that is physically and psychologically exhausting, with high demands and long working hours; they work in shifts, with work overload caused by the insufficient number of professionals to attend to overcrowded units. In addition, in such an environment, permeated by complex interpersonal relationships with the multiprofessional team, there is a lack of recognition and autonomy as well as devaluation of their professional category; there is daily coexistence with suffering, high performance demands from the teams and patient safety. These and other factors trigger occupational stress and cause harm to these professionals' physical and mental health[2].

Among the main outcomes associated with occupational stress, there are absenteeism, job dissatisfaction, occupational accidents, decreased quality of life, Burnout syndrome, cardiovascular problems and minor psychological disorders, in addition to impaired worker's performance, which has an impact on the quality of care provision[3].

Nowadays, nurses live with strenuous working hours, underemployment or two/multiple jobs, inadequate working conditions, lack of materials, inadequate staff sizing, a fragmented work process, increased level of complexity of patients/users, need for constant updating due to technological demands and the inexistence and/or ineffectiveness of public policies. These aspects expose workers to work intensification and precarization, which are factors that lead to illness and can substantially compromise the quality of the care provided. Therefore, work is configured as a web that brings a number of implications to workers, notably, illness. Diseases such as fatigue, low-back pain and injuries start to coexist with mental disorders: anxiety, depression, stress, Burnout and panic syndromes, which become part of workers' daily life[4].

Quality of work life (QWL) is directly related to individuals' satisfaction and well-being in the performance of their tasks, and it is essential for productivity and competitiveness, factors without which an organization would not survive in the market[5].

Many challenges are presented, which constitute essential actions in order to face the innumerable impacts that contemporaneity imposes on nurses. Among these, we highlight the strengthening of participation in class organizations aiming at the establishment of collective constructions that can benefit the profession; actively participating in the formulation and implementation of public policies aimed at workers' health and work regulation[4]. Thus, this study aims to analyze the association between damage to nurses' health and quality of work life.

METHOD

Quantitative, descriptive, cross-sectional study conducted at a University Hospital in Rio de Janeiro. It comprised nurses who had been working in low-, medium- and high-complexity care units at the institution for more than six months. The population consisted of 230 nurses. Information concerning the nursing staff was requested as regards: the total number of nurses, allocation, positions, types of employment contract (tenure track, outsourcing, residence). Also, information was obtained regarding the nursing staff members who were active, on vacation and on sick leaves. A sample calculation was performed with a 95% confidence level and a 5% margin of error. Thus, a sample of 145 nurses (63% of the staff) was achieved.

The same sample calculation was applied to each sector and work shift, reaching a number corresponding to 63% of nurses who should be interviewed by sector and shift, divided equally between day and night service. After approval of data collection by the Research Ethics Committees through reports number 1.634.051 and 1.643.912, the study was conducted with federal tenure-track nurses as well as with those under other types of employment contracts. Nurses in a nursing residency program were excluded from the study.

For data collection, a multidimensional questionnaire including the following modules was used: I) sociodemographic characteristics; II) measurement of health damage through an adapted instrument composed of a module with questions that assessed workers' self-perception of health damage, whether or not related to their work environment. The answer choices were distributed as follows: no damage; damage caused by work; damage aggravated by work; and damage unrelated to work[6]; III) To measure quality of work life, the short validated version of the Quality of Nursing Work Life (QNWL) instrument was used[7].

In the instrument, the concept of quality of work life is expressed by nurses' perception of satisfaction with work-related aspects considered important. The measure of quality of work life is based on the degrees of satisfaction and importance perceived by nurses in relation to different aspects of their hospital work. The original instrument consists of two questionnaires totaling 71 items[8].

Research Article
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The first evaluates the professionals' level of satisfaction with certain situations experienced at work, and the second, the degree of importance of each corresponding item on the satisfaction scale. The answer choices are distributed on a Likert-type scale with scores ranging from 1 (very dissatisfied/not at all important) to 5 (very satisfied/very important). The instrument also includes an answer choice, with zero value, which makes it possible to indicate when the situation portrayed in the item does not apply to the respondent. With this regard, QNWL assesses the following dimensions: institutional appreciation and recognition; working conditions, safety and pay; professional identity and image; and integration with the team.

The procedure for score assignment firstly required the score of satisfaction items to be recoded in order to centralize the zero on the scale. Such recoding was performed by subtracting the value 3 (three) from the scores attributed to each of the five levels of satisfaction, resulting in scores -2, -1, 0, +1 and +2, for the initial scores 1, 2, 3, 4 and 5, respectively; then, the recoded scores for each satisfaction item (from -2 to +2) were multiplied by the gross values of the scores assigned to the respective items of importance (from 1 to 5).

The total score was obtained by adding the weighted values of all items answered and dividing it by the total number of items answered. Up to that point, scores could range from -10 to +10. To eliminate negative scores in the final score, 10 was added to the values obtained, resulting in a possible variation from 0 to 20. The higher values indicated better quality of life in nurses' work. Briefly, the total score and for each dimension was calculated based on the recoded value algorithm of each satisfaction item (SAT) times the gross value of each item of importance (IMP) [(SAT x IMP) of each item ÷ number of items answered] + 10, with SAT = recoded value of each satisfaction item (-2 to +2) and IMP = gross value of each item of importance[7]. This procedure generated a continuous variable that was categorized based on the median values of the distribution. The reliability of QNWL was assessed using the Cronbach's Alpha coefficient[9]. To assess the level of stability of the answers, criteria suggested by Landis & Koch (1977) were adopted: below zero = poor; 0 to 0.20 = weak; 0.21 to 0.40 = probable; 0.41 to 0.60 = moderate; 0.61 to 0.80 = substantial and 0.81 to 1.00 = almost perfect.

On QNWL, the result of institutional appreciation and recognition showed a mean of 10 points (SD ± 3). Working conditions, safety and pay showed a mean of 7.5 (SD ± 2.9). Professional identity and image showed a mean of 11.6 (SD ± 3.0). Integration with the team showed a mean of 12.6 (SD ± 3.5). The Cronbach's Alpha values found demonstrated that factors "working conditions, safety and pay", "identity and professional image" and "integration with the team" had substantial internal consistency (between 0.61 and 0.80). However, factor "institutional appreciation and recognition" had almost perfect internal consistency[10].

Figure 1 shows the dimensions and cutoff points adopted, depending on the median, for classification of the study groups in relation to quality of work life when using the QNWL.

QNWL Dimensions	No. of items	Score variation	Mean (SD)	Cronbach's Alpha	Cutoff points	
					High QWL	Low QWT
Institutional appreciation and recognition	12	1.08-15.0	10.0 (3.0)	0.887	Scores>10.0	Scores≤10.0
Working conditions, safety and pay	10	0.0-16.8	7.5 (2.9)	0.801	Scores>7.6	Scores≤ 7.6
Professional identity and image	5	2.5-18.0	11.6 (3.0)	0.792	Scores>11.5	Scores≤11.5
Integration with the team	4	1.4-19.6	12.6 (3.5)	0.624	Scores>13.0	Scores≤13.0
QNWL global scale	31	1.71-14.61	9.8 (2.5)	0.924		

FIGURE 1: Dimensions and cutoff points adopted for classification of groups with high and low quality of work life, according to the QNWL. Rio de Janeiro, RJ, Brazil, 2018.

After they signed and Informed Consent Form (ICF), the nurses were interviewed by the researcher and three other research assistants who had been trained to apply the questionnaire. The questionnaires were self-administered.

The characterization of the sample in relation to sociodemographic and health-damage variables was based on descriptive statistics - mean and standard deviation, as well as gross and percentage values. The bivariate analyses used Pearson's chi-square test and the calculation of the odds ratio and its respective confidence intervals.

It is known that in cross-sectional studies, regression models that estimate the prevalence ratio (PR) are very efficient for estimating non-skewed point measures. However, it is known that PR tends to be overestimated in investigations whose outcome has a high prevalence in the studied group. Thus, the odds-ratio was used as a method

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of analysis in this study of health-related outcomes. Due to population size, it was not possible to proceed with multivariate analyses - as is the case of logistic regression.

The results obtained in the logistic regression would lose accuracy and compromise data interpretation. For processing quantitative data, the Statistical Package for the Social Sciences (SPSS) software, version 23, was used.

The study was developed according to the guidelines provided by Resolution number 466/2012 by the National Health Council, which concerns research involving human beings[11].

RESULTS

Sample consisting of 145 nurses with a mean age of 44 years (standard deviation - SD ± 10.8), 82% were females, 57.3% were married, and 96.6% had post-graduation certificates (69.4%) or degrees (27.6%). Regarding occupational variables, the mean length of employment in the hospital was 15 years (SD ± 12.1). The mean weekly working hours were 45.2 hours (SD ± 14.5). Of the participants, 51% worked in more than one institution, 86.2% were federal civil servants, 54.8% were working on the day shift, and 75.9% worked 30 hours per week. As for their wages according to the national minimum wage (MW), 41.4% earned from 6 to 8 MWs. Regarding their allocation sector, most of the sample (63.4%) was allocated in low-complexity sectors, and 36.6% were divided between medium- and high-complexity sectors.

Table 1 shows the health problems self-reported by nurses. For the purpose of describing the results, the variables related to health damage were categorized into three answer levels: “not present”, “caused/aggravated by work” and “unrelated to work”.

Table 1: Characterization of the studied group according to the health damage self-reported by nurses and the perception of its relationship with work (n = 145). Rio de Janeiro, RJ, Brazil, 2018.

Diseases and symptoms investigated	Self-reported health damage		
	Not present	Caused/ aggravated by work	Unrelated to work
	n(%)	n(%)	n(%)
Injury from accidents	96 (66.2)	46 (31.7)	3 (2.1)
Infectious diseases	105 (72.4)	37 (25.5)	3 (2.1)
Frequent medication use	95 (65.5)	44 (30.3)	4 (4.1)
Nervous system problems	89 (61.4)	54 (37.2)	2 (1.4)
Stress	22 (15.2)	120 (82.8)	3 (2.1)
Depression	100 (69.0)	41 (28.3)	4 (2.8)
Aggression or violent behavior	104 (71.7)	38 (26.2)	3 (2.1)
Sleep disorders	57 (39.3)	83 (57.2)	5 (3.4)
Mood swings/behavior changes	56 (38.6)	84 (57.9)	5 (3.4)
Alcoholism and other drug use	137 (94.5)	8 (5.5)	-
Frequent headache	71 (49.0)	63 (43.4)	11(7.6)
Hearing Loss	12 (82.8)	16 (11.0)	9 (6.2)
Eye problems	84 (57.8)	36 (4.8)	25 (17.2)
Heart disease	125 (86.2)	14 (9.7)	6 (4.1)
High blood pressure	97 (66.9)	39 (26.9)	9 (6.2)
Varicose veins	46 (31.7)	92 (63.4)	7 (4.8)
Kidney disease	130 (89.7)	10 (6.9)	5 (3.4)
Breathing problems	107 (73.8)	32 (22.1)	6 (4.1)
Skin diseases	115 (79.3)	28 (19.3)	2 (1.4)
Digestive problems	98 (67.6)	42 (29.0)	5 (3.4)
Liver diseases	129 (89.0)	12 (8.3)	4 (2.8)
Muscle fatigue	63 (43.4)	80 (55.2)	2 (1.4)
Joint problems	77 (53.1)	67 (46.2)	1 (0.7)
Spinal injuries	72 (49.7)	70 (48.3)	3 (2.1)
Backache	44 (30.3)	98 (67.6)	3 (2.1)
Poisoning by metals or chemicals	132 (91)	13 (9)	-
Cancer	137 (94.5)	5 (3.4)	3 (2.1)
Disorders related to the menstrual cycle	116 (80.0)	20 (13.8)	9 (6.2)
Pregnancy or reproductive organ disorders	131 (90.3)	12 (8.3)	2 (1.4)
Frequent sick leaves	113 (77.9)	31 (21.4)	1(0.7)
Work change/transfer due to illness	120 (82.8)	24 (16.6)	1 (0.7)

Research Article
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With regard to the health damages reported by the participants that were caused and/or aggravated by work activities, (30.3%) frequent use of medicines; (37.2%) nervous system problems; (82.8%) chronic stress, (28.3%) aggression or violent behavior; (57.9%) mood swings/behavior changes; (57.2%) sleep disorders; (43.4%) frequent headache; (63.4%) varicose veins, (55.2%) muscle fatigue; (46.2%) joint problems; (48.3%) spinal injuries; (67.6%) low-back pain; (21.4%) frequent leaves due to illness were noteworthy.

Table 2 shows the associations between the health damages self-reported by nurses, related to their work and quality of work life.

Table 2: Association between self-reported health damages related to nurses' work and quality of work life based on the odds ratio (OR) and its respective confidence intervals (95% CI) and the chi-square test (n=145). Rio de Janeiro, RJ, 2018.

Health damages	Poor Quality of Work Life		
	n (%)	OR (CI 95%)	*p*
Injury from accidents			
Not reported	42 (44.7)	1.0	
Yes, caused/aggravated	29 (60.4)	1.89 (0.93-3.83)	0.076
Nervous system problems			
Not reported	40 (49.0)	1.0	
Yes, caused/aggravated	31 (56.4)	1.52 (0.77-2.99)	0.228
Medication use			
Not reported	42 (44.7)	1.0	
Yes, caused/aggravated	28 (65.1)	2.31 (1.10-4.88)	0.026
Stress			
Not reported	10 (45.5)	1.0	
Yes, caused/aggravated	61 (50.8)	1.24 (0.50-3.09)	0.643
Sleep disorders			
Not reported	19 (33.3)	1.0	
Yes, caused/aggravated	52 (61.2)	3.15 (1.56-6.36)	0.001
Mood swings			
Not reported	24 (43.6)	1.0	
Yes, caused/aggravated	47 (54.0)	1.52 (0.77-2.99)	0.228
Depression			
Not reported	45 (45.9)	1.0	
Yes, caused/aggravated	25 (62.5)	1.96 (0.924.17)	0.077
Frequent headache			
Not reported	42 (58.3)	1.0	
Yes, caused/aggravated	29 (41,4)	1.98 (1.02-2.86)	0.044
Varicose veins			
Not reported	23 (50.0)	1.0	
Yes, caused/aggravated	45 (50.0)	1.00 (0.50-2.02)	0.999
Muscle fatigue			
Not reported	40 (51.3)	1.0	
Yes, caused/aggravated	31 (50.0)	1.05 (0.54-2.05)	0.880
Joint problems			
Not reported	33 (50.8)	1.0	
Yes, caused/aggravated	38 (50.0)	1.03 (0.53-2.00)	0.927
Spinal injuries			
Not reported	39 (54.9)	1.0	
Yes, caused/aggravated	32 (45.1)	0.67 (0.35-1.30)	0.240
Backache			
Not reported	22 (50.0)	1.0	
Yes, caused/aggravated	49 (51.6)	1.07 (0.52-2.18)	0.862

For the results in Table 2, the frequency of damages shown in more than 30% of the answers was used, as well as the damages that most affected nurses, as corroborated in the literature. In the association between self-reported health damages related to nurses' work and their quality of work life, it was noticed that medication use

Research Article
Artigo de Pesquisa
Artículo de Investigación

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caused/aggravated by work increased the chance of nurses' having low quality of work life by 2.31-fold. Regarding sleep disorders caused/aggravated by work, these increased the chance of their having low quality of work life by 3.15-fold, and frequent headaches caused/aggravated by work increased their chance of having low quality of work life by 1.98-fold.

DISCUSSION

Hospital and nursing work in particular have been greatly influenced by neoliberal and globalized policies, leading to the precarization of working conditions and relationships, which are detrimental to this scenario and to the quality of the care provided. Thus, professionals must better understand the process they are going through in order to equip themselves and claim better working and health conditions[12].

It should be noted that in the institution where the study was conducted, structural problems culminated in an unprecedented crisis. The hospital is linked to the Ministry of Education and Health and provides services to the Unified Health System (SUS). However, the funds allocated to the hospital are out of date and the debts have accumulated, which has led to precarious conditions of the unit's operation.

Nursing, as any other health profession, involves several risk factors, which are aggravated in the work carried out in hospitals, since such places are characterized as unhealthy. The recognition of risks at work involves several procedures to identify the factors and/or conditions/situations that pose potential for harm. Thus, assessing the risk "means estimating the probability of damage to occur and its severity". It is also noted that in health institutions, due to lack of knowledge or to not identifying some risk situations, workers develops actions without due protection, which may favor the occurrence of occupational accidents, occupational diseases or health problems[13].

The results in this study corroborate what the literature reports as regards the physical and emotional wear and tear that people may suffer in the work environment and relationships resulting in the onset of diseases, in which psychological adaptive behaviors as a coping mechanism are weakened[14].

The physical and social environment of hospital work is seen as painful, dangerous and unhealthy, and the illness profile among workers who perform their activities there is still vaguely known by institutional managers and public agencies. Also, there is a lot to be researched about health problems resulting from work overload, the effort required to carry out activities and inadequate working conditions that generate financial costs paid by social security. With this regard, the fact that the State and its citizens bear a burden that belongs to institutions, which, in their turn, make their workers sick, is undoubtedly an ethical and political issue to be discussed[15].

In the present study, it was shown that medication use increases the chance of nurses' bad quality of life by 2.31-fold, and sleep disorders increase such chance by 3.15-fold. Shift work and night work are job stressors, considering that the night shift leads to a lack of sleep and that professionals invariably resort to medication use to stay awake and/or to be able to rest, since they work double and triple shifts. It is noteworthy that the lack of sleep also causes vigilance problems that may be detrimental to patients, as it causes fatigue, mood disorders, as well as social isolation, family and social problems.

In order to feel comfortable in the face of physical or psychological disorders, nurses resort to the use of drug therapies, mainly using self-medication. In particular, the use of psychoactive substances is part of the daily life of nursing workers. According to the Brazilian Observatory on Drug Information (OBID), psychoactive drugs (also called psychotropics) are substances capable of acting on the central nervous system, depressing it (such as alcohol, barbiturates, benzodiazepines and opiates), stimulating it (such as amphetamines, cocaine and tobacco) or disturbing it (such as marijuana, hallucinogens, anticholinergics). In addition to therapeutic use, these substances are usually used to increase the feeling of well-being, without a medical prescription. In view of the above, attention should be paid to the effects resulting from the use of these substances, which may involve mental, physical and behavior changes, bringing risks to both the people who use them and those who live with them, as well as interfering directly in workers' health and quality of life[16].

Work-related musculoskeletal disorders (WMSDs) comprehend a heterogeneous group of disorders of the musculoskeletal system caused by a chronic process developed by activities performed during work activity. These activities affect muscles, tendons, joints, nerves and ligaments, presenting a varied clinical picture, including complaints of pain, tingling, numbness, weight and early fatigue. It is one of the most frequent and most expensive problems among nursing professionals, contributing significantly to disability and absence from work. Among health professions, nurses have been the most affected, since such workers carry out activities in different places,

Research Article
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among which are hospitals. Nurses perform such activities on a continuous basis, and they require constant attention and physical effort. It is repetitive work that demands physical effort, weight lifting (overweight or obese patients), inadequate postures necessary during care provision and the lack of architectural adequacy in the workplace, which, in association with mental stressors, are risk factors for the occurrence of such disorders. Work-related musculoskeletal disorders are not caused by just any repetitive effort. Their causes go beyond physical symptoms, as they involve work organization, interpersonal difficulties, as well as ergonomic factors intrinsic to the work environment[17].

This study showed that frequent headache caused/aggravated by work increases nurses' chance of having low quality of work life by 1.98-fold. According to the World Health Organization (WHO), headaches are relevant complaints in the population, often making people incapable of performing in their daily occupations. Many of the individuals who suffer less severe headaches do not seek medical care, and those who suffer from frequent headaches or crises do not always have access to health care services, thus becoming an unsolved problem in the health system. A study identified the frequency of headache in hospital employees in a city in the western region II of Goiás state and showed that the professionals who most often had headache were nurses (27%), and that the frequency of headache among nurses was 83.3%. One explanation for this episode was that such workers were exposed to continuous stress, with an excessive workload, resulting in few hours of sleep[18].

The conditions provided for health care work to be developed contribute to the "quality of service and professionals' performance". In addition, such workers' physical and mental overloads are related. Attention, safety in the execution of techniques and constant care can generate psychological and emotional stress for professionals and, consequently, lead to occupational injuries and illnesses[13].

The implementation of preventive measures in the work environment and permanent education would be good strategies to minimize the development and the consequences of these disorders and, consequently, reduce these professionals' leaves of absence from work. Encouraging regular exercise and managing risk factors through ergonomic interventions would also be actions that could help improve symptoms[17].

Study limitations

The limits to the study are related to the fact that the investigation was conducted on a specific sample and at a single federal public health institution. Thus, studies on nurses' quality of work life should be encouraged in the various care provision and academic settings.

CONCLUSION

The occurrence of damage to nurse's health deserves a deep discussion considering its severity and negative outcomes to nurses' quality of work life. Unhealthy work environments favor these professionals' mental and physical illness. Nurses' quality of work life is assessed according to the fulfillment of personal and professional needs. The impact of working conditions on nurses' quality of work life deserves attention, as it is known that adequate work environments provide personal and professional satisfaction, in addition to maintaining the excellence of nurse's workforce.

As contributions, this study allows the advancement of scientific knowledge by identifying damages to nurses' health related to their work practice and how such damages can negatively affect these professionals quality of work life.

The collection of these data can provide the planning of actions that will contribute to healthier work environments, thus encouraging a new practice in nurses' daily work in hospitals, as well as in other health care and teaching organizations.

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