



Journal of Nursing

Revista de Enfermagem

UFPE On Line

ISSN: 1981-8963

ORIGINAL ARTICLE

PREVALENCE AND CHARACTERISTICS OF (IN) ABILITY TO WORK FROM WORKERS OF NURSING

PREVALÊNCIA E CARACTERÍSTICAS DA (IN) CAPACIDADE PARA O TRABALHO DE TRABALHADORES DE ENFERMAGEM

PREVALENCIA Y CARACTERÍSTICAS DE (IN) CAPACIDAD PARA EL TRABAJO DE TRABAJADORES DE ENFERMERÍA

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ABSTRACT

Objective: to determine the prevalence and characteristics of reduced work ability among nursing workers. **Method:** cross sectional study involving 498 workers at the University Hospital of Santa Maria / RS / Brazil. The data were collected with self-administered questionnaire and the analysis was descriptive. We used the Brazilian version of the Index of Work Ability. The research project was approved by the Ethics in Research, CAAE: 0070.0.243.000-09. **Results:** workers, 28.9% were nurses, 44.6%, nursing technicians, and 26.5%, nursing assistants. The prevalence of reduced capacity to work was 43.3%. The most common diseases diagnosed in the past 12 months were musculoskeletal pain (27.5%), and neck (22.9%), respiratory diseases, recurrent infections (26.4%), sinusitis (21%), varices (30.2%), mild emotional disturbance (28%) and hypertension (16.1%). **Conclusion:** it is necessary preventive and health promotion, to promote / restore the ability to work. **Descriptors:** Nursing; Occupational Health; Work Capacity Evaluation; Working Conditions.

RESUMO

Objetivo: verificar a prevalência e as características de redução da capacidade para o trabalho entre os trabalhadores de enfermagem. **Método:** estudo transversal, envolvendo 498 trabalhadores do Hospital Universitário de Santa Maria/RS/Brasil. A coleta de dados ocorreu com questionário autoaplicável e a análise foi descritiva. Utilizou-se a versão brasileira do questionário Índice de Capacidade para o Trabalho. O projeto de pesquisa foi aprovado pelo Comitê de Ética em Pesquisa, CAAE: 0070.0.243.000-09. **Resultados:** dos trabalhadores, 28,9% eram enfermeiros; 44,6%, técnicos de enfermagem; e 26,5%, auxiliares de enfermagem. A prevalência de redução da capacidade para trabalho foi 43,3%. As doenças diagnosticadas mais frequentes, nos últimos 12 meses, foram musculoesquelética, dor nas costas (27,5%), e pescoço (22,9%); as respiratórias, infecções repetidas (26,4%), sinusite (21%); varizes (30,2%); distúrbio emocional leve (28%) e hipertensão arterial (16,1%). **Conclusão:** faz-se necessárias medidas preventivas e promoção à saúde, para promover/restaurar a capacidade para o trabalho. **Descritores:** Enfermagem; Saúde do Trabalhador; Avaliação da Capacidade de Trabalho; Condições de Trabalho.

RESUMEN

Objetivo: determinar la prevalencia y las características de la reducción de la capacidad de trabajo de los trabajadores de enfermería. **Método:** estudio transversal que implica 498 trabajadores del Hospital Universitario de Santa Maria/RS/Brasil. Los datos se recogieron con cuestionario autoadministrado y el análisis fue descriptivo. Se utilizó la versión brasilera del Índice de Capacidad para el Trabajo. El proyecto de investigación fue aprobado por el Comité de Ética en Investigación, CAAE: 0070.0.243.000-09. **Resultados:** los trabajadores, el 28,9% eran enfermeras, el 44,6%, los técnicos de enfermería, y el 26,5%, los auxiliares de enfermería. La prevalencia de la reducida capacidad de trabajo fue de 43,3%. Las enfermedades más comunes diagnosticados en los últimos 12 meses fueron: dolor musculoesquelético (27,5%) y cuello (22,9%), las enfermedades respiratorias, las infecciones recurrentes (26,4%), sinusitis (21%), varices (30,2%), trastornos emocionales leves (28%) y la hipertensión (16,1%). **Conclusión:** es necesario preventiva y promoción de la salud, promover/restaurar la capacidad de trabajo. **Descriptores:** Enfermería; Salud Ocupacional; Evaluación de la Capacidad de Trabajo; Las Condiciones de Trabajo.

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INTRODUCTION

Throughout history, many changes occurred in the workplace. Initially, it was seen as difficult and painful activity, practiced by people from disadvantaged social conditions. Contemporaneously, occupies a prominent place and centrality in the lives of many individuals¹ and, depending on the input mode/maintenance of these spaces in labor, contributes decisively to specific forms of wellness or illness, disability and death.

Health and disease are dynamic processes, closely articulated with the modes of production development of mankind at any given historical time.¹ In this sense, the poor working conditions directly affect the health of workers, may cause negative effect on the individual, discouraging the in carrying out its tasks, causing feelings of loneliness, helplessness, despair. Such a situation may lessen your ability to work, which is defined as how well the worker is and how he is able to perform his job, according to the labor demands of their health and their physical resources and mental.²

In early 1980, a group of researchers from the Finnish Institute of Occupational Health has developed a methodology known as Index Work Ability (ICT).² This index was widespread and is currently used in several countries for care services health workers. The ICT assesses the worker's ability to perform their job, and can predict the risk of failure in the near future.² For help in early identification of situations of loss of work capacity, and also aid in disease prevention, maintenance of health workers and improving the quality of life at work,³ the authors recommend that reapplied periodically to monitor the progress worker health.

The ICT can be used to monitor individual, groups or sectors, allowing to identify which factors (environment, demand, number of employees, etc.) are affecting more physical and mental health workers, to thus take up measures providing better working conditions for professionals and increase their ability to work.

In this context, this study justifies its relevance when considering that nursing is influenced by working conditions, highlighting the environment (away materials, position and height of the furniture, positions for achievements procedures, among others), the high demand and complexity of the activities, the constant state of alert and shortage of staff, job stress, and factors affecting the ability to work. Still, to understand how nursing workers perceive their ability to work,

can provide concrete evidence for the planning of maintenance programs and improved capacity for these professionals.

This study aims to determine the prevalence and characteristics of reduced work ability among nursing workers.

METHOD

Study extracted Labor Course Conclusion << **Working conditions, musculoskeletal pain and Capability Index for team work** >> Nursing, Federal University of Santa Maria / UFSM. Santa Maria-RS, Brazil. 2009.

Cross-sectional epidemiological study, with all 592 nursing staff (nurses, technicians and nursing assistants) from the University Hospital of Santa Maria/RS (HUSM). Inclusion criteria were considered: nursing workers gazetted and developed its activities in HUSM. We excluded those who were on leave, sick leave and vacation during the collection period. In the recruitment of workers to participate in the research were losses denials, and not meet the criteria established which resulted in a study population comprised 498 workers.

The questionnaire contained questions to assess the ability to work through the Index of Work Ability, translated and adapted to Portuguese.² The ICT is calculated based on the workers' responses to questions related to work demands, health status, physical, mental and social. In it, it is the perception of the worker about your health problem, previous diseases diagnosed by a physician or licensed to health care.

The ICT questionnaire consists of seven items whose sum of the points assigned to each of them defines the total score of ICT. Each item has a specific number of questions that provide answers to different.² The scores from the value of the questions for each item; one obtains a range of possible outcomes from 7 to 49 points. Within this range, the score can be classified into four different categories, 7-27 points: low capacity for work; 28-36: moderate capacity; 37-43: good capacity, and 44-49: great capacity.²

Data collection occurred from September to December 2009, through self-administered questionnaire conducted by 22 research assistants' certificates (nursing students, master students and nurses). The recruitment and participation of workers in the survey occurred during the actual shift (morning, afternoon and evening). After consent and signing the Informed Consent Form (ICF), the questionnaires were delivered and collected on the same day during working hours.

To insert the data used the program EpilInfo® version 6.4, by double entry independently. After checking for errors and inconsistencies, data analysis was performed using the PASW Statistics (Predictive Analytics Software from SPSS Inc., Chicago - USA) version 18.0 for Windows.

We conducted a descriptive analysis of the variables presented as mean, median, standard deviation and absolute numbers and percentages. The prevalence of reduced capacity for work has been verified from the dichotomy classifications of ICT: "reduced capacity" (low and moderate capacity) and "good / great ability."

The research project was approved by the Ethics Committee of the Federal University of Santa Maria - UFSM / RS (CAAE. 0070.0.243.000-09), Case No. 23081.005535/2009-19 in June 2009.

RESULTS AND DISCUSSION

Of the total population (N = 634), 42 nursing staff performed their functions in other organs of the university (Veterinary Hospital Dental Service) or were on clearance at the time of data collection. So, were eligible for the study 592 workers. Of these, 498 employees responded to the instrument (84%). Losses (16%, N = 94) resulted in refusals to participate in the research.

Demographic profile and labor of nursing: Predominance of female workers (87.8%), aged between 47 and 69 years (32.7%), married or living with a partner (69.3%), who had four dependents (26.5%), and had a family income per capita of two minimum wages (28.5%). Workers, 28.9% were nurses, and there were 44.6% of nursing staff and 26.5% of nursing; 37.6% worked in night shifts (30 hours per week) and 62.4% met a load schedule of 36 hours per week.

Assessment of capacity for work of nursing: The characterization of the capacity for work of the nursing team will be presented with the HUSM is based on the issues that make up the ICT.²

The current work ability was measured by the statement: "Suppose your best ability to work has a value of 10 points." After, they were asked to tick off a worker with an X on a scale of zero to 10, a score he would give to his ability to work today. The score had a higher frequency of response was 8 points (31.7%). The average score was 7.99 (± 1.44), indicating a good ability to work. National literature, is also predominantly higher percentage of workers with good work ability.³⁻⁶

Regarding the current capacity for work in relation to the physical demands of work, it was observed that the nursing staff reported a good capacity (44.4%), followed by moderate capacity (33.5%). The reference low to very low current capacity was observed for 7.2% of workers. Another study with nursing staff in the emergency room, found in this regard that all workers with very good response and good ICT had good / great (84.6%).⁴

Among the workers surveyed, the current capacity of work in relation to the mental demands was that with good (58.2%), followed by very good (24.7%). The reference low to very low capacity was observed for 2% of workers.

Despite the physical and mental fatigue caused by the nursing work, it was found that a considerable portion of workers reported good or very good work ability in relation to these requirements (physical and mental), which seems to show that daily activities although stressful, afforded satisfaction to professionals, which can minimize such workloads.

Diseases diagnosed by a physician in the last year and reported by the nursing staff, the highlight of musculoskeletal origin, especially back pain (27.5%) and neck pain (22.9%), the origin of respiratory, repeated infections (26.4) and sinusitis (21%), varices (30.2%), mild emotional disturbance (28%) and hypertension (16.1%). Among the diseases referred to as "my opinion", there are also the largest percentage of musculoskeletal origin, in mild emotional disturbances (33%) and varicose veins (33.4%), and obesity (17.6%), decreased hearing (13.9%) and gastritis (11.3%).

It is noted in other national studies that evaluated the ICT that the diagnoses reported were the varices and emotional disorders.^{4-5,7} relating these affections to shift work and the workload, which become heavy, both physically and emotionally.

The musculoskeletal work-related, in which Brazil became known as Repetitive Strain Injury (RSI) and / or Work-Related Musculoskeletal Disorders (MSDs) are a major group of health problems among the occupational diseases in our country. In Brazil, according to the National Institute of Social Security (INSS), these conditions are the second leading cause of illness at work, causing pain, disability, and long periods of removal benefits and compensation.⁸ In Rio Grande do Sul, in 2009, of injuries related to the work reported in the Information System on Occupational Health (SIST / RS), the DORT

/ RSI and mental disorders have the highest percentage: 55.1% and 9.3%, respectively.⁹

Results of studies on medical diagnoses of musculoskeletal disorders and its relation to ICT vary according to the profession of

workers surveyed, but the emotional disorders occupy a significant position among all workers, regardless of profession, job or position occupied.^{4,7}

Table 1. Frequency of estimated loss of work ability due to the presence of disease in the nursing staff of the University Hospital of Santa Maria. Santa Maria / RS. Sep / Dec 2009.

Estimated loss of ability to work	n	%
I am totally incapacitated for work.	2	0,4
Because of my illness, I am able to work only part-time.	19	3,8
Often I need to reduce my work rate or change my methods.	19	3,8
Sometimes I need to reduce my work rate or change my methods.	193	38,8
I am able to do my work, but it causes me some symptoms.	122	24,5
There are no impediments.	143	28,8
Total	498	100

Regarding the loss of capacity to work due to illness or injury, 38.8% of employees responded that they had, for some time, needed to slow down or change their working methods, followed by 28.8% of those not had impairments and 24.5% who were able to do their job, even showing some symptoms.

In research that found high prevalence of musculoskeletal disorders in the group with reduced capacity for work, it was found that people with musculoskeletal disorders suffer in their daily work routine due to discomfort and pain that are caused in certain procedures. These symptoms may be one reason for the slowdown in work.³

Pain and musculoskeletal discomfort are examples of the consequences of excessive workloads and inadequate because these are symptoms that may be related to the type of occupation / job function and work

environment (environmental conditions of labor, materials, procedures).

It is noteworthy that the signs of musculoskeletal disorders usually are not visible to other team members, and often the worker involvement did not stop doing their work, while not being able to accomplish it. Study that evaluated the anguish of nursing workers who fall sick DORT10 showed that there is a resistance to absence from work not only by medical professionals, but the workers themselves who live with MSDs. Identified that, when there is a worsening of the disease and the requirement for absence from work, settles the workers a sense of failure because they would be impossible to return to the practice of their profession again.

Table 2. Distribution of nursing as the number of days of absence from work due to health problem, medical appointments or to take over the last 12 months. Santa Maria / RS. Sep / Dec 2009.

Days away from Work	n	%
100 to 365 days	20	4,0
25 to 99 days	40	8,0
10 to 24 days	51	10,2
Until 9 days	125	25,1
None	262	52,6
Total	498	100,0

The need for removal from work due to health problems, 52.6% of workers in this study indicated that there was no need for the day off work, and 25.1% had to stay away from work until nine days. When considering these results in comparison with other studies,³⁻⁴ there is a small deviation to plus or minus the percentage. However, convergence is that the smaller the number of days of work, the better the classification of ICT.

When considering the current health status, 74.1% of workers considered that a period of two years would be quite likely that they could develop their activities, 23.5% said they were not very sure. Higher percentage

(83.3%) was found in another study of nursing staff in the emergency ward of a university hospital.⁴

With regard to feel satisfied with the activities daily, 58.6% of workers said they often felt satisfied, followed by 27.3% who always felt satisfied, and 13.3% sometimes. Satisfaction for the work appears associated with ICT in the study on the relationship between satisfaction, psychosocial aspects of work and health of workers.¹¹ The authors note that the ability to work is a precondition for a satisfactory general health condition. If the employee has an ICT excellent / good, he probably does not feel pain or any physical or

mental discomfort in performing their work, obtaining satisfaction in performing their tasks.

In a study that identified the strength of the associations of job satisfaction with health, showed that they remained independent of sociodemographic and functional, emphasizing the importance of psychosocial factors at work in relation to health, the mental health aspects and capacity for work.¹¹ Still, a study on the factors of motivation and job dissatisfaction of nurses notes that working conditions were among the factors that brought greater degree of dissatisfaction in their current job.¹²

When questioned as to feel active and alert at work, 58.6% of employees responded that almost always, 27.3% always, and 13.3% sometimes. How to feel hopeful for the future, 40.4% of them reported being almost

always hopeful; 39.4% always, and 16.7%, sometimes hopeful. In a pesquisa⁶ that related to optimism for the future ICT, 100% of those who never felt optimistic for the future ICT had low or moderate and 67% of those who had felt optimistic ICT good or excellent, showing significant difference among the groups.

From the workers' responses to the issues described above there were verified ICT workers HUSM nursing, which is presented in Table 3.

Table 3. Distribution of nursing at University Hospital as the Index Work Ability (ICT). Santa Maria / RS. Sep / Dec 2009.

ICT	n	%
Low capacity	29	5,7
Moderate capacity	187	37,6
Good capacity	206	41,4
Great capacity	76	15,3
Total	498	100,0

According to the score received on the issues in ICT, 41.4% of workers were classified with good work ability. These results corroborate other studies on the rate of capacity for work, in which the percentages ranged from 41,8 to 80,0%^{3-4,13} for good capacity.

However, by grouping the ratings low and moderate capacity, there is a percentage of 43.3% of workers with reduced work ability. This is very important because it suggests that almost half of the employees of the research institution were not fully able to perform their activities. Support measures directed at these workers should be implemented, because many of them are likely to become unable to work in a few years.² Among them, there is a reorganization of the distribution of work activities according to each professional category and incentive to conduct research and applying the results of same to bring practice and professional work situation.¹⁴

The value found in the ICT refers to the concept of the worker himself on his ability to work and allows more accurately identify the measures to be taken according to each score. Measures range from restoring the ability to work in lower scores, to maintain the ability to work in the case of the best scores.

CONCLUSION

In this study it was possible to verify that the share of workers (56.7%) with good / excellent work ability measures should be instituted to maintain this capability. Conversely, the others (43.3%) workers with reduced work capacity are necessary restoration measures this capacity. Such measures involve: the identification of risks related to work, the organization and its environment; possibilities casters, job changes, shifts, as well as other individual possibilities must be considered.

The results of this study indicate the need for the institution, revaluation and constant improvement of working conditions, as well as employ the periodic review of the health and work ability of workers. Accordingly, the ICT has been shown as an important tool for the adoption of measures that promote better health and less illness at work.

Thus, the intent of this study was to provide information to workers and to the institution to be adopted the necessary measures to promote the health and well-being in order to give the employee a level of work ability between good and optimal. In this context, the data information regarding the morbidity profile of workers, and reduced

work capacity, is critical to the development of health promotion, protection and recovery worker health.

The epidemiological survey, despite the limitations inherent in cross-sectional studies (not possible to relate cause and effect), allowed the initial exploration of issues surrounding the reduction of capacity for work, and evidence points to the relevance of the problem among nursing staff. We emphasize the importance of active participation and collective worker demands for change in working conditions, rethinking the traditional models of organization, in order to create conditions for a flexible work process.

It is understood that larger follow-up studies on the ability to work in this population is critical to the pursuit of measures that will improve their working conditions and consequently the quality of life for us.

ACKNOWLEDGMENTS

To the Federal University of Santa Maria (UFSM) and the Research Foundation of Rio Grande do Sul (FAPERGS), the support FIFE Layette (Initiation Scholarship) and Aid Newly Doctor, respectively.

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Submission: 2012/05/16

Accepted: 2013/06/04

Publishing: 2013/08/01

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