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EVALUATION OF THE WORK ABILITY: NURSING CARE STRATEGY AVALIAÇÃO DA CAPACIDADE PARA O TRABALHO: ESTRATÉGIA DE CUIDADO PARA ENFERMAGEM

EVALUACIÓN DE LA CAPACIDAD PARA EL TRABAJO: ESTRATÉGIA DE CUIDADO PARA ENFERMERÍA Patricia Santos Vieira Moreira¹, Zenith Rosa Silvino², Elaine Antunes Cortez³

ABSTRACT

Objective: to evaluate the ability for work of the nursing staff. **Method:** descriptive and exploratory study, of quantitative approach, with 131 employees of a university hospital in Niterói/RJ/Brazil, in the period from February to April 2013. The data were collected with the questionnaire Index of Ability to Work (ICT) and the data was analyzed in the SAS® 9.1 software (9.01.01M3P020206) and presented in tables. The research project has been approved by the Ethics Committee in Research, CAAE n° 11069612.1.0000.5243. **Results:** there was a predominance of women (71.0%); technicians (55.7%); married (46.6%); with an average age of 43 years old and ICT, in the range of 36 to 50 years old, from 37.84 points. **Conclusion:** the results indicate for relevance of studies about preservation strategies to the ability to work, since the ICT average was at the limit between good and moderate. **Descriptors:** Assessment of Working Ability; Nursing Staff; Worker's Health.

RESUMO

Objetivo: avaliar a capacidade para o trabalho da equipe de enfermagem. *Método*: estudo descritivo e exploratório, de abordagem quantitativa, com 131 trabalhadores de um hospital universitário de Niterói/RJ/Brasil, no período de fevereiro a abril de 2013. A coleta de dados foi realizada com o questionário Índice de Capacidade para o Trabalho (ICT) e os dados analisados no software SAS® 9.1(9.01.01M3P020206) e apresentados em tabelas. O projeto de pesquisa foi aprovado pelo Comitê de Ética em Pesquisa, CAAE nº 11069612.1.0000.5243. *Resultados*: houve a predominância de mulheres (71,0%); técnicos (55,7%); casados (46,6%); com média de idade de 43 anos e de ICT, na faixa de 36 a 50 anos, de 37,84 pontos. *Conclusão*: os resultados sinalizam para relevância de estudos sobre estratégias de preservação da capacidade para o trabalho, visto que a média do ICT mostrou-se no limite entre boa e moderada. *Descritores*: Avaliação da Capacidade de Trabalho; Equipe de Enfermagem; Saúde do Trabalhador.

RESIIMEN

Objetivo: evaluar la capacidad para el trabajo del equipo de enfermería. Método: estudio descriptivo y exploratorio, de enfoque cuantitativo, con 131 trabajadores de un hospital universitario de Niterói/RJ/Brasil, en el período de febrero a abril de 2013. La recolección de datos fue realizada con el cuestionario Índice de Capacidad para el Trabajo (ICT) y los datos analizados en el software SAS® 9.1 (9.01.01M3P020206) y presentados en tablas. El proyecto de investigación fue aprobado por el Comité de Ética en Investigación, CAAE número 11069612.1.0000.5243. Resultados: hubo predominancia de mujeres (71,0%); técnicos (55,7%); casados (46,6%); con media de edad de 43 años y de ICT, en la faja de 36 a 50 años, de 37,84 puntos. Conclusión: los resultados señalan la relevancia de estudios sobre estrategias de preservación de la capacidad para el trabajo, ya que la media del ICT se mostró en el límite entre buena y moderada. Descriptores: Evaluación de la Capacidad de Trabajo; Equipo de Enfermería; Salud del Trabajador.

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Evaluation of the work ability: nursing...

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INTRODUCTION

The World Health Organization (WHO) has shown concern about ageing at work and, affirming that the changes in several systems of the human body lead to a gradual diminution of the effectiveness of them. This process generates an impairment of functional ability of individuals and may bring conflicts with the work's demands.¹

Considering the longer the time that the worker is exposed to the work's demands the greater the functional aging. It is understood that the time of employment or occupation is related to the ability to work, besides of working time be related to chronological aging.²

According to WHO statistics projections, the elderly group in the country should have achieved about 32 million people being 60 years old or older in 2025. The population aging brings us to labor issues and labor ability of this workers.³ Therefore, it is relevant a study on the Ability to work that, while producing it, it had its origin in the concept of "stress-wear", in which the wear resulting from physical and mental loads of work, can generate decreased ability for work and the appearance of diseases in the ageing worker.⁴

The study chose the nursing category because of the peculiarity of the work developed, constituting a professional category subjected to exhausting work, which exposed to the work requirements may present greater functional and chronological aging. Also, they have a workday extensive weekly, as well as the minimum wage regulated in law.

Nursing can be exposed not only to biological risks but also ergonomic and psychosocial. Therefore, it is important the collection of subsidies to detect which referrals are required for the worker so that he preserve his ability to work, justifying thus the realization of this study that aims to:

 Assess the ability to work of the nursing staff.

METHOD

Exploratory and descriptive study of quantitative approach, with newly admitted workers (up to five years of exercise), intermediaries and those with more than 25 years of exercise in HUAP. workers with extended sick leave, maternity leave, vacation or working in other place were excluded from the research.

The collection of data was held in the period from February to April 2013, after approval of a research project by the Ethics Committee of the HUAP/UFF under CAAE number 11069612.1.0000.5243 and Opinion number 178.209.

Considering the eligibility criteria, the sample was composed of 131 workers chosen randomly. Those who joined the research received the Informed Consent Term (TCLE) and the ICT questionnaire, being properly instructed about its correct completion and the purpose of the research.

The ICT is a self-applicable questionnaire composed of ten items, synthesized in seven dimensions. In the multidimensional instrument, every answer was crediting points (score), which score varies from seven (worst index) to 49 points (best index).

Excel® 2010 spreadsheet program was used for categorizing the data. The analysis was performed by SAS® software 9.1 (9.01.01M3P020206), licensed to Dankook University, site 0038249001.

RESULTS

The female gender (71%) is predominant among the 131 respondents with more than half in the range of 36-50 years old (63.4%) and they are married or live with a partner (50.4%). They have higher-level education (45.1%), they are nursing technicians (55.7%), with permanent job link (76.3%) and work on the day shift (62.6%) and most have six to 24 years of service (59%), as shown in table 1.

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Table 1. Socio-demographic profile of nursing workers at HUAP. Niterói, Brazil, 2013.

Characteristics	Especifications	n=131	%
Gender	Female	93	71
	Male	38	29
Age group	20-35	28	21,4
	36-50	83	63,4
	+ 51	20	15,2
Marital Status	Single 39		29,8
	Married/live with partner	66	50,4
	Separated/divorced	22	16,8
	Widow	4	3
Education	Elementary school	7	5,4
	High school	29	22,1
	Higher level education	59	45,1
	Graduation	36	27,4
Occupation	Nurse	36	27,5
	Technician	73	55,7
	Assistant	22	16,8
Link	Permanent	100	76,3
	Temporary	31	23,7
Shift	Day	82	62,6
	Night	49	37,4

It is observed in table 2 that only for the technician category there are temporary workers with highest average of ICT (40.71). Among the nurses (39.25) and permanent technicians (38.14), the average ICT was next,

classifying them with good ability. The assistants showed lower average of 27.23 points and they showed functional and chronological aging.

Table 2. ICT average by link and occupational category. Niterói, Brazil, 2013.

Category	Link	n=131	%	ICT Average
Nurse	Permanente	36	100	39,25
Technicians	Permanente	42	57,5	38,14
	Temporário	31	42,5	40,71
Assistants	Permanente	22	100	27,23

It is shown in table 3 that the ICT average was higher in the newly admitted group with 41.23 points, classifying them with good ability to work; and it was lower in the group

of 15 to 24 years old with 31.97 punctuating a moderate ability to work.

The group with more than 25 years of service had a score next and quietly greater than the group of 15 to 24 years of work.

Table 3. Average of Index of Ability to Work by time of service. Niterói, Brazil, 2013.

Time of service/ICT	n=131	Average
Up to 5 years	39	41,23
From 6 to 14 years	42	39,17
From 15 to 24 years	34	31,97
Over 25 years	16	33,50

DISCUSSION

To assess the ability to work, there are models with multidimensional approach, different from traditional ones with focus on aspects of health and functional ability, considered the balance between resource and demand in the context that the worker is inserted. Current models also have focused aspects such as community work, administration and external micro and macro environments to work ⁵

Studies show that, since 1930, the International Labor Organization (ITO) and WHO have been studying the nursing profession, identifying their precarious situation as extensive journeys to work

without rest; stressful jobs; and the fact that the team not be heard regarding the planning and decision-making about professional practice, education and working conditions.⁶

A study developed in Croatia with nurses working in university hospitals identified occupational stressors and concluded that hospital managers should develop strategies for improving the quality of working conditions.⁷

In this study, the ICT average in women was 36.83, being classified as moderate, less than men, with an average of 38.18, similar to an article researching the association between hours of work and ability to work, which showed significant association between total workload and inadequate ICT just for women.⁸

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A research of nursing workers pointed out as most diseases referred to with medical diagnosis: the musculoskeletal, cardiovascular, respiratory and neurological.9 investigated study associations between musculoskeletal diseases, ability for work and demographics. It was found that the presence of musculoskeletal diseases affected various aspects of the ability to work. 10 In another research, while questionnaires are collecting instruments commonly used in research, information may suffer influence of memory, comprehension, availability of time, private interests and to consider institutional research. 11

It is noticed that temporary workers are hired by selective process, featuring the "technique" of outsourcing of work within the public institutions. Such instability situation may affect the reliability of responses, composed of 42.5% of temporary workers.

A study highlighted the importance of the active and collective worker's participation in claiming for change of working conditions, to create conditions for easing the process of work, and not in employment contracts.¹²

In this study, the time factor of service as determinant of ability to work was analyzed. The time of service was divided into four intervals of up to five years of service, between five and 15 years, between 15 and 25 years and over 25 years of service. In the first interval, there are 25.3% of the newly admitted with an ICT average of 41.23 points; in the second interval, there are 32.5 of workers whose ICT average was 39.17 points, both with good ability.

The third interval, composed of 26.5% workers, showed an ICT average of 31.97 points; and the fourth interval of workers with more than 25 years of service (15.7%) showed the ICT average of 33.50 points, both indicating moderate ability to work. It is observed that the group over 25 years presents discreetly average greater than the third interval. It is worth noting that even after 25 years of service, there are workers who preserved their great ability to work.

This larger index may be related to the issue of seniority confer the possibility of unfavorable environmental conditions, on completion and during the hours of work. It is up to workers and managers to share the decision of how to develop the work to meet their needs.

The wear can be controlled by strategies developed by workers to prevent diseases. These strategies generate a defense, a common behavior or activity to all group,

protecting them from risk and characterizing them by a defensive posture. 13

It should be noted that it is possible to use reorganization and more flexible schedules and tasks, so that older workers are exposed to better conditions during shorter time intervals throughout their career.14 However, there are many systems in the financial aspect not favoring the relaxation and reflection on the place of the worker; and managers try to adapt the human "means" and the workload to organizational needs. This logic of work performed with productivity at any cost, tends to ignore the human specificity and the peculiarity of each job, being easier to blame weakened workers for the problem instead of outdated management methods. 15

CONCLUSION

The ICT averages were quite close and the ability to work had good index. Actions for health care workers is paramount in order to obtain subsidies for maintaining the ability to work from admission until retirement, providing a chronological aging and functional healthy.

It is important to register that, for professionals over 43 years old and for those in the age group of 36 to 50 years old, the ICT average was 37.84 points. This score is the limit between good and moderate ability to work, and shows the relevance of studies on the preservation of ability to work, considering 45 years old the average age to the beginning of its decline.

Such actions require changes in work processes and environments that include all the complexity of the binomial health-work. Therefore, it is essential to the performance of various specialties to help a worker in his entirety.

Other studies are needed to investigate the mechanisms and strategies developed by workers to maintain the ability to work, since it was observed workers preserving great ability for work. It is important to emphasize that the ability to work is related to the health condition and with the peculiarity of the activity of each worker.

REFERENCES

1. Brasil. Ministério da Saúde [Internet]. Secretaria de Atenção à Saúde. Departamento de Ações Programáticas e Estratégicas. Atenção à Saúde da Pessoa Idosa e Envelhecimento. Série Pactos pela Saúde 2006, v. 12. Brasília (DF); 2010 [cited 2013 Oct 15]. Available from:

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http://bvsms.saude.gov.br/bvs/publicacoes/a tencao saude pessoa idosa envelhecimento

- v12.pdf
- 2. Tuomi K, Ilmarinen J, Jahkola A, Katajarinne L, Tulkki A. Índice de Capacidade para o Trabalho. São Carlos: EdUFSCAR; 2010.
- Brasil. Ministério da Saúde [Internet]. Secretaria de Atenção à Saúde. Departamento de Atenção Básica. Envelhecimento e Saúde da Pessoa Idosa. 1ª ed. 1ª reimp. Série A. Normas e Manuais Técnicos Cadernos de Atenção Básica, n. 19. Brasília (DF); 2007 [cited 2013 Oct 15]. Available from: http://bvsms.saude.gov.br/bvs/publicacoes/a bcad19.pdf
- 4. Helbig R, Rohmert W. Fatigue and Recovery [Internet]. In: Laurig W, Wolfgang V. (Ed). Physical and Physiological Aspects. Encyclopedia of Occupational Health and Safety. International Labor Organization, Geneva, 2011 [cited 2013 Oct 14]. Available http://www.ilo.org/oshenc/partiv/ergonomics/physical-and-physiologicalaspects/item/491-fatigue-and-recovery
- 5. Gould R, Ilmarinen J, Jarvisalo J, Koskinen S. Dimensions of Work Ability: Results of the Health 2000 Survey [Internet]. Vaasa, Helsink: Waasa Graphics Oy; 2008 [cited 2013 Nov 21]. Available from: http://www.etk.fi/fi/gateway/PTARGS_0_271 2_459_440_3034_43/http%3B/content.etk.fi%3 B7087/publishedcontent/publish/etkfi/fi/julk aisut/tutkimusjulkaisut/erillisjulkaisut/dimens ions_of_work_ability_7.pdf
- 6. Silva Junior HAS, Vasconcelos AGG, Griep RH, Rotenberg L. Validade e confiabilidade do índice de capacidade para o trabalho (ICT) em trabalhadores de enfermagem. Cad. Saúde Pública [Internet]. 2011 [cited 2014 Jan 02]; 27(6):1077-87. Available from: http://dx.doi.org/10.1590/S0102-311X2011000600005
- Golubic R, Milosevic M, Knezevic B, Mustajbegovic J. Work-related education and work ability among hospital nurses. J Adv Nurs [Internet]. 2009 [cited 2014 Jan 02]; 65(10):2056-66. Available from: http://www.ncbi.nlm.nih.gov/pubmed/19627 386
- 8. Rotenberg L, Portela LF, Banks B, Griep RH, Fischer FM, Landsbergis P. A gender approach to work ability and its relationship to professional and domestic work hours among nursing personnel. Appl Ergon [Internet]. 2008 [cited 2014 19]; 39(5):646-52. Available from: http://www.ncbi.nlm.nih.gov/pubmed/18405 878

- Duran ECM, Cocco MIM. Capacidade para o trabalho entre trabalhadores de enfermagem pronto-socorro de uт hospital universitário. Rev Latino-Am Enfermagem [Internet]. 2004 [cited 2014 Apr 16]; 12(1):43-9. Available from: http://dx.doi.org/10.1590/S0104-11692004000100007
- 10. Monteiro MS, Alexandre NM, Ilmarinen J, CM. Work **Rodrigues** ability musculoskeletal disorders among workers from a public health institution. Int J Occup Saf Ergon [Internet]. 2009 [cited 2014 Apr 21]; 15(3):319-24. Available from: http://www.ncbi.nlm.nih.gov/pubmed/19744
- 11. Raffone AM, Hennington EA. Avaliação da capacidade funcional dos trabalhadores de enfermagem. Rev Saúde Públ [Internet]. 2005 [cited 2014 Apr 21];39(4):669-76. Available from: http://dx.doi.org/10.1590/S0034-89102005000400023
- 12. Lima ACS de, Magnago TSBS, Prochnow A et al. Prevalência e características da (in) capacidade para o trabalho de trabalhadores de enfermagem. J Nurs UFPE on line [Internet]. 2013 Aug [cited 2014 Aug 23]; 7(8):5143-9. Available from: http://www.revista.ufpe.br/revistaenfermage m/index.php/revista/article/view/2974/pdf_ 3175
- 13. Bellusci SM. Doenças Profissionais ou do Trabalho. 2 ed. São Paulo: Editora SENAC São Paulo; 1999.
- 14. Fischer FM, Moreno CRDC, Rotemberg L. Trabalho em Turnos e Noturno na Sociedade 24 Horas. São Paulo: Editora Atheneu; 2004.
- **15.** Guerin F, Kerguelen A, Laville Daniellou F, Duraffourg J. Compreender o trabalho para transformá-lo: a prática da São Paulo: Edgard Blucher: ergonomia. Fundação Vanzolini; 2001.

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