ORIGINALES

Quality of life of nursing assistants and technicians retired from a university hospital

Qualidade de vida de auxiliares e técnicos de enfermagem aposentados em um hospital universitário

Calidad de vida de los auxiliares y técnicos de enfermería jubilados en un hospital universitario

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ABSTRACT:
Objective: To analyze the quality of life of nursing assistants and technicians retired from a university hospital.
Material and Methods: This is a cross-sectional study composed of 61 nursing assistants and technicians who retired from a university hospital of a public university in the state of Paraná. The data was collected from January to May of 2014, by two instruments: a questionnaire to characterize the interviewees, and the Short-Form Health Survey SF-36 to evaluate their quality of life. The Data has been analyzed by descriptive and inferential statistics.
Results: The average values of the eight SF-36 domains were: Functional Capacity: 70; Physical Aspects: 75; Pain: 72; General Health Status: 62; Vitality: 65; Social Aspects: 75; Emotional Aspects: 100, and Mental Health: 76. The practice of physical activity, presence of chronic diseases, the reason for retirement and time of service have been independently related to the domains that make up the quality of life.
Conclusion: The retired nursing assistants and technicians surveyed have presented a good perception of their quality of life.

Keywords: Quality of Life; Retirement; Nursing; Occupational Health.

RESUMO:
Objetivo: Analisar a qualidade de vida de auxiliares e técnicos de enfermagem aposentados em um hospital universitário.
Material e Métodos: Estudo transversal realizado com 61 auxiliares e técnicos de enfermagem aposentados em um hospital universitário de uma universidade pública paranaense. Os dados foram coletados no período de janeiro a maio de 2014, por dois instrumentos: um questionário para caracterização dos entrevistados e o *Short-Form Health Survey* SF-36 para avaliar a qualidade de vida. Os dados foram analisados por estatística descritiva e inferencial.
Resultados: As medianas dos valores dos oito domínios do SF-36 foram: Capacidade Funcional: 70; Aspectos Físicos: 75; Dor: 72; Estado Geral de Saúde: 62; Vitalidade: 65; Aspectos Sociais: 75; Aspectos Emocionais: 100 e Saúde Mental: 76. Prática de atividade física, presença de doenças crônicas, motivo de aposentadoria e tempo de serviço estiveram relacionados independentemente aos domínios que compõem a qualidade de vida.
Conclusão: Os auxiliares e técnicos de enfermagem aposentados pesquisados apresentaram uma boa percepção de sua qualidade de vida.

Palavras-chave: Qualidade de Vida; Aposentadoria; Enfermagem; Saúde do Trabalhador

RESUMEN:
Objetivo: Analizar la calidad de vida de auxiliares y técnicos de enfermería jubilados en un hospital universitario.
Material y métodos: Estudio transversal realizado con 61 auxiliares y técnicos de enfermería jubilados en un hospital universitario de una universidad pública paranaense. Los datos se recolectaron en el período de enero a mayo de 2014, a través de dos herramientas: una encuesta para caracterización de los entrevistados y el *Short-Form Health Survey* SF-36 para evaluar la calidad de vida. Los datos se analizaron por estadística descriptiva e inferencial.
Resultados: El promedio de los valores de los ochos dominios del SF-36 fueron: capacidad funcional: 70; aspectos físicos: 75; dolor: 72; estado general de salud: 62; vitalidad: 65; aspectos sociales: 75; aspectos emocionales: 100; y salud mental: 76. La práctica de actividad física, la presencia de enfermedades crónicas, la jubilación en sí y los años de trabajo se relacionaron, de forma paralela, a los dominios que componen la calidad de vida.
Conclusión: Los auxiliares y técnicos de enfermería jubilados encuestados presentaron una buena percepción de su calidad de vida.

Palabras clave: Calidad de vida; Jubilación; Enfermería; Salud Laboral.

.**INTRODUCTION**

Demographic data show a significant increase in the elderly population in Brazil, due to an increase in the longevity rate and a decrease in the birth rate. In 2009, the country had around 21 million people aged 60 and over, representing about 11.3% of the population, of whom approximately 66% were retired. It is estimated that this proportion will be 14% by 2025, and Brazil will have the sixth oldest population on the planet with 34 million people over 60 years old.[1].

As a result of this prediction, it is necessary to plan public health policies aimed at healthy aging, which means not only consider the number of years lived, but also having plans and actions that enable people to enjoy those years with the highest quality of life (QOL).

Aging is a natural and long process in which people's adaptive capacities diminish, making them more sensitive to the environment, which can be a facilitator or an obstacle to their lives. Aging is directly related to retirement, which, in most cases, leads the individual to inactivity and, consequently, it favors the appearance of physical and emotional problems, such as: self-devaluation, decreased self-esteem, apathy, demotivation, loneliness, social isolation, chronic diseases (CD), among others, impairing human QOL[2].

The QOL has been studied by several professionals, including in nursing and mainly by nurses, but the investigations between nursing technicians and nursing assistants are incipient, especially after retirement. Therefore, it would be relevant to conduct researches with these categories of professionals, whether in professional or retired practice, they develop their work activities in unhealthy environments, experience in their labor process the subordination and hierarchy, with rigid schedules, lack of autonomy, physical and mental exhaustion, exposure to biological agents, direct care to patients, living with the pain and death of people, which may interfere with their QOL when they are in full exercise of their job functions or later in retirement[3].

Authors[4] state that studies regarding the QOL of retirees are essential, since through them it is possible to identify several factors that permeate this process, providing managers and workers with planning to promote retirement with a good QOL.

In view of the above and the scarcity of studies about the QOL of nursing technicians and nursing assistants who retired after a long period of work in an environment that causes physical, mental and social deterioration, it is believed that the results of this study may contribute to the QOL of these retirees, as well as those of related areas.

In order to conduct the present investigation, the concept of QOL proposed by the World Health Organization (WHO) has been adopted, and it is defined as "the person's perception of their position in life in the context of the culture and value system in which they live and in relation to their goals, expectations, standards and concerns"[5:1405].

Based on the context presented, the following question has emerged: What is the perception of the quality of life of nursing assistants and technicians who worked in a university hospital after their retirement? In order to answer this question, this study aimed at evaluating the quality of life of nursing assistants and technicians who retired from a university hospital.

MATERIAL AND METHODS

This is a cross-sectional, quantitative study carried out with nursing assistants and technicians retired between January 2001 and December 2012, who practiced their professional activities in a university hospital belonging to a state university in the north of Paraná. It is a state public institution with 313 hospital beds, all of them under the Unified Health System, which provides medium and high complexity health care. The labor ties of the workers with the institution are, in the majority, public servants.

The search for possible research participants has been carried out through a registry of records with the Pro-Rectory of Human Resources of the mentioned university, identifying a total of 87 retired nursing assistants.

The following inclusion criteria have been adopted: both genders, to have been a public servant, to reside in the city or metropolitan region of the study and to be retired for at least two years. And as a criterion of exclusion: retirees still developing any kind of work activity, death and refusal to participate in the research.

Afterwards, contact has been made with the retirees by telephone, formalizing the invitation to participate in the research and providing information about it. After this contact, 26 people were excluded (four due to death, seven because they were

working, 13 due to change of status and two due to refusal to participate in the survey), which represented a sample of 61 retirees, representing 70.1% of the population.

The data was collected between January and May of 2014, at the participants' residence and at a time previously scheduled by telephone. Each interview had an average duration of 30 minutes.

In order to characterize the research participants, a semi-structured questionnaire has been developed containing questions about socio-demographic aspects, life and health habits.

In order to evaluate the QOL of the retirees, the Short-Form Health Survey (SF-36) has been used. It is a self-report instrument adapted to the Brazilian reality in 1999[6]. It is composed of 11 questions and 36 items that encompass eight domains: physical aspects (four items), pain (two items), general health status (five items), vitality (four items), social aspects (two items), emotional aspects (three items), and mental health (five items). The score of each domain is transformed into a linear scale ranging from 0 (worst QOL) to 100 (best QOL).

The data has been analyzed in the Statistical Package for the Social Sciences (SPSS), version 2.0. The Cronbach's alpha coefficient has used to evaluate the internal consistency of SF-36. For the quantitative variables, absolute and relative frequencies, measures of central tendency and variability have been used. Before the asymmetric distribution of the variables analyzed, the Mann-Whitney, Chi-Square and WilcoxonW tests have been used. The level of statistical significance was set at p <0.05.

Authorization has been requested from the Canadian Optum Insight group, the international copyright holder of the SF-36 instrument for its application, and a favorable opinion has been received under the No. QM021618 of 01/11/2013.

This study has been carried out in accordance with national and international ethical standards, and has been approved by the Local Research Ethics Committee, according to Opinion No. 002/2012, CAAE: 0344.0.268.000-12. All participants signed the Free and Informed Consent Term (FICT) in two copies.

RESULTS

It has been identified that, out of the 61 retirees, 53 (86.9%) were female and eight (13.1%) were male; six (9.8%) aged from 40 to 52 years old, 43 (70.5%) were between 53 to 65 years old and 12 (19.7%) were between 66 and 78 years old, with an average age of 61 years old. As for marital status, 35 (57.3%) were married or living in a stable union, one (1.6%) was single, 12 (19.7) were divorced and 13 (21.3%) were widowed; ten (16.4%) lived alone and 51 (83.6%) lived with their families. Regarding the income of the retirees, 43 (70.5%) were in the range of three to five minimum wages, 12 (19.7%) were between six and eight minimum wages and six (9.8%) were between nine and 11 minimum wages, with an average of R$ 3,714.12 (corresponding, on April 30, 2014, to US$ 1665,00 US dollars).

The service time ranged from 10 to 37 years, with an average of 28 years. Regarding the period of retirement, 24 (39.3%) had between three and five years; 24 (39.3%)

from six to eight years and 13 (21.3%) from nine to 12 years, with an average of 6.8 years of retirement. Regarding the reasons for which they were retired, 54 (93.4%) were for service time and 4 (6.6%) due to disability.

Regarding the lifestyle, 34 (55.7%) reported a sedentary lifestyle and 27 (44.3%) said to perform physical activity predominantly three times a week (14; 51.9%), followed by five times a week (5; 18.5%) and eight (29.6%) retirees twice a week.

Regarding smoking, 46 (75.4%) of the retirees mentioned that they have never smoked, 11 (18.0%) reported being ex-smokers, and four (6.6%) stated that they were active smokers. The amount of daily use was 20 cigarettes by three (4.9%) retirees and one reported smoking more than 20 cigarettes a day (1.7%). Regarding alcohol use, eight (13.1%) retirees stated that they drink alcoholic beverages once a week, and 53 (86.9%) reported not using alcohol.

Regarding the presence of CD, eight (13.1%) reported not presenting any, 40 (65.6%) mentioned up to two chronic pathologies and 13 (21.3%) three or more. Systemic arterial hypertension (SAH) has been identified in 34 (55.7%), diabetes mellitus (DM) in 24 (39.3%), followed by musculoskeletal disorders (MD) in 15 (24.6%), with the most reported diseases being arthritis, osteoarthritis, tendinitis, and inflammation in the lumbosacral spine. Depression has been reported by 13 (21.3%) of the retirees and respiratory diseases by eight (13.1%), the most cited of these were asthma and bronchitis.

The SF-36 instrument has presented satisfactory internal consistency (α=0.701), characterizing it as reliable and with good internal consistency. In the domains related to the QOL of the retirees it has been verified that the best averages were for the domains Emotional Aspects, Mental Health, Social Aspects and Physical Aspects, as presented in Table 1.

Table 1. Average and interquartile range of the Short-Form Health Survey-SF-36 domains of nursing assistants and technicians retired at a university hospital (n=61). Londrina, Paraná, Brazil, 2014.

Domains	Average	Interquartile Range
Functional capacity	70	42.50 – 90.00
Physical aspects	75	50.00 – 100.00
Pain	72	51.00 – 84.00
General Health Status	62	47.00 – 71.00
Vitality	65	45.00 – 75.00
Social Aspects	75	50.00 – 100.00
Emotional Aspects	100	67.00 – 100.00
Mental Health	76	62.00 – 84.00

Table 2 shows the SF-36 domains that presented statistical significance in relation to socio-demographic variables, life habits and health of the retired people surveyed. It has been identified that the variables gender, age, marital status, income, schooling, smoking and alcohol consumption did not present a statistically significant relationship with the QOL domains.

Table 2. Relation between the domains of the Short-Form Health Survey - SF-36 and the characteristics of nursing assistants and technicians retired in a university hospital (n = 61). Londrina, Paraná, Brazil, 2014.

Domains	Physical Activity	Chronic Diseases	Reason for Retirement	Service Time
Functional capacity	p=0.019	p=0.002	p=0.006	p=0.010
Physical aspects	p=0.043	p=0.002	p=0.001	p=0.002
Pain	p=0.036	p=0.000	-	-
General Health Status	-	p=0.000	p=0.006	p=0.010
Vitality	p=0.046	p=0.000	p=0.004	p=0.007
Social Aspects	p=0.003	p=0.002	p=0.006	p=0.009
Emotional Aspects	-	p=0.005	p=0.001	p=0.002
Mental Health	-	p=0.050	p=0.034	p=0.034

DISCUSSION

The socio-demographic characterization of the participants has revealed a predominance of female individuals, with an average age of 61 years, a stable marital relationship, who lived with their families and had an average monthly income of 5.13 minimum wages. Most of these results were similar to those obtained by other studies which have been conducted with elderly people in Brazil and abroad[7-9], except for income, since the retirees of this study had a lower average monthly income (US $ 1,665.00), when compared to those investigated in a study carried out in Mexico and Panama (US $ 3,000.00) [7]. As for the predominance of the female gender, it is a fact that the nursing area - the previous labor reality of the retired participants of this study - is characterized as a work space where there is a higher prevalence of females[3].

The scores obtained in the SF-36 by the participants of this study indicate that the nursing assistants and technicians present a good perception of their QOL after retirement. This positive finding may be related to the perception of the QOL, which has been evaluated subjectively, in which the individual tends to value personal issues over other factors, such as the environment in which they are inserted[10]. In addition, living with relatives, according to the majority of the participants of this research, presupposes having a network of social support, considered as an important promoter of the QOL[8].

In this investigation, gender, age, marital status, income, schooling, smoking and alcohol consumption did not present a statistically significant relationship with the QOL domains. Another study carried out with the elderly has also indicated the absence of association between gender and age with the QOL[11]. The other variables were formed by facts that do not corroborate those of the other surveys which have been conducted with the elderly, when identifying that having a stable marital relationship, higher income, higher schooling, not being smoker and not consuming alcoholic beverages are factors that favorably influence the QOL[11-13].

Although the majority of the participants were sedentary, it has been verified that 44.3% of the retirees in this study reported practicing physical activity regularly, and this practice was statistically associated with the best QOL. The physical activity has a positive effect on the physical and mental health of the elderly, as well as improving the disposition for daily activities. Thus, it should be encouraged not only for the

retirees, but also for the active workers in order to promote a good QOL and reduce the risk of CD in the future, since the sedentary lifestyle is harmful to anyone[11,14].

The presence of CD has been reported by 86.9% of the participants and their presence has been associated with worse QOL in all domains. Individuals living with some type of chronic morbidity commonly have a lower QOL and their presence is frequent during the aging process. Regarding the type of disease, it has been verified that SAH and DM are also the most prevalent CD in the elderly[7,15-16]. However, the MD and depression may constitute morbidities inherent in the work they performed. Studies have shown that MD and mental and behavioral disorders, especially depression, are among the main causes of sickness, withdrawal and disability among nursing workers, because their work process is full of physical and psychological overloads[17-19].

It can be assumed that the specificities of this labor process, such as overload and working conditions, also implied the relation with the service time, since the higher the service time, the lower the QOL in retirement.

This study has also identified that the reason for retirement was related to the QOL, since retirees due to disability (6.6%) reported lower QOL, which may be associated to the fact that clinical conditions interfere in several aspects of the individual's life, besides that, they need to adjust themselves to this process, which may imply a decrease in the QOL[20].

However, it is important to reflect about the fact that disability retirement does not always lead to a better or worse QOL, what needs to be considered is the individuality of each person, since individuals react and adopt coping strategies that are different from the overloads of the working world. One can have collective strategies, but individual strategies still stand out from the collective ones.

CONCLUSION

The QOL scores obtained between the retired nursing assistants and nursing technicians were high in most domains. It has been verified that the sedentary lifestyle, the presence of CD, retirement due to disability and longer time of service are related to the several facets that make up the QOL. Thus, there are indications that the work process of the assistants and technicians may have had repercussions on their QOL after retirement.

Knowing the QOL of these retirees have showed the importance of managers and professionals to structure retirement planning programs in line with the current public policies and focused on the nursing team's labor process, aiming at health promotion, prevention of occupational diseases and the well-being of these individuals.

Regarding the limitations of this study, the following can be mentioned: reduced sample; the transversal delineation, which prevented the causal association, that is, it only suggests the interrelation between the variables studied and the QOL, which prevents the generalization of the results obtained; and, finally, the scarcity of published studies involving the QOL of retirees, making it difficult to compare with the results found, being necessary to use the data found in studies on the elderly and the QOL in a generalized manner. Thus, it is suggested the development of new research

regarding the QOL related to retirement, especially the QOL of the retirees due to disability, since there was an indicative of greater impact among these people.

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