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ORIGINAL ARTICLE

SLEEP QUALITY IN ELDERLY PATIENTS IN OUTPATIENT CARE

QUALIDADE DO SONO EM PACIENTES IDOSOS EM ATENDIMENTO AMBULATORIAL

CALIDAD DEL SUEÑO EN PACIENTES ANCIANOS EN ATENCIÓN AMBULATORIA

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ABSTRACT

Objective: to evaluate the pattern characteristics of sleep in elderly assisted in the geriatric ward of a university hospital. ***Method***: a descriptive, cross-sectional study developed with 100 elderly between January and February 2014, through interviews subsidized by a structured instrument that included issues related to socio-demographic profile, as well as the Mini-Sleep Questionnaire - MSQ. Data analysis was carried out in a quantitative approach, using descriptive statistics and Chi-Square Pearson test. ***Results***: there was 58% male among the elderly, aged 60-69 years old (77%). Of them, 46% reported having changed much sleep but most rated their sleep pattern as good (57%). ***Conclusion***: it is emphasized the importance of care planning be geared to dealing with sleep disorders in the elderly to reduce the risk for illness and increase their quality of life. ***Descriptors***: Elderly; Sleep; Health of the Elderly.

RESUMO

***Objetivo*:** avaliar as características do padrão de sono em idosos atendidos no ambulatório de geriatria de um hospital universitário. ***Método*:** estudo descritivo, transversal, desenvolvido com 100 idosos entre janeiro e fevereiro de 2014, mediante entrevista subsidiada por um instrumento estruturado que contemplava questões referentes ao perfil sociodemográfico, assim como o *Mini-SleepQuestionnaire* – MSQ. A análise dos dados foi efetivada em uma abordagem quantitativa por meio da estatística descritiva e do *Teste de Qui Quadrado de Pearson*. ***Resultados*:** 58% dos idosos eram do sexo masculino, com idade entre 60 e 69 anos (77%). Destes, 46% relataram possuir sono muito alterado, porém a maioria classificou seu padrão de sono como bom (57%). ***Conclusão*:** ressalta-se a importância do planejamento da assistência ser voltado para o enfrentamento dos distúrbios do sono na população idosa, no intuito de diminuir o risco para o adoecimento e aumentar sua qualidade de vida. ***Descritores*:** Idoso; Sono; Saúde do Idoso.

RESUMEN

***Objetivo*:** evaluar las características del estándar de sueño en ancianos atendidos en el ambulatorio de geriatría de un hospital universitario. ***Método*:** estudio descriptivo, transversal, desarrollado con 100 ancianos entre enero y febrero de 2014, mediante entrevista subsidiada por un instrumento estructurado que contemplaba asuntos referentes al perfil socio-demográfico, así como el *Mini-Sleep Questionnaire* – MSQ. El análisis de los datos fue efectuada en un enfoque cuantitativo, por medio de la estadística descriptiva y del *Test de Chi Cuadrado de Pearson*. ***Resultados*:** 58% de los ancianos eran del sexo masculino, con edad entre 60 a 69 años (77%). De estos, 46% relataron tener sueño muy alterado pero la mayoría clasificó su estándar de sueño como bueno (57%). ***Conclusión*:** se resalta la importancia del planeamiento de la asistencia ser dirigida para el enfrentamiento de los disturbios del sueño en la población anciana, con el intuito de disminuir el riesgo para enfermarse y aumentar su calidad de vida. ***Descriptors*:** Anciano; Sueño; Salud del Anciano.

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INTRODUCTION

The increase in life expectancy raises concerns about the quality of life and well-being of the elderly. It is estimated that in 2025 the elderly in Brazil will reach an approximate of 30 million people, equivalent to 15% of the population. Studies show that due to falling fertility rates, especially from the 70s and 80s, and the gradual reduction of mortality rates recorded in recent decades, the aging of the population is irreversible.[1]

Throughout its existence, the human being passes through different anatomical and functional changes that are part of the aging process, leaving the body more susceptible to intrinsic and extrinsic aggression. Among the main concerns related to longevity, occurrences of chronic diseases, falls, disability, changes in the nervous system, cardiovascular, musculoskeletal are highlighted.[2] Among them, the changes in sleep patterns and its negative impact on psychological function, immune system, performance, behavioral response, mood and ability to adapt are pointed out.[3]

Among the elderly, these signs can be seen as changes due to the aging process or can be interpreted as indicative of cognitive impairment or dementia.[4] Also, older individuals have more difficulty initiating and/or maintaining sleep, having more awakenings during the night, daytime sleepiness, and increasing napping frequency. There are reports mainly of insomnia and hypersomnia, which is characterized by excessive sleepiness and are often secondary to other diseases.[1]

Sleep and rest are restorative functions necessary for the preservation of life, which justifies the need for health professionals to update their knowledge about the changes that occur in sleep during senescence, as well as the factors that interfere with their quality, such as disease clinics, psychiatric and psychosocial comorbidity events.[2] The nurse, as a member of the interdisciplinary team should be increasingly committed to assist these individuals, considering the process of own losses of aging and maintenance possibilities of their state of health.[5] The advent of an aging population requires the health professionals to understand the complexity of the human aging process, the strengthening of individual attention and integral to the elderly and the development of new ways of acting and health care.[4]

Faced with the growing aging population and the need for adequacy of health services for practices that provide comprehensive care, as well as the lack of studies that addressed aspects related to sleep in aging disorders, the importance of this research is due to the possibility of their results are useful for better planning of health care of the elderly with changes in sleep patterns. Therefore, considering the relevance of the topic, this study aims to:

- Evaluate the standard features of sleep in elderly assisted in the geriatric ward of a university hospital.

METHODOLOGY

Descriptive, cross-sectional study with a quantitative approach, developed with the elderly seen in the geriatric outpatient clinic of a university hospital located in Joao Pessoa, PB. The study population was all individuals 60 years old or older enrolled in the service.

The sample consisted of 100 elderly people and their determination of the probabilistic type by simply sampling technique. For the selection of the investigated elderly, the number of individuals registered with the service was raised by the sector of human resources. Subsequently, the sample was delimited by considering the following formula: n= Z2 PQ/d2, where n= minimum sample size; Z = reduced variable; P = probability of finding the studied phenomenon; Q = 1-P; d = desired accuracy. It was adopted p = 50%, because it is a multidimensional evaluation, and sampling error parameter of 5%.

The study included the elderly of both genders, who had preserved cognitive conditions, so that they were able to answer the research questions. In addition, those who had severe limitation in hearing or speech that would prevent the interview were excluded from the sample.

Data collection occurred in the period from January to February 2014, through interviews subsidized by a structured instrument that included issues related to socio-demographic profile, as well as the Mini-Sleep Questionnaire - MSQ6, which evaluates globally aspects that set the standard sleep and how often they occur. The total score ranges from 0 to 60, in which the total score allows the classification of the sleep pattern considering the following parameters: very good sleep (0-9 points), good sleep (10-24 points), sleep lightly changed (25-27 points), moderately altered sleep (28-30 points) and altered sleep (over 30 points).[6]

Data analysis was carried out in a quantitative approach by using descriptive statistics of all the variables, using the calculation of simple and medium frequencies. Variables were analyzed using Pearson's chi-square test with a significance level of 95% to compare the main categorical ones. The computer system Statistical Package for Social Sciences - SPSS version 20.0 was used, which is adequate to reach the study's objectives and enable the accuracy and generalization of the results.

It is noteworthy that throughout the research process, especially at the stage of collecting empirical data, the ethical aspects that regulate research involving human beings arranged in Resolution 466/2012 of CNS/MS/BRAZIL, especially the secrecy and confidentiality of information.[7] It is also stressed that the research project has been approved by the Ethics Committee in Research of the University Hospital Lauro Wanderley of the Federal University of Paraíba, under protocol number 508880/2013 and CAAE: 22349213000005183.

RESULTS

Among the elderly people surveyed, it was found that most of them were male (58%), predominantly aged between 60-69 years old (77%). It was found that 34% of elderly reported sleeping between 21 and 22 hours, 40% woke up between 5 and 6 a.m. and rated their sleep pattern as good (57%).

Table 1. Distribution of frequency of items from Mini-Sleep Questionnaire tool. João Pessoa - PB, 2013 (n=100).

Variables	Categories						
	Never	Very rare	Rare	Sometimes	Often	Very often	Always
Difficulty falling asleep	29%	18%	12%	12%	06%	10%	13%
Waking up and not going back to sleep	37%	11%	09%	10%	06%	20%	07%
Taking drugs to sleep	88%	04%	-	-	01%	-	07%
Sleeping during the day	33%	08%	04%	29%	06%	12%	08%
Waking up tired in the morning	48%	09%	03%	20%	08%	07%	05%
Snoring	38%	07%	11%	08%	04%	28%	01%
Waking up at night	10%	12%	06%	11%	06%	10%	45%
Waking up with headache	59%	07%	07%	19%	01%	05%	02%
Tired for no reason	28%	20%	11%	18%	10%	09%	04%
Disturbed sleep	46%	04%	07%	10%	06%	10%	17%

Table 1 shows the items that make up the Mini-Sleep Questionnaire. Aspects of sleep that occurred “Always” among the elderly were to wake up and go back to sleep (45%), disturbed sleep (17%) and difficulty falling asleep at night (13%). On the other hand, the items taking drugs to sleep (88%), waking up with a headache (59%) and waking up tired in the morning (48%) were the components that showed the highest frequency “never”.

Regarding the scores obtained in the Mini-Sleep Questionnaire, it was identified a minimum score of 10 and a maximum of 64 points, with a mean of 31.26 and standard deviation of 11.6. After classification, it has been shown that 46% of elderly respondents had a very altered sleep. By correlating the perception of sleep quality and classification according to MSQ sleep, statistically positive association was found ($p < 0.001$) between poor self-noticed sleep and altered sleep.

DISCUSSION

Despite the natural predominance of women among the elderly population, it was found in the present study the prevalence of males. The old age feminization phenomenon is explained by the fact that women are more concerned about health care while men are more vulnerable to violence, mostly for accidents and homicides.[8] Also, differences in personal lifestyles, such as physical activity, balanced diet and less exposure to harmful aspects to health, such as obesity, alcoholism, and smoking, can influence the increased survival among female subjects.[9]

Concerning the age, there was a prevalence of individuals aged 60-69 years old, which confirms the findings highlighted in a study on sleep quality in the elderly, in which more than half of the respondents belonged to this age group.[1,10] As this is an

outpatient service that requires displacement, the predominance of young people among the elderly population studied can be explained on the premise that with increasing age there is the further development of chronic diseases and the progressive increase of disabilities, struggling to search for care. On the other hand, younger elderly typically have better health and, therefore, ease of movement.[11]

On characteristics related to sleep, it was observed that 34% of respondents had a normal sleeping time between 21 and 22 hours while 40% reported waking up between 05 and 06 am in the morning. This is similar to a study in which the population investigated, 52% of the elderly would lie between 21 and 22 pm and 57.9% reported waking up between 05 and 06 am.[1] Research has shown an association between short sleep duration and debilitated state of health, particularly concerning mood, stress, and fatigue, especially with advancing age.[12]

In addition to the association with emotional changes, the relationship between sleep duration and other health-related aspects are also evident.[12] The sleep problems can be the cause as well as the effects of illness situations.[4] Research developed in Campinas, São Paulo, revealed a positive association between a higher number of chronic diseases and altered sleep patterns, with a prevalence of rheumatic diseases, circulatory, osteoporosis and back pain among those who slept less than six hours a day .[13]

Thus, living with chronic disease becomes a significant factor in reducing the quantity and quality of sleep and, consequently, is detrimental to the quality of life of the elderly.[4] Research has shown that sleep patterns of short duration and difficulty initiating and maintaining sleep are important predictors for the development of two type of diabetes.[14]

Concerning the items that make up the Mini Sleep Scale, there was a prevalence of “Always” in the following aspects: wake up and go back to sleep, disturbed sleep and trouble falling asleep at night. These findings are similar to those disclosed in similar research, found that the predominant alternative was “always”: wake up and go back to sleep and trouble falling asleep at night.[1]

These findings are because the change in circadian rhythm is characteristic of aging and has been linked to decreased quality of sleep.[1] In the elderly population, there are important changes in sleep structure, where there is a restriction on stage IV and increase in shallower sleep stages (I and II), thus causing more awakenings, bringing results in a lower efficiency asleep, damaging the quality intrusion daytime naps, and the anticipation of the onset and sleep end to earlier times.[13]

The preservation of sleep is recognized as one of the factors that influence the quality of human life. However, it appears that among the elderly population that needs is often impaired. Through the data collected in this study, it was observed that 46% of the elderly had a very altered sleep, showing a significant association ($p < 0.001$) between the event and negative self-perception of sleep quality. The aging process causes changes in the amount and quality of sleep, affecting more than half of the elderly living at home and 70% of institutionalized, causing a negative impact on quality of life.[4,15] Factors such as accumulation of chronic diseases, high consumption of derivatives of caffeine and stimulants, as well as not having a quiet sleeping environment may impede and even prevent the rest of the elderly.[4]

Although the impaired quality of sleep, when asked about the self-assessment of sleep, it was found that 57% of elderly reported as good while only 20% rated it as bad. Corroborating these findings, studies have shown that 81.6% of the individuals interviewed reported good sleep quality.[1]

This shows that the elderly patient fails to grasp the scale of this event and its damage to the quality of life, considering this wrong as natural aging, to get to develop compensatory mechanisms that ensure the feeling of having a good sleep, as the daytime naps.[4,16] Normally, the elderly cite their complaints related to sleep, but many do not conceive how dysfunction, but as normal senescence process event. This contributes to the underdiagnosis and increased consumption of hypnotic drugs, prescribed and consumed not always in compliance with the pharmacodynamic sensitivity age.[4]

The investigation of aspects related to sleep and rest in the old perspective reflects a search for comprehensive care to this population. The growing and abrupt succinct population aging in specific care demands, stimulating activities that can assist in preserving sleep, as a regular practice of moderate physical activity, regularity in behavior related to bedtime and wake up and maintenance of a suitable environment for the conservation of sleep.[2]

CONCLUSION

The study looked at the proposed objective of evaluating the standard features of sleep in

elderly assisted in the geriatric ward of a university hospital. The elderly who participated in the survey were most male, predominantly aged between 60-69 years old. When asked about how to classify their sleep, 57% of them reported having a pattern of good sleep. As for the Mini Sleep Questionnaire ranking, aspects of sleep that occurred over the "Always" among the elderly were to wake up and go back to sleep, restless sleep and trouble falling asleep at night.

The results should be assessed considering their limitations, such as the possible difficulty of storing elderly respondents. Furthermore, one must consider that the results portray a specific reality; it is not possible to generalize. However, the study was developed from the extensive literature review and used a previously validated instrument in the Brazilian context.

It is emphasized the importance of the results obtained to help in the planning of care, seeking the face of sleep disorders and their consequences in the elderly. The results also point to the need for these individuals possess a better clarification regarding aspects related to sleep, so that they may know the causes and appropriate treatments, enabling a better quality of life for this population.

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