Job satisfaction and sleep quality in nursing professionals

ABSTRACT
This study aimed to verify the correlation between job satisfaction and sleep quality among nursing technicians and assistants who worked 12-hour night shifts at a philanthropic hospital in Tubarão (SC), Brazil. The participants of this study were 81 professionals, average age 31.9 years old (SD=8.18). Spearman correlation test showed a correlation between sleep quality and job satisfaction (r=-0.41; p<0.00). Some aspects were reported as very satisfactory by these workers such as work content and motivation towards the work as well as the extension in which they identify themselves with the hospital image.

Keywords: job satisfaction; nursing staff, hospital; personnel staffing and scheduling; occupational health nursing; occupational health; shift work; occupational diseases; workload.

INTRODUCTION
In the modern world, labor-related issues should no longer be simply thought of as the immediate connection between workers and their objectives. Changes in work environments are more intense due to organizational, technological, and social changes1. Studies have reported that shift work can lead to alterations in sleep, digestive and nervous disturbances, cardiovascular diseases, and a disruption of family and social life2,3. These findings are particularly applicable to nursing services, in which work schedules are organized for the continuous care of patients and include night work and irregular hours4. Much scientific evidence exists about the negative physiological and psychological effects of work organization5.

Nursing is a profession that is part of a political, economic, and social context; thus, it is directly influenced by all of these factors, both through legal questions and through the economic policies adopted in Brazil at the beginning of the 1990s. In addition, transformations in the labor world have impacted nursing. These factors can be observed in workers experiencing fear of unemployment and in workers subjected to long shifts and low wages, among other issues6. Job dissatisfaction is considered by Dejours7 to be one of the fundamental burdens of health care workers because it is related to significant aspects of the occupation. It may be caused by feelings of indignation at being required to perform an uninteresting task or by feeling dissatisfied with both salary and work recognition.

Some studies have suggested that sleep disturbances, which are common among shift workers, are associated with psychosocial problems, such as job satisfaction8-10. Assuming that sleep quality can influence job satisfaction, our aim was to assess the correlation between sleep quality and job satisfaction among nursing professionals who work 12-hour shifts in a charity hospital in the Southern Region of Brazil.

METHODS
This was a cross-sectional, quantitative epidemiological study. The study was conducted in a regional charity hospital in the Southern state of Santa Catarina in Brazil. After obtaining formal authorization from the hospital to perform the study, the project was approved by the Ethics Committee of the Universidade do Sul de Santa Catarina.

The study population consisted of nursing assistants and technicians who worked 12-hour night shifts. Of the 140

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nursing professionals in the hospital, 81 worked the night shift. The night shift workers were distributed among the 17 nursing units in the hospital that participated in the study. These professionals worked one night (a 12-hour shift, from 7 pm until 7 am) and were off duty the following night, a system that is termed “12 per 36 hours”.

The professionals in each work area were individually invited to participate in the research. The individual meetings were held in the work place. The timing and duration of the meetings depended on the availability of each professional and the needs of the study.

The data collection was performed between April and May of 2005. We used three questionnaires: 1) the Personal Data Questionnaire; 2) the Occupational Stress Indicator (OSI)\textsuperscript{11,12}; and 3) the Pittsburgh Sleep Quality Index (PSQI)\textsuperscript{13}. It is important to point out that the Pittsburgh Sleep Quality Index is negative scored, with the minimum score meaning better sleep (score 0) and the maximum (score 21) meaning worse sleep.

We performed a descriptive analysis of the data and tested the Spearman rank-order correlation between job satisfaction and sleep quality.

RESULTS

The study participants worked in different sections of the hospital. Most participants were from the Intensive Care Unit (22.2%), followed by the surgery center (9.9%) and the obstetrical center (9.9%). The remaining participants (58%) were from different departments, such as pediatrics, maternity, and emergency medicine.

The median age of the participants was 31.9 years, with a maximum of 51 years and a standard deviation 8.18 years. The majority were women (50.1%). Of the 81 workers who participated in this study, 50.6% had children less than 12 years of age, and 49.4% do not have children in this age group. The majority of the workers did not have secondary employment (80.2%).

The job satisfaction variable had a mean of 63.7 points and a standard deviation of 17.3 points. The minimum value possible on the scale is 22, and the maximum is 132 points.

The psychosocial job aspects that were most unsatisfactory for the study participants were communication and flow of information (66.5%), use of individuals’ potential (65.5%), the way that conflicts are resolved (60.6%), volume of work to be performed (58%), how changes and innovations are implemented (55.8%), job security (51.9%), opportunities for reaching their career aspirations (51.8%), type of assignments received (50.6%), style of supervision by superiors (48.2%), psychological climate in the company (43.2%), and career opportunities (43.2%).

The aspects that gave the most satisfaction were relationships with other people in the company (67.9%), job content (60.5%), work motivation (58%), identification with the image and achievements of the company (55.5%), the possibility of growth and development at work (53%), and the organizational structure of the company (46.9%).

DISCUSSION

The results of this study provided evidence for the correlation between job satisfaction and sleep quality, supporting the idea that sleep quality indicates the degree of adaptation to job demands in this population. According to Karagozoglu and Bingöl and the results presented here, poor sleep quality is correlated with lower job satisfaction\textsuperscript{14}. The association between sleep problems and work concerns has also recently been demonstrated by Kristiansen et al.\textsuperscript{15}.

For decades, studies have demonstrated that shift workers and night shift workers experience reduced sleep dura-
tion that is not compensated for during their free time\textsuperscript{16-19}. The accumulation of long-term sleep debt directly affects job satisfaction, leading to lower job satisfaction due to the shorter sleep duration\textsuperscript{20}. As observed by Takahashi et al.\textsuperscript{21}, moreover, reduced sleep duration increases somnolence, which can also be associated with low job satisfaction.

Regarding the actual work performed, the workers in this study demonstrated satisfaction with the way they perceived their work, a finding that has also been previously reported\textsuperscript{22-24}. Silva studied the administrative professionals of a large company in the Portuguese financial sector and reported similar results. Satisfaction with the actual work performed was identified as one of the major correlations with job satisfaction\textsuperscript{24}.

Although the prevalence of sleep medication use among the workers was not high, the use frequency (up to two times per week) deserves attention. Gordon et al. have stressed that night shift workers show a quality of life-related increase in the use of alcohol, stimulants, and nervous system depressants\textsuperscript{25}.

Employee health is essential for good performance in any institution. In nursing, low wages, demanding activities, and tiring and repetitive night shifts aggravate the situation. This study demonstrated the significant relationship between the psychosocial aspects of job satisfaction and sleep quality.

The study population suffered from the influence of shift work and night shift work. Shift work directly affects sleep quality and consequently affects job satisfaction. Potential changes should consider meeting the needs, expectations, and wishes of employees to the extent that they are compatible with the demands of the tasks. Such changes will require long-term, gradual implementation that may be constrained by the economic, administrative, and human-resource limits of organizations.

REFERENCES