# QUALITY OF LIFE AND SLEEPINESS AMONG GRADUATE STUDENTS OF NURSING AND PHARMACY FROM A FEDERAL UNIVERSITY IN MATO GROSSO, BRAZIL

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**ABSTRACT** — The aim of this study was to determine some important factors related to the quality of life and sleep among university students of nursing and pharmacy.

**KEYWORDS** — Sleep; leisure; sexual dissatisfaction.



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pharmacy students from a Federal University in Mato Grosso State, located in the Central-Western Brazil.

## MATERIALS AND METHODS

An observational transversal study was conducted with 196 university students of Nursing (83 subjects) and Pharmacy courses (113 subjects), both gender, from the Araguaia University Campus, located in Pontal do Araguaia, MT, Brazil. Family income (in Brazilian basic salaries, e.g., U\$200.00) of pharmacy students were higher than nursing students and is presented in Fig. 1.

Before answering the questionnaire students agree and signed an informed consent to engage the study. The instrument was the validated Brazilian version of the WHOQOL-bref plus two questions from the hole version [13] and the Epworth sleepiness scale [14]. Statistical analysis consisted of the z-test which compares the frequency of events in different two proportions (nursing students x pharmacy students) and the significance level was 5% (p<0.05).

## RESULTS

The presence of negative feelings tended to be increased among pharmacy than nursing students which, however, was not statistically different (5.88% versus 11.43%, p<0.18).

Considering the perception of QOL nursing students tended to had lower positive perception which was not confirmed by statistical analysis (p=0.43).

A higher frequency (90%) of university students

# INTRODUCTION

Quality of life (QOL) has been defined as being a subjective perception of the person regarding his/her situation in social life according to cultural and value systems and also in relation to their concerns, standards, goals and expectations [1].

Also considered the subjective well-being, QOL is influenced by subjective values and expectations, age, social functioning, goal adjustment, self-efficacy, presence or absence of comorbidities, education, salary, employment status, and responsabilities [2–8].

The life of academic students, especially in developing nations, is not so easy. In fact, their transition to adult life is marked by excessive new responsabilities and greater physical and mental demands during each academic semester [9,10].

As a consequence of overload demands due to working and studying, university students, especially from the health sciences courses, had sleeping problems, physical fatigue, attention difficulties, anxiety, stress and depression as well as decreased percetion of adequate QOL [10–12].

Considering that inadequate quality of life can compromise the hole life aspects of the future health professionals, the objective of the current study was to determine the QOL and sleepiness of nursing and declared positive meaning attributed to life with no significant differences between groups (p=0.37). Students also reported a higher satisfaction with received familial support during their courses (80%) with no differences between the groups (p=0.42).

In respect of focusing capacity, learn and memory, 8.8% and 16.8% of nursing and pharmacy students had lowest values, whereas 32.6% and 43.4% of nursing and pharmacy academics had high focusing, leaning and memory capacity with no statistically significant difference between the two courses.

Self-satisfaction (67%) and self-image acceptance (60.85%) scores were higher among both student groups with no statistical differences.

A considerable proportion (23.35%) of both nursing and pharmacy students was not satisfied with their sleeping, whereas 54.5% were satisfied or very satisfied with their sleeping routines (Fig. 2).

Sexual satisfaction was different among nursing and pharmacy students (Fig. 3). More nursing students were dissatisfied with their sexual lifes comparing to pharmacy students (15.2% versus 6.3%, p=0.04). However, in the other groups (neither satisfied nor dissatisfied and satisfied) there were no significant differences between pharmacy and nursing students.

As noted in figure 4, the proportion of nursing students that had lower leisure opportunities was higher than that found for pharmacy students (30.2% versus 16.7%, respectively, p=0.025), whereas considering high leisure opportunities the proportion was greater among pharmacy than nursing students (43.5% versus 26.5%, respectively, p=0.015).

The Epworth sleepines scale indicates the probability of daytime sleeping and is an indirect method for measuring sleep quality and fatigue. In this respect, the mean Epworth scores of pharmacy students ( $\chi \pm \eta$ -1= 11±3.2) classified them as mild excessive daytime sleepiness, whereas nursing students ( $\chi \pm \eta$ -1= 9±3.7) were considered with normal daytime sleepiness.

## DISCUSSION

The presence of negative feelings (negative mood) was lower when compared to other studies. A study with nursing students in São Paulo, Brazil, reported prevalence of depression ranging from 15.4% to 28.6% [12].

Although using another method to verify the general satisfaction with QOL a study from Ribeirão Preto (SP), Brazil [15], found similar results compared to the present study.

However, a study from São Paulo (SP), Brazil, reported a 60.1% satisfaction with QOL [16], whereas nursing and pharmacy students, from the current work, reported 77.9% and 67.5% of QOL satisfaction, respectively.

In another study conducted in Lorena, São Paulo state (SP) [17], the satisfaction with QOL was also lower (55%) when compared to the present study.

Focusing, learning and memory capacity in the current study was higher in both nursing (83.2%) and pharmacy (91.2%) students compared with data (62.18%) from a private nursing school in Curitiba, PR, Brazil [18]. A possible factor that explain this lower focusing, memory and learning score from nursing of Curitiba is that the majority of them had to work in order to pay for the course, whereas the majority of the students from the current work did not work. In the same study nursing students reported 66.91% had satisfaction with QOL which was lower than data from the current study.

Leisure opportunities among nursing students (45.35%) were higher in the study of Machado et al. [18] compared to nursing students of the current study (26.5%), but were similar to that found for pharmacy students (43.4%) of this study. In the same manner, satisfaction with leisure opportunities were similar to data from a study with nursing students in Lorena, SP, Brazil [17].

In the current study the proportion of nursing students dissatisfied with sexual life was higher than that found for pharmacy students. However, the sexual satisfaction among both nursing and pharmacy academics (64.5% and 61.3%, respectively) was similar to that found in Curitiba study [18].

The QOL of pharmacy students of the current work was similar to that reported by Belmiro et al. [10] studying pharmacy academics from University of Brasilia, Brazil.

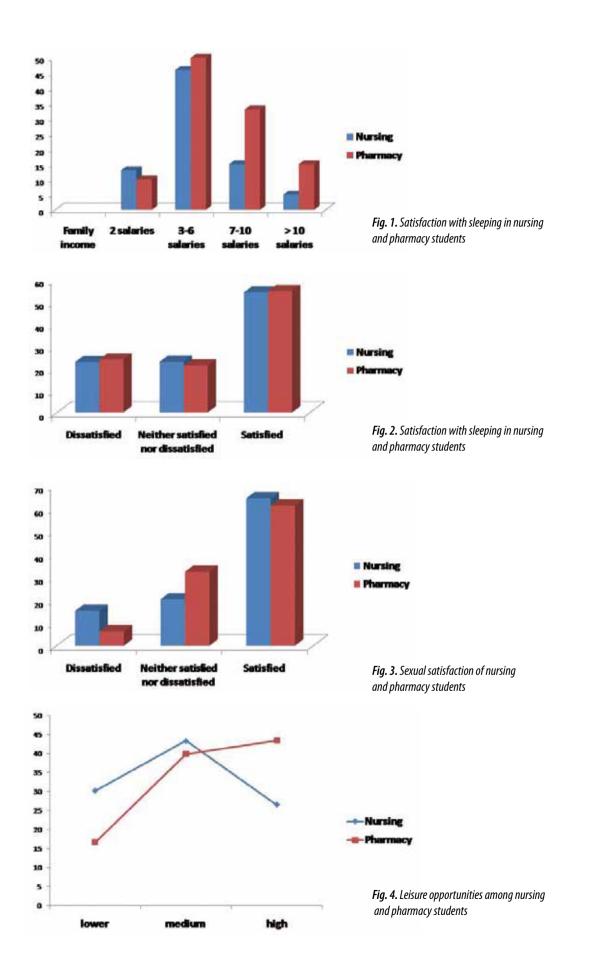
A study of QOL with four health courses (medicine, nursing, pharmacy, and phonoaudiology) from a public state university in Campinas (SP), Brazil, revealed that nursing had lower QOL scores compared to pharmacy, whereas medicine had the lowest QOL values [19].

### CONCLUSIONS

The satisfaction with QOL of the academics was high, whereas the presence of negative mood was very lower. However, only 54.5% of students from both courses were satisfied with sleep. Pharmacy students had increased risk of excessive daytime sleepiness, whereas nursing students were more prone to have dissatisfaction with sexual life and leisure opportunities.

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