Nursing students' quality of life

Qualidade de vida de estudantes de enfermagem

Calidad de vida de estudiantes de enfermaría

Marcos Antonio Nunes de Araujo[1], Wilson Danilo Lunardi Filho[2], Lucas Rasi Cunha Leite[3], Regiane Tu Kun Ma[1], Anderson Aparecido da Silva[1], José Carlos Souza[1]

One aimed to evaluate the quality of life of nursing students from a public university from Dourados, MS, Brazil. This is an exploratory, descriptive and cross-sectional study conducted in October and November 2011 through the demographic and quality of life questionnaires SF-36. Out of the 102 students who participated in the study, 91.0% were between 18 to 23 years old, 49.01% had financial support from their parents of up to two minimum wages, 89.5% were single, 98.7% did not work. Nursing students from the 3rd and 2nd year had the lowest scores for quality of life and students from the 1st and 4th years had the highest scores. Changes were detected in the areas Physical Aspect (p=0.002), Mental Health (p=0.010), Social Aspect (p=0.002), Emotional Aspect (p=0.001) and General Health State (p=0.001). It is concluded that female students who are attending the intermediate years have low quality of life.
Descriptors: Quality of Life; Students, Nursing; Nursing.

Objetivou-se avaliar a qualidade de vida dos estudantes do curso de enfermagem da uma Universidade Pública de Dourados, MS, Brasil. Trata-se de um estudo exploratório, descritivo e transversal realizado em outubro e novembro de 2011 através dos questionários sociodemográficos e de qualidade de vida SF – 36. Dos 102 acadêmicos que participaram do estudo, 91,0% tinham entre 18 a 23 anos, 49,01% tinham auxílio financeiro dos pais, de até dois salários mínimos, 89,5% eram solteiros, 98,7% não trabalhavam. Os acadêmicos de enfermagem da 3º e 2º ano tiveram os menores escores de qualidade de vida e os acadêmicos da 1º e 4º ano tiveram as maiores pontuações. Foi detectada alteração nos domínios Aspecto Físico (p=0,002), Saúde Mental (p=0,010), Aspecto Social (p=0,002), Aspecto Emocional (p=0,001) e Estado Geral de Saúde (p=0,001). Conclui- se que os estudantes do sexo feminino que cursam os anos intermediários têm baixa qualidade de vida.
Descritores: Qualidade de Vida; Estudantes de Enfermagem; Enfermagem.

El objetivo fue evaluar la calidad de vida de estudiantes del curso de enfermería de una Universidad Pública de Dourados, MS, Brasil. Estudio exploratorio, descriptivo y transversal, en octubre y noviembre de 2011, a través de los cuestionarios demográficos y de calidad de vida SF - 36. De los 102 estudiantes que participaron del estudio, 91,0% tenía entre 18 y 23 años, 49,01% recibían ayuda financiera de los padres, hasta dos sueldos mínimos, 89,5% eran solteros, 98,7% no trabajaban. Los estudiantes de enfermería de tercero y segundo año tuvieron las puntuaciones más bajas de calidad de vida y los de primero y cuarto años tuvieron scores mayores. Se detectaron cambio en los dominios Aspecto físico (p=0,002), Salud mental (p=0,010), Aspecto Social (p=0,002), Aspecto Emocional (p=0,001) y Estado general de salud (p=0,001). En conclusión, los estudiantes del sexo femenino que cursaban los años intermediarios presentaron baja calidad de vida.
Descriptores: Calidad de Vida; Estudiantes de Enfermería; Enfermería.

[1]Universidade Estadual de Mato Grasso do Sul. Dourados, MS, Brazil.
[2]Universidade Federal do Rio Grande. Rio Grande do Sul, RS, Brazil.
[3]Fundação de Apoio à Tecnologia e Ciência. Campo Grande, MS, Brazil.

Corresponding author: Marcos Antonio Nunes de Araujo
Av. Fernando Osório, 7727 apt. 148 Bloco 12, Ed. Res. Buenos Aires, CEP: 96055-005. Pelotas, RS, Brazil. E-mail: marcosojuara@uems.br

Introduction

Different philosophical references, since antiquity, conceptualize what life with quality is. The historical and cultural development of humanity brings references that attempts to define quality of life, even before the Christian era. In written productions such as the Nicomachean Ethics, Aristotle (384-322 BC) it was stated that people conceived good life or well--being as being the same thing as happiness and the meaning of happiness became a matter of dispute, with dubious understanding, because each individual used to define it in a different way from another[1].

Quality of life has been the center of a lot of debate since ancient times, and until nowadays it is judged as a complex construct of thoughts that can be interpreted in several ways[2]. The concept of Quality of Life has received increasing attention in several literary and scientific production areas such as Sociology, Education, Medicine, Nursing, Psychology and other specialties, besides evidence in the media, in advertising campaigns and even in political speeches, becoming thus a major theme in modern society[2].

The concern with Quality of Life has been extensively studied. In recent years, research has focused on the Quality of Life of undergraduate students, due to the verification of factors present in the daily life of the teaching-learning process that influence the health of these students, which, commonly, already arrive in the academic life under severe stress and pressure, due to the process they have been submitted for getting into higher education, with a lot of expectations and aspirations consistent with the moment they are experiencing as university students[3].

The students of the nursing program at the State University of Mato Grosso do Sul have classes full time, participate in educational projects, research and extension, in addition to symposiums, conferences, seminars, workshops, curricular and extracurricular internships and other activities planned in the teaching project of the course. In periods of practical classes, which start from the second year on, and the practical internships, which start in the fourth year, most of the time, they need to get up around 6 am and, depending on the specificity of the "practice field" they need to wake up around 5 am, due to the shift (in some hospitals of Douradas the nursing shift change happens at 6 o'clock and both the nursing staff and all students must arrive 15 minutes before that).

The campus of the State University of Mato Grosso do Sul is 12 km away from the city center, distance that requires some time to commute, considering also that most people use public transportation. Due to the current proposal of the educational program, the nursing program has pedagogical meetings that happen every Monday in the morning, during which it was possible to observe a common complaint among teachers about students' laxity, besides other claims due to the difficulties of carrying out all planned activities as well as the short time for leisure, physical activities, spiritual follow-up, sleep and rest, especially those in classroom practice and supervised training.

Because of this observation, the following research question emerged: How is the quality of life of students from the nursing course at the State University of Mato Grosso do Sul? To answer this question, this study was conducted, which aimed to evaluate the quality of life of students in the undergraduate nursing course at the State University of Mato Grosso do Sul.

Method

This is a quantitative, cross-sectional research, conducted between the months of October and November 2011. The participants were nursing students at the State University of Mato Grosso do Sul from Douradas, located in the south region of Mato Grosso do Sul, Brazil. The nursing course from the state university of Mato Grosso do Sul is expected to be completed in four years, divided into four grades of full-time.

Authorizations were asked to the nursing pro-

gram Coordination of the State University of Mato Grosso do Sul to conduct the research and subsequently to the professors for the implementation of the data collection instruments, in class, according to the students' availability. The following clarifications were made to students about the objectives of the study, aiming to obtain their voluntary cooperation. After acceptance and signature of the free and informed consent form, participants answered in one meeting, two different questionnaires: the sociodemographic, in order to characterize the participants, and the Quality of Life questionnaire, the Medical Outcomes Study 36 -item Short-Form Health Survey (SF-36), which aims to reflect about the impact of a disease on the lives of people in a wide variety of population[1].

The SF-36 is the most used questionnaire of generic measures on Quality of Life[4], which was developed by John E. Ware Jr. and Donald Cathy Sherbourne in The MOS 36-item short-form health survey (SF-36). It evaluates aspects related to the function, dysfunction and physical and emotional discomfort[1]. It is a multidimensional questionnaire, which can be self-manageable, and aims to examine the perception of health status by the patient. It consists of 36 items grouped into 8 scales, components, domains or dimensions: physical capacity (10 items), physical aspects (4 items), pain (2 items), general health status (5 items), vitality (4 items), social aspects (2 items), emotional aspects (3 items), mental health (5 items) and one more question of comparative evaluation between current health status and those of a year ago[1]. The 8 health dimensions have a variable number of items graduating responses from 0 to 100, and the highest score indicates better health status[4]. The item of comparative evaluation, which compares the current health with health a year before, receives no score[4].

The choice of the SF-36 Quality of Life questionnaire was due to the fact that it can be used in healthy people and ill ones. And as some professors knew

a significant number of students absent from the studying students for health reasons, such as type 2 diabetes mellitus, hypertension, insomnia, panic attacks, urinary disorders, depressive symptoms, change of mood, social withdrawal, loss of interest in activities, anxiety symptoms, hyperactivity, cardiac arrhythmia, stable angina, eating disorders, besides lassitude and discouragement.

In the statistical data analysis, three different statistical tests were applied, which were juxtaposed for categorical variables, regarding the dimensions of the SF-36, such as the analysis of variance test, the student's t mean differences test. Concerning the continuous socio demographic variables, Pearson's linear correlation test was used. The significance level was 5%, that is, all of them applied with 95% of reliability.

This study was approved by the Ethics Committee on Human Research of the Catholic University Don Bosco, which evaluated the project and gave its assent (Protocol. 052/11).

Results

From a universe of 143 students who were regularly enrolled in 2011, 40 (28.0%) refused to participate and 1 (0.7%) student was underage. Thus, a number of 102 students was possible, corresponding to 71.3% of the total. A slight majority of students surveyed was concentrated in the 4th year (27.0%) and in the 2nd (25.0%), and both the 1st and the 3rd years had 24.0% each. There was a predominance of female students (82.4%); aged between 18 and 30 years old, most of them were between 18 and 23 years old (90.2%); single (89.0%); 98.1% were in their first university course; and only one worked (1.0%). There was a statistically significant difference of 95% reliability in the domains: Physical Aspect, Mental Health, General Health Status and Social Aspect, as shown below in Table 1.

Table 1 - Comparison of quality of life in all the years of nursing students at the State University of Mato Grosso do Sul

Domain	Year	n	Average	SD	F	p
Functional capacity	1st	26	83.08	19.60		
	2nd	24	86.04	11.03	0,40	0,750
	3rd	25	80.80	17.89		
	4th	28	82.50	17.72		
Physical aspect	1st	24	70.83	32.69		
	2nd	23	46.74	37.92	5,50	0,002
	3rd	25	37.00	27.12		
	4th	28	65.18	35.58		
Pain	1st	23	45.83	13.42		
	2nd	22	57.45	27.77	2.29	0.084
	3rd	24	41.71	19.01		
	4th	20	52.45	25.75		
General health status	1st	23	69.04	13.97		
	2nd	20	63.00	17.67	6.43	0.001
	3rd	23	49.87	17.29		
	4th	15	68.20	16.15		
Vitality	1st	25	57.00	9.01		
	2nd	23	54.57	8.52	2.65	0.053
	3rd	23	50.65	7.43		
	4th	27	55.74	7.81		
Social aspect	1st	23	75.00	19.58		
	2nd	17	62.50	15.93	5.26	0.002
	3rd	24	53.65	23.45		
	4th	14	72.32	17.80		
Emotional aspect	1st	25	73.32	34.71		
	2nd	23	42.03	40.48	5.85	0.001
	3rd	25	29.32	38.87		
	4th	28	57.14	42.42		
Mental health	1st	25	70.56	17.04		
	2nd	23	65.39	14.10	4.01	0.010
	3rd	25	55.04	17.37		
	4th	28	64.00	15.63		

As it can be seen in this table, the students of the 3rd year and 2nd year had the lowest scores in the Physical Aspect, when data from the SF-36 were crossed (p=0.002). When the socio-demographic data and the SF-36 were crossed, significant differences were detected in the General Health Status in all the years

with decreased Quality of Life of respondents. When the domain Social Aspect was analyzed (p=0.002), the 3rd year again showed the lowest average (53.65; p=0.002), followed by the 2nd year with an average of 62.50. The Emotional Aspect (p=0.001) was altered, with focus on students from the 3rd year, with an average of 29.32, followed by the 2nd year with an average of 42.03, as demonstrated by the SF-36 questionnaire in this area, with more concern in women due to an average of 50.40. In relation to the mental health domain (p=0.010), 3rd year presented again the lowest average (55.04), followed by the 4th year (12.63), with females being more susceptible (62.51).

On Table 2, when relating participants' gender and domains of the SF-36 questionnaire, it was possible to detect a significant difference in the Quality of Life domains. It was evident that the female gender has a score with lower Quality of Life.

Table 2 - Comparison of gender and quality of life of nursing students from the State University of Mato Grosso do Sul

Domain	Gender	n	Average	SD	t	p
Functional capacity	Female	84	81.07	17.73	6.70	0.011
	Male	19	91.84	7.49		
Physical aspect	Female	81	57.10	36.06	1.14	0.288
	Male	19	47.37	34.25		
Pain	Female	71	47.99	21.37	0.83	0.365
	Male	18	53.39	26.56		
General health status	Female	66	62.20	17.51	0.07	0.797
	Male	15	60.87	20.04		
Vitality	Female	80	54.31	8.56	0.48	0.492
	Male	18	55.83	7.91		
Social aspect	Female	64	64.26	21.69	0.72	0.399
	Male	14	69.64	20.64		
Emotional aspect	Female	82	50.40	41.66	0.04	0.837
	Male	19	52.63	44.88		
Mental health	Female	83	62.51	16.43	2.47	0.119
	Male	18	69.33	17.94		

Regarding gender, only the functional capacity domain (p=0.011) had significant difference, ie, the averages quality of life are different, among students,

in this domain of the SF-36 instrument. On average, men (average=91.84) have higher average score in functional capacity in relation to the average score of women (average=81.07). Functional capacity is related to the ability to perform activities of daily living which are probably done by the female students surveyed such as tasks of daily life, taking care of the home environment, washing and ironing, cooking, cleaning the home environment, need of more time to take care of their beauty and health. Situations that students from the male sex spend less time doing or do not do at all.

Discussion

This study hypothesized that students of the nursing course at the State University of Mato Grosso do Sul have low quality of life, which, based on the data analysis, has proven true. It was also confirmed that nursing is a predominantly female profession, as to the gender of the students surveyed, there was a predominance of women, with 82.4% of respondents, confirming results of other studies carried out with nursing students and it was possible to confirm this female predominance with results of 85.7%[5], 70%[6], 89.6%[7] and 98.7%[8].

The age range of students surveyed ranged between 18 and 30 years old, and 90.2% are between 18 and 23 years old. A study about physical activity among undergraduate nursing students found an average age of 22.4 years old[7]. Evidence from another study, which aimed to study the quality of life of nursing students at the city of Foz do Iguaçu, also had a significant concentration of nursing students in the same age, with an 86.9% rate among 18 and 25 years of age[9]. Another study about Quality of Life with nursing students found out that 58.7% were up to 25 years old[10]. The study with students from a public and university nursing school from São Paulo, found out that 80% were up to 25 years old[11].

It is increasingly common for young people or young adults to graduate and settle down profession-

ally first and then to decide about their future marital life. In this study, most of the students are single (89.5%). Corroborating this result, another survey found out that there is a significant predominance of single people studying nursing(81.5%)[6].

Different from other studies with nursing students about work activity and quality of life, which found out that 47.0%[12], 57.0%[7] and 67.0%[10] work in parallel with their undergraduate studies, in this study, it was found that only one of the participants worked (1.03%), probably as a result of the fact that the nursing course from the State University of Mato Grosso do Sul is developed in full-time and requires numerous activities that occupy the time of students beyond the regular times, for example, educational projects, research and extension activities that often require students to use their free time at night to meet the other requirements of the course. With this, it is required from students almost an "exclusive dedication" to stay regular at the course.

Among the participants in this study, most of them are in their first university degree (98.1%). By analyzing this data, it can be seen the preference for the nursing course, which is increasingly visible and valued. Corroborating this data, a study on the profile of nursing students showed that 60.0% of the participants attended another college before the nursing undergraduate course[13].

Concerning the Quality of Life of the students surveyed, it can be seen in the grades of the 1st year that the students' performance is more theoretical. Students from that year are college students that are still in transition from a position of passive listeners, experienced in traditional high schools, starting to engage progressively and emotionally with the future experiences in practice fields, feeling anxiety due to these situations.

From the students' arrival at the university, being the majority of them young people, they demonstrate to be in a period of changes, bringing doubts and uncertainties about their adaptation in the academic environment. They also have strong pressure

and stress to match the hopes of their families, which carry expectations about the students' future life. Students will undergo changes in their lives, because they are vulnerable to the stress caused by the university, and the impacts will be dealt with according to their psychological maturity, which will reflect in moderate levels of stress for some or adaptive crisis situations to others.

The integration of students from the 2nd and 3rd years in supervised practical classes may result in conflicts and changes in daily life. These changes make it difficult for them to adapt to the new routine, both in practical classes and in the classroom, and learning can be harmed by physical and mental fatigue. As it can be seen when comparing the students' Quality of Life in the domains Physical Aspect and Mental Health, in different years, this showed that the results of the average scores are significant.

Students from the 3rd and 2nd year obtained the lowest scores in the domain Physical Aspect (p=0.002), when crossed with data from the SF-36. The lack of quality of the physical environment has also been contributing to the changes presented, such as public transportation, eating habits, insecurity and lack of physical space for rest during breaks. Students devote at least 36 hours per week for training, both in theoretical and practical classes, besides the need for individual and/or group work and also to be subjected to different assessments.

Another fact that may influence the outcome of the Physical Aspect domain is that most students do not live with their parents, which also make them responsible for household chores, assuming early this responsibility. Different from other research results conducted on Quality of Life with nursing students in the physical well-being domain, 60% of the participants were satisfied in this dimension[13]. A study that investigated fatigue among nursing undergraduate students found out that 83.5% of the participants reported being between moderately and extremely tired, out of which 59.8% said it caused injury from moderate to severe[14].

In relation to the mental health domain (p=0.010), the 3rd year was again the one with the lowest average 55.04, followed by 4th year with an average of 12.63, being females more susceptible with an average of 62.51 . One verifies in the application of the SF-36 that the sample studied allowed one to detect the 3rd year as the one when students demonstrate greatest weaknesses, when they need more support from professors, since in this period students are in the initial insertion phase in hospital clinical fields, witnessing death and morbidity in a stressful environment. A study conducted with the students from the nursing course of the Federal University of Piauí concluded that they go through times of change, development, frustration, growth, fears and anxieties, because an environment that should contribute to build up knowledge, and be the basis for their training experiences, becomes sometimes also the triggering of pathological disorders, when there is an exacerbation of the problem of "academic stress"[12].

Therefore, it is necessary that individuals know how to face stressful situations, adapting positively, and reconciling the stressful situations and feelings of apathy and lack of motivation. This moment brings up the challenge of dealing with a curriculum reform that allows flexibility strategies and spaces for students to develop their academic activities without prejudice or possible psychological trauma that can influence their personal and professional life.

When sociodemographic data and the SF-36 domains were crossed, significant differences were detected in the field General Health Status in all the years with decreased Quality of Life of respondents. The low score on the General Health Status can be connected to the stress and poor sleep quality that students have during some graduation periods, causing inattention, headache, gastrointestinal disorders, body aches, sedentary lifestyle, lack of social interaction and depression. This domain may be related to the previous health status of each student, since the nursing program "requires" exclusive dedication, that is, besides the presence in theoretical and practical

classes and extracurricular studies, which are paramount for their learning and training.

Comorbidities change, besides students' physical state, their psychological and social state too, which are generally ignored during the process of teaching and learning, creating an image of being complainant students or characterizing them as those who "drag their feet" . Corroborating this result, in a study conducted about depression among students of two nursing undergraduate courses, it was possible to detect that 15.4% of students found themselves ill in moderate and severe condition[15]. Different result from the one conducted with nursing students from the University of Concepción in Chile, which studied the factors related to quality of life and satisfaction among nursing students, which obtained 90.4% of good and very good, concerning their degree of satisfaction[16].

By analyzing the domain Social Aspect (p=0.002) in this study, it was also altered, 3rd year again showed the lowest average (53.65), followed by the 2nd year (62.50). Nursing students, due to the several activities that they perform, almost don't have time for personal relationships, physical activity, leisure, spiritual moments and others. Corroborating the findings of this research, other studies on Quality of Life with nursing students showed especially the 4th year with low score in the domain Social Aspect, highlighting disorganization of subjects, not very didactic classes, conflicted relationship with professors, lack of professional ethics, competitiveness among students, financial costs and lack of space and time for leisure[12]. These changes are reflected in their Quality of Life and in their social context, which creates favorable processes and wear, at the moment of social life and work that sometimes favors health and life and sometimes disease and death, resulting in health and disease patterns[11].

Conclusion

This study allowed one to identify that students of the nursing course from the State University of Mato Grosso do Sul, are mostly young, single and are taking their first undergraduate course. The data presented in this research detect the need for greater caution and attention on the part of the course coordination as well as on the part of professors, especially in relation to the Physical Aspect, Mental Health, General Health Status and Social Aspect of students, since there were different patterns of quality of life among students participating in the study, according to the year they were attending.

The freshman (first year) and graduates (fourth year) have better standards of quality of life than students of the middle years (second and third years) of the nursing course. Thus, the results of this study allow the coordination, with the collaboration of the professors' board, to perform actions that aim to provide improvements in the years when students are most affected in their quality of life.

Therefore, it is concluded that the results of this study indicate the lack of students support. Thus, it contributes to strengthen, although erroneously, the idea that educational institutions have balanced theory, however different practice.

Collaborations

Araujo MAN contributed to the conception and organization of the study, analysis, data interpretation and writing of the article. Lunardi Filho WD contributed to the review, critical writing and analysis of the article, Leite LRC performed the tabulation and statistical analysis. Ma RTK, Silva AA and Souza JC, contributed to the processing and identification of the samples collected.

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