

Quality of life of undergraduate nursing students at a Brazilian public university

Angela Rosa Moritz¹
Evani Marques Pereira²
Kátia Pereira de Borba³
Maria José Clapis⁴
Vania Gryczak Gevert⁵
Maria de Fátima Mantovani⁶

Quality of life of undergraduate nursing students at a Brazilian public university

Objective. To analyze the quality of life of undergraduate students of a nursing course. **Methods.** This was a descriptive and cross-sectional study with a quantitative approach conducted in a public university in a municipality of Paraná State, Brazil; the study used the *World Health Organization Quality of Life* questionnaire (WHOQOL-BREF) of the World Health Organization. **Results.** The study included 95 students, predominantly young (83.2%), single (89.4%), females (91.6%), living with friends (47.4%), receiving allowances (59%), with

enough monthly income (77.9%), and dedication of seven to eight daily hours to academic activities (25.2%). Among the areas of quality of life, social relationships showed the highest score (77.20) followed by psychological (67.73), environmental (64.85), and physical (63.40). The relationship between sociodemographic variables and domains of quality of life was not significant according to the Student's t and ANOVA tests. **Conclusion.** This study highlights the importance of attention to the physical health of nursing students.

Key words: quality of life; nursing students; nursing education.

-
- 1 Nurse. Nova Laranjeiras City Hall. Paraná, Brazil. email: angela.mortiz2007@gmail.com
 - 2 Nurse, Ph.D. Professor, Universidade Estadual do Centro Oeste, Guarapuava, Paraná, Brazil. email: evanimp@hotmail.com
 - 3 Nurse, Ph.D Student. Professor, Universidade Estadual do Centro Oeste, Guarapuava, Paraná, Brazil. email: kpborba@gmail.com
 - 4 Nurse, Ph.D. Professor, Ribeirão Preto School of Nursing, Universidade de São Paulo, Ribeirão Preto, São Paulo, Brazil. email: maclapis@eerp.usp.br
 - 5 Mathematician, Ph.D Student. Professor, Universidade Estadual do Centro Oeste, Guarapuava, Paraná, Brazil. email: vaniagg2@hotmail.com
 - 6 Nurse, Ph.D. Professor, Universidade Federal do Paraná, Curitiba, Paraná, Brazil. email: mfatimamantovani@ufpr.br

Article linked to the research: Análise da qualidade de vida de graduandos de um curso de enfermagem. Trabalho de conclusão de curso de graduação em enfermagem, apresentado ao departamento de enfermagem da Universidade Estadual do Centro Oeste (UNICENTRO), Paraná, Brasil, em 2012 .

Conflicts of interest: none.

Received on: April 19, 2016.

Approval on: August 31, 2016.

How to cite this article: Mortz AR, Pereira EM, Borba KP, Clapis MJ, Gevert VG, Mantovani MF. Quality of life of undergraduate nursing students at a Brazilian public university. Invest. Educ. Enferm. 2016; 34(3):564-572.

DOI: 10.17533/udea.iee.v34n3a16

Calidad de vida de los estudiantes de Enfermería de una universidad pública brasileña

Objetivo. Evaluar la calidad de vida de los estudiantes de Enfermería de una universidad pública brasileña.

Métodos. Estudio descriptivo, transversal y de enfoque cuantitativo, realizado en una universidad pública de un municipio del interior del Estado de Paraná, Brasil. Se aplicó la versión breve del cuestionario *World Health Organization Quality of Life (WHOQOL-bref)*. **Resultados.** Participaron en el estudio 95 estudiantes, que fueron predominantemente: jóvenes (83.2%), solteros (89.4%), de sexo femenino (91.6%), vivían con amigos (47.4%), recibían mesada (59%), con renta mensual suficiente (77.9%) y que dedicaban de 7 a 8 horas diarias a las actividades académicas (25.2%). Dentro de los dominios de calidad de vida, el de relaciones sociales obtuvo el mayor puntaje (77.2), seguido del psicológico (67.7), medio ambiente (64.9) y físico (63.4). El promedio del puntaje del WHOQOL fue de 78. Las relaciones entre las variables sociodemográficas y los dominios de calidad de vida no fueron estadísticamente significativas. **Conclusión.** Entre los alumnos de Enfermería investigados se observó un alto puntaje de calidad de vida general. Se atribuye este resultado al hecho de que los investigados tienen una adecuada condición socioeconómica, disponen de apoyo de las familias y de los amigos y estudian en una universidad que presenta una buena infraestructura. Es importante que se preste más atención a la salud física de los estudiantes.

Palabras clave: calidad de vida; estudiantes de enfermería; educación en enfermería.

Introduction

Quality of life (QOL) is a subjective concept because the interpretation of each individual depends on his/her personal point of view. It is also multidimensional, given the influence of factors related to education, economy and sociocultural aspects.¹ The World Health Organization Quality of Life Group defined QOL as “the individuals’ perception of their position in life in the context of culture and value systems in which they live, and in relation to their goals, expectations, standards and concerns”.² In the national and international scientific literature, in the health education field

Qualidade de vida de estudantes de enfermagem de uma universidade pública brasileira

Objetivo. Avaliar a qualidade de vida de estudantes de enfermagem de uma universidade pública brasileira.

Métodos. Estudo descritivo, transversal e de abordagem quantitativa, realizado em uma universidade pública de um município do interior do estado do Paraná, Brasil. Aplicou-se a versão breve do questionário *World Health Organization Quality of Life (WHOQOL-bref)*, da Organização Mundial de Saúde. **Resultados.** Participaram do estudo 95 estudantes que eram predominantemente; jovens (83.2%), solteiros (89.4%), do sexo feminino (91.6%), viviam com amigos (47.4%), recebiam mesada (59%), com renda mensal suficiente (77.9%) e que dedicavam-se de 7 a 8 horas diárias às atividades acadêmicas (25.2%). Dentre os domínios de qualidade de vida, as relações sociais obtiveram o maior escore (77.2), seguido do psicológico (67.7), meio ambiente (64.9) e físico (63.4). A pontuação média do WHOQOL foi de 78. As relações entre as variáveis sócio-demográficas e os domínios de qualidade de vida não foram estatisticamente significativas. **Conclusão.** Entre os alunos de enfermagem investigados se observou um alto escore de qualidade de vida geral. Atribui-se a esse resultado o fato de os investigados terem uma boa condição socioeconômica, disporem de amparo familiar e de amigos e estarem em uma universidade que apresenta uma boa infraestrutura. É importante que se preste mais atenção a saúde física desses estudantes.

Palavras chave: qualidade de vida; estudantes de enfermagem; educação em enfermagem.

and especially in nursing education, QOL has been a subject of major interest.^{1,3-8}

Nursing students represent a group of individuals who are constantly compromising their QOL. To perform the actions of their training, they face situations of suffering and stress, such as helping human beings to be born, overcome problems and limitations, and die with dignity.⁹ The training function of the university should provide a learning environment that promotes the QOL of students.⁵ However, studies have shown that the QOL of nursing students has been affected by

the time overload of the course and the lack of time for leisure.¹ Undergraduate nursing students at the Universidade Estadual do Centro Oeste (UNICENTRO) are part of a group that deserves attention regarding the analysis of their quality of life.

The nursing course is full-time, students participate in research and extension projects, there is a curricular internship, and extracurricular activities, such as participation in scientific events. The practical activities begin from the second year, and internship programs occur simultaneously with the development of the final paper of the course (TCC – Trabalho de Conclusão de Curso) in the fourth year. The nursing course of UNICENTRO has adequate educational infrastructure, including anatomy and physiology laboratories and for practice of nursing procedures, classrooms, comfortable auditoriums, computer centers, library and study areas. For practice and internship activities, UNICENTRO has partnerships with hospitals and public health units located in the city of the institution headquarters, which is approximately 4 to 5 km far from the university.

This nursing course has educational meetings routinely on Mondays. On these occasions, teachers share the students' complaints of fatigue, especially in periods of practical field activities and supervised training, in relation to their difficulties to perform all the activities planned by the course and still have time for leisure, physical activity, sleep and rest. Thus, assuming the committed quality of life of nursing students, the following research question emerged: 'How is the quality of life of undergraduate students of the nursing course of UNICENTRO?' This study was performed to answer that question, with the aim to evaluate the quality of life of undergraduate nursing students from a Brazilian public university.

Methods

This is a descriptive, cross-sectional study of quantitative approach. The coordination and faculty members of the nursing course of UNICENTRO

(state of Paraná, Brazil) granted authorization for the performance of the study. Study participants were the first to fourth year undergraduate students of the nursing course who were in the classroom on the data collection day, which was August 6th, 2012 (subject to students' availability). The application of data collection instruments happened after clarification of the study objectives, agreement and signature of the informed consent form (IC). The data collection instruments were self-applicable forms answered by students and there were no difficulties during this period.

In data collection, was used a characterization questionnaire of participants regarding gender, age, marital status, financial and housing conditions, and period of dedication to academic study (in hours), and the World Health Organization Quality of Life questionnaire (WHOQOL-BREF), an instrument developed by the World Health Organization Group (WHO), translated and validated for the Brazilian reality.¹⁰ The WHOQOL-BREF considers the last two weeks experienced by respondents. It has 26 questions; two of general scope (one refers to life and the other to health) and 24 comprise the domains of physical health, psychological health, social relationships and environment, which present objective and subjective aspects of assessment. The answers are on a Likert scale, varying in intensity, capacity, frequency and evaluation. The final scores of each domain consider the answers to each question composing it, resulting in final scores on a 4-20 scale that can be turned into 0-100 measured in a positive direction. Higher scores indicate better assessment of the quality of life.^{11,12}

The collected data were inserted in an Excel spreadsheet and statistically treated for further analysis. Sociodemographic data were analyzed using simple descriptive statistics, with calculation of absolute and relative frequency.¹³ The QOL results were distributed statistically into the four domains, and the sum of questions comprising each domain reached a total of 100. The ANOVA and Student's t test were used to

identify the significant differences between the means of sociodemographic variables and the physical, psychological, social relationships and environmental domains. In all cases, the p -value <0.05 was considered statistically significant.¹⁴ The study was performed in accordance with the guidelines and standards for research in human subjects, according to Resolution number 196/1996 of the Health National Council (effective resolution in the data collection period). The study was approved by the Ethics Committee of the Universidade Estadual do Centro Oeste (UNICENTRO), Paraná, Brazil, under number 80/2012.

Results

Of the 134 undergraduate students enrolled in the nursing course at UNICENTRO in 2012, 95 (70.89%) participated in the study. Among those invited to participate in the study, 9.47% refused and 31.57% did not attend class on the data collection day. Regarding the year of graduation, 38.94% of first year students participated, 23.15% of second and fourth year students, and 14.73% of third year students.

Table 1 shows the distribution of the total number of surveyed academics, according to sociodemographic variables and associations with domains of quality of life.

Among participants, the young women (91.6%) predominated. The age ranged between 17-25 years, and 83.2% were aged 17-20 years. Regarding sociodemographic data, the following information stands out: being single (89.4%), receiving allowance from parents (59%), living with friends (47.4%), and having enough monthly income (77.9%). In relation to time dedicated to academic activities, the students dedicating seven to eight hours to study daily predominate (25.2%), or an average of 52.5 hours per week. Table 2 shows the average scores attributed to the quality of life domains for the total of nursing students. The physical domain had the lowest score for

QOL (63.4), followed by the environmental (64.8) and psychological (67.7) domains. The social relationships domain had the highest score (77.2). Among participants, the general score of quality life ranged from 30 to 100, reaching an average of 78.

Table 3 shows the comparison of the mean scores of the quality of life domains among students from first to fourth year. The physical domain had the highest score for first year students (65) and lowest score for third year students (61.6). The psychological domain had the highest score for students of the first and fourth year (69.20), and lowest score for third year students (65.2). The social relationships domain had the highest score for first year students (79.4) and lowest score for second year students (73.6). The environmental domain had the highest score for fourth year students (65.4) and lowest score for second year students (63.8). Among students of the first, second, third and fourth years, the average p -values of the physical domain ($p=0.93$), psychological domain ($p=0.15$), social relationships domain ($p=0.51$) and environmental domain ($p=0.96$) are higher than the predetermined significance level.

Discussion

In this study, was discussed the hypothesis that nursing undergraduate students at UNICENTRO have low quality of life. The use of ANOVA and Student's t statistical tests (significant at $p <0.05$) showed no significant differences between the sociodemographic variables and quality of life domains, and the overall QOL score was high among participants. However, some considerations about the sociodemographic results and the mean scores of the quality of life domains stand out. The results of sociodemographic data regarding the predominance of females of young age may be related to other studies findings.^{1,3,4,9,14,15} These results reveal a peculiar profile in Brazilian public universities, that is of young women who are studying nursing.

Table 1. Scores of quality of life (mean ± standard deviation) of 95 nursing undergraduate students according to associations between sociodemographic characteristics (Paraná, Brazil, 2012)

Variables	n (%)	Domains				p
		Physical	Psychological	Social relationships	Environmental	
Gender						0.7
Female	87 (91.6)	63.1±10.2	67.4±7.9	76.9±14.6	64.6±11.3	
Male	8 (8.4)	64.6±16.5	69.3±13.6 69,3±13,6	81.5±8.9 81,5±8,9	64.7±8.9	
Age						0.71
17- 20 years	79 (83.2)	63.1±1.2	67.4±7.9	76.9±14.6	64.6±11.3	
> 20 years	16 (16.8)	64.8±11.5	69.3±8.2	78.6±13.9	66.0±12.8	
Marital status						2.19
Married	5 (5.3)	71.0±11.6	68.4±6.8	81.2±16.6	76.7±9.9	
Single	85 (89.4)	63.1±10.5	68.1±8.0	77.3±13.2	63.9±11.5	
Stable relationship with a steady partner	5 (5.3)	61.4±5.6	61.2±5.2	71.4±29.8	69.6±2	
Allowance						0.85
Yes	56 (59.0) (59,0)(59,0)	64.2±9.3	68.5±9.0	78.7±15.3	63.8±13.0	
No	39 (41.0)	62.8±11.2	67.2±7.1	76.2±13.7	65.6±10.4	
Academic scholarship						0.53
Yes	14 (14.8)	58.8±12.0	63.4±7.7	74.9±10.4	65.7±10.8	
No	81 (85.2)	64.2±10.0	68.5±7.8	77.6±15.0	64.7±11.7	
Monthly income						0.08
Surplus	17 (17.9)	62.2±13.7	67.6±8.4	75.9±17.3	64.5±11.4	
Sufficient	74 (77.9)	63.7±9.5	67.8±8.0	77.6±13.9	65.1±11.9	
Insufficient	4 (4.2)	63.5±14.2	67.8±5.0	74.3±13.0	62.0±6.9	
Lives with						0.15
Alone	5 (5.3)	59±15.7	71.2±6.0	75.8±17.7	65.4±12.5	
Parents	33 (34.7)	64.8±8.9	68.8±8.6	77.2±14.0	63.0±12.5	
Relatives	12 (12.6)	66.3±10	68.7±7.3	78.4±16.2	70.2±10.6	
Friends	45 (47.4)	62±10.8	66.3±7.7	77.0±14.3	64.8±11.3	
Daily dedication to academic activities						0.07
6 hours	10 (10.5)	64.7 ±9.8	67.5 ±7.3	80.4 ±11.9	65.2 ±10.8	
6-7 hours	23 (24.2)	65.5 ±9.3	67.7 ±5.6	73.8 ±16.8	68.1 ±11.8	
7-8 hours	24 (25.2)	64.0 ±7.9	66.8 ±8.7	80.0 ±16.2	63.7 ±11.6	
8- 9 hours	20 (21.1)	62.6 ±11.5	66.8 ±4.7	74.1 ±11.8	64.0 ±13.6	
10 hours or more	18 (19.0)	60.2±13.5	70.2±12.0	79.6±12.1	63.0±9.3	

Table 2. Scores of the WHOQOL-BREF of 95 nursing undergraduate students (Paraná, Brazil, 2012)

Domain	Mean	SD	Median	Minimum	Maximum
Physical	63.4	2.7	63.0	31.0	86.0
Psychological	67.7	1.5	68.0	38.0	91.0
Social relationships	77.2	5.1	80.0	20.0	100.0
Environmental	64.8	3.3	65.7	37.0	92.7
Overall quality of life	78.0	6.1	80.0	30.0	100.0

Table 3. Mean scores of the quality of life domains according to the *WHOQOL - BREF* of 95 nursing undergraduate students and year of graduation (Paraná, Brazil, 2012)

Domain	Year	n	Mean	SD	T	p
Physical	1 st	37	65.0	9.4	0.63	0.93
	2 nd	22	62.6	12.5		
	3 rd	14	61.6	9.3		
	4 th	22	62.6	10.5		
Psychological	1 st	37	69.2	6.5	1.80	0.15
	2 nd	22	65.4	9.2		
	3 rd	14	65.2	5.9		
	4 th	22	69.2	9.1		
Social relationships	1 st	37	79.4	14.6	0.76	0.51
	2 nd	22	73.6	17.6		
	3 rd	14	77.0	12.3		
	4 th	22	77.0	11.5		
Environmental	1 st	37	65.2	11.0	0.08	0.96
	2 nd	22	63.8	12.7		
	3 rd	14	65.0	12.5		
	4 th	22	65.4	11.0		

Still regarding gender, the evidence of better quality of life of the average scores of domains related to psychological aspects of men compared to women is noteworthy. Compared to women, men have several risky behaviors, consider health care of less importance, and value the psychological symptoms less. Thus, there is a socially constructed requirement that men be physically and psychologically stronger.¹⁵ The characterization of investigated students regarding their single marital status, receivers of parental allowance, living with

friends and owners of sufficient monthly income can be related to some studies that investigated the QOL theme among nursing students of public universities.^{1,15} Nursing courses in public universities are full-time.^{1,3,4,9,14,15} Thus, students are required to perform numerous activities that keep them busy beyond the regular hours and demand an almost exclusive dedication.¹⁵ In this perspective, there is a profile of students who generally do not work, but have to have a good financial condition to maintain their socioeconomic needs.

The fact that 93.8% of students reported not being fully satisfied with their sleep is considered a contributing factor to the lower QOL scores in the physical domain. The predominance of nursing students' reports corresponding to dissatisfaction with sleep demonstrates the compromised quality of rest and the level of energy among participants, revealing negative interference in the performance of daily activities and in the learning process.⁶ The study on the nursing students' perception of their quality of life performed at the Universidade Federal do Estado de São Paulo corroborates the result of the physical domain.¹ In this study, the physical domain had the lowest mean score for nursing students in the four years of the course. The aspects comprising the physical domain are closely linked to success in the learning process and achievement of academic activities, and may trigger negative feelings, which have direct influence on the degree of satisfaction/dissatisfaction that students demonstrate with their quality life.⁶ The fact of 72.6% of students admitting the presence of negative feelings sometimes or often, such as moodiness, anxiety and despair is related to the result of psychological domain. The study on undergraduate nursing students' perception of quality of life performed at the Universidade de Brasília corroborates this finding, given that 78.6% of respondents stated they experienced negative feelings sometimes or frequently.⁶

The negative feelings presented by nursing students may be related to coping with difficult and uncomfortable situations as the reality of clinical practice and care for the sick, the course workload, and even socializing with teachers in practical activities.³ The academic performance throughout graduation will depend on psycho-emotional changes of students, which involves aspects that seem to interfere with their quality of life.¹⁴ Thinking of nursing students in relation to care with their health, it is necessary to value the assessment of quality of life in relation to the environmental domain, since in general, it had lower mean scores than social relationships and psychological aspects, and the failure to satisfy the recreational needs (93.6%) contributed to lower scores of quality of life in the environmental

domain. This result is related to the fact that the undergraduate nursing course in the studied institution is full-time.

Full-time courses in the health area can lead to overload of activities for students, resulting in their fatigue and exhaustion.⁷ The study on quality of life of nursing undergraduate students found the activity overload in the full-time course, and lack of time for extracurricular activities and leisure were the most reported factors by students as affecting their quality of life.³ The satisfaction of needs of leisure and fun activities is essential to maintain quality of life.⁶ Leisure is a factor compromised by the excessive demands in academia and course workload.³ The students' dissatisfaction with lack of time for leisure activities may have roots in the same justification for problems with sleep and lack of energy.⁶ Studies on factors related to the quality of life of nursing students highlight their poor satisfaction with the curriculum flexibility, which can interfere with the satisfaction of leisure needs and compromise the quality of life.⁵

The QOL domain of social relationships with highest scores is related to the students' feeling of equal satisfaction with the relationship and support they receive from friends and relatives (88.4%) and their sexual life (44.2%). Added to these revelations is the fact that most students participating in the study lived with friends. Other studies that also used the WHOQOL-BREF corroborate these findings.^{1,6} For nursing students, the features of social support and sexual activity related to social aspects represent factors of positive influence on their quality of life.^{1,6} The university location away from home can be a factor contributing to empower students in their social relations. The descriptive exploratory study of qualitative approach performed in a nursing course at a public university in São Paulo identified the friendship bonds established with colleagues as one of the factors favoring the quality of life within the university, because they give strength to face difficulties during graduation.³

Regarding the years of course, the participants with better QOL scores were first year students

in the physical, psychological and social relationships domains, and fourth year students in the physical and environmental domains. The lowest scores were from second year students in the social relationships and environmental domains, and third year students in the physical and psychological domains. The study on quality of life of nursing students performed at a public university in the central west of Brazil corroborates these findings.¹⁵ In this study, nursing students of the second and third years had the lowest scores for quality of life, and students of the first and fourth years had the highest scores. Nursing students of the first year are still in transition from the passive posture of listener experienced in a traditional high school, to the gradual engagement with experiences and emotions in practice fields, which will add anxieties in future situations.¹⁵ In the first year, even though students go through changes and new experiences resulting from their inclusion in university, and have to adjust to the course, they perform predominantly theoretical and practical activities in the classroom and laboratories.¹⁴ Thus, these situations favor good standards of quality of life. However, fourth year nursing students have a more impaired QOL than first year students. In the fourth year of the course, there are more academic assignments, such as finishing the final paper, as well as expectations for graduation, the feelings of inadequacy and insecurity about the future, and dealing with the labor market.¹⁴

Different situations compromise more the quality of life standards of second and third year students than of first and fourth year students. Second and third year students have supervised practical classes, which can cause conflicts and changes in daily life by the adaptation to different routines, and commit their learning due to physical and mental fatigue.¹⁵ In the second year, nursing students are inserted in the hospital setting to perform practical activities linked directly to patients. This situation generates anxiety, fear, anguish, conflicts, stress and depressive symptoms. In the third year, the theoretical and practical activities continue, and in general, students are more adapted to the university environment and

teaching/learning scenarios.¹⁴ The overall score of quality of life among participants was high. This result is explained by the fact that in general, participants seem to have a good socioeconomic status, support from family and friends, and are in a university with adequate infrastructure. The study on the nursing undergraduate students' perception on their quality of life corroborates this result.¹⁶ In such study, nursing students considered their quality of life as good, and highlighted the factors favoring it, namely, the friendship bonds established with colleagues, the great library collection, the technical knowledge acquired, the fact that the university is public, the easy access to the university, and the infrastructure offered. Although in the present study the results between the average quality of life domains and the correlation with sociodemographic variables did not present significant differences among participants, the undergraduate nursing course is perceived as a contributing factor for changes in the quality of life of students. Students have different perceptions about their QOL, and there are factors that favor and compromise it during the training years. Among the QOL domains analyzed, the first and fourth year students showed higher standards of quality of life than students of middle years (second and third years). However, the physical domain had lower score for the total of nursing students.

Some methodological limitations should be considered for this study. Although the use of a generic instrument has allowed assessment of QOL among students of different years of the course, the questionnaire may have not detected differences related to specific conditions of these students. The assessment of the quality of life domains of this study demonstrated the importance of performing this type of research, with a view to obtain results showing how students are experiencing their passage by university. Measuring the QOL of nursing undergraduate students results in the production of essential knowledge that can guide educational institutions in the development of strategies of support and coping based on the real needs involved in the quality of life of this particular group.

References

1. Arronqui GV, Bóz Lacava RMV, Magalhães SMF, Goldman RE. Percepção de graduandos de enfermagem sobre sua qualidade de vida. *Acta Paul. Enferm.* 2011; 24(6):762-5.
2. The Whoqol Group. The development of the World Health Organization quality of life assessment instrument (the WHOQOL). In: Orley J, Kuyken W, editors. *Quality of life assessment: international perspectives*. Heidelberg: Springer Verlag;1994. P 41-60.
3. Oliveira B M, Mininel VA, Felli VEA. Qualidade de vida de graduandos de enfermagem. *Rev. Bras. Enferm.* 2011; 64 (1):130-35.
4. Ferro PA, Espírito Santo FH. Qualidade de vida: um estudo com ingressantes do curso de graduação em enfermagem e licenciatura. *R. Pesq.: Cuid. Fundam.* 2012; 4(1):2647-53.
5. Barraza CG, Moreira LO. Factores relacionados a la calidad de vida y satisfacción en estudiantes de enfermería. *Cienc. Enferm.* 2012; 18(3):111-9.
6. Bampi LNS, Baraldi S, Guilhem D, Pompeu RB, Campos ACO. Percepção sobre qualidade de vida de estudantes de graduação em enfermagem. *Rev. Gaúcha Enferm.* 2013; 34(1):125-32.
7. Paro CA, Camargo Bittencourt ZZL. Qualidade de vida de graduandos da área da saúde. *Rev. Bras. Educ. Med.* 2013; 37(3):365-75.
8. Yildirim Y, Kilic SP, Akyol AD. Relationship between life satisfaction and quality of life in Turkish nursing school students. *Nurs. Health Sci.* 2013; 15(4):415-22.
9. Furegato ARF, Santos JLF, Silva EC. Depressão entre estudantes de dois cursos de enfermagem: autoavaliação da saúde e fatores associados. *Rev. Bras. Enferm.* 2010; 63(4):509-16.
10. Fleck MPA, Leal OF, Louzada S, Xavier M, Chachamovich E, Vieira G, et al. Desenvolvimento da versão em português do instrumento de avaliação de qualidade de vida da Organização Mundial de Saúde (WHOQOL-100). *Rev. Bras. Psiquiatr.* 1999; 21(1):19-28.
11. Organização Mundial de Saúde- OMS. Programa de Saúde Mental. Genebra. Grupo Whoqol. Whoqol Abreviado. Versão em Portugues, 1998 [Internet]. Available from: <http://www.ufrgs.br/psiquiatria/psiq/whoqol84.html>
12. Fleck MPA, Louzada S, Xavier M, Chachamovich E, Vieira G, Santos L, et al. Aplicação da versão em português do instrumento abreviado de avaliação de qualidade de vida Whoqol - bref. *Rev. Saude Publica.* 2000; 34(2): 178-83.
13. Marconi MA, Lakatos EM. *Técnicas de Pesquisa*. 7th Ed. São Paulo: Atlas, 2012.
14. Souza IMDM, Paro HBMS, Morales RR, Pinto RMCC, da Silva CHM. Qualidade de vida relacionada à saúde e sintomas depressivos de estudantes do curso de graduação em Enfermagem. *Rev. Latino-Am. Enfermagem.* 2012; 20(4):736-43.
15. de Araujo MAN, Filho WDL, Leite LRC, RTK Ma, Silva AA, Souza JC. Qualidade de vida de estudantes de enfermagem. *Rev. Rene.* 2014; 15(6):990-7.
16. Silva PAS, Furtado MS, Guilhon AB, Souza NVDO, David HMSD. A saúde do homem na visão dos enfermeiros de uma unidade básica de saúde. *Esc. Anna Nery.* 2012; 16(3):561- 8.