# NURSING UNDERGRADUATE STUDENTS' PERCEPTION OF QUALITY OF LIFE

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#### **ABSTRACT**

The research objective was to know nurse undergraduate students' perception of quality of life. A cross-sectional study was conducted from August 2010 to August 2011 with 56 nursing students of the Faculty of Health Sciences, University of Brasilia, Brazil. A specific questionnaire was used (sociodemographic, academic and health profile) and the WHOQOL-BREF. Statistical analyzes included a description of frequency, central tendency and dispersion measures, and comparison between domains. The Psychological and Environment domains were assessed as the best and worst scores, respectively. The facets called Thinking, learning, memory and concentration, Sleep and rest, Energy and fatigue, Activities of daily living, Work Capacity, Participation in and opportunities for recreation/leisure activities, financial resources and negative feelings were affected. The facets with the worst score influenced negatively the quality of life for students and might trigger negative feelings such as bad mood, desperation, anxiety and depression.

Descriptors: Quality of life. Perception. Students, nursing. Schools, nursing. Education, nursing.

## **RESUMO**

A pesquisa objetivou conhecer a percepção sobre a qualidade de vida de graduandos em enfermagem. O estudo transversal foi realizado entre agosto de 2010 a agosto de 2011, com 56 acadêmicos de enfermagem da Faculdade de Ciências da Saúde da Universidade de Brasília, Brasil. Foi utilizado questionário específico (perfil sociodemográfico, acadêmico e de saúde) e o WHOQOL-bref. As análises estatísticas incluíram descrição de frequência, tendência central e dispersão e comparação entre os domínios. Os domínios psicológico e meio ambiente foram avaliados como o melhor e pior, respectivamente. As facetas denominadas capacidade de concentração, sono, grau de energia diário, capacidade para realizar atividades do dia a dia e para o trabalho, oportunidades de lazer, recursos financeiros e sentimentos negativos demonstraram-se comprometidas. Essas facetas influenciaram negativamente a qualidade de vida dos estudantes, podendo desencadear sentimentos negativos, como mau humor, desespero, ansiedade e depressão.

**Descritores:** Qualidade de vida. Percepção. Estudantes de enfermagem. Escolas de enfermagem. Educação em enfermagem. **Título:** Percepção sobre qualidade de vida de estudantes de graduação em enfermagem.

# **RESUMEN**

La investigación tuvo como objetivo conocer la percepción sobre calidad de vida de estudiantes de pregrado en enfermería. Estudio transversal realizado entre agosto de 2010 y agosto de 2012 con 56 académicos de enfermería de la Facultad de Ciencias de la Salud de la Universidad de Brasilia, Brasil. Fue utilizado cuestionario específico (perfil sociodemográfico, académico y de salud) y el WHOQOL-bref. Los análisis estadísticos incluyeron descripción de frecuencia, tendencia central y dispersión, y comparación entre los dominios. Los dominios psicológico y medioambiente fueron evaluados como mejor y peor respectivamente. Las facetas denominadas capacidad de concentración, sueño, grado de energía diaria, capacidad para realizar actividades diarias y del trabajo, oportunidades de ocio, recursos financieros y sentimientos negativos se mostraran comprometidos. Estas facetas influyeron negativamente la calidad de vida de los estudiantes, pudiendo desencadenar sentimientos negativos como mal humor, desesperación, ansiedad y depresión.

**Descriptores:** Calidad de vida. Percepción. Estudiantes de enfermería. Escuelas de enfermería. Educación en enfermería. **Título:** Percepción sobre calidad de vida de estudiantes de pregrado en enfermería.

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# INTRODUCTION

The term quality of life was coined by former U.S. President, Lyndon Johnson, in 1964. At the time he said the development of the nation could not be measured by their bank balance sheet, but by the quality of life afforded to people<sup>(1)</sup>. Currently, there is a growing interest in the used construct in various approaches. It comprises popular concepts widely used related to well-being, pleasure, feelings and emotions, personal relationships, professional events, among others, to the scientific perspective, with several meanings in literature<sup>(2)</sup>.

The quality of life concept was incorporated into the global debate, especially with regard to human development, social well-being, democracy, human and social rights, covering several sectors, including health<sup>(3)</sup>. In the individual aspect, it comprises an individual centered approach based on subject's perception about their functioning in many areas of life, eg, physical, occupational, psychological and social aspects<sup>(4)</sup>.

Quality of life can change over time, either globally or in some areas of life<sup>(2)</sup>. This term, which is so debated among researchers from various areas and occupying a broader space in society and in public policy, however, does not have a universal definition. In several studies, different concepts and approaches on the theme, theoretical models and assessment tools are applied<sup>(2)</sup>.

Quality of life is defined as "individuals' perceptions of their position in life in the context of the culture and value systems in which they live and in relation to their goals, expectations, standards and concerns" (5). This concept was developed in the 1990s by the study group of the World Health Organization (WHO), a multicenter project that originated two measurement instruments: World Health Organization Quality of Life-100 (WHOQOL-100) and its short version WHOQOL-BREF(5).

This project involved the participation of Brazilians through the WHOQOL Brazil group, Department of Psychiatry and Legal Medicine, Federal University of Rio Grande do Sul, which translated the instruments into Portuguese. WHO's objective was to develop a concept and tools with transcultural approach covering three aspects related to the theme: subjectivity (individual's perception of his life); multidimensionality (including various dimensions of life), and the presence of elements of both positive and negative evaluation (1.6).

In the health sector, quality of life achieves relevance in the rhetoric of professionals, including nurses. Studies on quality of life for graduate students in the sector, especially with the use of the methodology WHOQOL-BREF, focuses in the areas of nursing<sup>(7-8)</sup>, medicine<sup>(9-10)</sup> and nutrition<sup>(11)</sup>. As this theme has been addressed in Nursing graduate courses<sup>(7)</sup> and health sciences.

In the Nursing course, which require personal interaction on the central object of study – implies establishing effective relationships to care for others – and it is permeated by socio-cognitive and affective processes, expressing itself through feelings and emotions in situations of conflict or overcoming, it is irrefutable that the proximity to human suffering and death are present and interfere with the performance of the students. These issues are reflected in the way students prepare themselves to care for their patients, as well as the consolidation of their personal and professional relationships. The reality experienced during formative years may directly influence students' quality of life<sup>(3)</sup>.

Given this context and the relevance of understanding the possible interferences of the process of academic training on nursing students' quality of life, this research aimed to identify the nursing undergraduate students perception of quality of life from the Faculty of Health Sciences, University of Brasilia (UnB). This knowledge will support interventions that might assist in the process of training and improving students' quality of life.

# **METHODS**

The research was conducted at the Faculty of Health Sciences at UnB, from August 2010 to August 2011. Data from the System Information of Undergraduate Academic showed that in the first half of 2010 the nursing program had 309 enrolled students, 267 women and 42 men. Based on this information, 95% confidence interval and maximum standard error equal to 5%, we obtained a random sample stratified by gender. Interviews were conducted with 56 randomly selected students, 48 women and 8 men, equally distributed in the course eight semesters, i.e. 6 women and 1 man in each semester.

This is a cross sectional study, in which interviews were conducted with the application of two research instruments. In order to know the sociodemographic, academic and health aspects, a specific instrument was created, which characterized the subject. To collect data on the quality of life we used the WHOQOL-BREF, which refers to the last fortnight experienced by participants.

WHOQOL-BREF, used to assess quality of life in adult populations, consists of twenty six questions. Two questions are general and refer to the perception of quality of life and satisfaction with health. The other questions, represent the twenty-four facets that comprises the original tool and are divided into four domains: physical health, psychological health, social relationships and environment<sup>(6)</sup>.

The domains and their facets have objective and subjective aspects for assessment and the answers are given on a Likert scale. The answers vary in intensity (nothing - extremely), capacity (nothing - completely), frequency (never - always) and evaluation (very dissatisfied - very satisfied and very poor-very good)<sup>(1)</sup>. The WHOQOL-BREF has been used in Brazil in studies with nursing<sup>(7-8)</sup>,medicine<sup>(9-10)</sup>, nutrition<sup>(11)</sup> and other students<sup>(12)</sup>. The methodology was also applied to more specific groups, such as people with traumatic spinal cord injury<sup>(4)</sup>, traumatic brain injury<sup>(13)</sup>.

Data analysis was performed using the Statistical Package for the Social Sciences (SPSS) 17 and included descriptive statistical analysis of frequency, central tendency and dispersion measures, and inferential analysis of comparison between domains.

From the values found for each of the twenty-four facets that comprise the domains the median responses were obtained, i.e. the value which separates 50% of the responses, when they are arranged. The values indicate 1 as the worst response and 5 as the best response, which enabled us to verify facets which received positive or negative evaluation. For purposes of uniformity and enabling the comparison, the median presented in facets related to pain and discomfort, dependence of treatments or medications and negative feelings were analyzed reversed, as recommended by WHO<sup>(6)</sup>.

The calculation of the scores for quality of life assessment was done separately in each of the four domains, since conceptually there is no provision in the instrument an overall score of quality of life. The raw score was transformed to a scale from 0 to 100 (score transformed ST 0-100) according to the syntax proposed by WHO for SPSS. Thus, the minimum scores for each domain was 0 and the maximum was 100, so that the higher the score, the more positive the assessed domain.

In order to compare the domains and verify statistically significant differences a t test mean comparison was performed for paired data.

Agreeing with the Resolution No. 196/96, of the National Health Council, which deals with Research Involving Human Subjects in Brasil<sup>14</sup>, the project of the present study was submitted to the Ethics Committee in Research of the Faculty of Health Sciences at UnB, under the CEP registration number 104/09, and it was approved in the 9<sup>th</sup> Regular Meeting held on 13/10/2009. All students were informed about the objectives and methodology adopted in the research and confidentiality of the data source was assured. Voluntary participation was achieved through the signing of the consent form. All students invited accepted to participate in the study.

#### RESULTS AND DISCUSSION

The epidemiological profile of the 56 academics interviewed, revealed a predominance of women among undergraduate students of UnB nursing, 85.7% of the sample.

Regarding age, 98.2% of the students are between 18 and 25 years, with only one student aged 35. The mean age was 20.71 years and standard deviation of 2.20 years. It was found that 96.4% of the participants live without a partner and that 96.4% only study. Perhaps the predominance of student non-workers is justified by the insertion of young graduates from high school whose financial support comes from their families. Other researches related to quality of life and socio-demographic profile of nursing students showed similar percentages<sup>(7-8,15-17)</sup>.

WHOQOL-BREF has two general early questions. In the first, 85.4% of participants assessed their quality of life as good or very good. Other studies have found similar results<sup>(7-8,15-17)</sup>. In the second question, we found a worrying fact, 34.6% of participants said they were dissatisfied or neither satisfied nor dissatisfied with their health. Researches conducted in public and private universities found similar percentages<sup>(7-8)</sup>.

The score transformed ST 0-100 revealed the mean assessment of the four domains: psychological: 69.6; social relations: 69.2; physical health: 65.4; environment: 63.3. This assessment favors comparative analyzes between domains, providing greater visibility to the results<sup>(7)</sup>. In a study with

nursing ungraduated students in the south of Brazil, it was proposed that the values between 0 and 40 were considered as failure range, 41-70 as uncertainty range and above 71 range of success<sup>(7)</sup>. From this proposition it was observed in the present study, none of the domains achieved the range of success and are in the region of uncertainty.

Comparing the domains by the t test mean comparison for paired data, we found that the mean assessments are statistically different. The psychological domain was rated the best. The same result can also be observed in another study with nursing students<sup>(15)</sup>. Then classified the physical health and social relationships domains. The domain with worse assessment was the environment.

It was conducted an analysis by the median of responses in each question (facets) of each domain. The psychological domain, best assessed, consists of six questions that reflect their personal condition of life (Figure 1). The assessments have shown that participants rely on Spirituality/Religion/Personal beliefs, have Positive feelings, good Self-esteem and accept their Bodily image and appearance. Such facets accounted therefore factors that favored students' quality of life.

A research conducted with nursing students at the Pontifical Catholic University of Sao Paulo concluded that the psychological and Spirituality/ Religion/Personal beliefs constitute the bases for maintaining the balance of the student<sup>(16)</sup>. The facet Thinking, learning, memory and concentration, however, showed median 3, indicating some level of dissatisfaction. This assessment may be related to other facets relating to the physical health domain that interfere with the ability to concentrate, such as satisfaction with Sleep and rest, which was also the median 3 (Figure 3). It is observed an association when Sleep and rest does not provide the adequate mental and physical rest, resulting in impaired concentration ability of the student.

Regarding to the social relationships domain (Figure 2), the participants revealed to be equally satisfied with their Personal relationship and Social support they receive from friends and family, as well as with their Sexual activity, self-assessing with median 4. These facets represented for students positive factors on their quality of life. This domain received the highest score among nursing students in other studies on quality of life, which also used the methodology of the WHOQOL-BREF<sup>(7-8)</sup>.

The physical health domain consists of seven questions presented in Figure 3. Some variations may be observed between the median score of each facet. The best score is on the Mobility, with at least half of participants answering it as 5. This result shows that physically, there are no problems which prevent or hinder students' activities. A good evaluation (median 4) on the issues of Pain and discomfort

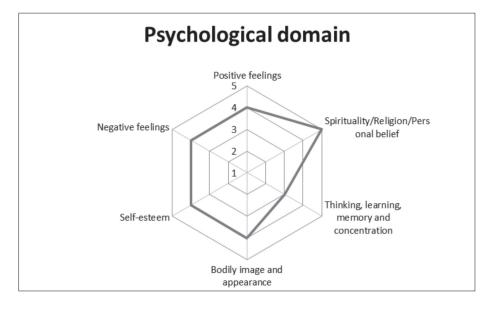


Figure 1 – Median of participants score in the facets of the psychological domain of WHOQOL-BREF, from August 2010 to August 2011. Brasília, DF, 2011.

and Dependence on medicinal substances and medical aids also suggest a good general physical condition. Although the total score of the domain (65.4) indicate an acceptable assessment of the physical health on the part of academic student, some facets had a median 3, reflecting some degree of dissatisfaction. These issues are related to Sleep

and rest, Energy and fatigue, Activities of daily living and Work capacity.

Importantly, these facets are intimately related, as Energy and fatigue of the individual is a consequence of the quality of their Sleep and rest, which also establishes the degree of disposition for all Activities of daily living and Work capacity

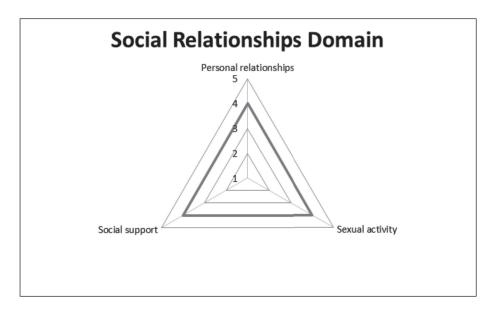
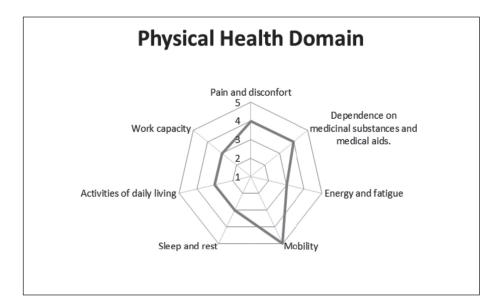


Figure 2 – Median of participants score in the facets of social relationships domain of WHOQOL-BREF, from August 2010 to August 2011. Brasilia, DF, 2011.



**Figure 3** – Median of participants score in the facets of the physical health domain of the WHOQOL-BREF, from August 2010 to August 2011. Brasília, DF, 2011.

in the case of studying. This result is of concern because the sample is composed of young people in a considered life full period (joviality, favorable hormone levels, among others) have some thresholds characteristics in terms of physical performance.

The environment domain (Figure 4) received the worst evaluation. It comprises eight facets that address the environment conditions and lifestyle of participants. The questions related to Home environment, Physical environment (pollution/noise/traffic/climate), Health and social care: accessibility and quality and Opportunities for acquiring new information and skills presented median 4, featuring a satisfactory evaluation.

Three other questions, however, had a median of 3, these facets are related to Financial resources, Participation in and opportunities for recreation/leisure activities and Transport. On these questions, more than half of the participants said they were very dissatisfied, dissatisfied or neither satisfied nor dissatisfied.

Financial resources may have explanation on their profile of students, mostly do not work and rely on family funding. In this scenario, it is possible that families are unable to meet their requirements in terms of recurring expenses and extraordinary, especially with regard to Participation in and opportunities for recreation/leisure activities are considered essential for the quality of life. Two other studies with university students also pointed out the environment domain as the worst assessed among academics<sup>(7,12)</sup>.

The results revealed impaired sleep quality and the degree of energy interfering with activities of daily living and hence the learning process of students. A similar situation was observed in a study with students of physical education, psychology and systems information of the University Center of the Associated Colleges of Education, a private institution in Sao Joao da Boa Vista, São Paulo State<sup>(12)</sup>, enabling us to think that these students complaints are general and not only of undergraduate students of health area<sup>(11,18)</sup> and nursing<sup>(16)</sup>.

The excessive workload, with large volume of activities in their undergraduate courses, could explain the low performance in facets Sleep and rest, Energy and fatigue, whereas the overload of the course is identified as a factor negatively influenced by the quality of life of nursing students<sup>(16-17)</sup> and medicine<sup>(9,19)</sup> in other research on the topic. Another explanation is that these physical symptoms can translate a depression condition. In research on

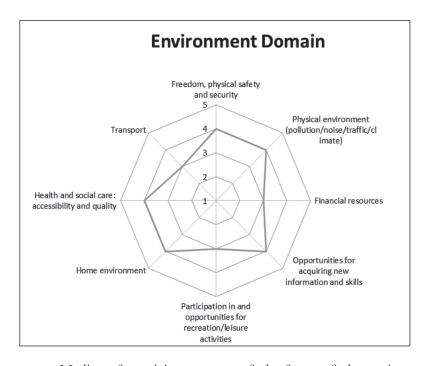


Figure 4 – Median of participants score of the facets of the environment domain of WHOQOL-BREF, from August 2010 to August 2011. Brasília, DF, 2011.

the health of physicians in Brazil, it was observed that stress, anxiety and depression may also show physical manifestations, including: fatigue, sleep disturbance, and difficulty concentrating<sup>(20)</sup>.

In the present study, although the psychological domain was highlighted, best score in the evaluation, the question regarding the presence of negative feelings, such as moodiness, anxiety, despair and depression caught the attention. Among the participants, 64.3% said they experienced such feelings sometimes, 14.3% often, 10.7% very often and 8.9% always experienced it. These feelings arise due to contact with sensitive and discomfort situations, as the reality of clinical practice and care for patients (practical activities of the course), the volume of course load and even socializing with professors (15-17).

The relationship between students and professors has not been assessed by the methodology used. However, other studies on quality of life involving nursing students revealed that conflicted relationship with professors was unfavorable factor for quality of life<sup>(15-17)</sup>. It is worth noting the important role that professors present as facilitators and supporters of the academic process.

The students' dissatisfaction with the lack of time for leisure activities may have roots in the same justification for problems with sleep and lack of energy. Leisure is considered as a factor in other studies compromised by over-charging of university area and the course load<sup>(17)</sup>. On the other hand, it is pointed as an indispensable item for maintaining a balanced life on the overload that students face<sup>(16)</sup>.

## CONCLUSION

The facets denominated Thinking, learning, memory and concentration, Sleep and rest, Energy and fatigue, Activities of daily living, Work capacity, Participation in and opportunities for recreation/leisure activities and Financial resources were negative influences on quality of life of participants, for a worse performance. These are closely linked to success in the learning process and the achievement of academic activities. These characteristics may trigger negative feelings, which have direct influence on the degree of satisfaction/dissatisfaction that the students demonstrated in their quality of life.

Improving the quality of life of nursing students may have positive influence on the process of humanization of care, because the well-being of the professional/student reflects on the way they care for others. University students need support to cope with various situations that interfere with their quality of life, especially those that are linked to the formation process (proximity to the suffering and death). This need is evidenced by the presence of negative feelings that permeated the day-to-day lives of participants.

The use of a generic instrument for assessing quality of life allowed us to know the multidimensionality involved in evaluating and verifying facets evaluated positively or negatively by a group of university students in the health area. This methodology, however, failed to detect specific conditions to this group, for example, the influence of satisfaction with the received training efficiency and the selected career. The instrument proved to be valid to the purpose of knowing the multiple objective and subjective, positive and negative aspects involved in the evaluation. Measuring quality of life through generic instruments provides an initial knowledge that may guide future research to evaluate the characteristics of each group.

The results from studies on quality of life may contribute to the design of strategies to identify the difficulties experienced favoring the search for solutions to conflicts, which affect students' quality of life.

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