QUALITY OF LIFE OF STUDENTS IN HEALTH SCIENCES FROM A PRIVATE UNIVERSITY IN NUEVO LEON, MEXICO

CALIDAD DE VIDA EN ESTUDIANTES DE CIENCIAS DE LA SALUD DE UNA UNIVERSIDAD PRIVADA EN NUEVO LEÓN, MÉXICO.

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ABSTRACT

Introduction: Knowing the quality of life allows taking action for its improvement. **Objective:** To describe the quality of life in students in the Health Sciences area of a private university in Nuevo León. Methods: Quantitative, observational, descriptive, cross-sectional study. Population: health sciences students from a private university in Nuevo León, Mexico, during August-December 2018. Construct used: quality of life, was measured using the World Health Organization Quality of Life short version. Statistical analysis: IBM SPSS, performing student's t-test and one-way ANOVA. **Results:** Sample of 611 students, with age m = 20.53 years, SD ± 2.92 years, gender: 58.6% female (n = 358) and 41.4% male (n = 253). Nationality: 84% Mexican (n = 513) and 16% foreigners (n = 98). Place of origin: 74% urban area (n = 452) and 26% rural area (n = 159). 44.7% refer to their quality of life as fair (n = 273). There is a statistically significant difference in the quality of life of students according to the degree they are studying (F = 2.052 and p = 0.039) and according to their nationality, (t = 2.013, p = .045). **Conclusions:** Career, age and nationality directly influence the quality of life, for which comprehensive health promotion strategies should be considered, emphasizing psychological health and interpersonal relationships that allow students to obtain the necessary resources to face challenges, preserve and improve their quality of life.

Keywords: Quality of life, health science students, university students (Source: MeSH NLM).

RESUMEN

Introducción: Conocer la calidad de vida permite tomar acción en pro de su mejora.
Objetivo: Describir la calidad de vida en estudiantes del área de Ciencias de la Salud de una universidad privada en Nuevo León. **Metodología:** Estudio cuantitativo, observacional, descriptivo, de corte transversal. Población: estudiantes de ciencias de la salud de una universidad privada en Nuevo León, México, durante agosto-diciembre 2018. Constructo utilizado: calidad de vida, se midió mediante el World Health Organization Quality of Life versión breve. Análisis estadístico: IBM SPSS, realizándose t de student y ANOVA de un solo factor. Resultados: Muestra de 611 estudiantes, con edad m= 20.53 años, DE ±2.92 años, género: 58.6% femenino (n = 358) y 41.4% masculino (n = 253). Nacionalidad: 84% mexicanos (n = 513) y 16% extranjeros (n = 98). Lugar de procedencia: 74% área urbana (n = 452) y 26% área rural (n = 159). 44.7% refieren su calidad de vida como regular (n = 273). Existe diferencia estadísticamente significativa en la calidad de vida de los estudiantes según la carrera que cursan (F=2.052 y p=0.039) y según su nacionalidad, (t = 2.013, p = .045). **Conclusiones:** La carrera, edad y nacionalidad influyen de manera directa en la calidad de vida, por lo cual deberían plantearse estrategias integrales de promoción de la salud, enfatizando la salud psicológica y las relaciones interpersonales que permitan a los estudiantes obtener los recursos necesarios para afrontar los retos, preservar y mejorar su calidad de vida.

Palabras clave: Calidad de vida, estudiantes de ciencias de la salud, universitarios (Fuente: DeCS BIREME).

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INTRODUCTION

The university stage is a period of transition in the life of an individual, covering from adolescence into adulthood. During this stage, the individual determined and creates habits that they will have during adulthood [1]. For this reason, promoting a healthy lifestyle among university students is even more relevant [2]. The purpose of this study was to describe the quality of life of students in the Health Sciences area of a private university in Nuevo Leon. The literature review was performed based on the variables quality of life, its components and determinants. For the WHO, quality of life refers to the perception of an individual regarding their own place in existence, within the cultural context, in the system of values in which they live, and in relation to their objectives, expectations, norms and concerns [3].

Quality of life, according to Banda Castro and Morales Zamorano, is affected by diverse factors such as physical health, the psychological state, independence level, social relationships, and the interaction with their environment. 4 This means that external, as well as internal, factors should be considered as determinants in the process of quality of life.

In summary, some factors that act as quality of life determinants are health, economy, love, emotional stability, body image, intellectual preparation, social relationships, family relationships, nutritional state and sexual relationships, such as Pacheco Rodríguez, Michelena González, Mora González and Miranda Gómez, Wanden-Berghe et al. have claimed[2,5].

Cardona and Agudelo, and Chen, Sekine, Hamanishi, Yamagami and Kagamimori propose to group the factors in the following manner: (a) material factors, that are the available earnings, their position in the job market and educational level, (b) environmental factors, which are the presence and access to public services, transport, access to technology, housing characteristics and (c) social factors, such as family relationships, belonging to social or religious organizations, hobbies and social roles[6,7].

The same authors claim that such factors are measured in two main dimensions: the evaluation of quality of life based on objective indicators and the individual perception of this situation [6,7]. The objective of this research was to learn the quality of life of students of the health sciences area of a private university in Nuevo Leon, Mexico, during August-December 2018 and their associated factors: age, gender, degree studied, marital status, nationality, place of origin, religion practiced, and current work.

METHODS

Design and area of study

Quantitative, observational, descriptive, cross-sectional study. The study population was made up of students in the Health Sciences area from a private university of Nuevo Leon.

Population and sample

The population was made up of 1020 students in the health sciences area of a private university of Nuevo Leon, Mexico. The total number of participants was 611 students. A calculation of sample size was not performed, since we intended to include the total population in the study, but it was not possible since only the students that attended school the day of the application were included. A participation of 59.9% of the total population was obtained.

Variables and instruments

The variable used in this study was quality of life. We used some demographic variables such as age, gender, degree studied, marital status, nationality, place of origin, professed religion, and current work. The measure of the quality of life construct used was the World Health Organization Quality of Life, short version questionnaire (WHOQOL-BREF), which allows the quality of life evaluation, measuring hopes, joys, habits, and concerns, based on only one structure with four domains: physical health, psychological health, interpersonal relationships, and environment. 8 In Mexico, WHOQOL-BREF is used, in its short version and adapted by Sánchez Sosa and González Celis in 2005, with confidence through the Cronbach alpha coefficient, with α values greater than .70 for all dimensions and global α=.895, which indicates a high instrument consistency[8,9].

Procedures

The World Health Organization Quality of Life, short version questionnaire (WHOQOL-BREF) was used for data collection of quality of life. We asked for the authorization of the university's ethics committee and the ethics committee of the health sciences area. Later, we proceeded to request authorization of the faculty directors and degrees corresponding to each faculty and health sciences area degree and coordinate with them the dates and locations of instrument implementation, which was carried out in person during September 2018.

Statistical analysis

We designed a data base for the results analysis, first in the Excel 2010 program, for its posterior statistical management. Once the data base was created, a data base clean-up was carried out, eliminating data entry errors, extreme data and outliers. We obtained frequencies, descriptive and assumptions of regression,

to carry out the hypothesis test through the Student t-test for independent samples and one-way ANOVA. The analysis of the data collected was carried out by the Statistical Package for Social Science (SPSS) version 22.0.

Ethical aspects

This research counted on the evaluation and approval of the university ethics committee and the ethics committee of the health sciences area. An informed consent was developed and applied to protect the privacy of all the participants in the questionnaires carried out. All the research support and foundation were recognized, as well as the author rights of each of the contributors.

The information the participants provided to the study was of a strictly confidential character and used only by the research project team and is not available for any other purpose. All participants were codified with a number and their name was not used, therefore they could not be identified. The study participants did not receive any pay for participating in the research and it also did not imply any cost to them.

RESULTS

The total participants were 611 students. The mean age was m= 20.53 years, with a SD ±2.92 years. The student distribution according to gender was the following: 58.6% were females (n = 358) and 41.4% males (n = 253).

Table 1. Distribution of participants according to sociodemographic variables.

	N	%
Marital status		
Single	600	98.2%
Married	10	1.6%
Other	1	0.2%
Nationality		
Mexican	513	84%
Foreigner	98	16%
Place of origin		
Urban area	452	74%
Rural area	159	26%
Degree studied		
Medicine	354	57.9%
Odontology	74	12.1%
Physical and Rehabilitation Therapy	72	11.8%
Psychology	48	7.9%
Nursing	19	3.1%
Nutrition	17	2.8%
Clinical Biology Chemistry	13	2.1%
Dental technology	11	1.8%
Food chemistry	3	0.5%
Work while studying		
Yes	351	57.4%
No	260	42.6%

According to the scores the participants give their quality of life, the distribution of the same were the following: 44.7% refer it as fair (n = 273), 36.7% refer it as good (n = 224), 14.4% refer it as very good (n = 88), 3.4% refer it as slightly bad (n = 21) and 0.8% refer it as very bad (n = 5), In table 2, we observe the minimal, maximum, mean, and standard deviation score obtained by the participants in the quality of life domains. The domain with the highest mean was the interpersonal domain, and the domain with the lowest mean was psychological health.

Table 2. Scores obtained by the participants in the different domains that compose quality of life.

Domains	N	Minimal	Maximum	Mean	Standard Deviation
Domain 1: Physical health	611	8	20	14.32	2.291
Domain 2: Psychological	611	5	20	13.82	2.249
Domain 3: Interpersonal	611	5	20	14.55	3.033
Domain 4: Environment	611	7	20	13.89	2.274

Regarding the hypothesis tests, we observed that there is no statistically significant difference in the quality of life of students in the Health Sciences area of a private university in Nuevo Leon, according to their gender, student t-test with t = 0.985 and p-value of 0.325.

We observed there was a statistically significant difference in the quality of life of students in the Health Sciences area of a private university in Nuevo Leon, according to degree studied, one-way ANOVA test, with an F value of 2.052 significance p-value of 0,039.

We observed there as a statistically significant difference in quality of life of students in the Health Sciences area of a private university in Nuevo Leon, according to their nationality, student t-test of t = 2,013 and a p-value of 0,045.

DISCUSSION

This study had the objective of describing the quality of life of students of the health sciences area of a private university in Nuevo Leon. We found that the participants in this study perceive and report their quality of life as fair (44.7%, n = 273) or as good (36.7%, n = 224), and no variation exists in the score according to gender, which is similar to that observed in the study by Reig Ferrer, et al[10].

In this study we found that a significant difference in quality of life exists in students according to the degree studied, which has been observed in other research such as the one carried out by Reig Ferrer, et al. and that carried out by the Universidad Pública de Navarra and Government of Navarra and that carried out by Durán A., et al[10,11,12].

In this study we found that a variation exists in the means of the domains that compose the quality of life

construct, with the domain of interpersonal relationships having the highest mean (m = 14.55 with SD ± 3.033), followed by the physical health domain (m = 14.32 with SD ± 2.291) and the environment domain (m = 13.89 SD ± 2.274), and with the psychological domain with the lowest mean (m =13.82 with SD ± 2.249), which is similar to that observed in the study carried out by Reig Ferrer, et al. and another study carried out by Aktekin, et al[10,13].

Regarding the variations in the mean of the domains, education in the health area, was characterized by presenting a high demand level, generating significant levels of stress and greater risk of psychological morbidity compared to the general population[13]. This coincides with that observed in the research, where the mean of the psychological health domain was reported as the lowest and where 57.1% (n = 349) of students refer presenting frequent negative feelings.

In the same manner, we have observed that the most recognized stressors by students were exams, drafting of their work, overload, lack of time to complete homework, and constant pressure of studying[14]. This is similar to that observed in the research, where 42.6% (n = 260) of students work while studying, making this so that 45.2% (n = 273) of students refer being moderately satisfied with their ability to perform their work and study, and 3.4% refer having little or no access to information required to carry out their activities.

In this manner, the interpersonal relationship domain has the highest mean (m = 14.55 with SD ± 3.033), which coincides with that expressed by students regarding their satisfaction with their interpersonal relationships, where 38.5% refer being very satisfied (n = 235) and 30.9% refer being moderately satisfied; the level of

satisfaction referred by the support received from their peers and friends, where 39.3% refer being very satisfied (n = 240) and 27.8% refer being moderately satisfied, which is similar to that observed in the study by Reig Ferrer, et al. and that by the Universidad Pública de Navarra and the Government of Navarra[10,11]. This is highly important since, in young adults, the social environment impacts the individual's wellbeing integrating the variables of social skills, belonging to a group, self-concept, self-esteem, and family situation[15].

Regarding the satisfaction with their physical health, we observed that 37.8% (n=231) of students were moderately satisfied and 36.7% (n = 224) were very satisfied (n = 224); likewise the physical health domain had the second highest mean (m = 14.32 with SD $\pm$ 2.291), which reflects the importance students place on their health, given that they worry about taking care of it and demonstrate positive attitudes to diverse behaviors related to health, such as their physical appearance, nutrition, and sleep, which has been evidenced in other research such as that by Reig Ferrer, et al. and that performed by the Universidad Pública de Navarra and the Government of Navarra[10,11]. Given that the quality of life is multidimensional, implies health, or

it is affected by it, in addition that it covers other personal conditions and behaviors, as well as environmental opportunities and conditions, it is highly relevant to establish actions that contribute to the comprehensive health promotion in students[10,16].

Among the limitations of this study was having performed a self-informed questionnaire, that runs the risk of answer bias since it depends on the sincerity and good memory of the participants, in order to improve this, data was collected anonymously. In the same manner, we only included students that attended school the day of the application achieving a participation of 59.90% of the population in addition ot not having carried out a prior sample size to determine if the number of people surveyed is representative.

CONCLUSION

In this research we observed that the degree that students study and their nationality, influence their quality of life, which is why comprehensive strategies should be implemented for health promotion, emphasizing psychological health and interpersonal relationships that allow students to obtain the necessary strategies to face the challenges that may be present, and, in this manner, improve their quality of life.

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