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Nursing students' quality of life

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Abstract

Introduction

Quality of life is a broad notion comprised of: a human being's health state, their psychological state, social relations, a degree of independence as well as their attitude toward their surroundings.

The aim of the study

The research aimed at specifying nursing students' subjective quality of life.

Material and methods

The study involved 210 nursing students of the Medical University of Lublin. The research cohort was comprised of 199 females and 11 males. The investigation was administered by means of the Polish version of the WHOQOL-Bref scale. This tool allowed to specify the quality of life in physical, psychological, environmental and social domains.

Results

Investigated students' quality of life averaged out at 3.98, whereas their health state self-assessment averaged out at 3.73. The physical domain scored highest (averagely 15.54). Lower values were obtained in the sphere of social relations (15.52) and the environmental domain (13.81). The psychological domain scored lowest (13.62).

Conclusions

Nursing students' quality of life averaged out at a satisfactory level. Investigated students' health state self-assessment and marital status made a considerable difference for their quality of life. Male students and those with urban background assessed their quality of life at relatively higher levels.

Key words: quality of life, nursing students, WHOQOL-Bref Scale.

Introduction

Quality of life is an interdisciplinary notion investigated by researchers from branches of science as diverse as medicine, pedagogy, sociology, economics, physiology, and politics. The term as such is difficult to define because its multidimensional nature naturally opens it to numerous interpretations. A quality of life's holistic definition to include a broad sphere of human existence has been debated for many years [1]. There are several aspects that contribute to the interdisciplinary nature of the notion, which might be grouped into several spheres:

- physical sphere (somatic state, functional fitness, physical symptoms), psychological (cognitive and emotional functioning), social (social integration, relations with other people, social roles in which one is engaged), some researchers add one more sphere – spirituality
- subjectivism and objectivism of the notion
- individual judgement made by a human being

- dynamic character of their judgement [2].

Students' quality of life is shaped by various factors. These might include psychological problems, social relations, self-assessment, etc. These might have a considerable influence on students' life, their study results and general behaviour [3]. Satisfaction with one's life means satisfaction and acceptance of one's situation, meeting one's needs and requirements for one's life as a whole. Satisfaction with life is a subjective and cognitive assessment of one's quality of life and is understood as a key indicator for well-being [4,5].

The aim of the study

The research aimed at specifying nursing students' subjective quality of life.

Material and methods

The investigation comprised 210 nursing students. The research was administered at the Nursing and Health Sciences Department of the Medical University of Lublin. Investigated students had been informed that the research would be anonymous and made informed choices to agree to participate. Table No. 1 presents a detailed characteristics of the investigated cohort.

Table 1. Characteristics of the research cohort.

		%
Sex	female	95.00
	male	5.00
Age	up to 21	38.10
	22-24	51.90
	over 25	10.00
Marital status	single	90.00
	married	10.00
Social background	urban	54.00
	rural	46.00
Place of residence during studies	with one's own family	33.00
	students' hall of residence	23.00
	rented accommodation	44.00

Research material was collected by means of the Polish version of the WHOQOL-Bref Scale, which consists of 26 questions and makes it possible to obtain a quality of life profile in four domains: physical, psychological, social and environmental. The scale also includes questions concerning one's general perception of their quality of life as well as individual perception of one's life, which are analysed separately. The point score ranges from 1 to 5 and is directed positively – i.e. the more points, the better one's quality of life [6,7].

Findings were analysed statistically and parameter values were presented by means of average values, median and standard deviation for measurable values, while largeness and proportion were used for non-measurable values. Distribution normality was assessed with the Shapiro-Wilk test for measurable features. U Mann-Whitney test was employed to compare two independent groups and Kruskal-Wallis test was used for more than two groups. Significance level of $p < 0.05$ was adopted to indicate occurrence of statistically significant differences or correlations. STATISTICA 10.0 (StatSoft Polska) computer software was used to manage the database and statistics.

Results

Findings on nursing students' quality of life were analysed in the context of general quality of life, self-assessment of one's health state and within four domains: physical, psychological, social relations and environmental.

Investigated nursing students averagely described their general quality of life at 3.98 ± 0.57 , whereas their health state self-assessment averaged out at 3.73 ± 0.74 . It was the physical domain that was given the highest scores (15.54 ± 2.28) and the social relations domain obtained the second-highest result (15.52 ± 33.01). Lower values were obtained for the environmental domain (13.81 ± 2.01), whereas the psychological domain, for which values averaged out at 13.62 ± 2.49 , scored lowest.

The next research stage aimed at analysing students' quality of life self-assessment depending on their marital status. The cohort comprised of single students assessed their general quality of life at 3.95 ± 0.57 whereas married respondents averaged out at 4.22 ± 0.60 . Health state was assessed similarly in both groups, i.e. at 3.73 ± 0.74 for single students and at 3.74 ± 0.81 for married ones. The physical domain obtained higher scores in the group of married respondents (15.65 ± 2.53) whereas single students' scores were slightly lower in this domain (15.53 ± 2.25). Married students assessed the psychological domain at 14.52 ± 1.69 ,

whereas in the cohort comprised of single students it was at the level of 13.50 ± 2.55 . Single people assessed their social relations at 15.48 ± 3.06 whereas results for married students were higher, i.e. at the level of 15.83 ± 2.61 . Married students also obtained higher scores for the environmental domain (14.09 ± 1.88), which obtained considerably lower scores in the group of single students (13.78 ± 2.03). No statistically significant correlation was found between nursing students' marital status and their quality of life assessment, except for the general quality of life.

The investigation also involved students' quality of life assessment depending on their sex. Males assessed their general quality of life as slightly higher (4.00 ± 0.63) than females whose quality of life assessment averaged out at 3.97 ± 0.57 . Respondents' health state self-assessment averaged out at 3.71 ± 0.75 for females and 4.09 ± 0.54 for males. A significant difference occurred merely for psychological and environmental domains. Table 2 depicts a detailed statistical analysis for individual quality of life domains.

Table 2. Sex and WHOQOL-Bref scale values for individual domains.

Domain	Sex							
	Females			Males			Statistical analysis	
	Average	Median	Standard deviation	Average	Median	Standard deviation	Z*	p
General quality of life	3.97	4.00	0.57	4.00	4.00	0.63	-0.115	0.90
Health state self-assessment	3.71	4.00	0.74	4.09	4.00	0.53	-1.641	0.10
Physical	15.50	15.42	2.29	16.25	16.57	1.88	-1.015	0.30
Psychological	13.52	14.00	2.48	15.33	15.33	2.04	-2.482	0.01
Social relations	15.43	16.00	3.03	16.96	17.33	2.07	-1.703	0.08
Environmental	13.73	14.00	1.99	15.18	14.50	1.91	-2.173	0.02

* *U Manna-Whitney Z test*

Nursing students' perception of their quality of life depending on their place of residence was specified in the next research stage. General quality of life for respondents living in rural areas was at the level of 4.00 ± 0.48 whereas nursing students living in urban

areas assessed their quality of life slightly lower, i.e. at the level of 3.95 ± 0.67 . Rural dwellers assessed their health state at the level of 3.75 ± 0.72 and urban dwellers' health state was at the level of 3.71 ± 0.77 . The physical domain was assessed better by rural dwellers (15.74 ± 2.11) than by city dwellers whose score for this domain was at 15.30 ± 2.45 . Rural dwellers also scored higher in the psychological domain (13.63 ± 2.17), because urban dwellers averaged out at 13.60 ± 2.83 . Nursing students living in rural areas assessed their social relations at 15.71 ± 3.07 and for city dwellers this value reached 15.29 ± 2.94 . In case of the environmental domain, rural dwellers obtained higher results (14.02 ± 1.91) than city dwellers who assessed this domain at the level of 13.56 ± 2.10 . It was only in the environmental domain that a statistically significant difference was found between students' place of residence and their quality of life assessment (see Table 3).

Table 3. Place of residence and values of individual domains in the WHOQOL-Bref scale.

Domain	Place of residence							
	Urban			Rural			Statistical analysis	
	Average	Median	Standard deviation	Average	Median	Standard deviation	Z*	p
General quality of life	4.00	4.00	0.47	3.94	4.00	0.67	-0.579	0.56
Health state self-assessment	3.75	4.00	0.72	3.70	4.00	0.76	-0.357	0.72
Physical	15.74	15.71	2.11	15.29	15.42	2.45	-0.940	0.34
Psychological	13.63	14.00	2.17	13.59	14.00	2.83	0.136	0.89
Social relations	15.70	16.00	3.06	15.29	16.00	2.94	-0.825	0.40
Environmental	14.02	14.00	1.91	13.55	13.56	2.10	-1.997	0.04

*U Manna-Whitney *Z test*

Investigated students were also asked to specify their health state. The majority (72.00%) claimed they had no problems with their health whereas 28.00% of the research cohort reported some health problems. Healthy people averagely described their quality of life at 4.09 and their health state at 3.98. Best results were obtained in the physical domain (16.19) and the social relations domain (15.90). Psychological and environmental domains were

assessed at the level of 14.34. Interrogated students who reported health issues averagely assessed their quality of life at 3.67 and their health state at 3.08. The social relations domain was assessed highest in this group of students (14.62). The second highest was the physical domain (13.82), the environmental domain was assessed at a lower level (12.39) and the psychological domain at the lowest level (11.72). Carrying out a statistical analysis confirmed an occurrence of a significant difference between quality of life assessments in investigated groups of students (Table 4).

Table 4. Health state self-assessment and students' quality of life.

Domain	Healthy			With health issues			Statistical analysis	
	Average	Median	Standard deviation	Average	Median	Standard deviation	Z*	p
General quality of life	4.09	4.00	0.53	3.67	4.00	0.57	-3.825	0.000
Health state self-assessment	3.98	4.00	0.55	3.08	3.00	0.77	-6.598	0.000
Physical	16.19	16.57	2.04	13.82	14.00	1.96	-6.662	0.000
Psychological	14.33	14.66	2.07	11.72	11.66	2.51	-6.381	0.000
Social relations	15.85	16.00	2.99	14.62	14.66	2.89	-2.944	0.003
Environmental	14.34	14.50	1.75	12.39	12.50	1.94	-5.968	0.000

*U Manna-Whitney *Z test*

Discussion

Students' personality plays an important role and specific traits either predispose them to the profession of a nurse or disqualify them from qualifying as one. Literature of the subject reports on various situations that nursing students may encounter during their professional education, which could affect their quality of life. They often feel overwhelmed and unprepared for their professional practice. They are often anxious about issues like: work with a dying patient, conflicts with other employees, insecurity about their clinical competence, interpersonal problems with patients, and being overworked [8,9]. All the above may become factors that influence nursing students' quality of life self-assessment. Research results proved students to assess their quality of life relatively high, which is in line with findings by other authors [10,11,12] who also proved nursing students to make high quality of life self-assessments. Authors' own work as well as the investigations made by other

researchers show students to assess highest the physical and social relations domains of their quality of life.

The research also proved males to enjoy higher quality of life than females. Assessments made by males were higher in all domains, however, the difference was significant only in the psychological and environmental domains. Hądzerek et al. [13] also obtained similar research findings as students assessed their quality of life very well and health state self-assessment was very similar. Average values that were obtained in Authors' own research as well as those obtained by other researches were at similar levels. In particular, Maniecka-Bryła et al. [14] obtained comparable results on health state self-assessment and general quality of life. Their findings prove students to typically enjoy good or very good health state. Quality of life assessments were comparable to those obtained in Authors' own research.

The notion of Health Related Quality of Life (HRQOL) was introduced to medical sciences by Shipper [15], who defined it as the subjectively perceived influence that an illness and the course of its treatment exerts on an individual's functioning and their general satisfaction with life. According to that author, HRQOL concerns four basic domains: mental state, social situations and economic conditions, and finally somatic experience (illness symptoms, pain) [16,17]. HRQOL is closely related to an individual's health state and refers to the level at which a human functions, their physical and mental state and generally perceived health. Literature of the subject features some corroboration of a correlation between various students', including nursing students', health state and their quality of life levels [12,18,19,20,21]. Authors' own research further confirms this correlation as students reporting health issues assessed their quality of life lower in comparison with the cohort of healthy ones. The difference was conspicuous both in the general quality of life assessment and in individual domains comprising quality of life.

Conclusions

Doing the research helped to prove nursing students to enjoy relatively high quality of life. Nursing students' quality of life self-assessment significantly affected their general level of life. Male students made their quality of life assessments at a higher level than investigated females. Individuals with urban background proved to enjoy better quality of life than those with rural background.

Conflicts of interest

The authors declared no potential conflicts of interest.

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