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Original Article

Education Section

Health-related Quality of Life among University Students: The Role of Demographic Variables

ARASH ZIAPOUR[1], NEDA KIANIPOUR[2]

ABSTRACT

Introduction: Quality of life is seen as a broad concept pertaining to the sense of well-being and satisfaction in life. The physical and mental health of the students directly correlate with the health and future of the society.

Aim: The present study aimed to investigate the effect of factors associated with quality of life on health promotion among students at Kermanshah University of Medical Sciences.

Materials and Methods: In this descriptive study, 453 students of Kermanshah University of Medical Sciences were selected through stratified random sampling in the academic year 2015-2016. For data collection, a demographic questionnaire and the SF-36 questionnaire were used. Data were analysed through the descriptive statistics (percentage, mean, and standard deviation) and inferential statistics (Kolmogorov–Smirnov test, independent t-test, and ANOVA). Further, the SPSS Statistics 21 Software was utilised for data analysis.

Results: The results of the present study showed that the mean and SD of the total score for health-related quality of life of students was measured to be 2.55±0.40. The results also indicated that quality of life significantly correlated with gender, age, marital status, education, faculty, and residence ($p<0.001$).

Conclusion: Considering the results of the present study and the desire of the students for a better quality of life, there is a necessity to introduce programs in universities to improve the quality of life. Also, more attention should be paid towards students' health and quality of life during their education.

Keywords: Demographic factors, Health, Medical sciences students

INTRODUCTION

Health-related quality of life has many applications in medical sciences, including one's subjective assessment of health status, health care, and health-promoting activities which enables one to pursue worthy goals in life [1]. Quality of life is one of the major concerns of health professionals, and it is known as an index for measuring health status in studies about health [2]. Quality of life has different dimensions such as physical health, mental health, economic conditions, personal beliefs, and interaction with the environment [3]. In addition, quality of life is of utmost importance since it encompasses one's physiological aspects, performance, and essence [4].

In recent years, quality of life has been addressed as an important index to assess personal health, decision making and judgement of the overall health of the society and to find the main problems in various aspects of people's lives [5]. The significance of quality of life and health status is to the extent that the present century has been given the title of 'improving the quality of life (not just survival) and health status' [6]. It is believed that measuring health should include assessments of well-being and welfare in addition to mortality and life expectancy [7], which are embedded in the concept of health-related quality of life [8].

Accordingly, paying attention to factors that are associated with quality of life, and its improvement is of the essence. The results of studies conducted by Vaez M et al., showed that the quality of life of university students was lower than that among others of the same age [9]. Makvandi S and Zamani M concluded that the rate of problems related to emotional health of university students was higher than issues associated with their physical health [10]. Likewise, the results of a Swedish study indicated that the quality of life of university students was lower than that of workers of the same age, and it was shown that their quality of life was affected by factors such as academic success, occupational problems, lack of social adaptation, problems with behaviour, personality, and marriage [9,11]. Similarly, the results of an Iranian study conducted on Guilan University students demonstrated that their quality of life was relatively high [12]. Additionally, the results of another Iranian study conducted on Gorgan University students were indicative of the fact that their quality of life was average (49.5%) [13]. Conversely, contradictory statistics were reported about the quality of life of students residing in Tehran because some studies indicated that quality of life was suitable as opposed to low levels reported in some other studies [5,14], while the results of studies conducted by Mansourian M et al., and Baumann M et al., were indicative of higher rates of quality of life among female students compared to male ones [13,15].

Assessing the quality of life of university students is a totally comprehensive task and depends on various factors, such as faculty, age, gender, residence, health status, economic status, and social environment [4,14]. Research shows that students with a better understanding of quality of life use all academic services optimally and are more active in scientific and extracurricular fields [16]. Additionally, the rapid growth of urbanisation has played a major role in the fabric of families and youth and student's quality of life [17]. As a result of these changes, the pursuit of new ways of life in recent years has caused concerns about the quality of life of students at universities [18]. In most areas of the world, especially Iran, the number of students has been on the rise in recent decades. For example, according to statistics, about 8% of the 18-29 year age group have entered both public and private universities in Iran. Therefore, examining the basic needs of students towards providing them with happy and healthy lives is a top priority [18]. So, the present study aimed to investigate the effect of the factors associated with quality of life on health promotion among students at Kermanshah University of Medical Sciences over 2015-2016.

MATERIALS AND METHODS

In this descriptive study, 453 out of 500 students from the schools of paramedics, health, nursing and midwifery (213 males and 240 females) at Kermanshah University of Medical Sciences were selected through stratified random sampling in the academic year 2015-2016. To commence the study, the required permits were obtained from the Vice Chancellery for the Department of Research and Technology at Kermanshah University of Medical Sciences and the selected colleges.

In addition, the inclusion criteria were agreement to participate in the research and studying in the academic year 2015-2016; whereas the incomplete questionnaires, university dropouts and those failing to return the questionnaires were excluded from the study. For data collection, a two-part questionnaire was used.

Demographic Questionnaire

It was comprised of six items: gender, age, marital status, education, faculty and residence.

Quality of Life Questionnaire (SF-36)

This 36-item scale was developed in America by Ware JE Jr. and Sherbourne CD [19].

The subscales of this questionnaire are physical functioning (10 items), physical role (4 items), emotional role (3 items), vitality (3 items), mental health (6 items), social functioning (2 items), bodily pain (2 items), general health (6 items). A score ranging from 0 (indicating the worse health status) to 100 (indicating the best health status) was assigned for each domain.

STATISTICAL ANALYSIS

In the present study, the validity and reliability of the questionnaire were re-examined, and the content validity was examined by a panel of 12 experts in lifestyles whose corrective comments were included in the questionnaire. Furthermore, the Cronbach's alpha was used to determine the reliability (α=0.89). Data were analysed through the descriptive statistics (percentage, mean, and standard deviation) and inferential statistics (Kolmogorov–Smirnov test, independent t-test, and ANOVA) ($p<0.05$). Further, the SPSS Statistics 21 Software was utilised for data analysis.

RESULTS

In the present study, of the total, 240 (53%) subjects were female and 213 (51.6%) were male, and the mean age of participants was 21.67±3.7 years [Table/Fig-1].

Variables	Groups	Number (%)
Gender	Female	240 (53%)
	Male	213 (47%)
Age (years)	18-22	327 (72.2%)
	23-27	69 (15.2%)
	28 ≤	57 (12.6%)
Marital status	Single	418 (92.3%)
	Married	35 (7.7%)
Education	Associate's Degree	46 (10.2%)
	Bachelor's Degree	368 (81.2%)
	Master's Degree	39 (8.6%)
Faculty	Health	146 (32.2%)
	Nursing and Midwifery	171 (37.7%)
	Paramedics	136 (30%)
Residence	Dormitory	182 (40.2%)
	Rental	83 (18.3%)
	Personal	188 (41.5%)

[Table/Fig-1]: The participants' demographic characteristics.

The mean and standard deviation of the total score of students' quality of life was measured to be 2.55±0.40. The results demonstrated that vitality (mean and SD=3.53±0.17) and emotional role (mean and SD=1.73±0.26) had the highest and lowest scores, respectively [Table/Fig-2].

Dimensions of quality of life	Mean±SD
Physical functioning	2.58±0.18
Physical role	1.81±0.19
Emotional role	1.73±0.26
Vitality	3.53±0.17
Mental health	2.87±0.95
Social functioning	3.10±0.29
Bodily pain	2.48±0.30
General health	2.31±0.44
Total quality of life	2.55±0.40

[Table/Fig-2]: The mean and SD of different dimensions of quality of life.

Moreover, as for the relationship between the quality of life and gender, the results indicated that there was a significant relationship between the two. In other words, girls' quality of life was higher than boys' (mean score of 2.62 as opposed to 2.48) ($p<0.05$). In addition, the results of comparing the mean scores of students' quality of life demonstrated that they were significantly different in terms of the demographic variables (age, marital status, education, faculty, and residence) ($p<0.05$) [Table/Fig-3].

Variables	Groups	Frequency	Mean±SD	p-value
Gender	Female	240	2.62±0.41	t=3.606 p=0.034
	Male	213	2.48±0.38	
Age (years)	18-22	327	2.65±0.40	F=13.398 p=0.023
	23-27	69	2.56±0.39	
	28 ≤	57	2.51±0.41	
Marital status	Single	418	2.55±0.40	t=11.288 p=0.019
	Married	35	2.53±0.38	
Education	Associate's Degree	46	2.51±0.38	F=7.083 p=0.011
	Bachelor's Degree	368	2.58±0.40	
	Master's Degree	39	2.33±0.41	
Faculty	Health Sciences	171	2.71±0.38	F=24.831 p=0.017
	Nursing and Midwifery	136	2.51±0.37	
	Paramedics	146	2.41±0.39	
Residence	Dormitory	182	2.56±0.39	F=4.221 p=0.045
	Rental	83	2.66±0.47	
	Personal	188	2.50±0.37	

[Table/Fig-3]: Frequency, percentage, and health-related quality of life based on the students' demographic characteristics.

DISCUSSION

The present study aimed to investigate the effect of the factors associated with quality of life on health promotion among students of Kermanshah University of Medical Sciences over 2015-2016. The results of the present study indicated that the quality of life of students under study was relatively high. The results also demonstrated that the mean and SD of the health-related quality of life of students measured 2.55±0.40. This finding was concurrent with the results of other studies conducted earlier [1,18,20]. The reason for the variability of the quality of life score in different studies is that the sociocultural differences and personal characteristics affect the quality of life in various environments.

In this study, among the dimensions of quality of life, the highest mean was related to the dimension of vitality (energy and fatigue).

This finding was consistent with the results of studies performed by Cella D et al., Fallahzadeh H and Mirzaei H [21,22]. Other studies concluded that physical functioning played a positive role in improving the quality of life [10,23,24].

The results also indicated that there were significant differences between the demographic variables and each of the total quality of life and its subscales. Furthermore, gender, age, marital status, education, faculty and residence correlated with quality of life and its subscales. Also, the results were indicative of higher rates of quality of life among female students compared to male ones. This result was concurrent with the results of studies conducted by few other authors [13,15,25-27]. However, this finding was inconsistent with the results of certain other studies [12,28,29]. To further explain this part, it can be expressed that the difference in the quality of life of girls and boys can ensue from various factors such as differences in male and female personality traits, interpersonal relationships, social fabrics of samples under study and different socioeconomic classes.

The results of the present study demonstrated that there was a significant relationship between the age of university students and their quality of life. This finding was consistent with the results of studies done by Hsiao YC et al., and Amiri M et al., [30,31] and inconsistent with the results of other studies [5,32]. These results are probably due to the low range of variations in the ages of the samples under study. Obviously, older age leads to reduced physical activities and physical limitations, thereby affecting the quality of life. It can also be expressed that age has predictive effects on students' quality of life.

In addition, the results of the present study indicated that marital status and quality of life significantly correlated and the highest score of quality of life belonged to single students. This result was consistent with the results of studies performed by Patel V et al., Mansourian M et al., and Amiri M et al., [11,13,31], while this result was inconsistent with the results of other studies conducted earlier [21,32-34]. Given the results of the present study, the reason for the high quality of life of single students may be attributed to the lack of responsibility in spousal roles, physiological characteristics, interpersonal relationships and their adaptive behaviours.

The results of the present study showed that there was a significant positive relationship between education and quality of life. This finding was concurrent with the results of studies done by Nardelli S et al., and Habibi S et al., [8,26]. It was also concluded that faculty and quality of life significantly correlated, so that midwifery and nursing students had the highest levels of quality of life, while the lowest levels of quality of life belonged to health students. This result was concurrent with the results of studies performed by Patel V et al., and Hosseini S et al., [11,28]. In a study conducted by Hsiao YC et al., the relationship between education and promotion of lifestyles among the Taiwanese nursing students was investigated. The results indicated that the tendencies of students towards healthy behaviors were increased in line with education [30]. Salehi T et al., did not find any significant relationship between field of study and quality of life [5]. This result might be due to the knowledge that medicine students acquire in the fields of physiology and health sciences.

The results of the present study also indicated that there was a significant relationship between the residence of students and quality of life. This result was consistent with the results of studies conducted by Salehi T et al., Mansourian M et al., and Alizadeh Eghdam M et al., concluded that the residence of students and quality of life inversely correlated. In other words, quality of life is reduced with the increase in the number of roommates and noise [5,13,25]. Similarly, Soltani R et al., and Amiri M et al., showed that there was no relationship between the total score of quality of life and residence [12,31]. Given the results of the present study, the higher mean score of students living in rental houses can be due to the fact that residence in student dormitories, especially with more rooms, is accompanied by crowds and noise. Therefore, students are more inclined to stay in rental houses to maintain their mental and physical relaxation, and concentration towards study.

LIMITATION

The present study had several limitations. Firstly, the data were collected through the self reporting methods, possibly affecting the accuracy of the results. Secondly, because of the individual differences of the research samples, the generalisability of the results may be affected. Finally, given the individual differences of the samples, it is recommended that further studies be carried out in this regard to draw comparisons towards reaching a consensus on this matter.

CONCLUSION

According to the findings of the present study, it is necessary that more attention be paid to the quality of life and health of university students, as the future makers of societies. It is also recommended that the vitality of students be taken into consideration more than ever. Moreover, in the present study, the effects of other variables, including employment, interest in the field of study and socio-economic status on quality of life were not investigated. Accordingly, it is suggested that these variables be addressed in future studies. In the end, it is recommended that careful planning be made towards improving the quality of life of students, and it is suggested that counseling workshops be held to enhance the health of students and improve their quality of life.

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PARTICULARS OF CONTRIBUTORS:
1. Research Center for Environmental Determinants of Health, Kermanshah University of Medical Sciences, Kermanshah, Iran.
2. Students Research Committee, Kermanshah University of Medical Sciences, Kermanshah, Iran.

NAME, ADDRESS, E-MAIL ID OF THE CORRESPONDING AUTHOR:
Dr. Neda Kianipour,
Students Research Committee, Kermanshah University of Medical Sciences, Kermanshah, Iran.
E-mail: Nedakianipour@gmail.com

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