

Original Research Article

Quality of life and its determinants in students of medical and non-medical education

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ABSTRACT

Background: This study was conducted to find and compare the quality of life of medical and non-medical students using a WHO questionnaire.

Methods: The cross-sectional study was conducted at Shaikh Khalifa Bin Zayed Al-Nahyan Medical and Dental College, University of the Punjab and University of Engineering and Technology (UET) Lahore. The shortened version of WHO Quality of Life questionnaire was used. Consecutive non-probability sampling was utilized to collect data which was analysed using SPSS 21.

Results: Of the 450 questionnaires distributed, 400 qualified for the analysis. Out of 200 medical students' questionnaires, 118 were filled by male and 82 by female medical students. The mean age of medical students participating in this study was 20.425 ± 1.498 years. Of the 200 qualified non-medical questionnaires, 111 were filled by male and 89 by female non-medical students. The mean age of non-medical students was 20.995 ± 1.645 years. Medical students' environmental domain showed the highest mean score 65.52 ± 14.82 followed by social relationships 62.39 ± 13.98 , psychological domain 59.84 ± 13.64 and physical health domain 54.89 ± 12.03 . Non-medical students' environmental domain had the highest mean score 64.18 ± 15.67 followed by psychological domain 62.45 ± 13.62 , social relationships domain 59.82 ± 14.42 and physical health domain 57.04 ± 12.98 . The scores of four domains were found to be significantly different in both disciplines (medical education and non-medical education).

Conclusions: The results of present study emphasize on the need to look into all the parameters of physical health, psychological health, social relationships and environment of medical and non-medical institutes to improve the quality of life of students.

Keywords: Education, Health, Medicine, Quality of life

INTRODUCTION

WHO defines quality of life as, "an individual's perception 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".¹ During the past decades, many researchers have paid attention to health-related quality of life (HRQOL) and its determinants, especially in people with

chronic diseases.² Health related quality of life (HRQOL) is an important health outcome measurement since it assesses health not only on the basis of years living but in terms of quality living.³ Biological, psychological, behavioural and socioeconomic factors as well as age and gender can affect an individual's level of health related quality of life. The relationships, however, between these factors and quality of life can vary in different cultures and populations.⁴ The notion of quality of life (QoL) as it relates to medical students and their learning environment

has been well researched and debated.⁵ However, this topic requires a more comparative research to understand the dynamics of learning process and the quality of life of medical students using established research tools such as those developed by the World Health Organization.⁶ Students of medical education are considered at risk for poor quality of life.⁷ Studying and training in a medical school causes stress from high competition, lack of free time and psychological distress from experiencing illnesses and suffering of patients.⁸ Medical education is always long in duration and consists of great academic pressure and narrow professional employment opportunities. Some students of medical education with poor academic and clinical performance fail to achieve the above mentioned goals. The students of medical education are more prone to experience stress issues as compared to the students of non-medical education.⁹ Great attention has been focused on different populations since the concept of quality of life has become widely accepted by society.¹⁰ Burnout and psychiatric morbidity in new medical graduates is common. In an Australian study it was found that during internship the peak point prevalence of burnout assessed with Maslach Burnout Inventory was 75% 8 months into internship, and 73% met criteria for psychiatric morbidity on at least one occasion.¹¹ The chances of sound sleep and rest, sexual activity, and participation and opportunities for recreation and leisure are significantly less in students of medical education than in students of non-medical education, while the scores of facets of dependency on medication and treatment, financial resources, opportunities for acquiring new information and skills, and transport were significantly higher in medical students than in non-medical students.¹²

The non-medical institutes also offer challenges to their students but different from those of the medical institutes. The dynamics of learning process of non-medical students are a lot different from those of the medical students. These two groups of students go through different routines and calibre of difficulty to appear as the professionals in their respective fields. A little about the quality of life of non-medical students is known. Therefore, this demands a great level of research, study and debate in this regard.

This cross-sectional study was conducted at Shaikh Khalifa Bin Zayed Al-Nahyan Medical and Dental College, University of the Punjab and University of Engineering and Technology in Lahore. This study addresses the hypothesis that perceptions of QoL of medical students are different from those of non-medical students. It was expected that there would be a difference due to the literature emphasizing medical students' experiences of intense stress and burnout.¹³

METHODS

This study was carried out during the period of May 2017 to September 2017. The shortened version of WHO Quality of Life questionnaire was used. Consecutive non-

probability sampling was utilized for collection of data which was analysed using SPSS 21.

Participants

Total four hundred students were part of this study. Two hundred medical students studying in 1st, 2nd, 3rd and 4th years participated in the present study. Two hundred non-medical students studying in 1st, 2nd, 3rd and 4th years also participated in this study.

Procedure

Data of medical students were collected at Shaikh Khalifa Bin Zayed Al-Nahyan Medical and Dental College Lahore and that of non-medical students were collected at University of the Punjab and University of Engineering and Technology (UET) Lahore. The said students were asked to fill in anonymous questionnaire in a lecture hall at the end of a formal class, and the students were given 10 minutes to read the instructions given on the questionnaire and answer the questions asked in the survey with the most suitable option in their opinion. These questionnaires were collected by two research personnel. The questionnaire asked the students specifically about their life in the last four weeks. The questionnaire consisted of a demographic survey and the international version of WHO questionnaire (WHOQOL-BREF). Ethics approval for the collection and use of data was obtained from Ethics Committee at Shaikh Khalifa Bin Zayed Al-Nahyan Medical and Dental College, University of the Punjab and University of Engineering and Technology (UET), Lahore beforehand.

Measures

The main measure in the study was the WHOQOL-BREF, which has 26 items including two global items about QoL and health and 24 items relating to four QoL domains which are physical health, psychological health, social relationships and environmental conditions. Physical health refers to activities of daily living, dependence on medicinal substances and medical aids, energy and fatigue, mobility, pain and discomfort, sleep and rest, and work capacity. Psychological health comprises of bodily image and appearance, negative and positive feelings, self-esteem, religious beliefs, thinking, learning, memory and concentration. The social relationships domain contains personal relationships, social support/affairs and sexual activity. The environmental domain relates to financial resources, freedom, physical safety and security, and accessibility to health services, home environment, opportunities for acquiring new information and participation in leisure activities, physical environment and transport. All items are presented on a 5-point Likert scale. Questions 1 and 2 are not used in the calculation of domain scores and considered indicators of overall QoL, with question 1 measuring "quality of life in general" and question 2 measuring "satisfaction with individual health." The

anchors/scale used in the WHOQOL are denoted differently in reference to question sets. Three reversed questions had to be recorded so that high scores represent higher levels of QoL and lower scores the converse.

RESULTS

Of the 450 questionnaires distributed, 400 qualified for the analysis. 200 were of the medical students and the rest were of non-medical students. Out of 200 medical students' questionnaires, 118 were filled by male students and 82 by female medical students (Figure 1). The mean age of medical students participating in this study was 20.425 ± 1.498 years. Of the 200 qualified non-medical questionnaires, 111 were filled by male students and 89 by female non-medical students (Figure 2). The mean age of non-medical students was 20.995 ± 1.645 years.

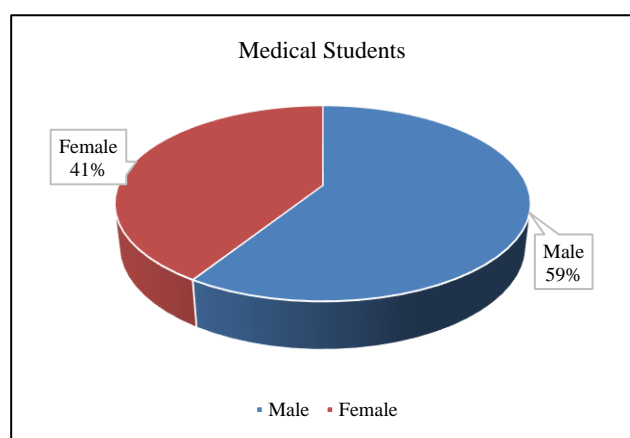


Figure 1: Questionnaires filled by medical students.

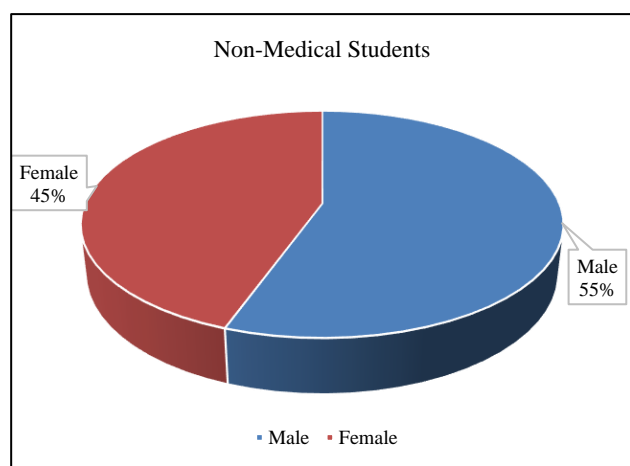


Figure 2: Questionnaires filled by non-medical students.

Overall, 61 medical students rated their life as “very good,” 105 as “good,” 30 as “neither poor nor good,” 01 as “poor” and 03 as “very poor” (Figure 3). 22 medical students were “very satisfied” with their life, 110 “satisfied,” 39 “neither satisfied nor dissatisfied,” 20 “dissatisfied” and 9 very dissatisfied (Figure 4).

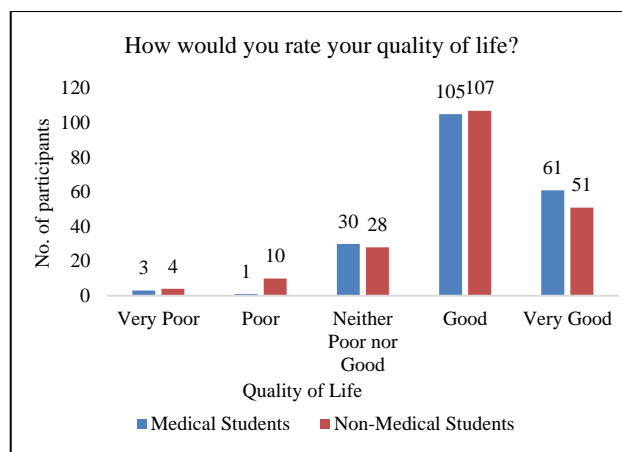


Figure 3: Rating of quality of life.

Out of 200 non-medical students, 51 rated their quality of life as “very good,” 107 as “good,” 28 as “neither poor nor good,” 10 as “poor” and 4 as “very poor” (Figure 3). 35 non-medical students marked their health as “very satisfied,” 99 as “satisfied,” 37 as “neither satisfied nor dissatisfied,” 27 as “dissatisfied” and 9 were dissatisfied with their health (Figure 4).

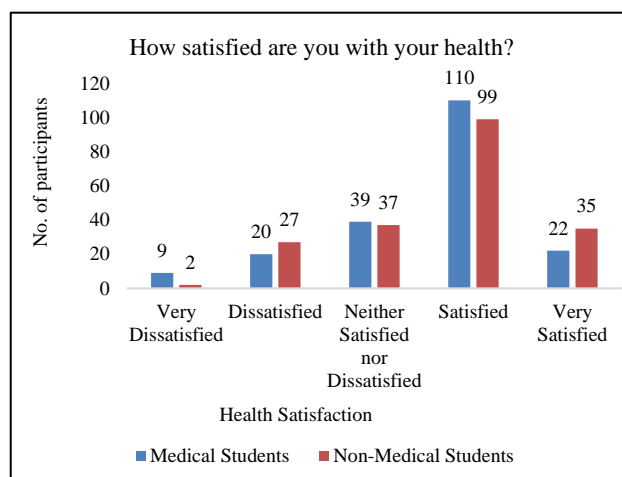


Figure 4: Rating on health satisfaction.

Medical students' environmental domain showed the highest mean score 65.52 ± 14.82 followed by social relationships 62.39 ± 13.98 , psychological domain 59.84 ± 13.64 and physical health domain 54.89 ± 12.03 . non-medical students' environmental domain had the highest mean score 64.18 ± 15.67 followed by psychological domain 62.45 ± 13.62 , social relationships domain 59.82 ± 14.42 and physical health domain 57.04 ± 12.98 (Figure 5).

The scores of all four domains were found to be significantly different in both disciplines (medical and non-medical education). The non-medical students were at a higher score in Psychological domain 62.45 ± 13.62 as compared to the score of medical students 59.84 ± 13.64 (Figure 5).

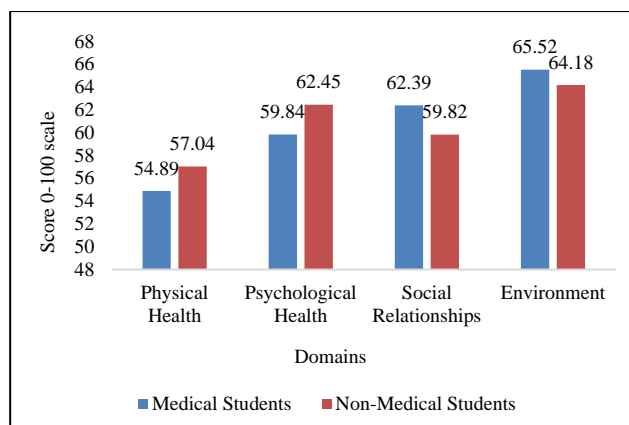


Figure 5: Domain scores of medical and non-medical students.

DISCUSSION

The current study aimed at evaluating the assumption of difference in terms of quality of life, using the WHOQOL-BREF, between medical and non-medical students studying in Shaikh Khalifa Bin Zayed Al-Nahyan Medical and Dental College, University of the Punjab and University of Engineering and Technology (UET) Lahore. This survey focuses on the quality of life, academic burden, peer pressure and daily routine of medical and non-medical students. The response rate in this was 88.88% which is suggestive of the fact that the collected data is quite representative of targeted population and shows the interest of the students to participate in such surveys being conducted on them to seek their state of health. The response rate in a similar study conducted at Shifa College of Medicine, Islamabad was 86.87%.¹⁴

Similar study was conducted at the University of Auckland, New Zealand. The main finding of that study indicated that medical students had similar quality of life perceptions as of non-medical students except for the environmental domain.⁵

The mean age of medical participants was 20.425 ± 1.498 years and that of the non-medical participants was 20.995 ± 1.645 years which depicts that the students were relatively younger than the students on whom most of the researches are conducted. Younger the person is, the more susceptible to peer pressure, to develop bad habits like smoking, drug addiction and if not channelled in a proper way, the huge stress level can even lead them to suicidal thoughts.¹⁴

In present study, 41% were female and 59% were male medical students while the percentages of non-medical students were 45% female and 55% male. In a study conducted at Shifa College of Medicine Islamabad there was unequal participation from both genders with marked female predominance while in our study male participation is quite pre-dominant, therefore, the results

cannot be unanimously applied to the participants of one specific gender.

This study consists of four domains:

1. Physical domain which asks both medical and non-medical participants about their daily living activities, dependence on medical substances and aids, energy and fatigue, mobility, pain and discomfort, sleep and rest and work capacity.
2. Psychological domain which asks the participants of both categories about their bodily image perception, negative feelings, positive feelings, self-esteem, religion, spirituality, personal beliefs, thinking, learning, memory and concentration.
3. Social relationships domain which enquires about personal relationships, social support and sexual activity.
4. Environmental domain which is related to the financial resources, freedom, physical safety and security, health and social care accessibility and quality, home environment, opportunities for acquiring new information and skills, participation in opportunities for recreation and leisure activities, physical environment (pollution, noise, traffic and climate) and transport.

Students were asked via questionnaire method about their daily budget versus expenditure, modes of transport, professional career after graduation, and medical students were found financially more stable and secure about their future. They had a healthy physical environment and felt safer and secure about their career and surroundings. Participation in extra-curricular activities and optimistic perceptions about their living conditions made them better able to get around. Being a part of the medical profession, they found to have easy and better access to health facilities. All of these aspects show that medical students enjoy better environmental health as compared to their counterparts in this study. Medical students were more active in their social circle, found it more cooperative, in which they were able to get support in the time of need. They had a neutral point of view about their sex lives. These findings are based on their better score in social relationships and environmental domains.

Non-medical participants, on the other hand, were found less stable and less secure about their future from monetary point of view. They were found to enjoy less healthy physical environment and they felt less safe and secure about their professional career after graduation. Their response showed less interest in context to the participation in extra and co-curricular activities. They did not show a contented response about their living conditions and their access to health facilities. All these parameters depict that non-medical students do not have healthy environment to enjoy as compared to the medical professionals. Non-medical students were less active in approach to their social circle and were not able to get support in the time of need. These findings are based on

their score in social relationships domain and environmental domain.

Students of medical education showed less score in the assessment of physical health domain and psychological health domain as compared to the students of non-medical education. This tells us that medical students experience stress, depression, anxiety and academic burden more frequently. On contrary, non-medical students were found to experience these vibes less frequently. Non-medical participants were found more active in activities of daily living, more energetic and more capable in work capacity as compared to the medical participants. Non-medical students were found to have experienced less pain and discomfort as compared to the medical students.

This study suggests that all the students are expressing concerns related to quality of life one way or the other.⁵

CONCLUSION

The results of this study emphasize that students of all disciplines are expressing concerns related to quality of life and, therefore, there is need to look into all the parameters of physical health, psychological health, social relationships and environment of both medical and non-medical institutes to improve the perceptions of quality of life of both.

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Ethical approval: The study was approved by the Institutional Ethics Committee

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