

Assessment of quality of life of postgraduate students in a private medical college of Karnataka using World Health Organization quality of life-BREF questionnaire

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ABSTRACT

Background: Quality of life (QoL) is gaining importance as an important tool to assess the health situations. Medical field is one such stressful environment which can decrease the QoL of medical students. Among the medical students, postgraduate students undergo more stressful learning environment. **Objective:** To assess the QoL of postgraduate students in a private medical college using the World Health Organization (WHO) QoL-BREF questionnaire. **Materials and Methods:** This was a questionnaire-based, cross-sectional study conducted for 2 months from February to March 2016 on all postgraduate students of a private medical college in Karnataka. WHOQoL-BREF questionnaire is used as a study tool. **Results:** With respect to their health perception, exact half of students felt that they were satisfied with their health. Around 40% of them felt their QoL was good. **Conclusion:** Among the various domains of QoL, the students had higher mean score in physical domain, followed by psychological, environmental and social domain.


KEY WORDS: Quality of life; Postgraduate students; Medical college; World Health Organization Quality of life-BREF

INTRODUCTION

Quality of life (QoL) is gaining importance as an important tool to assess the health situations. The World Health Organization (WHO) defines QoL as “individual’s perception of their position in life in context of the culture and value systems in which they live and in relation to their goals, expectations, standards, and concerns.”^[1] QoL refers to a subjective evaluation which is predisposed by cultural, social, and environmental context.^[2] Medical field is one such stressful environment which can decrease the QoL of medical students. The medical education in India is one of

the top professions chosen by parents and students because of economic security and honored position in the society. There are various reasons for which a student enters into the medical field - to fulfill their own dreams, parent’s pressure, job and financial security, prestigious position, etc. The students enter the profession without understanding the need for commitment which imparts stress and depression, negative impact on their academic performance, anxiety, loss of self-esteem, etc., in them.^[3-6]

Among the medical students, postgraduate students undergo more stressful learning environment with overload of classes, patient diseases, and conflicting relationships with peer and staff members. Some find it inspiring, exciting, and interesting whereas others become tensed and stressed from the working environment. Limited studies are found in assessing QoL in postgraduate students in India, and hence, it becomes important to assess the QoL and the factors influencing it on postgraduate students to suggest suitable measures to improve QoL if necessary.

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MATERIALS AND METHODS

This was a questionnaire-based, cross-sectional study conducted for 2 months from February to March 2016 on all postgraduate students of a private medical college in Karnataka after obtaining permission from the Institutional Ethics Review Board. The study subjects were asked to fill in a sociodemographic profile and WHOQoL-BREF questionnaire. Permission from Institutional Ethics Review Board was obtained to conduct the study. All the postgraduates were included in the study to ensure full coverage. Those who gave consent to participate were given WHOQoL-BREF questionnaire. The identity of the study subject was not revealed. The students who refused to answer the questions and students who were unavailable at the time of data collection after three times of visit were excluded from the study.

WHOQoL-BREF Questionnaire

The WHOQoL-BREF is a shorter version of WHOQoL-100 (original version) developed by WHO. WHOQoL-BREF questionnaire assesses the individual's perceptions in the context of their culture and value systems, and their personal goals, standards and concerns.^[2] It is a self-report Likert type scale which includes 26 questions that measure the following four broad domains: Physical health, psychological health, social relationships, and environment. Two items of 26 questions give overall QoL and general health score. The questionnaire is validated and is available in 19 different languages which include Hindi (national language) and Kannada (local language). The local language Kannada version was used in this study, which has been validated and has good reliability and internal consistency.

Statistical Analysis

The data will be entered in Excel sheet and analyzed using Epi info version 7. WHOQoL tool, Chi-square test, and percentages will be used to analyze the data.

RESULTS

There were 121 postgraduates at the time of study, of which 108 (89.25) filled in and returned questionnaires with complete and congruent data. The mean age of male and female students across the study group was 29.17 and 27.50 years, respectively, and also the mean age of entire study group was 28.43 years. Among the study subjects, 60 (64.8%) were males and 48 (44.4%) were females. The characteristics of the study subjects are described in Table 1.

With respect to overall QoL, around 40% of them felt their QoL was good; around 3% of students had felt that their QoL was very good and around 9% of them felt that their QoL was very poor. With respect to their health perception, exact half

of students felt that they were satisfied with their health; 7.4% of the students felt that they were very satisfied with their health and 3.7% of them felt that they were very dissatisfied (Tables 2 and 3).

Table 1: Sociodemographic characteristics of the study subjects

Characteristics	Female (n = 48)	Male (n = 60)	Total (n = 108)
Age (mean ± SD)	27.50 ± 3.60	29.17 ± 4.66	28.43 ± 4.29
Year (%)			
1	16 (40.0)	24 (60.0)	40 (100.0)
2	17 (48.6)	18 (51.4)	35 (100.0)
3	15 (45.5)	18 (54.5)	33 (100.0)
Specialty			
Paramedical	7 (29.2)	17 (70.8)	24 (100)
Clinical	53 (63.1)	31 (36.9)	84 (100)
Residence			
Hostel	30 (42.3)	41 (57.7)	71 (100.0)
Local	18 (48.6)	19 (51.4)	37 (100.0)
Marital status			
Married	26 (38.2)	42 (61.8)	68 (100.0)
Unmarried	22 (55.0)	18 (45.5)	40 (100.0)
Children			
Yes	8 (47.05)	9 (52.95)	17 (100.0)
No	40 (44.0)	51 (56.0)	91 (100.0)
Religion			
Hindu	47 (44.8)	58 (55.2)	105 (100.0)
Muslim	1 (33.3)	2 (66.7)	3 (100.0)

Table 2: Distribution of study subjects according to their perception of QoL

QoL	Number of students (%)
Very poor	10 (9.3)
Poor	11 (10.2)
Neither poor nor good	40 (37.0)
Good	44 (40.7)
Very good	3 (2.8)
Total	108 (100.0)

QoL: Quality of life

Table 3: Distribution of study subjects according to their health perception

QoL	Number of students (%)
Very dissatisfied	4 (3.7)
Dissatisfied	18 (16.7)
Neither satisfied nor dissatisfied	24 (22.2)
Satisfied	54 (50.0)
Very satisfied	8 (7.4)
Total	108 (100.0)

QoL: Quality of life

Among the various domains of QoL, the students had higher mean score in physical domain, followed by psychological, environmental, and social domain. The variation of scores within the study group was highest in social domain as compared to other domains (Figure 1). More than 70% of students had scores more than 50 among physical, psychological, and environmental domain.

We found that there is a significant difference in the mean score of physical domain ($t = 0.218$ and $P = 0.017$) with respect to the gender. The male students had the higher mean score in the entire domain as compared to female students.

The mean scores of different specialty were significantly different in the physical domain ($t = 2.814$, $P = 0.006$). The students from the paramedical had higher mean score than those from other specialty in all the domains.

The results also show that there is no significant difference in the mean scores of all the domains according to the place of residence ($P > 0.05$). The students residing in hostel had higher mean scores in physical and psychological domain and lower in social and environmental domain as compared to students staying in their homes.

We also found that there is a significant difference in mean scores of social domain between married and unmarried students ($t = -5.031$, $P = 0.000$). Unmarried students had lower mean score in psychological domain as compared to married students.

The mean score of different academic year was significantly different in the social and environmental domains ($t = 4.617$, $P = 0.012$ and $t = 4.790$, $P = 0.010$, respectively). Third year students had higher mean scores as compared to the previous years (Table 4).

DISCUSSION

Medical field is known to be the area of pressure and stress. Considerable degree of psychological distress has been

reported in medical students compared to students in other fields. A high level of mental distress may have a negative effect on learning capacity of the students which in turn may have an effect on their QoL.^[4,7] This study examined the QoL in terms of various demographic variables and investigated the effect of QoL and its four domains on subjective well-being. With respect to perception of QoL, more than half felt that they had neutral, poor or very poor QoL. 50% of them perceived that their health was satisfied. The score in physical domain (63.65) was high followed by psychological (60.72), environmental (60.04), and social domains (41.74). The male students had the higher mean score in all the domains as compared to female students. The students from the paramedical subjects had higher mean score than those from other specialty in all the domains. The students residing in hostel had higher mean scores in physical and psychological domain and lower in social and environmental domain as compared to students staying in their homes.

With respect to the domains, our study findings are similar to the result found in a study done in New Zealand among Asian medical students and other racial medical students.^[8,9] In contrast to the above findings, the social domain score was found high than the rest of the scores in a study done by Agnihotri et al.^[10] According to gender, similar high score in male students was seen in a study done on medical students of China.^[11] This is in contrast with the results found in medical students of Visakhapatnam except physical domain which is higher in males.^[12] This study shows high mean score in postgraduates of paramedical subjects than of clinical subjects. This observation is in contrast to the findings done in medical students of China where the students in clinical medicine had higher mean scores compared to preventive or paramedical students.^[11] With respect to place of residence, the findings are line with that found by MSDP Nayak on medical students in Visakhapatnam.^[12]

The WHOQoL-BREF questionnaire although has strengths in finding the QoL of postgraduate medical students in a private college in Karnataka; there are a few limitations in this study. (1) The samples included were only from a single college, thus the population surveyed was not demographically diverse and generalization is limited; (2) the curriculum variables were not considered in the study.

CONCLUSION

To conclude, more than half of the postgraduate medical students had satisfactory health perception and QoL. With relation to domains, the lower score was observed in social domain.

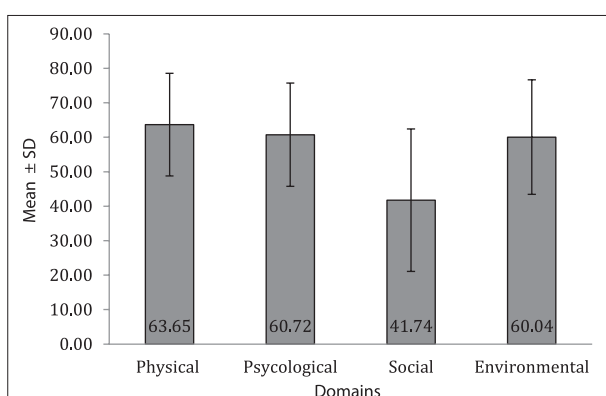


Figure 1: Scores in different domains of quality of life

Table 4: Sociodemographic variables compared to domains

Variables	Physical	Psychological	Social	Environmental
Gender ^a				
Male	67.43±13.53	61.08±12.85	42.18±21.13	62.12±14.99
Female	60.61±60.61	60.43±16.57	41.38±20.51	58.36±17.73
<i>t</i> value	0.218	0.223	0.2	1.171
<i>P</i> value	0.017	0.824	0.842	0.244
Speciality ^a				
Para medical	70.99±13.18	63.29±14.38	45.36±19.36	64.04±17.08
Clinical	61.56±14.76	59.99±15.11	40.70±21.05	58.89±16.39
<i>t</i> value	2.814	0.953	0.975	1.345
<i>P</i> value	0.006	0.343	0.332	0.181
Residence ^a				
Hostel	64.38±15.25	62.56±15.96	39.48±20.23	58.59±17.25
Local	62.24±14.28	57.19±12.30	46.08±21.15	62.81±15.10
<i>t</i> value	0.706	1.788	-1.562	-1.311
<i>P</i> value	0.482	0.077	0.123	0.194
Marital status ^a				
Married	63.60±16.07	61.19±16.54	34.87±19.01	58.49±17.59
Unmarried	63.73±12.83	59.93±11.99	53.43±18.21	62.68±14.60
<i>t</i> value	-0.043	0.459	-5.031	-1.333
<i>P</i> value	0.965	0.647	0.000	0.186
Academic year ^b				
1	63.08±12.37	58.03±12.99	34.40±19.05	54.20±15.61
2	62.09±18.38	61.71±18.22	44.09±22.89	61.43±17.36
3	66.00±13.69	62.94±13.27	48.15±17.81	65.64±15.07
<i>F</i> value	0.629	1.090	4.617	4.790
<i>P</i> value	0.535	0.340	0.012	0.010

^a*t*-test and ^bOne-way ANOVA**REFERENCES**

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