ORIGINAL ARTICLE

QUALITY OF LIFE AMONG DOCTOR OF PHYSICAL THERAPY STUDENTS USING SF-36 SCALE

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ABSTRACT

Objective: To assess the life quality amongst undergraduate physiotherapy students by means of Short-form 36 (SF-36) health questionnaire and to contrast variation in quality of life realms among males & females.

Material & Methods: A cross sectional research was conducted in Islamabad, Pakistan among 145 undergraduate physical therapy students to assess the life quality domains. Demographic proforma and SF-36 health survey questionnaire was used for data collection. Data collection was completed by using convenience sampling. To evaluate scores between males and females an independent-sample T-test was performed.

Results: Mean age of all male students was 22.02 ±1.67 years & female student was 21.09±1.90 years. Highest outcome was noted in the physical functioning (71.66) and pain (67.14), on the other hand low scores was calculated in social functioning (64.46), emotional problems (58.95), physical health (59.71), energy (53.74) and general health (56.45). A notable difference was seen concerning pain domain for males vs. females (76.90±22.33 vs.57.37±23.71; p<0.05).

Conclusion: This study concludes low score between majority domains of quality of life which means quality of life is poor between students. Therefore in coming time more studies should be conducted to recognize the elements linked with poor quality of life in order to establish enhanced health measures to make quality of life better.

Key Words: Academic, Clinical, Physical Therapy Quality of life, Students.

INTRODUCTION

According to the WHO, quality of life (QOL) is oneself awareness of their locality in life circumstance of customs and moral beliefs in which they reside, and in connection to their aims, potentials, principles and worries" [1]. HRQOL is a significant health facet & also multidimensional prejudiced notion rather than an objective observation. For usual and useful performance of an individual healthier HRQOL is imperative. Health, occupations, shelter and alma mater, are all spheres of quality of life. In these on the whole quality of life health is an imperative domain. [2] In society health is observed as multifaceted construct that embraces social domains physical and mental. Being physically active and healthy and a person to maintain own entity and self-care all are key indicators of high-quality of life. [3]

In relation to health QOL is a broader concept that entail the social well being as compared to individual health position. It is renowned as a notion representing human being reactions to physical, psychological and social effects of sickness on daily living that persuades the degree to which personal satisfaction with life conditions can be attained.[4] To reveal the significance of HR-QOL health associated quality of living evaluation among students and general people large number of studies has been done. [3, 5, 6]Over

the past few decades, an imperative assessment in educational scenery was shown to be the evaluation of health associated quality of living.[7] For the evaluation of HR-QOL, short form- 36 health survey tool the multitudinous health associated quality of living tool is most commonly used. The "SF-36" tool is utilized to evaluate both mental health as well as physical. Taken as a whole health status on tool one of the authenticated and trustworthy gadget is SF-36. Approximations of reliability in the physical and mental sections are on average beyond 0.90. [8, 9] University campus life, where chief life alteration happens, has frequently been renowned as a demanding stage in one's life in which students countenance several personal and educational scenery disputes that can end up in poorer HRQOL. A preliminary research studies reveals that medical students have poorer status of mental health as well as physical, and they have more depression and anxiety as compared with nonmedical students.[10] Widespread stressors and factors that affect the students standard of living are study demands; maternal pressure, yearning for house, economic dilemmas. Rather than these more factors which were also identified as poor quality of life aspect include psychological troubles such as sadness and low self-esteem. [11,12] Quality of life amid undergraduate physical therapy students has not been evaluated in Pakistan at all, so the main objective behind the conduction of current research was to evaluate the standard of living among undergraduate physical therapy students. To create mindfulness toward the improvement of QOL during study life phase this is advantageous for the student itself and for their families.

MATERIAL AND METHODS
A cross sectional study among undergraduate physiotherapy students of Sarhad University and Isra University was carried out to assess the health associated standard of living. The research was conducted from April 2017 to December 2017. Using the Yamane formula, the research sample size was 200 (according to nearest 100 rule).out of 200, 145 students participated in the study.

The inclusion criteria of current research study were: Doctor of Physiotherapy students, age ranging from 18 to 30 years and both male and female. This research study was initiated after taking consent from the research Committee of isra institute of rehabilitation sciences, Islamabad and from the head of the institutions. Data was collected from undergraduate physical therapy students after taking informed written consent. The sampling technique was non-probability convenience sampling to gather data. Data was collected by demographic Performa and SF-36 health survey tool. SPSS version 20 was used for data analysis. The results of study were presented as frequency, percentages, p-values and in term of descriptive statistics. Independent-samples t-test was runned to relate scores for male and female students.

RESULTS
145 participants completed the data, in which 42(29.0%) were male and l03 (71.0%) were females. The mean age group male was 22.02 ±67 years and female were 21.09±90 years. Regarding body mass index (BMl) data 95(65.3%) were normal, underweight students were 20 (14 %), 22(15.4 %) were overweight 8(5.6%) participants were obese. When common health statistics was calculated and analyzed, 24.1 % were in very good health conditions, 58.6% were in good health state, 15.2% were in fair health, 0.7% and 1.4 % were in poor and very poor health condition.

Highest scores were calculated in Emotional Problems (58.95), Physical activity (71.66) and pain (67.14), though low scores were calculated in Social activity (64.46), Physical Health (59.71), Energy (53.74) and common health (56.45). A significant difference was seen regarding pain item score for males vs. females (76.90±22.33 vs.57.37±23.71; p<0.05), low score among the female gender means that females encounter more pain and intrusion with vocation than males. **(Table 1)**

Table 1: Comparison of SF-36 domains among male and female students(n=145)

Quality of life domains		N (%)	Mean	S.D	p-value
Physical function	Male	42(13.5)	69.40	21.70	
	Female	103(33.1)	73.92	23.28	0.281
	Overall	145	71.66	3.20	
Role limitation due to physical health	Male	42(13.5)	61.90	33.23	
	Female	103(33.1)	57.52	35.67	0.495
	Overall	145	59.71	3.10	
Limitation due to emotional health problem	Male	42(13.5)	53.17	37.58	
	Female	103(33.1)	64.72	36.40	0.088
	Overall	145	58.95	8.17	
Energy/Fatigue	Male	42(13.5)	54.76	18.54	
	Female	103(33.1)	52.71	16.06	0.508
	Overall	145	53.74	1.45	
Emotional well-being	Male	42(13.5)	63.42	19.12	
	Female	103(33.1)	64.93	17.18	0.645
	Overall	145	64.18	1.07	
Social function	Male	42(13.5)	62.79	26.40	
	Female	103(33.1)	66.13	22.39	0.441
	Overall	145	64.46	2.36	
Pain	Male	42(13.5)	76.90	22.33	
	Female	103(33.1)	57.37	23.71	0
	Overall	145	67.14	13.81	
General health	Male	42(13.5)	54.52	13.51	
	Female	103(33.1)	58.38	18.15	0.216
	Overall	145	56.45	2.73	

DISCUSSION

The aim of this study was to assess the quality of life among Doctor of Physical Therapy Students. In terms of the overall scores in different quality of life domains, the findings of the present study indicate a negative quality of life among the students. The mean scores for Role limitation due to Physical Health (59.71), Social Functioning (64.46), Limitation due to emotional health Problems (58.95), Energy (53.74), and general health (56.45) reflect low energy levels, poor physical health, poor general health, and increased emotional health problems. These results align with the research conducted by Unni EJ in 2015 among pharmacy students in the United States, which aimed to assess the quality of life in various educational settings and identify factors associated with poor quality of life among students. Unni EJ's study found that the emotional/mental domain had the lowest scores among students.[13,14] Another study conducted among Belgrade university students in Serbia showed the highest values for Physical Functioning and the lowest SF-36 values for the Vitality item.[15] The present study's results are further supported by a study conducted in Iran in 2012 among students of medical sciences, where the highest values on the SF-36 scales were obtained for Physical Functioning, while the lowest SF-36 values were observed for General Health.[16] At 9:28, the findings of the present study showed that all participants had an average score of 15.6 in terms of their health. The measurement was done in units of "K/s." The study's outcomes differed from a study conducted among medical students in Sharjah, UAE, where it was discovered that pharmacy students at the

University of Sharjah generally had a good to excellent quality of life.[17]

In terms of gender differences, the present study found that female students had higher mean scores in the domains of physical functioning, limitation due to emotional health problems, social functioning, and general health compared to male students. On the other hand, male students had higher mean scores in physical health and pain compared to female students. These results contrast with a study conducted in 2017 among pharmacy students. However, the present study's findings are consistent with a study conducted by Pekmezovic et al. in 2011 among Belgrade University students, where the highest SF-36 scale score was obtained for Physical Functioning.[15] The present study's results differ from a study conducted by Megahed et al. in 2014 among Saudi students, where the mean age was 20.99 ± 1.73 years.[18] In the present study, a significant difference ($p<0.005$) was found in the pain domain score between males (M=76.90±22.33) and females (M=57.37±23.71; t=4.57). This indicates that females experience more pain and interference with work compared to males, as evidenced by their lower scores. This finding is in line with a previous study conducted among Saudi students (n=286) with an average age of 20.99+1.73 years. In that study, significant differences were observed in all eight domains between males and females. Male participants had higher scores than female participants in physical functioning, role limitation due to physical health, role limitation due to emotional health problems, energy, emotional well-being, and general health scales. On the other hand, female participants had higher scores than males only in Social Functioning (50.66) and pain (46.02).

In a previous study conducted in Serbia in 2011, high scores were observed in all domains except for Role limitation due to physical health. This suggests that male students had a better quality of life compared to female students. The present study's results are consistent with a study conducted among students at Anadolu University. In that study, a significant difference ($p<0.01$) was found in the physical functioning domain between males and females.[18-20]

The current study's findings are also concurrent with a study conducted by Paro et al. in 2010 among medical students aged 18 to 31 years. They reported that female students had lower health-related quality of life (HRQOL) scores compared to males (p=0.01), indicating that male students had better overall quality of life.[20]

In this research, a notable difference ($p<0.005$) was noted about pain section score among males (M =76.90±22.33) & females (M=57.37±23.71; t=4.57), therefore low score among females indicate that females experience more pain and interference with work than males. In comparison with one of the previous studies conducted among Saudi students (n=286), (Average age: 20.99+ 1.73 years) in which they found significant differences in all eight domains among males and females. [18] The current research results were also consistent with the study done in 2011 in Serbia, in which high score was observed in all sections except for the Role constraint due to physical health which indicate better QOL among male students vs. female students. [15] The present research results are also consistent with another study carried out in students in Anadolu University in which they found significant difference in physical functioning ($p<0.01$) domain among males and females. [20]

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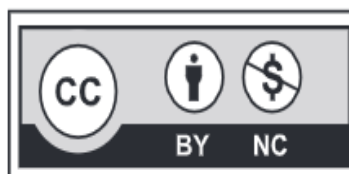
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