

## ORIGINAL ARTICLE

## PHYSICAL HEALTH RELATED QUALITY OF LIFE IN PAKISTANI PHYSICAL THERAPISTS

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## ABSTRACT

**Objectives:** The objective of this study is to find out the quality of life (QOL) related to physical health and factors associated with it in physical therapists of Pakistan. **Materials & Methods:** Descriptive cross sectional survey was conducted among physiotherapists of Pakistan working in different hospitals and teaching institutes. The sample (n=378) was collected through convenient sampling technique. The qualified doctors of physical therapy with age of 22-50 years were included. Data was collected by using General demographic questionnaire including age, gender, qualification, marital status, job type, job nature, financial issues, family issues, job satisfaction, salary satisfaction, overall satisfaction, depression anxiety stress (DAS) and physical health related quality of life (WHO-QoL). Data was analyzed by using SPSS 21. **Results:** The results showed that mean age of study participant was 29.66±3.75. the average population of PTs had normal physical health(49.53±15.17). A total of n=146(38.64%) physical therapist had good, n=90(23.81%) had normal, n=136(35.98%) had poor and n=6(1.59%) had very poor quality of life related to their physical health. Physical health was found poor among PTs those who were divorced (37.33±9.81), severely depressed (32.27±13.09), in severe anxiety (32.75±3.24) and severely stressed (31.00±.00). **Conclusion:** Average population of PTs had normal physical health. The physical health was associated with gender, type of job, nature of job, financial issues and family issues. Physical health becomes poorer as depression, anxiety and stress severity increases.

**Keywords:** Physical Therapist, quality of life, Depression, anxiety, stress. Work related musculoskeletal disorders.

## INTRODUCTION

Quality of life is perception of a person about life according to his purpose, goals and expectations in relation to culture and values of a system in which he survives. It is a multidimensional concept referring to people's emotional, social and physical well-being and their ability to function in the ordinary tasks of living.<sup>1</sup>

The concept of HRQoL is relatively new, though it is self-reported outcome but overall HRQoL is dynamic and multidimensional covering physical functioning, social functioning, role functioning, and mental health. Healthy people are more productive, more energetic to work, have good self-esteem, can communicate more honestly and effectively.<sup>2</sup> Studies related to HRQOL are useful in every sector.<sup>3</sup> Numerous studies have been carried out to assess HRQoL in various disease conditions to identify appropriate interventions to improve HRQoL of target population. However, there is a dearth of literature on HRQoL among Medical professionals.<sup>4</sup> One study done on physicians showed that many of them experience professional burnout, characterized

by emotional exhaustion, depersonalization, and a low sense of personal accomplishment which affect professionalism, influence quality of care, increase the risk for medical errors, promote early retirement, broken relationships, increased alcohol use, and suicidal ideation<sup>5</sup>. Research has consistently shown that doctors with healthy personal lifestyle habits are more likely to impart healthy behaviors to their patients.<sup>6</sup> In most of the studies done on health of doctors, their health problems are mainly discussed in relation to substance abuse and psychiatric disorders rather than in terms of physical diseases<sup>7</sup>. One study reported prevalence of WRMDs among Saudi dentists affecting their daily activities. Physical therapists (PTs) are health care professionals who diagnose and treat movement dysfunctions. Their job is very demanding on both time and physical capabilities which can affect their physical health due to musculoskeletal problems and decrease their work performance and increase absenteeism.<sup>8</sup> A study was conducted on physiotherapists to examine their activity levels and quality of life related to health in an Australian

hospital and health service and participants reported with most of them being in full health. Musculoskeletal problems and burnout of moderate intensity with high level jobs have been reported by Physiotherapists which even result in more health care consultations and leaves due to sickness.<sup>9</sup> No study has been conducted to observe physical and mental health in PTs of Pakistan. There is paucity of information so further studies are required to assess HRQOL in physical therapists. The objective of this study is to find out the QOL related to physical health and factors associated with it in physiotherapists of Pakistan.

## MATERIAL & METHODS

Descriptive cross sectional survey was conducted among physiotherapists of Pakistan working in different hospitals and teaching institutes. The sample (n=378) was collected through convenient sampling technique and was decided by raosoft sample size calculator with 5% margin of error. The qualified doctors of physical therapy with age of 22-50 years were included. Physical therapy technicians and diploma holders were excluded from the study. Anonymity and Confidentiality of study participants was observed throughout the research. Prior to study informed consent was obtained from the study participants. Data was collected by using General demographic questionnaire including age, gender, qualification, marital status, job type, job nature, financial issues, family issues, job satisfaction, salary satisfaction, overall satisfaction, depression anxiety stress (DAS) and physical health related quality of life

(WHO-QoL). The mean±SD and n(%) were used to describe the results. To determine association between variables, chi square was used. The level of significance was set at  $p<0.05$ . Data was analyzed by using SPSS 21.

## RESULTS

The results showed that mean age of study participant was  $29.66\pm 3.75$  and mean physical health score was  $49.53 \pm 15.17$  that showed that average population of PTs had normal physical health. A total of n=146(38.64%) physical therapist had good, n=90(23.81%) had normal, n=136(35.98%) had poor and n=6(1.59%) had very poor quality of life related to their physical health. (Figure 1)

The results showed that no significant association was found between age and physical health of Physical therapist. The physical health showed significant association with gender ( $\chi^2=9.04, p=0.02$ ), type of job ( $\chi^2=14.76, p=0.02$ ), nature of job ( $\chi^2=21.99, p=0.00$ ), financial issues ( $\chi^2=9.96, p=0.01$ ), family issues ( $\chi^2=11.70, p=0.00$ ), depression ( $\chi^2=48.37, p=0.00$ ), anxiety ( $\chi^2=40.81, p=0.00$ ) and stress ( $\chi^2=31.36, p=0.00$ ). Physical health was found poor among PTs those who were divorced ( $37.33\pm 9.81$ ), severely depressed ( $32.27\pm 13.09$ ), in severe anxiety ( $32.75\pm 3.24$ ) and severely stressed ( $31.00\pm 0.00$ ). The detailed results of different variables according to mean±SD, frequency distribution and their association with physical health can be seen in table 1.

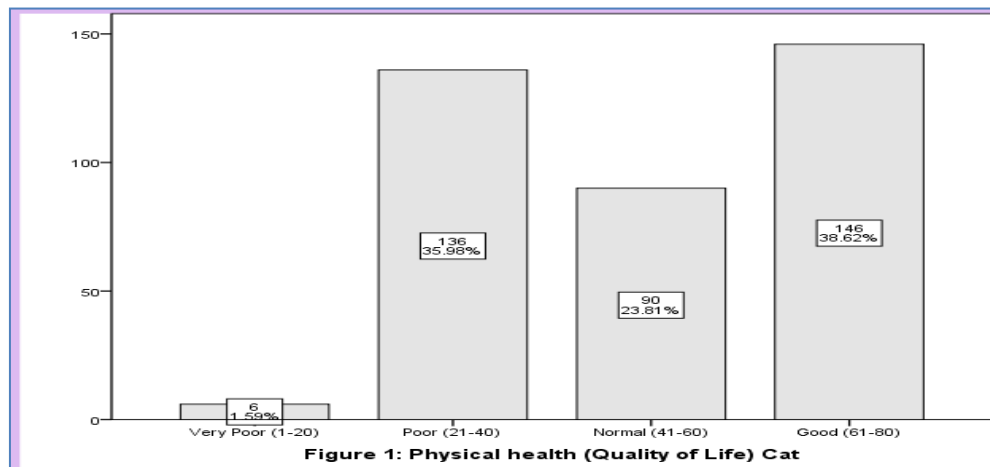


Table 1: Physical Health Related QOL among Physical Therapist

		Physical Health						X <sup>2</sup>	p-value
		N	Mean±SD	Very Poor (1-20) N(%)	Poor (21-40) N(%)	Normal (41-60) N(%)	Good (61-80) N(%)		
Gender	Male	136	52.37±13.49	2(33.3)	36(26.5)	40(44.4)	58(39.7)	9.04	0.02
	Female	242	48.46±15.50	4(66.7)	100(73.5)	50(55.6)	88(60.3)		
Qualification	BSPT	38	52.21±14.30	-	12(31.6)	8(21.1)	18(47.4)	6.44	0.69
	DPT	138	50.27±15.09	2(1.4)	46(33.3)	38(27.5)	52(37.7)		
	PPDPT/ MS	192	48.79±15.06	4(2.1)	76(39.6)	42(21.9)	70(36.5)		
	Ph. D candidates	10	55.40±10.59	-	2(20)	2(20)	6(60)		
Marital status	Married	128	51.90±14.28	2(1.6)	40(31.3)	30(23.4)	56(43.8)	11.63	0.23
	Unmarried	172	48.94±15.56	2(1.2)	66(38.4)	35(20.3)	69(40.1)		
	In a relationship	72	49.54±14.24	2(2.8)	26(36.1)	23(31.9)	21(29.2)		
	Divorced	06	37.33±9.81	-	4(66.7)	2(33.3)	-		
Job type	Clinical	172	48.51±15.16	2(1.2)	64(37.2)	51(29.7)	55(32)	14.76	0.02
	Academic	112	49.09±14.85	2(1.8)	44(39.3)	25(22.3)	41(36.6)		
	Both	94	53.32±14.12	2(2.1)	28(29.8)	14(14.9)	50(53.2)		
Job nature	Government	82	46.34±14.46	2(2.4)	32(39)	29(35.4)	19(23.2)	21.99	0.00
	Semi-government	60	52.96±14.55	2(3.3)	18(30)	12(20)	28(46.7)		
	Private	196	50.18±15.14	-	74(37.8)	39(19.9)	83(42.3)		
	Self employed	40	51.10±14.34	2(5)	12(30)	10(25)	16(40)		
Financial Issues	Yes	228	49.66±14.75	6(2.6)	80(35.1)	63(27.6)	79(34.6)	9.96	0.01
	No	150	50.16±15.20	-	56(37.3)	27(18)	67(44.7)		
Family Issues	Yes	118	46.79±14.84	-	56(47.5)	24(20.3)	38(32.2)	11.70	0.00
	No	260	51.28±14.76	6(2.3)	80(30.8)	66(25.4)	108(41.5)		
Job satisfaction	Yes	161	48.24±15.23	4(2.5)	62(38.5)	35(21.7)	60(37.3)	2.56	0.46
	No	217	50.49±15.09	2(0.9)	74(34.1)	55(25.3)	86(38.6)		
Salary satisfaction	Yes	101	48.34±15.16	-	44(43.6)	18(17.8)	39(38.6)	6.46	0.09
	No	277	49.97±15.17	6(2.2)	92(33.2)	72(26)	107(38.6)		
Overall satisfaction	Satisfied	68	52.63±14.23	-	19(27.9)	15(22.1)	34(50)	6.11	0.41
	Average	132	48.89±15.29	3(2.3)	51(38.6)	30(22.7)	48(36.4)		
	Not satisfied	178	48.83±15.36	3(1.7)	66(37.1)	45(25.3)	64(36)		
Depression	Normal	94	50.19±13.95	-	29(30.9)	35(37.2)	30(31.9)	48.37	0.00
	Mild	184	49.38±14.97	2(1.1)	69(37.5)	44(23.9)	69(37.5)		
	Moderate	89	51.31±15.92	2(2.2)	30(33.7)	11(12.4)	46(51.7)		
	Severe	11	32.27±13.09	2(18.2)	8(72.7)	-	1(9.1)		
Anxiety	Normal	176	49.93±15.40	4(2.3)	59(33.5)	42(23.9)	71(40.3)	40.81	0.00
	Mild	168	51.66±14.50	-	55(32.7)	38(22.6)	75(44.6)		
	Moderate	26	38.30±12.18	2(7.7)	14(53.8)	10(38.5)	-		
	Severe	8	32.75±3.24	-	8(100)	-	-		
Stress	Normal	151	49.98±14.64	-	55(36.4)	33(21.9)	63(41.7)	31.36	0.00
	Mild	121	52.23±15.44	3(2.5)	34(28.1)	28(23.1)	56(46.3)		
	Moderate	96	47.37±14.93	3(3.1)	37(38.5)	29(30.2)	27(28.1)		
	Severe	10	31.00±0.00	-	10(100)	-	-		

## DISCUSSION

The objective of the study was to find out the physical health and factors affecting it within physiotherapists of Pakistan and according to results the mean values of physical health which is one of the domains of WHO Bref QoL were in moderate ranges while majority of participants were with mild depression but with normal anxiety and stress level. Physical function was associated with depression level, anxiety level, stress level, job status, job

nature, family issues, marital status, and health status. 73% females were with poor health.

Enormous studies have been conducted in western countries to assess level of stress, mental health and other related variables in various professions but very few for physical therapists.<sup>8,9,10</sup> In present study poor health increases with increasing depression, anxiety and stress. Studies conducted previously have demonstrated that physical therapists experience high level of job stress. But the scope of the problem is difficult to evaluate because of focus group studies and interviews. However, there is

evidence that doctors are at greater risk of mental illness and stress-related problems and more susceptible to substance abuse.<sup>10,11</sup> Further their suicide rate is higher than general population.<sup>12</sup> they are at greater risk of poorer health and wellbeing because of their professional circumstances like working in rural and remote areas, excessive hours or shift work<sup>13</sup>. For junior doctors their professional stage and For senior doctors, professional isolation, the challenges of managing a business, employing staff, juggling commitments to patient care, teaching, administration, professional development, family and caring responsibilities plus chronic diseases can cause stress<sup>14,15</sup>. In present study from clinicians 37.2% and from academics 39.3% were with poor health. Though clinicians have more physical work as compared to those who work in academics but mental health is affected more in them so it might have indirectly affected the physical health. 37% privately employed were with poor health. 37.3% although were with no financial issues but having poor health while 35.1% were with poor health with financial issues and 47.5% with family issues were also with poor health.

Medical students also experience higher rates of depression and stress.<sup>16</sup> One study done for Medical representatives showed that they were suffering from health problems and majority of them were not involved in any physical activity other than the routine work which was affecting their HRQoL<sup>17</sup>. It is also reported that use of junk/fried food affect the HRQoL which affects their productivity and satisfaction level.<sup>18</sup> Some other studies also reported stress, psychiatric morbidity, high suicide rates and ill health in doctors with high BMI, prevalent smoking and alcohol use<sup>7,19,20</sup>.

It is sad and surprising that physicians suffer more from one or more of "the three Ds" drugs, drink & depression. Illnesses experienced by doctors include: cardiovascular diseases (4% to 15%), respiratory illnesses (10% to 21%), musculo-skeletal problem (9% to 38%), cancer (2 to 3%) & psychiatric illness (3 to 10%)<sup>21</sup>. There has been no study which investigated quality of life among Pakistani physiotherapists but some other studies in different countries like in South Korea investigated prevalence

of WRMDs and its association with QOL and work place stress and the results showed that 94.5% of participants were suffering from WRMD at least at one body site. For QOL difference was higher for above 49 years of age and it was associated with number of pain sites. Work stress was higher and due to job specifications, role conflicts, personal relations and employment instability. Work stress was influenced by multiple pain sites and in turn affecting quality of life thus supporting the results of present study that effect on mental health can affect physical health<sup>22</sup>. In a study done by Morken et al. reported that QOL specially physical role limitations and observable symptoms have lower average values unlike present studies in which physical function was in moderate ranges.<sup>23</sup> Another study showed that QOL can be affected by length of shift and duration of labour<sup>24</sup>. Different other studies have also reported WRMD within physical therapists and their assistants<sup>8,10, 25-27</sup>.

Another study done in KSA reported that demands of work in context of physical and psychological health leads towards moderate level of job demands. To work in uneasy positions, work pressures and to complete work in time results in musculoskeletal problems which affect the quality of life of PT's. It was more prevalent in juniors. Physical health can be affected by either of physical or psychological factor<sup>28,29</sup>.

In current study comorbidities which could also affect health were not identified. Geography and environmental factors that may affect physical health are missing in the study.

## CONCLUSION

Average population of PTs had normal physical health. The physical health was associated with gender, type of job, nature of job, financial issues and family issues. Physical health becomes poorer as depression, anxiety and stress severity increases. In future studies can be performed with larger sample size.

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