



# Quality Of Life among Physically Disabled Females in Backward Areas of Pakistan

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## ABSTRACT

**Back ground and Aims:** Social discrimination is one of the most fatal and important source of hindrance for women causing them depressed. The aim of this research study was to find important information on QOL of physically disabled women of backward areas (Triple discriminated population of Pakistan).

**Methodology:** The current research was conducted at PRSP, D.I.Khan through Cross sectional survey. Sample size for current study was 300 and SF-36 was used to measure QOL. Data was analyzed by using SPSS 22.

**Results:** The measured mean age of the sample was  $27.07 \pm 11.10$  years. Only 22% of the participants were married. Only 10.3.3% of the participants, completed their tertiary education. The overall SF-36 score

was  $47.07 \pm 12.78$ . the domains like Physical functioning was  $41.33 \pm 20.38$ , Role physical  $31.66 \pm 35.61$ , Body pain  $74.77 \pm 24.06$ , General health  $44.91 \pm 14.12$ , Energy/fatigue  $43.16 \pm 16.01$ , Social functioning  $49.37 \pm 19.80$ , Role emotional  $30.77 \pm 36.53$ , and Mental health  $45.97 \pm 13.71$ . This study shows that education has significant impact on the QOL.

**Conclusion:** Physical disability has visible effects on quality of life of Female PWDs. In PWDs management, quality of life needs to be focused in Rehab program for more effective approach.

**Keywords:** *Quality of life, person with disability, physical rehabilitation, gender discrimination, prosthetics and orthotics, disability and gender.*

## INTRODUCTION

Quality of life QOL is a person's own perceptions about his/her position in life within the society that consider their objectives and goals<sup>1</sup>. All over the globe, the persons with physical disability experience different kind of problems that can affect quality of life<sup>2,3</sup>. Discrimination in persons with disability is the major social scar that occurs in most of the societies<sup>4</sup>. Persons with disability are amongst the most marginalized in all communities and always face barriers to entertain their human rights<sup>5,6</sup>. Persons with Disabilities (PWD) in Pakistan are generally confined and living in dust and their active participation is generally prohibited along with normal bodied community members<sup>7</sup>. Low self-confidence, deficiencies, social isolation and feeling of being disgraced are linked with disabilities and results in low quality of life<sup>8</sup>. With functional restoration, it is also important to improve a person's quality of life through rehabilitation<sup>3</sup>. There are complex dynamics due to the diversity in cultures and traditions in Pakistani society.

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The Historical observation suggests that girls' education and health has been a contested cultural, social, economic, political, and religious issue in the KPK<sup>9</sup>. Females in Pashtun regions either never avail their full health related opportunities or they avail very limited health related opportunities<sup>10,12</sup>. The residents of the Dera Ismail Khan Division especially of district Tank and South Waziristan are ethnically, culturally and linguistically distinct from the rest of the country, being mostly of Pashtun-Afghan origin<sup>13</sup>. In this region, the society is whole dominated by male, and majority of the females have been victimized by patriarchies and servitude. The girls mostly grow up only learn to obey and serve the males<sup>13,14</sup>. Women are socially discriminated in these areas and this social discrimination is one of the most fatal and important sources of hindrance for women due to which most of them are socially suppressed and depressed and they cannot avail basic rights including health issues and physical rehabilitation at all<sup>15</sup>.

### Objective

To find important information on QOL of physically disabled women of the backward areas (the triple discriminated population of Pakistan i-e disability, gender and living area). There is no such population-based study conducted in this region which assessed all the aspects.

### METHODOLOGY

The current research was conducted in PIPOS Rehabilitation Services Program, Dera Ismail Khan through Cross sectional survey design in 6 months of duration. The sample size for current study was 300 female disables that were selected through Non probability convenience sampling. SF-36 questionnaire version 1.0 was used for the measurement of QOL of Person with disabilities (PWDs). Data was analyzed by using SPSS 22. Initially, the descriptive statistics were performed. Categorical variables (i.e. place of living) are presented as frequency/percentage.

### Inclusion criteria

Female PWDs that are residents of district Dera Ismail Khan, Tank and South Waziristan and aged between 18 to 60 years were included in current research study. The female disables that were mentally unstable or can't communicate are excluded from this study.

### RESULT

#### Demographical results

The demographic data of study group shows that the female disabled persons (n=300). The living area for study sample was, the participants from District Dera Ismail Khan were 115 (38.3%) and that from District Tank was 99 (33%) and that of South Waziristan were 86 (28.6%). The mean age of the participants was  $27.07 \pm 11.10$  years. 66 (22%) out of the total sample were married while 234 (78%) of the female disables were un-married in our given sample. In this study 105(35%) participants completed only their primary education, 53(17.7%) of the participants completed secondary education while only 10(3.3%) participants could reach to the tertiary education. On other hand 132(44%) participants never went to school. The sample distribution according to their type of disability showed that 60(20%) participants were with Post-Polio Paralysis, 144(48%) were having some kind of amputation while 48(16%) participants were disabled due to cerebral palsy and that with drop foot and wrist drop were 36(12%) and 12(4%) respectively.

Baseline characteristic	Full sample	
	<i>n</i>	%
<b>Education</b>		
Illiterate	132	44
Primary education	105	35
Secondary education	53	17.7
Tertiary education	10	3.3
<b>Marital status</b>		
Single	66	22
Married/partnered	234	78
<b>Residency</b>		
<u>Dera ismail Khan</u>	115	38.3
Tank	99	33
South Waziristan	86	28.6
<b>Disability Type</b>		
Post-Polio Paralysis	60	20
Amputations	144	48
Cerebral Palsy	48	16
Drop foot	36	12
Wrist Drop	12	4

Table 01: Patient Demographics

### QOL Results

A detail assessment of QOL was done using the SF-36, v1.0 questionnaire. The PCS (physical component summary) contains four domains: Physical functioning, general health, body pain, and role limitations due to physical health. In this study, participants showed better with body pain with mean score  $74.77 \pm 24.06$ . Participants scored poor in role limitations due to physical health with mean score  $31.66 \pm 35.61$ . The mean score for physical functioning was  $41.33 \pm 20.4$  and mean score for general health was  $44.9 \pm 14.12$ ; the overall PCS mean score was  $48.17 \pm 14.42$ .

Domain	N	Mean	SD
Physical functioning	300	41.3333	20.41515
Role limitations due to physical health	300	31.6667	35.61062
Pain	300	74.7750	24.06468
General health	300	44.9167	14.12118
Physical component summary	300	48.1729	14.42147

Table 02: Sample Physical Component Summary table

The MCS contains four domains: energy/fatigue, emotional well-being, social functioning, and role limitations due to emotional problems; these four domains give the overall MCS score of the individuals. In the current study participant show better with emotional well-being  $60.57 \pm 17.06$  with mean score. Participants score poor in role limitations due to emotional problems with mean score  $30.77 \pm 36.53$ . The mean score of energy/fatigue was  $43.16 \pm 16.01$  and mean score of social functioning was  $49.37 \pm 19.8$  while the overall MCS mean score was  $45.97 \pm 13.71$ . The two most

affected domains were RP and RE. The two domains that were least affected were pain and emotional well-being.

Domain	N	Mean	SD
Role limitations due to emotional problems	300	30.7778	36.53705
Energy/fatigue	300	43.1667	16.01543
Emotional well-being	300	60.5733	17.06307
Social functioning	300	49.3750	19.80056
Mental component summary	300	45.9732	13.71153

Table 03: Sample Mental Component Summary table

When the SF-36 scores and its sub domains were compared against various socio-demographic factors i-e age, residence and educational status of study participants, significant associations were observed. Domain scores were found to have statistically significant association with living place. Female PWDs in the age group 18–29 years score well and they had good QOL, but elderly participants (30 years and more) score lower comparatively. Elderly participants had poor QOL than the younger females with PWDs. Female PWDs living in district Dera Ismail Khan were living with good QOL as compared with that of district Tank and South Waziristan. These current results shows that young, educated and rural area were living better QOL then elderly, uneducated disabled females of urban area.

## DISCUSSION

The current research have similar results as that of the previous studies representing lack of energy<sup>(16)</sup> and decreased QOL in PWDs<sup>17,18</sup>. The most crucial findings of the current study was, disability adversely affects QOL, as disclosed by the scores of the SF 36. The results showed that participants have high physical component summary (PCS) (48.17) as compared to mental component summary (MCS) (45.97), so Female PWDs of this region are affected mostly in emotional aspect then physical. Furthermore, from the results of previous studies that used fatigue impact scale (FIS) for PWDs, it was found that fatigue is not significantly related to physical health, but fatigue has significant negative impact on emotional and psychosocial functioning of the PWDs<sup>19</sup>. The results of the current study supported the previous researches and suggest that mental fatigue represented the major problems in PWDs<sup>20</sup>. The current study explored further the health-related QOL of female with disabilities in this backward area of KPK, Pakistan. The average age of the respondents showed that subjects in the current study were younger when it as compared with the results of the previous studies carried out to find the QOL in disables. Ganesh et al and Wang et al reported the ages of disables as 45-65 years and  $55.2 \pm 8.4$  years, respectively<sup>21,22</sup>. The reality is that some of disabilities like post-polio paralysis had been diminished over a decade ago in some countries. In Pakistan, especially the tribal region, fresh polio virus cases are still reported among children and the war on terror also causes a lot of physical disabilities in this region<sup>23,24</sup>. The results were same reported by Ganesh et al. in the psychological and physical domains (32.9 and 50.3, respectively), while Wang et al. reported as 43.0 and 52.2 respectively<sup>21,22</sup>. Some of the factors effecting the QOL can be resolved by health-care and rehabilitation professionals, government administrations and society. The first barrier is the participation in chosen activities and is related to environmental barriers. These barriers could result for not having equal access of disable persons to different opportunities. Problems with using public transport by PWDs have also been previously noted<sup>25</sup>. In the current study, QOL score was found to be high in mental component domain reflecting on negative thinking, worse bodily image appearance and lower self-esteem or

disgrace. Psychological domain score was also noted as high across female disables of this region. In a study carried out in Nigeria among physical disabled persons showed high QOL scores under all domains namely physical health, psychological health, social health and environmental domains<sup>26</sup>.

## CONCLUSION

It is concluded that quality of life of PWDs has been badly affected by disability. The findings of the current research study demonstrate that disability and gender play a crucial role for further impairment and lower QOL in PWDs. The study reveals that female PWDs are greatly affect psychological as well as in physical aspect of QOL. In the present study, psychological aspect has been affected more as compared to physical aspect.

### AUTHORS' CONTRIBUTION:

The following authors have made substantial contributions to the manuscript as under:

**Conception or Design:** Mehran Ullah

**Acquisition, Analysis or Interpretation of Data:** Tehmina Khan, Abid Ali

**Manuscript Writing & Approval:** Hassan Saifullah

All authors acknowledge their accountability for all facets of the research, ensuring that any concerns regarding the accuracy or integrity of the work are duly investigated and resolved.

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