

# Comparison of Quality of Life between patients with Anxiety Disorders and Healthy Subjects

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## ABSTRACT

**Aim:** To assess the quality of life in patients with anxiety disorders and compare quality of life between patients with anxiety disorders and healthy subjects.

**Study Design:** This was a hospital based cross-sectional comparative study

**Setting:** Department of Psychiatry, Services Hospital, Lahore.

**Subjects:** Hundred consecutive patients suffering from anxiety disorders were included in the study. They were compared with hundred healthy subjects matched on three variables, which were age, sex, and socio-economic status.

**Procedure:** After taking the informed consent, each individual was subjected to a semi-structured clinical interview and additional information was recorded on self devised proforma which covered demographic details and psychiatric history. Each individual in healthy subject group was administered GHQ12 for screening purpose to exclude any psychiatric illness. Diagnosis for patient group was made by applying ICD -10 criteria and HAM-A was used to measure the severity of anxiety disorders.

**Results:** Patients with anxiety disorders had significantly poorer quality of life when compared with healthy subjects. Quality of life was significantly lower in generalized anxiety disorder, panic disorder, social phobia, agoraphobia and specific phobia. Among 100 patients of anxiety disorders 73% had severe anxiety, 23% moderate and 4% had mild anxiety on HAM-A Scale. QOL was lower in mild, moderate as well as severe anxiety.

**Conclusion:** Quality of life is a broad concept including person's subjective opinion regarding physical health, psychological state, personal beliefs, social relationships and their relationship to the environment. This study highlights that anxiety disorders adversely affects the quality of life in all the above-mentioned areas.

**Key words:** Anxiety disorders, Quality of life.

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## INTRODUCTION

Anxiety is a state of apprehension, uncertainty and fear arising from anticipating imagined threatening events, often impairing physical and psychological functioning disorder<sup>1</sup>.

The symptom of anxiety is found in many disorders, and in the anxiety disorders it is the most severe and prominent symptom<sup>2</sup>. Anxiety disorders make up the most common group of psychiatric ailments.<sup>3</sup> It was reported that one out of four people met the diagnostic criteria of at least one anxiety disorder and one year prevalence rate is 17.7%. Anxiety disorders are twice as common in females as in males<sup>3</sup>.

The developing world is faced with a high burden of anxiety disorders. Anxiety disorders are common in the general population around the world and makes up a substantial proportion of global burden of disease and are projected to form a common cause of disability by 2020<sup>4</sup>.

These disorders exert significant financial burden on the global economy<sup>5</sup>. The exact prevalence of anxiety disorders in Pakistan is not known. Several studies have measured the prevalence of anxiety and depression together, with figures varying from 7% to 50% in different urban centers<sup>6,7</sup>.

Quality of life indices have been used in medical practice to estimate the impact of different illnesses on functioning, well being and also in assessing the outcome of the treatment modalities<sup>8</sup>.

Quality of life is defined as a multidimensional concept comprising of the subjective well being, functioning in daily life, material and social support<sup>9</sup>. There is growing recognition that anxiety disorders are disabling ailments which are associated with the impairment of quality of life and thus cause substantial morbidity<sup>10</sup>.

World Health Organization Quality of Life Group<sup>11</sup> defined it as "individuals' perceptions 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".

The treatment of illness was focused on improving the symptoms in the past. There is a shift

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in concept of treatment with more emphasis on patient's perspective one aspect of which is more important is quality of life. It is basically the quality of life, which influences person's satisfaction with life in response to physical, social and mental aspects of an illness.<sup>12</sup>Quality of life is identified as a key outcome measure for evaluating the effects of treatment<sup>13</sup>.

The anxiety disorders are not only independently associated with several physical conditions in the community but this co morbidity is significantly associated with poor QOL and disability<sup>14</sup>.

As anxiety disorders are both under diagnosed and under treated, this is associated with significant disability including educational and occupational which has a negative impact on QOL. <sup>15</sup>Poor QOL, significant disability and enormous social cost are all associated with anxiety disorders<sup>16,17,18,19</sup>.

In particular, a longitudinal study by Fava et al. indicates that agoraphobia, as a diagnostic category, is frequently independent of panic disorder and panic attacks, is unlikely to remit spontaneously and entails compromised quality of life<sup>20</sup>.

**METHODOLOGY**

This was cross sectional comparative study. One hundred consecutive patients suffering with anxiety disorders attending both inpatient and outpatient facility at the Department of Psychiatry, Services Hospital Lahore.

**Control Group (B):** One hundred healthy subjects matched for age, sex and socioeconomic status.

**Inclusion Criteria**

1. Both male and female patients.
2. Ages ranging from 18 to 60 years.
3. All cases with anxiety disorders diagnosed on International Classification of Diseases and Related Health Problems – 10<sup>th</sup> revision criteria.

**Exclusion criteria**

1. Patients with diagnosed chronic medical and surgical illnesses.
2. Patients with any psychiatric illnesses other than anxiety disorders.
3. Patients with history of substance abuse.

**Instruments:** General Health Questionnaire (GHQ12)<sup>21</sup> Urdu version was used to screen out healthy population from those suffering from psychiatric illnesses. The diagnosis of anxiety disorders was made on the basis of ICD –10 criteria. The severity of anxiety was assessed by applying Hamilton Rating Scale for Anxiety (HAM-A)<sup>22</sup>.The quality of life was assessed on the basis of Urdu version of World Health Organization Quality of Life Assessment- brief version<sup>23</sup> (WHOQOL-BREF)

**Procedure:** After taking the informed consent, each individual was subjected to a semi-structured clinical

interview and additional information was recorded on self devised performa which covered demographic details and psychiatric history. On each individual GHQ12 was administered for screening purpose to exclude any psychiatric illness Diagnosis for group A was made by applying ICD -10 criteria and HAM-A was used to measure the severity of anxiety disorders. To evaluate quality of life, Urdu Version WHO QOL-BREF was filled by both groups.

**Statistical Analysis:** Statistical analysis of the data was done by using the SPSS (version-10). The comparison between scores on WHO QOL-BREF in study and control group was done. Chi –square test was used for qualitative data and Student's t –test was used for quantitative data.

**RESULTS**

The present study consisted of 200 subjects presented to the Department of Psychiatry, Services Hospital Lahore (both in and out- patients). The sample was divided in two groups on the basis of presence or absence of anxiety disorders.

Group A: patients with anxiety disorders

Group B: healthy subjects.

Table 1: Comparison between Group A & Group B on Scores of WHO QOL - BREF ( n = 200 )

Group A	Group B	T	P
n = 100	n = 100		
Mean ± SD	Mean ± SD		P
46.47 ± 12.243	66.04± 15.745	9.812	<0.05
46.42±14.407	64.14± 16.085	8.206	<0.05
44.14 ± 19.539	65.83 ± 18.367	8.088	<0.05
41.73 ± 14.893	62.84± 18.436	8.907	<0.05
2.88 ± .591	3.59± 1.006	6.086	<0.05
2.37 ± .800	3.69 ± 0.918	10.844	<0.05
N=	No. of Patients		
SD=	Standard Deviation		
Group A=			
Group B=	Healthy Subjects		
WHO QOL BREF=			

Both the groups were matched on age, sex and socio economic status. The age range of the total sample (n=200) was 20–>60 years. Mean age of group A was 34.72±9.223 years and of group B was 34.61±8.98 years. The study sample consisted of 90 males and 110 females. The Group A consisted of 47 males and 53 females, whereas group B included 43 males and 57 females. Majority of the subjects in group A and group B were married. There was no significant mean difference (p>.05) between both groups regarding marital status of the subjects

Among the sample of 100 patients with anxiety disorders in group A 38% were having Panic disorder, 35% generalized anxiety disoreder,16%

specific phobia, 6% social phobia 5% agoraphobia. The results indicated that there was a significant mean scores difference between the two groups: group A (patients with anxiety disorders) and group B (healthy subjects) on scores of WHOQOL-BREF, each domain and global items, which indicated that

patients with anxiety disorders had significant poor quality of life when compared with healthy subjects.

Among the sample of 100 patients with five types of anxiety disorders, there was significantly poor quality of life in each domain and global items of WHOQOL-BREF as shown in table below.

Table 2: Quality of life in Anxiety disorders (n = 100)

Domains	GAD	Panic Disorder	Sp. Phobia	Social Phobia	Agora Phobia
	n = 35	n = 38	n = 16	n = 6	n = 5
	Mean ± SD	Mean ± SD	Mean ± SD	Mean ± SD	Mean ± SD
D 1	47.71±10.862	45.79 ± 13.847	46.69± 14.022	47.17 ± 8.636	41.40± 7.197
D 2	44.63±13.295	47.89 ± 15.120	47.00 ± 13.847	42.83 ± 7.333	50.20 ± 25.830
D 3	44.00 ± 20.383	44.00± 20.383	43.88± 13.426	42.83 ± 15.613	47.60 ± 31.989
D 4	39.91± 15.120	39.91± 15.120	44.06 ± 15.661	43.83 ± 16.339	34.00 ± 11.424
<b>Items</b>					
Item 1	2.83 ± .514	2.83 ± .514	3.13 ± .619	2.60± .516	2.60 ± .548
Item 2	2.43 ± .655	2.43 ± .655	2.31 ± .793	2.50 ± .837	2.00 ± .000
	N	=	No. of Patients		
	SD	=	Standard Deviation		
	GAD	=	Generalized Anxiety Disorder		
	Panic	=	Panic Disorder		
	sp.phobia	=	Specific Phobia		
	social pho	=	Social Phobia		
	Agorapho	=	Agora Phobia		
	WHO QOL BREF	=	World Health Organization Quality of Life Scale Brief Version		
	D 1	=	Physical Health		
	D 2	=	Psychological Health		
	D 3	=	Social Relationships		
	D 4	=	Environment		
	Item 1	=	General Quality of Life		
	Item 2	=	Satisfaction With Health		

Table 3: Scores on WHO QOL - BREF according to severity of anxiety (n = 100)

Domains	Mild	Moderate	Severe	P
	n = 4	n = 23	n = 73	
	Mean ± SD	Mean ± SD	Mean ± SD	
D 1	81.50 ±11.504	55.61± 9.326	41.67± 7.470	< . 05
D 2	83.00 ±14.674	56.91 ± 14.254	41.11± 8.731	< . 05
D 3	79.50 ± 3.000	62.26 ± 21.378	36.49 ± 12.299	< . 05
D 4	81.50± 11.504	50.61 ± 17.328	36.75± 8.340	< . 05
<b>Items</b>				
Item 1	4.25 ± .500	2.83 ± 0.834	2.82 ± 0.385	< . 05
Item 2	4.50 ± .577	2.74 ± .964	2.14 ± .481	< . 05
	N	=	No. of Patients	
	SD	=	Standard Deviation	
	Mild	=	18+	
	Moderate	=	25+	
	Severe	=	30+	
	WHO QOL BREF	=	World Health Organization Quality of Life Scale Brief Version	
	D 1	=	Physical Health	
	D 2	=	Psychological Health	
	D 3	=	Social Relationships	
	D 4	=	Environment	
	Item 1	=	General Quality of Life	
	Item 2	=	Satisfaction With Health	

Among the sample of 100 patients of anxiety disorder all patients with mild, moderate and severe anxiety showed significantly lower quality of life on all domains and global items as shown in table above.

## DISCUSSION

In this study the quality of life of patients with anxiety disorders was compared with the quality of life of healthy subjects. This study also assessed the severity of anxiety in patients with anxiety disorders.

Sareen<sup>14</sup> studied a sample of 4181 subjects with age range 18-65years, for quality of life in anxiety disorders and physical illnesses subjects were matched demographically. Patients were diagnosed as cases of GAD, Panic Disorder, Sp. Phobia, Social Phobia and agoraphobia by using Diagnostic and Statistical Manual of Mental Disorders, Fourth Edition. QOL was assessed by using Short Form Health Survey (SF-36). Results of this study were in accordance with current study despite use of different instruments for assessing QOL. The previous study also found that presence of anxiety disorder is significantly associated with physical condition and is responsible for poor QOL in physical conditions but this was not the focus of our study.

Henning<sup>18</sup> 2007 compared the quality of life patients with GAD (n=52) to that of no anxious controls (n=55). Individuals with GAD reported more impairment at work and social functioning. QOL was poor as compared to no anxious subjects particularly in regard to self esteem, goal, values, money, creativity and relations. Our study also shows the same results despite the fact that number of patients with GAD in current study was 35% among a sample of 100 patients with anxiety disorders.

Equchi<sup>24</sup> studied 50 patients having panic disorders with or without agoraphobia the physical and mental domains were assessed the QOL was lower in mental domains these results are in line with our study however our study reported had showed lower scores on all domains including physical domain as well and global items, this finding could be due to difference in sample size and cultural background, severity of anxiety, duration of illness and socioeconomic status.

Carrera<sup>19</sup> by applying SF36 studied 125 subjects for panic disorder and reported that QOL was lower in patients with panic disorders compared to normal controls. Frequency of panic and Agoraphobia were accounting for poor quality of life. The results of previous study are in line with our study despite using different scale for measuring quality of life.

**Limitations:** The present study has a number of limitations including that the sample was assessed only once. The possibility of change in severity of symptoms of anxiety disorders and quality of life at

later stages cannot be determined. The study did not focus on the effect of treatment and duration of illness related to the quality of life of patients. The quality of life researches usually need larger sample size; however the sample size in the present study was relatively small. The impact of demographic and social variables on the QOL has not been included in this study. In present study both the researcher and the sample was aware of the objectives of the study that could have a biased effect on the results.

## CONCLUSION

Quality of life is a broad range concept affected in complex way by the person's physical health, psychological state, social relationships and their relationship to the salient features of their environment. In the past all the efforts of health care system were concerned with prevention and treatment of the disease only as viewed by the health professionals. It is for the last few years that treatment strategies have incorporated the subjective opinion and concerns of the patient. There are numbers of Anxiety disorders which starts different ages and affect the number of people in the population. These illnesses are under recognized and treated thus causing great burden on the sufferer and the society. Further research is required in this important field to achieve the state of complete physical, mental social well-being and not merely the absence of disease as defined by World Health Organization.

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