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# **Original Article**

# Disability and Quality Of Life among the Psychiatric Patients: A Cross-Sectional Hospital Based Study in Nepal

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### **Abstract**

# **Background**

To study disability and quality of life within the psychiatric patients presenting to the Psychiatric out-patient unit at a University Hospital.

#### **Materials and Methods**

It is a hospital based cross sectional study among the patient age group 18-65 years who presented to outpatient unit in Department of Psychiatry in a period of one year after ethical clearance from the institute. Participants were assessed by both validated Nepali versions tools: Disability assessment scale, World Health Organization Disability Assessment Schedule and World Health Organization Quality of Life 8-question scale (N=700). A structured questionnaire were used by the researchers that included personal and demographic characteristics and illness related parameters. The relationships between the variables, Disability, and quality of life were analyzed using independent sample t-tests.

# Results

Among 700 individuals presenting to the Psychiatric out-patient department and the disorders being categorized into 5 groups (Depressive disorders, Anxiety disorders, Somatoform disorders, Psychotic spectrum disorders, and Others), Anxiety disorders are the most common (49.6%) of cases to be diagnosed. Disability scores show a statistically significant difference (p=0.00), with females having higher disability scores than males. Individuals earning above five lakhs have significantly higher quality of life scores (p=0.00), suggesting a strong association between income and overall well-being.

# Conclusion

Gender and income show statistically significant relationships with quality of life and disability, whereas other factors exhibit minor variations without strong significance.

Keywords: Disability, Quality of life, Disability assessment scale, Questionnaire



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# Introduction

Advances in health care have reduced morbidity and mortality, and also increased longevity. These advances have brought into focus two important elements of individual functioning: disability and quality of life (QoL) [1]. Both are the essential aspects of disease, and they have high public health significance [2, 3]. Disability is defined as decrement in certain domains of the individual functioning; it is also considered an umbrella term for impairments, activity limitations, and participation restrictions [4]. On the other hand, QoL, is the individuals' perception of their life situation in their socio-cultural context, it is also related to the patients' goals, expectations, standards and concerns [5]. The level of individual functioning can have direct effect on the patient's QoL [6].

Mental disorders usually lead to significant disability and QoL impairments. Recent studies around the globe have assessed disability and QoL diminution associated with psychiatric illnesses; in India [7], Germany [5], and in the United States [6].In Nepal, there are very few studies that address QoL and disability among the mentally ill individuals [8, 9]. Considering this knowledge gap, we intend to conduct a study that will assess disability and QoL among the mentally ill persons who are utilizing the psychiatric services in a tertiary care Hospital.

This study will measure the levels of disability and QoL among the individuals who have been suffering from any Psychiatric illness.

## **Materials and Methods**

This hospital based cross-sectional study wasconducted among individuals who presented to the outpatient department (OPD) of the Psychiatry, Kathmandu University Hospital, Dhulikhel Hospital over a period of one year after approval obtained from the Institutional Research Committee (IRC) of Kathmandu University Hospital(Approval number: 83/23). Individuals' aged 18-65 with history of psychiatric illness for at least one year with their consent was taken into consideration. Written informed consent was designed in both Nepali and English and was taken from all the individuals after explaining the details mentioned in the proforma. Interview was conducted in Nepali language after informed and written consent were taken.

Whereas, patients having cognitive impairment in the form of delirium due to any cause, not amenable to interview due to their health conditions or poor hearing were excluded from the study. Sample size of 700 participants were included using convenience sampling method considering OPD patients in last six months. Diagnosis were made by consultant psychiatrist as per International Classification of Diseases-10<sup>th</sup> revision Diagnostic criteria for research (ICD-10) [10]. Patients were assessed by both validated Nepali versions tools: Disability assessment scale, World Health Organization Disability Assessment Schedule (WHODAS)[11] and World Health Organization Quality of Life 8-question scale (WHOQoL-8) (N=700) [12].

WHODAS 2.0 having 12-items version was further merged into 6 domains- cognition (understanding and communication); mobility (getting around); self-care; getting along with people (interpersonal relationships); life activities (work and household roles); and social participation, for easy administration of the scale. The items are rated on a five point scale ranging from 'No Disability' to 'Extreme Disability' taken in one month period of time. Nepali version of the tool WHODAS 2.0 with Cronbach's alpha (0.89) was used as Nepali-Bhasais the national language and understood by majority of the individuals [11, 13.14].

WHOQoL-8, a short version containing 8 items of the original 26 items was used. Each of the 8 items were further categorized to four domains: global, physical, psychosocial, and environmental. The scale has been translated and culturally adapted in Nepali-Bhasa for the use in Nepali population with Cronbach's alpha 0.74. Each item of the WHOQoL-8 is rated on a five-point scale ranging from "Worst" to "Best" with total maximum score of 40 indicating higher the score, better the quality of life [12].

A structured questionnaire were used by the researchers that included personal and demographic characteristics and illness related parameters. Socioeconomic status was evaluated using modified Kuppuswamy's scale [15, 16].

Analysis of data was carried out using SPSS (Statistical package for social sciences) version 23.0. Group comparison for categorical variables was done by using chi square test and the relationships between the variables, Disability, and QoL were analyzed using independent sample t-tests. Level of statistical significance was kept at p<0.05.

#### Results

Socio-demographic data of the study population shows the age of the participants ranged from 18-65 years with Mean (±SD): 40(±13.7). Majority of the participants was found to be females 399(57%). Marital status were divided into two groups, married, unmarried and others included: unmarried, separated and widow. Education status were divided into two groups: non-formal (cannot read or write, and cannot read and write), and formal (primary, secondary, higher secondary, bachelor, and masters and higher). Similarly, occupation status were also categorized into two groups, employed (earning, self-employment, self, student, homemaker) and unemployed (retired, unemployed). (Table 1)

Table 1: Socio-demographic variables of the patients. (N=700)

Socio-demographic Variables		Number (%)
Age (in years)	Below 40	367(52.4)
Mean (±SD): 40 (±13.7)	Above 40	333(47.6)
Gender	Male	301(43)
	Female	399(57)
Marital Status	Married	515(73.6)
	Unmarried and others	185(26.4)
Residence	Rural	169(24.1)
	Urban	531(75.9)
<b>Education status</b>	Non- formal	220(31.4)
	Formal	480(68.6)
Occupation status	Employed	552(78.9)
	Unemployed	148(21.1)
Yearly Income	Below five Lakhs	529(75.6)
	Above five Lakhs	171(24.4)

Quality of life in all domains of total sample was higher with the mean score of 17.7. Highest mean score in quality of life score among Psychiatric patient was seen in psychosocial domain i.e. 4.9 and the lowest was seen in environmental domain with mean 3.8.

Disability was assessed using Nepali version of WHODAS. The mean disability score of total domain of disability was 9.9 suggesting moderate level of disability. The mean score was highest in Social participation (2.2) and lowest in self-care (0.7).

# Psychiatric Diagnosis:

Anxiety disorders are the most common (49.6%) of cases to be diagnosed followed by mood disorders (36.4%), psychotic spectrum disorders (6.6%), somatoform disorders (4.9%) and others (2.6%). Individuals with somatoform disorders report both high QoL and high disability score,

suggesting a complex relationship between perceived well-being and actual impairment. (Table 2)

Table 2: Psychiatric Diagnosis of the patients.

Disability and Quality of Life (QoL) scores across

Psychiatric Diagnosis Frequency (%)	Total Quality of life Score Mean (SD)	Total Disability Score Mean (SD)
Anxiety Spectrum 347(49.6)	17.27(5.05)	15(9.21)
Mood Spectrum 255(36.4)	18(4.9)	17.2(9.6)
Somatoform Disorder 34(4.9)	18.3(4.7)	21.6(11.51)
Psychotic Spectrum 46(6.6)	19(3.9)	16(10.6)
Others 18(2.6)	16.2(2.6)	14.2(6.6)

# Socio-demographic profiles:

Females shows higher disability scores than males. Individuals earning above five lakhs have higher QoL scores (p=0.00) and lower disability scores (p=0.08), suggesting a strong association between income and overall well-being. (Table 3)

Table 3: Disability and Quality of Life (QoL) Scores across Socio-demographic profiles of Psychiatric patients. (N=700)

Socio-demographic Variables	Frequency (%)	Total QoL Score Mean (SD) p-value	Total Disability Score Mean (SD) p-value
<b>Age (in years)</b> Mean (±SD): 40 (±13.7)	367(52.4)	17.7(6.0) 0.7	9.6(9.02) 0.4
Below 40 Above 40	333(47.6)	17.8(5.8) 0.7	10.1(8.5) 0.4
<b>Gender</b> Male	301(43)	17.8(5.6) 0.6	8.5(8.08) 0.00
Female	399(57)	17.6(6.1) 0.6	10.9(9.2) 0.00
<b>Marital Status</b> Married	515(73.6)	17.9(5.7) 0.17	10.1(8.9) 0.22
Unmarried and others	185(26.4)	17.2(6.4) 0.19	9.2 (8.5) 0.21
<b>Residence</b> Rural	169(24.1)	17.4(6.01) 0.40	10.2(9.2) 0.60
Urban	531(75.9)	17.8(5.9) 0.40	9.8(8.6) 0.62
Education status Non- formal	220(31.4)	17.3(5.4) 0.19	10.8 (9.0) 0.47
Formal	480(68.6)	17.9(6.1) 0.18	9.4(8.6) 0.51
Occupation status Employed	552(78.9)	17.9(5.8) 0.10	9.8 (8.8) 0.69
Unemployed	148(21.1)	17.0(6.5) 0.13	10.1(8.7) 0.69
<b>Yearly Income</b> Below 5 Lakhs	529(75.6)	17.2(6.0) 0.00	10.2(8.9) 0.08
Above 5 Lakhs	171(24.4)	19.4(5.4) 0.00	8.8(8.2) 0.07

Gender and Disability Domain Score: In cognition domain, females reports higher mean disability scores (2.08 vs 1.63), likewise, females show a higher mean (2.1 vs 1.54) in getting around domain. There is also a higher mean scores for females in getting along (1.57 vs 1.11). Again, female reports higher scores (1.87 vs1.45) in life activities along with social participation domain(2.34 vs 2.03), with p-value below 0.05.

Table 4, shows a consistent pattern of higher disability burden among females across all measured domains, and statistical significance confirms these differences are unlikely to occur due to chance.

Table 4: Gender and Disability domain score:

Disability Domains	Gender Frequency (%)	Mean (SD) p-value
Cognition	Male	1.63(1.71)
	301(43)	0.001
	Female	2.08(1.91)
	399(57)	0.001
Getting around	Male	1.54(1.78)
	301(43)	0.00
	Female	2.1(2.02)
	399(57)	0.00
Self-care	Male	0.65(1.18)
	301(43)	0.021
	Female	0.88(1.45)
	399(57)	0.017
Getting along	Male	1.11(1.67)
	301(43)	0.011
	Female	1.57(1.86)
	399(57)	0.010
Life activities	Male	1.45( 1.62)
	301(43)	0.002
	Female	1.87(1.87)
	399(57)	0.001
Social participation	Male	2.03(1.89)
	301(43)	0.041
	Female	2.34(2.04)
	399(57)	0.039

Yearly income and Quality of Life score: Global QoL score shows, higher income individuals report better overall QoL (4.72 vs 4.32). In psychological QoL, there is strong disparity showing higher income individuals experience better psychological well-being (5.43 vs 4.75). Similarly, in environmental QoL, higher-income individuals shows better environmental quality (4.40 vs 3.67) with p-value (0.00). (Table 5)

Table 5: Yearly Income and Quality of Life (QoL) score:

Quality of life (QoL) Domains	Yearly Income Frequency (%)	Mean (SD) p-value
Global	Below 5 Lakhs 529(75.6) Above 5 Lakhs 171(24.4)	4.31(1.58) 0.003 4, 72(1.58) 0.004
Physical	Below 5 Lakhs 529(75.6) Above 5 Lakhs 171(24.4)	4.50(2.30) 0.082 4.84(1.91) 0.056
Psychosocial	Below 5 Lakhs 529(75.6) Above 5 Lakhs 171(24.4)	4.75(2.12) 0.000 5.43(1.45) 0.000
Environmental	Below 5 Lakhs 529(75.6) Above 5 Lakhs 171(24.4)	3.67(1.73) 0.000 4.40(1.73) 0.000

### **Discussion**

Psychiatric disorders can significantly impact an individuals' ability to engage in their daily activities, maintain social relationships and attain personal goals. The study evaluates the disability and quality of life among the psychiatric patients. In this study, anxiety disorders are the most common (49.6%) of cases to be diagnosed. With high prevalence, individuals with anxiety disorders reported low QoL scores, suggesting some level of distress in emotional and functional wellbeing. Similar finding is seen in study indicating that anxiety disorders are associated with significant reductions in health-related QoL, often surpassing the impact of other psychiatric illnesses [17].

Mood disorders (36.4%) followed as the second most commonly diagnosed psychiatric illness. Individuals with mood disorders showed a higher disability score than those with anxiety disorders, likely reflecting greater challenges in maintaining activities of daily living and keeping social interactions. Similarly, a study reported that depressive disorder is associated with the lowest QoL scores among psychiatric conditions, focusing the impact of mood dysregulation to maintain functionality [18].

Individuals diagnosed with psychotic spectrum disorders (6.6%) reported the highest QoL scores. This results may suggest that some individuals experience relative stability despite their condition, possible due to their support system, symptom remission period, or coping mechanisms that enhance perceived well-being. Research on integrated psychiatric care models has shown that structured support and treatment approaches can improve QoL outcomes for individuals with severe mental illnesses [18].

Somatoform disorders (4.9%) presented a particularly complex pattern, with both high QoL and high disability scores. The duality indicates that while individuals perceive a sense of well-being, they also experience high functional impairments. The discrepancy may arise from differences in symptom interpretation, support system or variation in coping strategies among individuals with somatic symptoms. Similar studies have emphasized the need for targeted interventions that address both perceived well-being and functional limitations in individuals with somatoform disorders [19].

In this study, disability and quality of life scores across socio-demographic profiles of individuals with age below and above 40 years shows similar QoL (p=0.7) and disability scores (p=0.4) indicating that age doesn't significantly impact these factors. Similar study indicates that subjective well-being in an individuals' suffering from psychiatric illnesses is often more closely linked to other factors that to age itself [20]. Gender differences in disability scores were statistically significant, with females reporting higher disability levels than males. Studies have documented greater functional limitations among women with psychiatric disorders, often attributed to biological, social, and economic disparities [19].

Other factors, such as urban residence, formal education, and employment status, showed minor variations without strong statistical significance. While urban dwellers reported slightly higher QoL, previous studies suggest that urban environments can often better healthcare access and social opportunities, but may also introduce stressors such as pollution and overcrowding [20]. Similarly, formal education and employment were associated with marginally better QoL and lower disability scores, reinforcing the notion that socioeconomic stability plays a role in shaping well-being.

Female's reports higher disability burden across all measured domains, with statistically significant differences. Few study shows the same result indicating that women with psychiatric disorders often experience greater functional limitations compared to men [20, 21]. Significant differences observed in domains such as mobility, self-care, social participation, and life activities suggest that psychiatric disability among women extends beyond symptom severity to impact daily functioning and interpersonal relationships. Similar study have highlighted that women with psychiatric illnesses often report greater difficulties in maintaining

independence and engaging in social interactions, reinforcing the need for gender-sensitive interventions [19].

Income and employment disparities further compound these challenges, as financial insecurity has been linked to poorer health outcomes and increased disability among psychiatric patients. Addressing these disparities through targeted policies such as improving access to mental health services, enhancing social support networks could help mitigate the disability burden among women. Overall, these findings underscore the importance of integrating gender-sensitive approaches into psychiatric care and disability interventions. Further research should explore the underlying mechanisms driving these disparities to inform more equitable healthcare strategies [19, 20]. Higher income individuals shows significantly better global QoL scores (4.72 vs 4.32), suggesting that financial stability reduces the overall burden of psychiatric illness and related disability [17].

In physical QoL domain, although higher income appears to be associated with minor improvements in physical functioning, the observed pvalues (0.08 and 0.05) indicate that these differences may not reach robust statistical significance. Similar study shows that physical health in individuals with psychiatric illnesses is multifactorial, while improved income may facilitate better access to healthcare and encourage healthier lifestyle [19, 22, 23]. Psychological QoL domain shows most prominent disparity. Higher income individuals report substantially better psychological well-being (5.43 vs. 4.75) with highly significant differences. Enhanced psychological health contributes to lower disability levels and improved overall functioning [18-21].

Environmental QoL differences are evident in the data, with higher income participants rating their environmental conditions more favorably (4.40 vs 3.67). Similar studies shows that social determinants of health have a significant impacts on disability burden of psychiatric patients [21, 24].

# Conclusion

The study aimed to look for the disability and quality of life in individuals suffering from psychiatric illnesses. Findings suggests females have higher disability scores compared to men and income is associated with quality of life and well-being. The study focuses the need for further research and support to individuals with psychiatric illnesses.

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# Conflict of interest: None.

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