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Quality of Life among Caregivers of Psychiatric Patients: Educational Qualification and Gender Differences

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Abstract: *Families of psychiatric patients experience challenges to maintain personal well-being. The present study aimed to compare the quality of life among caregivers of psychiatric patients against the general public. A cross-sectional study was carried out on sub-samples of caregivers (n = 123) and the general public (n = 146) belonging to middle socioeconomic status in districts Haripur and Abbottabad. Participants responded to the Urdu version of the World Health Organization Quality of Life Questionnaire (WHOQOL-BRIEF). They also provided information about gender (men = 48%, women = 52%), age (18-40 years), marital status, and educational level. The findings of the Mann-Whitney U test showed caregivers had a poor quality of life in physical, psychological, social relations, and environmental health domains. The Kruskal-Wallis test revealed significant differences in the quality of life of participants across six levels of education, and caregivers with graduate degrees had a better quality of life than those with elementary, middle, or matric certifications. However, gender differences were absent, as hypothesized. Findings highlight the significance of the personal well-being of caregivers by providing them with counseling and psychoeducation to cope with the caregiving stressors.*

Key Words: Caregivers, Gender, Psychiatric Illness, Qualification, Quality of Life

Introduction

Psychiatric illnesses risk the health of patients and offer physical, psychological, and economic challenges to the immediate family members and caregivers (Ansari, 2015). A review of the above 1200 published research articles included quality of life (QOL) as one out of five salient challenges to caregivers of psychiatric patients (Akbari et al., 2018). Psychiatric illnesses are associated with distress and functioning problems in social, work, or family activities (Imran et al., 2007). The World Health Organization (WHO, 2012, p.3) defined QOL as "*an individual's perception of their position in life in the culture's context and value systems in which they live and about their goals, expectations, standards, and concerns*." Recently, satisfaction from life is also added to delineate QOL (APA Dictionary of Psychology, 2020).

QOL is categorized into four domains - physical, psychological, social, relationships, and environmental health. Physical health refers to the functional capacity for daily activities, fitness and disease profile, pain, sleep, etc. Psychological health refers to the mental status and ability to learn, memorize, concentrate, think, and process information positively. The social relationships domain refers to the level of satisfaction in personal relationships, social support, and freedom from conflicts. Environmental health refers to general living conditions, safety, recreation, provision of resources, services, opportunities, etc. (World Health Organization, 2012). QOL and mental health are of the utmost concern in developing countries. The hospital-based mental health services are poorly employed

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in Pakistan because there is a misconception and social stigma linked to psychiatric illness. Ansari (2015) reported that 10-16% of the Pakistani population faces mild to moderate psychiatric illnesses and that is true for women.

Associates of QOL

Scholars paid attention to the study of QOL and its correlates among families of people suffering from psychiatric illnesses. A study found that the primary caregivers of schizophrenic patients had poor QOL and those spending around 40 hours per week with psychiatric patients reported having stressful social relationships within and outside the family. Poor QOL predicted depressive symptoms among caregivers (Shahin et al., 2010). Another study found a significant negative association of overall QOL and its domains with caregivers' burden in a sample from Rawalpindi and Islamabad. Most prominently, the social relations and environmental health domains were affected badly (Bukhari et al., 2020). Aarti et al. (2019) found that caregivers had poor QOL and experienced symptoms of moderate-to-severe depression (24%). The caregivers mostly lacked the environmental and psychological QOL.

Previous literature shows that QOL among caregivers serves as an antecedent or consequent of other problems. Iseselo et al. (2016) conducted a study to qualitatively explore the nature of psychosocial problems and coping mechanisms among caregivers of psychiatric patients in Dar es Salaam. They noted that predictors of QOL were low financial security, social support, and family functioning. These problems worsened when patients and their families were socially alienated, stigmatized, and faced discrimination. The researchers also found that caregivers mainly adopted religious orientation and acceptance of the psychiatric illness to cope with psycho-social challenges (Iseselo et al., 2016). Caregivers of psychiatric patients reported having low QOL and moderate-to-severe depression and anxiety, which were exacerbated in the presence of a financial burden on family resources (Imran et al., 2007; Shahin et al., 2010). The length of the psychiatric illness was closely correlated with the chances of poor psychological health of caregivers. Depression and anxiety were relatively higher among families of psychiatric patients who were ill for over 18 months (Minhas et al., 2005).

Caregiving responsibilities offer a multitude of challenges to the families of psychiatric patients. Neong and Rashid (2018) compared the levels of QOL between caregivers of psychiatric patients and patients with other chronic diseases. They noted that caregivers of the forth-mentioned had low QOL and reported higher physical (i.e., heartburn & headache), psychological (i.e., depression, anxiety, & insomnia), and socio-emotional symptoms (i.e., social isolation & family conflicts) than their counterparts. Siddiqui and Khalid (2019) conducted a study on determining factors of burden among caregivers of schizophrenia, major depressive disorder, and bipolar disorder patients in Rawalpindi. They enlisted the causes of caregiving burden, such as length of illness, non-functional status, low physical capacity of patients, avoidant coping behavior of caregivers, longer hours of caregiving, and the poor financial status of the family.

Studies examined QOL among caregivers of patients with diverse diseases. Minhas et al. (2005) found high levels of depression and anxiety among caregivers of psychiatric patients, especially those with schizophrenia than with other psychological disorders and substance abuse. Shahin (2010) reported higher levels of depression among caregivers of psychiatric patients, in particular among families of patients with psychiatric disorders than with depression only. In a study with a sample of HIV-positive drug abusers in Pakistan, Afzal et al. (2018) examined the association between the likelihood of psychiatric disturbances and QOL. They found that a high level of psychiatric disturbances was positively correlated with poor QOL and its four domains. The existing literature lacks insight into QOL in the families of psychiatric patients as compared to the general public.

Educational and Gender Differences

The socio-demographic variables affect QOL among caregivers of psychiatric patients and many researchers studied them as control variables or covariates. Concerning the educational level, studies reported that more educated caregivers were taking better care of psychiatric patients and their health (Shakeel et al., 2015). They perceived caregiving was less of a burden (Kuchhal et al., 2019; Siddiqui &

Khalid, 2019). In a study on the association between QOL and education levels, Aarti et al. (2019) found significant group differences in QOL between primary versus secondary versus tertiary levels of education. The caregivers with a primary level of education had the lowest QOL scores across all domains of QOL. Literature does not include comparison across levels of education and none of the previous studies examined QOL among caregivers with varying levels of education.

For gender differences, a few studies did not report a significant difference between men and women caregivers of psychiatric patients (Minhas et al., 2005; Shakeel et al., 2015). Whereas a study found low QOL among caregiving women than men (Aarti et al., 2019). A recent empirical study supported this finding, especially concerning the psychological and social relations domains of QOL (Hanssan., 2006). Because of inconsistency in the findings, the current study aimed to verify the presence or absence of gender differences in QOL.

The high prevalence of psychiatric illnesses poses serious threats to caregivers' QOL in Pakistan. The previous literature informs about salient familial issues of caregivers in the families of psychiatric patients' but there is a gap in the empirical literature about the extent of differences between the caregivers of psychiatric patients and their counterparts from non-clinical families in the general public. In the light of all the above gaps in the literature, the present study is aimed to compare the QOL of the caregivers of psychiatric patients to the general public. The educational and gender-based comparisons are also made to address the inconsistencies in the existing literature.

Hypotheses

1. Caregivers of psychiatric patients will have poorer QOL than members of non-clinical families in the general public.
2. The more educated caregivers of psychiatric patients will have a better QOL than their less-educated counterparts.
3. There will be no gender difference in the QOL of the caregivers of the psychiatric patients.

Method

A cross-sectional study was carried out with the families of the psychiatric patients from District Haripur and Abbottabad during the Fall 2019.

Participants

The subsamples of caregivers (*n* = 123) and the general public (*n* = 146) were purposively selected from middle-class families, matching them on demographic characteristics. Information was sought about gender, age, marital status, and level of education. 129 men (48%) and 140 women (52%) with the age range of 18-40 years took part in this study. Majority of the participants were married (n = 140, 52%). Among caregivers, 50.4% were men and 49.6% were women, while 45.9% of men and 55.1% of women were chosen from the general public. All participants belonged to the middle socioeconomic class. The educational level was recoded into six categories of primary, middle, matric, intermediate, graduation, and others. One-third of the participants had an intermediate level of education (see Table 1).

Table 1. Sociodemographic Characteristics of the Participants (n=269)

	Full Sample (*n* = 269)		**Caregivers (*n* = 123)**		**General Public (*n* = 146)**	
Demographic Variables	***N***	**%**	***n***	**%**	***n***	**%**
Gender						
Men	129	48%	62	50.4%	67	45.9%
Women	140	52%	61	49.6%	79	55.1%
Age						
18-20	10	3.7%	5	4.1%	5	3.4%
21-25	113	42.0%	37	30.1%	76	52.1%

26-30	95	35.3%	49	39.8%	46	31.5%
31-35	39	14.5%	28	22.8%	11	7.5%
36-40	12	4.5%	4	3.3%	8	5.5%
Education						
Primary	26	9.7%	17	13.8%	9	6.2%
Middle	27	10.0%	19	15.4%	8	5.5%
Matric	28	10.4%	12	9.8%	16	11.0%
Intermediate	78	29.0%	34	27.6%	44	30.1%
Graduation	73	27.1%	27	22.0%	46	31.5%
Others	37	13.8%	14	11.4%	23	15.8%
Marital Status						
Single	126	46.9%	49	39.9%	77	52.7%
Married	140	52.0%	71	57.7%	69	47.3%
Others	3	1.1%	3	2.4%	0	0%

Note. n= number of participants, % = percentage

Assessment of QOL

The World Health Organization Quality of Life-Brief is a shorter version of the WHOQOL scale with 100 items. This self-administered measure has 26 items across four domains of physical health (7 items), psychological health (6 items), social relationships (3 items), and environmental health (8 items). The first two items independently measure the overall QOL and produce a score for general health. The physical scale comprises items 3, 4, 10, 15, 16, 17, and 18. The psychological scale comprises 5, 6, 7, 11, 19, and 26. The social scale includes items 20, 21, and 22; and the environmental scale has items 8, 9, 12, 13, 14, 23, 24, and 25. Each item was responded to on a five-point scale and scored between 1-5. We reversed scored three negatively worded items to match the pattern of other items, as stated in the questionnaire manual. The higher score shows better QOL for the caregivers and the general public. The alpha reliability of the WHOQOL-Urdu version was 0.79.

Procedure and Data Analysis

Data were collected from the families of the psychiatric patients during home visits. Age, gender, education, caregiver's status, socioeconomic status, and marital status of caregivers were identified. The patients were identified from local hospitals and clinics. Their respective caregivers and the general public were informed about the purpose of the research and willing respondents were included in the study. No participation incentive was given. We did not collect any identifying information and anonymized the data. Still, we applied for approval from the ethics committee of the University of Haripur, Pakistan and it was waived off. We ensured informed consent for participation and publication, data confidentiality, and freedom to withdraw from the study.

Statistical Analysis

Data were entered into SPSS software version 25 for statistical analysis. The alpha reliability and correlation were computed at the alpha level .05. Descriptive statistics for subscales of QOL and demographic variables of gender and levels of education were computed to meet the study objectives. The data normality, linearity, and missingness were checked before hypothesis testing. The significance values of Shiparo-Wilk, skewness, and kurtosis verified the data's non-normal distribution. Initially, the QOL of caregivers of psychiatric patients was compared with demographically homogenous non-clinical members of the general public. Then, the levels of education and gender differences were examined only for the caregivers and not for the non-caregivers. The Mann-Whitney U test was run to examine gender differences and the Kruskal-Wallis test was run to examine educational differences among caregivers of psychiatric patients.

Results

In the present study, the non-clinical family members from the general public were chosen as a reference group and the QOL among caregivers of psychiatric patients was measured across domains of physical, psychological, social relations, and environmental health.

Table 2. Inter-correlations for QOL Scale and Subscales disaggregated by Caregiving Status (n = 269)

	Scales	1	2	3	4	5	6
1	QOL		.79**	.67**	.57**	.53**	.69**
2	Physical	.72**		.50**	.40**	.18*	.50**
3	Psychological	.62**	.31**		.27**	.06	.32**
4	Social Relations	.67**	.28**	.28**		-.02	.27**
5	Environment	.85**	.45**	.37**	.54**		.38**
6	General Health	.64**	.37**	.37**	.47**	.42**	

*p = 0.05. **p = 0.01 (2-tailed).

Note. The upper half diagonal represents the values for caregivers (n = 123) and the lower half diagonal represents the values of the general public (n = 146)

First, correlation and descriptive analyses were performed. Table 2 presents correlation coefficients for caregivers of psychiatric patients and the general public. All variables were significantly positively correlated at the alpha level ≥ .05 and .01, except environmental health, which was non-significantly correlated with psychological health and social relations. Overall, the magnitude of coefficients was in the low range.

Table 3. Median and Standard Deviation Scores for Participants' Education and Gender Groups (n = 269)

Variables	QOL	Physical	Psychological	Social	Environment	G. Health
	Mdn (SD)	Mdn (SD)	Mdn (SD)	Mdn (SD)	Mdn (SD)	Mdn (SD)
Overall	89(10.60)	22(3.53)	21(2.75)	11(2.49)	26(4.56)	7(1.61)
Caregivers	81(7.90)	22(2.66)	22(2.73)	10(2.41)	24(3.02)	6(1.42)
General Pub	93.50(11.29)	23(3.86)	21(2.75)	12(2.42)	29(4.82)	7(1.65)
<u>Education</u>						
Primary	94(8.02)	23(2.93)	22(2.45)	11(2.40)	27(3.84)	8(1.30)
Middle	81(8.44)	21(2.96)	20(2.82)	10(1.94)	24(3.44)	6(1.55)
Metric	88(8.82)	23(2.51)	21(2.74)	10(2.29)	26(2.86)	7(1.41)
Intermediate	88(9.65)	22(3.97)	22(2.64)	11(2.34)	26(4.34)	7(1.35)
Graduation	94(12.06)	23(3.62)	22(2.35)	12(2.85)	29(5.18)	8(1.99)
Others	84(10.77)	22(3.23)	19(3.10)	10(2.60)	26(4.99)	6(1.43)
<u>Gender</u>						
Men	87(11.13)	22(3.29)	20(3.01)	10(2.73)	26(4.20)	7(1.72)
Women	91(10.05)	23(3.73)	21(2.49)	11(2.24)	27(4.85)	7(1.51)

As the data were non-normally distributed therefore, median scores were computed. Table 3 presents the descriptive scores for levels of education and gender groups of participants on QOL scales and their subscales. The median score of the full scale of QOL (*Mdn* = 89, *SD* = 10.60) showed that the overall QOL of the study participants was in the medium range. Across the domains of QOL, participants had the highest median score in environment health, followed by physical health, psychological health, and so on. However, the general public had a higher median score than caregivers. Females had relatively higher scores across domains of QOL than males. The median score for males (*Mdn* = 87) was below the full-scale median and the median score for females (*Mdn* = 91) was above it.

Table 4. Mann Whitney U test for QOL Scale and Subscales disaggregated by Caregiving Status (n = 269)

Care Status	Caregivers	Care Status	Z
Scales	**Mean Rank**	**Mean Rank**	
QOL	103.25	162.75	-6.15*
Physical	107.67	158.03	-5.32*
Psychological	141.19	129.78	-1.20
Social Relations	113.79	152.87	-4.14*
Environmental	96.29	167.61	-7.51*
General Health	113.78	152.88	-4.19*

*$p = 0.05$.

A unique trend was observed for the level of education differences in the median scores of QOL. Though more educated caregivers had better QOL however, the reported level of QOL was higher among caregivers with primary education, low among middle and high school certified, and then higher again among participants with graduate degrees. The caregivers with the lowest academic qualification, i.e., up to grade 5, showed homogenous median scores with those having graduate degrees on QOL full scale (*Mdn* = 94) and subscales except for the environmental health subscale.

As shown in Table 4, Mann-Whitney U test indicate overall QOL was significantly higher for general public (*Mean rank* = 162.75) than for the caregivers of psychiatric patients (Mean rank = 103.25), *U* ($n_{\text{caregivers}} = 123$, $n_{\text{general public}} = 146$) = 5073.50, $z = -6.15^*$, $p = .00$. There were significant differences between both comparison groups on subscales of physical health, social relations, environmental health, and general health. The findings supported the hypothesis about differences in QOL scores between caregivers and the general public. However, the psychological health of the general public (Mean rank = 129.78) did not significantly differ from caregivers (Mean rank = 141.19) of psychiatric patients, $U = 8217.50$, $z = -1.20$, *ns*, $p = .23$.

Table 5. Kruskal-Wallis H Test for QOL Scale and Subscales Disaggregated by Educational Levels (n = 123)

Education	Primary	Middle	Matric	Inter	Graduation	Others	$\chi^2(df = 5)$
Group Size	**n = 17**	**n = 19**	**n = 12**	**n = 34**	**n = 27**	**n = 14**	
Scales	**Mean Rank**	**Mean Rank**	**Mean Rank**	**Mean Rank**	**Mean Rank**	**Mean Rank**	
QOL	83.76	58.55	59.42	55.68	62.87	56.14	8.09
Physical	86.59	54.76	53.54	61.56	57.74	58.50	10.33*
Psychological	70.65	60.79	55.67	49.97	**79.15**	54.71	12.30*
Social	77.53	66.63	64.71	61.79	52.70	52.96	6.49
Environment	69.29	58.32	75.17	58.38	56.61	66.04	3.75
Gen Health	83.18	52.16	54.21	58.43	64.96	59.29	9.05

*$p = 0.05$.

The education differences among six categories of participants in QOL were examined using the Kruskal-Wallis H test (see Table 5). Findings show that there was no significant difference among participants concerning social health, environmental health, and general health. Caregivers had statistically significant differences in the physical domain (χ^2 (5) = 10.33, p =.05) and psychological domain (χ^2 (5) = 12.30, p =.03) because of levels of education. The less-educated participants, i.e., those with primary education, had the highest mean rank of 83.76 on overall QOL, 86.59 on physical, 77.53 on social, 69.29 on environmental, and 83.18 on general health than their counterparts. For psychological health, participants with graduate degrees scored the highest (mean rank = 79.15) than others. The findings did not fully support the hypothesis of better QOL among educated caregivers than less-educated caregivers.

Table 6. Mann Whitney U Test for QOL Scale and Subscales Disaggregated by Gender of Caregivers (n = 123)

Gender groups	Men (n = 62)	Women (n = 61)	U	Z
Scales	**Mean Rank**	**Mean Rank**		
QOL	60.99	63.02	1828.50	-.32
Physical	60.49	63.53	1797.50	-.48
Psychological	60.53	63.49	1800.00	-.46
Social Relations	62.38	61.61	1867.50	-.12
Environment	66.29	57.64	1625.00	-1.35
General Health	59.65	64.39	1745.00	-.75

$^*p = 0.05$. *n.s.*

It was hypothesized that there will be a non-significant gender difference among caregivers of psychiatric patients on QOL and men and women will not differ from each other on average. As shown in Table 6, the findings support the hypothesis with evidence of non-significant gender differences among caregivers of psychiatric patients on QOL scale, U ($n_{\text{men}} = 62$, $n_{\text{women}} = 61$) = 1828.50, z = -.32, $p = .75$). Men ($n = 62$) and women ($n = 61$) did not significantly differ on any subscales of QOL. This finding led to retaining the null hypothesis.

Discussion

The present study compared the QOL of the caregivers of psychiatric patients with non-caregivers. The findings show that caregivers have a poorer QOL than members of non-clinical families in the general public. In Pakistani culture, family caregivers are considered the foundation of the primary care system. Family members including parents, spouses, or relatives, provide care to the psychiatric patient for months or years. This responsibility can affect caregivers' QOL and their physical and psychological health. Meanwhile, it may lead to the subjective and objective burden which occurs because of the stigmatizing attitude of society (Imran et al., 2010). Thus, caregivers suffer from physical and environmental health problems and experience difficulties in social relationships. Also, psychiatric illness is assumed to be present because of possession of some supernatural evil forces (Mubbashar, 2003). The present finding supports the hypothesis and is aligned with the previous studies of Aarti et al. (2019) who observed poor QOL among caregivers of psychiatric patients.

The differences in QOL of caregivers were also examined as a result of their educational qualification. It was assumed that the more educated caregivers of psychiatric patients will have a better QOL than their less-educated counterparts. Findings showed that the level of education of the participants was not associated with better QOL and the less-educated caregivers had a relatively better QOL than more educated caregivers. The group differences in the physical and psychological health of caregivers concerning the level of education of the participants had significant chi-square values. Though the hypothesis was not supported, findings highlighted significant variations in the average scores of participants across education levels.

As per the third hypothesis, it was assumed to observe non-significant gender differences in QOL between caregivers of psychiatric patients and the general public. Data were collected from 123 caregivers, of whom 62 were men and 61 were women. QOL differences were examined using the total sample segregated by gender and in the sub-sample of caregivers only. The findings supported the hypothesis that caregiving men and women had similar scores on QOL and its domains. Previously, two studies (e.g., Aarti et al. (2019); Shakeel et al., 2015) reported the absence of significant gender differences among caregivers. Though some studies found women than men on the low end of the QOL continuum because of the caregiving burden and household responsibilities, more empirical studies are required to develop an understanding of gender differences in QOL of caregivers in families with psychiatric diseases.

Limitations, Strengths, and Future Recommendations

The present study did not get the information about patients' medical history, type, duration, and length of psychiatric illness. The scope of the research would have increased if data comparisons were made among patients with diverse psychiatric disorders and caregivers' profiles as parents, siblings, or children of the psychiatric patients. On the other hand, two salient strengths of the study are the comparison of caregivers against non-clinical control groups from the general public and studying their sociodemographic covariates. Future researchers are recommended to conduct a qualitative inquiry to learn about the feelings, attitudes, and experiences of caregivers. The paired sampling of family members as caregivers and non-caregivers of patients will also provide valuable information about this phenomenon. Families of psychiatric patients need awareness about caregiving risks and their management. It is rudimentary to accept psychiatric illness and stop stigmatizing the sufferers. In this regard, the services of psychologists, sociologists, and mental health workers are urged. The concerned authorities need to provide affordable mental health care services at the doorstep.

Implications

The present study provided insight that the health-related QOL of caregivers is as important as the health of psychiatric patients. The findings portrayed an indigenous picture of the QOL in Pakistani families with psychiatric patients. The health professional, counselors, paramedical staff, and general public can benefit from these findings in such a way that professionals will devise therapeutic, psycho-educational, and assistance programs; and the general public will offer a support network to the caregivers of the psychiatric patients.

Conclusion

In conclusion, the management of psychiatric patients is a challenge and risks the health and well-being of caregivers. That is why the caregivers of psychiatric patients had poor QOL as compared to the general public. They scored differently on different dimensions of QOL, showing vast differences from their counterparts. The least educated caregivers showed better QOL than those will higher qualifications. Thus, caregivers need counseling and psychoeducational training to cope with the stressors of caregiving and maintain their well-being.

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