PSYCHOSOCIAL MORBIDITY AND PSYCHOLOGICAL DISTRESS

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ABSTRACT

The aim of the study was to examine the prevalence of psychosocial morbidity (including perceived social support and psychological distress) and its impact on personal satisfaction and quality of life among cancer patients in Pakistan. This cross-sectional study was conducted between January and June 2022, with a sample of 100 participants (cancer patients) selected using purposive sampling. The findings revealed a significant linear regression equation ($F(1, 98) = 22.596$, $p < .000$) with an R^2 of .187 (R^2 adjusted = .179), indicating an inverse relationship between psychological distress and quality of life. The study also identified high frequencies of both perceived social support and psychological distress among the participants.

Keywords: Mental Health, Psychological Distress, Social Support, Cancer.

INTRODUCTION

The study aimed to assess the prevalence of psychosocial morbidity (perceived social support and psychological distress) and its impact on personal satisfaction and quality of life among cancer patients. In 2019, approximately 140,690 cancer cases were reported in Pakistan, with a majority of patients continuing to battle the disease throughout their lives. A survey conducted in 2012 revealed that around 63,415 males and 85,590 females were diagnosed with cancer in Pakistan. Globally, countries with the highest cancer prevalence rates include Australia, New Zealand, and Ireland. According to research by Sarwar and Anum (2017), the International Agency for Research on Cancer (IARC) estimated that 14.1 million cancer cases occurred worldwide in 2012, with nearly 8 million reported in developing countries, representing approximately 80% of the total population.

The experience of cancer has been associated with significant levels of psychological stress, dating back to observations by Galen and noted by physicians in the 18th and 19th centuries. Cancer diagnosis can evoke severe emotional reactions, including shock, anger, depression, loss, and grief. Patients with terminal illnesses are particularly susceptible to psychological issues, with adjustment disorder being the most common mental condition among cancer patients. However, many studies have faced criticism for their narrow focus on specific mental disorders and lack of comprehensive mental assessments. Cancer is now the second leading cause of death globally, with incidence expected to increase by over 80% between 2008 and 2030, particularly in less-developed countries. Literature from developed countries indicates that cancer patients experience higher rates of depression and anxiety compared to the general population, and comorbidity with depression leads to greater morbidity and poorer cancer-related outcomes.

Materials and Methods
Study Type

The research design of the present study was cross sectional conducted between January and June 2022.

Study Population and Sample

The study sample was a total of 100 participants (cancer patients) using the purposive sampling method to collect data. Participants were all 18 years of age and above. The structured interview was conducted with cancer patients and who gave their consent for participating in the research. All the ethical procedures as determined by Board of Advanced Studies were followed in the administration and scoring of the questionnaires and confidentiality of all participants was maintained.

Inclusion Criteria

A firm inclusion criterion was not reflected on religion the participants belong to. Education criteria was also set aside after experiencing real ground work.

Exclusion Criteria

The study sample did not include children or youngsters less than 18 years of age as well as those who had severe mental and health issues that were unable to respond to the questions in the study.

Data Collection Tools

Depression Anxiety and Stress Scale (DASS)

According to Lovibond (1995), depression is characterized by dysphoria, hopelessness, devaluation of life, and self-deprecation. The anxiety scale evaluates autonomic arousal, skeletal muscular effects, situational anxiety, dryness of mouth, and other symptoms. The stress scale measures chronic, non-specific arousal levels. The Depression, Anxiety, and Stress Scale (DASS) is a reliable and valid 21-item self-report instrument used to assess these negative emotional states, with an alpha reliability of 0.80.

The Multidimensional Scale of Perceived Social Support (MPSS) defines perceived social support as the reliance on various sources in one's environment during times of need, including relatives, family, friends, and significant others. It consists of 12 items assessing support from family, friends, and a significant other using a 5-point Likert scale. The scale has demonstrated strong factorial validity, internal consistency, and test-retest reliability. Higher levels of perceived social support are associated with lower levels of depression and anxiety.

Quality of Life (WHOQOL) refers to an individual's perception of their circumstances, including cultural and societal factors. The WHO-QOL-100 assessment was developed by the WHOQOL Group to provide a comprehensive evaluation of quality of life across different cultural contexts. It consists of 26 items and was created to complement traditional well-being markers by integrating measures of sickness, disability, perceived health, and functional status.

Analysis of Study Data

To analyze the study data frequencies and simple linear regression analysis was used in SPSS.

Results

The demographic statistics in table 1 show the frequencies and percentages of the demographic variables. The sample consisted of mean age range of 45.58 of 37% males and 63% females. The sample consisted of cancer patients only. The sample was categorized on the basis of socioeconomic status having upper, middle and lower class having frequency of upper class 36%, middle class 53% and lower class 11%. The sample was also categorized on the basis of education having frequency of illiterate 4% primary 12% middle 8%, matric 16% intermediate 15% graduation 29% post-graduation 16%. The sample was also categorized on the basis of family structure nuclear 23% joint family system 77%. The sample consisted of marital status as well married 77% unmarried 9% widowed 12% separated 2%.

Descriptive statistics and Cronbach's alpha reliability coefficients in Table 2 shows the descriptive properties and the reliability of the tests used in this study. All three instruments WHO Quality of Life Scale, Depression Anxiety Stress Scale, and Multidimensional Perceived Social Support Scale along with their sub-scales show good reliability. According to Cronbach's Alpha Reliability test scores should all be higher than 0.5 which indicates good reliability.

Table 1
Demographic Variables of Study Variables (N=100

Demographics Variables	*F*	%
Gender		
Female	63	63.0
Male	37	37.0
Education		
Illiterate	4	4.0
Primary	12	12.0
Middle	8	8.0
Matric	16	16.0
Inter	15	15.0
Graduation	29	29.0
Post-Grad	16	16.0
Socio Economic Status		
Lower class	11	11.0
Middle class	53	53.0
Upper class	36	36.0
Family structure		
Nuclear	23	23.0
Joint	77	77.0
Marital status		
Married	77	77.0
Unmarried	9	9.0
Widowed	12	12.0
Separated	2	2.0
Age	Mean age = 45.58	SD= 12.271

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Table 2

Descriptive Statistics and Alpha Reliability Coefficients of Study Variables (N=100)

Scales	Items	Cronbach's Alpha	M	SD
Physical	7	.56	22.50	3.81
Psychological	6	.56	20.51	3.68
Social Relations	3	.84	10.79	2.91
Environmental	8	.85	26.57	5.71
Depression	7	.83	6.67	4.16
Anxiety	7	.77	6.72	3.70
Stress	7	.83	7.78	4.32
Family	4	.89	19.11	6.87
Friends	4	.93	18.59	7.31
Significant Others	4	.91	19.87	7.32

Table 2 shows the descriptive properties and the reliability of the tests used in this study. All instruments, WHO Quality of Life Scale, Depression Anxiety Stress Scale, Multidimensional Perceived Social Support Scale along with their sub-scales show good reliability. Sub-scale Religious Denial of the Brief Cope Scale showed low reliability.

Table 3

Frequency table for Psychosocial Morbidity DASS (N=100)

Score Rating	Depression		Anxiety		Stress	
	F	%	F	%	F	%
Normal	40	40.0	23	23.0	55	55.0
Mild	6	6.0	22	22.0	5	5.0
Moderate	41	41.0	15	15.0	27	27.0
Severe	10	10.0	12	12.0	10	10.0
Extremely Severe	3	3.0	28	28.0	3	3.0

Table 3 shows the frequency and score rating for psychosocial morbidity measured by the Depression Anxiety Stress Scale with frequencies distributed as Normal, Mild, Moderate, Severe and Extremely Severe.

Table 4

Frequency table for Psychosocial Morbidity MPSS (N=100)

Family			Friends			Significant Other		
Rating	F	/ %	Rating	F	/ %	Rating	F	/ %
6	4	4.0	4	5	5.0	5	6	6.0
10	6	6.0	7	6	6.0	10	5	5.0
11	6	6.0	9	6	6.0	11	5	5.0
12	5	5.0	14	16	16.0	12	6	6.0
14	10	10.0	15	6	6.0	13	6	6.0
15	11	11.0	18	12	12.0	15	10	10.0
17	8	8.0	19	4	4.0	20	11	11.0

Family			Friends			Significant Other		
20	10	10.0	20	5	5.0	21	8	8.0
22	4	4.0	21	6	6.0	23	5	5.0
23	1	1.0	22	4	4.0	25	4	4.0
24	5	5.0	24	4	4.0	27	16	16.0
25	4	4.0	26	4	4.0	28	18	16.0
27	4	4.0	28	22	22.0			
28	22	22.0						

Table 4 shows the frequency and score rating for psychosocial morbidity measured by the Multidimensional Perceived Social Support Scale. Table is further categorized by sub-scales of Family, Friends and Significant others.

Table 5

Simple Liner regression model impact analysis of Psychosocial Morbidity on Quality of Life. (N=100).

Variables	B	SE	B	T	P
Physical	-.069	.034	-.203	-2.049	.043
Psychological	-.095	.032	-.289	-2.984	.004
Social Relation	-.126	.023	-.487	-5.525	.000
Environmental	-.199	.047	-.390	-4.199	.000
Qol Total	-.489	.103	-.433	-4.754	.000

Table 5 shows how the independent variable, Psychological Distress predicted the dependent variable i.e. variable of Quality of Life. Simple linear regression was calculated to predict the Quality of life based on the patients psychological distress. A significant linear regression equation was found (F(1, 98) =22.596, p < .000 with an R² of .187. R² adjusted = .179. The regression coefficient (B = -.489) indicated that an increase in one unit of psychological distress corresponded, on average, to a decrease in Quality of life to .489 per unit. Psychological distress and quality of life have an inverse relationship.

Discussion

High psychosocial morbidity was found among cancer patients in Pakistan. Significant frequencies were found in levels of depression anxiety and stress among cancer patients. Malignant growth has critical psychosocial implications, related to the effect of the illness and its treatment on the individual mental and profound dimensions, just as on the elements of interpersonal and social connections (Girgis et al., 2013). Table 3 shows the frequency and score rating for psychosocial morbidity measured by the Depression Anxiety Stress Scale with frequencies distributed as Normal, Mild, Moderate, Severe and Extremely Severe. Depression was marked as 41% Moderate, 10% Severe and 3% extremely Severe. Anxiety was marked as 15% Moderate, 12% Severe and 28% extremely Severe. Stress was marked as 27% Moderate, 10% Severe and 3% extremely Severe. It can be further translated as out of 100 cancer patients, 54% of patients suffered from Moderate to Extremely Severe levels of Depression, 55% of patients suffered from Moderate to Extremely Severe levels of Anxiety, 40% of patients suffered from Moderate to Extremely Severe levels of Stress. Similarly Mushtaq et. al. (2017) concluded in a study that depression was normal in patients in advanced phases of cancer and in those enduring longer after being diagnosed. Table 4 shows the frequency and score rating for psychosocial morbidity measured by the Multidimensional Perceived Social Support Scale. Table 4 is categorized by sub-scales of Family, Friends and Significant others. These categories help identify a patients support system while battling terminally ill disease such as cancer. The score range was 23 being minimum and 84 being maximum, the mean score value 57.32 of patients revealed a very good social support system comprising of the social support extended to them by family, by friends and their significant others. 39% of patients reported a total score ranging between 64 to 84 which interprets an excellent perceived social support system. Hence hypothesis 1 established with statistical evidence marking high psychosocial morbidity among cancer patients.

There was a negative impact of psychological distress on quality of life among cancer patients. A study by Chabowski et. al. (2018) chronicled the intricate association between quality of life, psychological well-being and adjusting to cancer. As explained in previous researches increased levels of psychological distress lead to decreased levels of quality of life as well as decrease of personal satisfaction, hindrance in social connections, hazard of self-destruction, longer rehabilitation time, helpless adherence to treatment and abnormal sickness conduct, family dysfunction, and, possibly, more limited endurance (Mehta & Roth, 2015; Mitchell et al., 2011). Table 5 shows how the independent variable, Depression Anxiety Stress Scale (DASS), predicted the dependent variable i.e. variable of Quality of Life. Simple linear regression was calculated to predict the Quality of life based on the patients' psychological distress. A significant linear regression equation was found ($F(1, 98) = 22.596$, $p < .000$ with an R^2 of .187. R^2 adjusted = .179. The regression coefficient (B = -.489) indicated that an increase in one unit of psychological distress corresponded, on average, to a decrease in Quality of life to .489 per unit. All the sub-scale variables of Quality of life were reported in Table 5. Psychological distress being the independent variable had a negative relation with the dependent variable, Quality of life all together as well as all its sub-scale variables. The sub-scale variables of quality of life included Physical, Psychological, Social Relations and Environmental. All dependent variables of quality of life were negatively associated with psychological distress. If psychological distress increases quality of life decreases, if psychological distress decreases quality of life increases. Psychological distress had an inverse relationship impact on Quality of life. Hence hypothesis 2 established with empirical evidence formed by a simple linear regression equation ($F(1, 98) = 22.596$, $p < .000$ with an R^2 of .187. R^2 adjusted = .179.

Suggestions and Limitations

The biggest limitation was data collection. The data being collected was sensitive and extremely time consuming in nature as cancer patients are already extremely exhausted and burned out thin due to excessive radiation, cancer medication, steroids and chemotherapy. The second limitation was the Covid-19 restraint. Since the pandemic the dynamics of business as usual has significantly change, hospitals did not allow everyone inside the oncology ward as inbound or outbound cancer patients would come in for follow up. All these cancer patients were immune compromised. More than usual Covid-19 protocols were imposed by hospitals while collecting data from oncology wards.

Study can be improved by increasing the sample size and including other areas too apart from Islamabad and Rawalpindi. Due to covid-19 it was very difficult to collect data. A detailed national and provincial policy should be designed, formulated, enacted and implemented to ensure educating the primary care givers, doctors, nurses, cancer patients and all related medical worker with better coping strategies towards any terminally ill disease.

A very common phenomenon found in North American countries, there are Cancer support groups for people suffering from cancer as well as their primary care givers. A detailed national and provincial policy should be designed, formulated, enacted and implemented to ensure such platforms exist in Pakistan widely so people can belong to a sense of community. Sharing ones burdens helps ease psychological distress.

There was resistance from organizations as well as hospitals to conduct research on cancer patients. An important observation made during data collection was that most cancer patients have a very poor self-image of themselves. A detailed national and provincial policy should be designed, formulated, enacted and implemented to ensure campaigns that create awareness about the prevalence of cancer and work towards improving self-image of those who are suffering from the disease or are the survivors of the disease.

Conclusion

The current study was helpful in understanding and estimating the frequency of psychosocial morbidity (Perceived social support and Psychological distress) while evaluating the personal satisfaction, quality of life among cancer growth patients. Eventually the current examination upholds what most previous studies have contended. Large number of researches report high frequencies of psychological distress. The research was different because it assessed whether high frequencies of psychosocial morbidity would exit as well, the results report both high levels of psychological distress and perceived social support among cancer patients in Pakistan. To improve future examination is important to be mindful of ethical boundaries while conducting research especially on Cancer patients. Organizations, hospitals and communities should have a more open approach for research in various areas of Pakistan. Additionally, different techniques could be thought about for future exploration.

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