

Nexus of spirituality and social support with its impact on cancer patients' stress in KPK, Pakistan

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Objective: To evaluate the relationship between spirituality and social support with its impact on cancer patients' stress.

Methodology: This cross-sectional study was carried out from 15th July to 31st August 2019. A structured questionnaire was developed and collected data through a purposive sampling method from 200 cancer patients. Data were analyzed by using SPSS V-20. Pearson's Correlation was used for the relationship of variables.

Results: Majority (75%) of the cancer patients were males, most were unmarried (58%) and 35% patients were from the 49-58 age group. The clinical information indicated that 12% had Laryngeal cancer and 38% were stage-III cancer

patients. Analyzing the spirituality levels, 37% were highly spiritual patients and 36% adopted recitation of the Holy *Quran* verses for the cure of their disease. Mean score of spirituality was 2.42, social support 2.19 and stress 2.32. In correlation analysis, spirituality and social support had an inverse but significant relationship ($r=-0.751/-0.781$; $p=.000/.001$) with the patients' stress.

Conclusion: Spirituality and social support had a significant relationship with cancer patients' stress. Patients performed several spiritual practices and adopted various social support approaches to reduce disease-related stress. (Rawal Med J 202;45:794-797).

Keywords: Cancer, stress, social support.

INTRODUCTION

Despite advanced medical technology and treatment mechanism, cancer is one of the chronic diseases and a major challenge faced by the healthcare system globally.¹ Pakistan is one of cancer emerging countries and only in 2018, a total of 173,937 new cases were reported.² According to a WHO report, the growing cancer cases need serious attention to prevent the disease and to focus on its treatment.³ Cancer has deleterious effects on patients' health and their experiences.⁴ These patients face several dilemmas i.e. stress, anxiety, terror and also influenced patients' social roles.⁵ During the past two decades, the concept of "stress" has received significant attention as it was frequently reported among cancer patients.⁶

The various negative impacts of stress in cancer patients indicates the need for a holistic coping approach.⁷ Spirituality is one of the coping mechanisms and currently becoming a core concentration in the academic and clinical research fields.⁸ Spirituality has been defined as a set of feelings through which an individual search for meaning and purpose in life with the help of self, nature and sacred.⁹ A study, spirituality was

associated with lower levels of stress and depressive symptoms.¹⁰ Social support had a negative association with stress and a positive relationship with better physical and mental health.¹¹ The aim of this study was to investigate the relationship of spirituality and social support with its impact on cancer patients' stress in their healthcare and socio-economic system.

METHODOLOGY

In this cross-sectional study data were collected from 15th July to 31 August 2019 at the IRNUM hospital, Peshawar. A structured questionnaire was used for quantitative data and collected through a purposive sampling technique. According to the Sekaran sample size formula, a total of 415 respondents, 200 patients were selected for data collection. Patients were included according to the set criteria.¹² An individual must be diagnosed as a cancer with the age of 18 years and above, must be a Muslim and a sound patient with physical/mental qualities. Those below 18 years of age, patients attending follow up check-ups and mentally disabled patients were excluded.

Firstly, the questionnaire was adopted in the English

language and translated into *Urdu*. For measuring the patients' spirituality, the Peterman et al, 12-items scale (Functional Assessment of Chronic Illness Therapy-Spiritual wellbeing scale (FACIT-Sp) was adopted.¹³ Berlin Social Support Scale (BSSS) was used to measure social support.¹⁴ All the responses were measured by a five- point Likert scale ranging from 0= *not at all* to 4= *very much*.

Statistical Analysis: Statistical analysis was performed using SPSS version 20. For bivariate analysis, all the selected variables were indexed and evaluated the relationship by Pearson's Correlation Coefficient test.

RESULTS

Among 200 patients, 151 (75%) were males. In the age groups, 35.0% were from the age group of 49-58 and 58% were unmarried (Table 1). Laryngeal cancer and breast cancer were commonest diagnosis. In cancer stages, (n=77, 38.5%) of the patients were of stage-III cancer and (n=29, 14.5%) patients diagnosed with stage-I cancer. Furthermore, (n=117, 58.5%) of the patients received social support from family members and (n=10, 5%) patients got it from healthcare professionals. Moreover, a great number of the patients were highly spiritual, recited specific *Quranic* verses and used *Zam Zam* water (Holy water) for healing (Table 2).

Table 3 shows the means and standard deviations scores of the patients' spirituality, social support and stress. A higher indexed mean score than (M=2.0) shows greater level and a lower mean score than (M=1.99) indicates vice versa. The spirituality got a high mean (M=2.42) score, whereas, the subscales such as meaning (M=2.55) and peace (M=2.65) also got higher mean scores. The social support also got a higher mean score (M=2.19), while its sub-aspects, emotional support got (M=2.45), followed by instrumental support (M= 2.31) as a mean score. The result further indicates that the patients' stress got a greater mean score (M=2.32), which shows that cancer patients were highly stressed. Whereas health-related stress got higher mean scores (M=2.95) and role-related stress got the lower mean score (M=1.42).

Table 1. Demographic information of the study participants.

Variable		Frequency	%
Gender	Male	151	75.5
	Female	49	24.5
Age Group	18-28	35	17.5
	29-38	34	17.0
	39-48	44	22.0
	49-58	70	35.0
	59-68	12	6.0
	Above 68	5	2.5
Marital Status	Widower/widow	20	10.0
	Unmarried	116	58.0
	Married	63	31.5
	Divorced	1	0.5

Table 2. Clinical, spirituality and social support related information.

Variable		Frequency	%
Type of Cancer	Colon	16	8.0
	Breast	23	11.5
	Prostate	12	6.0
	Lung	18	9.0
	Laryngeal	24	12.0
	Lymphoma	13	6.5
	Myeloid	11	5.5
	Liver	17	8.5
	Gastric	15	7.5
	Bladder	15	7.5
	Leukemia	11	5.5
	Renal	10	5.0
Cancer Stage	Brain/CNS	15	7.5
	Stage 1	29	14.5
	Stage 2	52	26.0
	Stage 3	77	38.5
	Stage 4	42	21.0
First Time Diagnosed	Yes	140	70.0
	No	60	30.0
Received Social Support from	Spouse/partner	55	27.5
	Family	117	58.5
	Friends	18	9
	Healthcare professionals	10	5
Spirituality level	Low	14	7.0
	Medium	45	22.5
	High	73	36.5
	Very High	68	34.0
Spiritual / Religious Practices	Petitionary prayer	21	10.5
	Pray	8	4.0
	Recitation of holy scripts	33	16.5
	Rosary	14	7.0
	Spells	12	6.0
	Amulet	13	6.5
	Visit a Spiritual Healer	10	5.0
	Specific Quranic Verses	72	36.0
	Fasting	13	6.5
	Holy water/ <i>Zam Zam</i> water	4	2.0
Tend towards spiritual practices	Before diagnosis	20	10
	After diagnosis	168	84
	Never changed and as usual	12	6

Table 3. Mean and Standard Deviation.

Variables		Indexed Mean	Standard Dev.
Spirituality	Meaning	2.55	.825
	Peace	2.65	.813
	Faith	2.45	.861
	Spirituality	2.42	.596
Social Support	Emotional Support	2.45	.855
	Instrumental Support	2.31	.888
	Informational Support	2.42	1.024
	Need for Support	2.37	.778
	Support Seeking	2.08	.850
	Social Support	2.19	.568
Stress	Health-Related Stress	2.95	.767
	Role Related Stress	1.42	.496
	Perceived Stress	2.32	.640

Table 4. Correlations between Variables.

Variable	D. Variable	R-value	P-value
Spirituality/	Perceived Stress	-0.751/-0.781	.000/.001
Social	Health Related Stress	-0.518/-0.672	.000/0.000
Support	Role Related Stress	-0.485/-0.432	.189/.000

Table 4 shows that spirituality had a significant and negative relationship with perceived stress ($r = -0.75$; $p = .000$) and health-related stress ($r = -0.518$; $p = .000$). Whereas, spirituality has a non-significant relationship ($r = -0.485$; $p = .189$) with role-related stress. The result also indicates that social support has a significant negative relationship with perceived stress ($r = -0.781$; $p = .001$), health-related stress ($r = -0.672$; $p = .000$) and with role-related stress ($r = -0.432$; $p = .000$).

DISCUSSION

Cancer is a life-threatening issue and patients faced stress which affects the patients' pre and post-treatment as well as overall health. Patients considered spiritual practices as a positive source of strength and healing. The present study had similar results with that of McSherry as people inclined toward spiritual practices when they faced diseases.¹⁶ In fact, all the patients were Muslim and a strong belief that illness and healing are God's power and ultimately spiritual practices are the key coping mechanisms for healing.

Our study showed that the selected cancer patients received high social support and considered it as a helpful element in the cure of disease. Nikbakhsh et

al, also found that cancer causes stress and it further produced various psychological as well as other health-related issues.¹⁹ Another study found that the majority of the patients had high stress, uncertainty and anxiety.¹⁷

Spirituality was constantly associated with lesser stress in the present study as well as a previous study conducted by Schreiber and Brockop.¹⁰ For many patients, social support is a key factor either they directly received from their family members or other relatives had a positive source of support. The current study correlation results portray that social support has a significant negative ($M = -0.781$; $p = .001$) relationship with cancer patients' stress. A previous study found that social support negatively linked to stress, and positively assists one's recovery from disease, increases adjustment with treatment and extends patients' life span.¹⁸

CONCLUSION

Spirituality and social support had a significant relationship with cancer patients' stress. Patients performed several spiritual practices and adopted various social support approaches to reduce disease-related stress.

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