



A QUANTITATIVE ANALYSIS OF SPIRITUALITY AND SOCIAL SUPPORT WITH ITS IMPACT ON CANCER PATIENTS' QUALITY OF LIFE

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ABSTRACT

OBJECTIVE: To investigate the level of spirituality and social support along with its impact on health related quality of life (QoL) in cancer patients.

METHODS: This cross-sectional study was conducted from 15th July to 31st August 2018 on 200 patients selected through purposive sampling. Pre-validated questionnaires were used to collect the data on spirituality, social support and QoL, which were analyzed using SPSS v.20.0. Descriptive and inferential statistics were applied where needed.

RESULTS: In 200 patients, 151 (75.5%) were male, majority (n=70; 35%) were from >48 to 58 years of age group, maximum (n=116; 58%) were unmarried, while majority had primary education (n=62; 31%). Laryngeal carcinoma (n=24; 12%), was the commonest clinical presentation followed by breast cancer (n=23; 11.5%). Majority (n=77; 38.5%) presented at Stage III, 140 (70%) reported it to be diagnosed at first evaluation, 161 (80.5%) had no family history, 109 (54.5%) reported to start spiritual treatment after diagnosis, and 117 (58.5%) reported family as their main support during the whole phase. In spirituality distinctiveness, 68 (34%) patients showed very high spiritual level, 72 (36%) reported to recite specific Quranic verses in religious practice, in which 112 (56%) reported to recite *فین* *وإذا مرضت فهو يشفين*, 168 (84%) leaned towards spiritual practices after diagnosis. In correlation, spirituality (2.42±0.596) and social support (2.19±0.568), both had a significant correlation with QoL (2.37±0.494) with values of r=0.289, p=0.000 and r=0.238, p=0.001 respectively.

CONCLUSION: Spirituality and social support are the key coping mechanisms that have supportive influences on the patients' overall health-related QoL.

KEY WORDS: Spirituality (MeSH); Quality of Life (MeSH); Cancer (MeSH); Social Support (MeSH).

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INTRODUCTION

Cancer is a major health burden globally and recent statistics shows that 18.1 million fresh cases are diagnosed and 9.6 million deaths are reported, worldwide in 2018.¹ In Pakistan, the ratio of cancer is rising and a total of 173937 new cases have been reported by GLOBOCAN in 2018.² This may be due to various reasons such as no annual or appropriate medical checkup, expensive medical treatment, fear of disease, prevalent pessimistic public opinions and several common

myths regarding the disease. Moreover, proper medical facilities are also not accessible to all, as it is believed to be an incurable disease, so mostly dealt with various traditional and allied healthcare approaches.³ People frequently attain health recovery by performing certain supportive medical and spiritual practices for various diseases.⁴ Spirituality is one of those particular coping mechanisms and currently gaining more importance in the academic and clinical research fields.⁵ It has been defined as a set of internal feelings through which an individual search for meaning and purpose of life

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and associates it with self, intimates, nature and sacred.⁶

Several research studies acknowledged the role of spirituality among cancer patients and noted that spirituality has been practiced⁷ and it was found helpful in repercussions on the enhancement of patients' quality of life (QoL),⁸ their functional wellbeing,⁹ physical wellbeing¹⁰ and decrease stress symptoms among cancer patients.¹¹ Furthermore, another study reported that prayers, reading of the holy scriptures and meditation can also improve sense of control over stress and ultimately enhances patients' QoL.¹²

Besides, social support also plays an essential role in the cancer patients' QoL¹³ and higher levels of social support was associated with lesser death rates,¹⁴ better post-traumatic progression,¹⁵ greater levels of physical activity,¹⁶ better overall health¹⁷ and lower level of stress.¹⁸ Some researchers have pointed out that if a greater level of social support is delivered under stress situations, a high decrease can be observed in emotional and functional symptoms.¹⁹ Another study reported that social support decreases the psychological troubles and hopelessness while increasing cancer patients' QoL.²⁰ Keeping in view the salutary role of spirituality and social support, this study was planned to find out its impact on patients' QoL. However, a great research work done in western religions/cultures but no such kinds of research or survey has been conducted in Pakistan, although such practices are dominant in our society. This may be due to the pre-eminence of bio-medical treatment mechanisms which neglected the influence of these coping strategies. Therefore, it was

TABLE I: DEMOGRAPHIC PROFILE OF THE STUDY PARTICIPANTS

Variable	Frequency (n=200)	Percentage	
Gender	Male	151	75.5
	Female	49	24.5
Age Group	18-28	35	17.5
	>28-38	34	17.0
	>38-48	44	22.0
	>48-58	70	35.0
	>58-68	12	6.0
	> 68	5	2.5
Marital Status	Widower/widow	20	10.0
	Unmarried	116	58.0
	Married	63	31.5
	Divorced	1	0.5
Educational Level	Illiterate	25	12.5
	Primary	62	31
	High School	57	28.5
	HSS	35	17.5
	Bachelor	20	10
	Master	1	0.5

TABLE II: CLINICAL PROFILE OF THE STUDY PARTICIPANTS

Variable	Frequency (n=200)	Percentage	
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
	Brain/Cantal nervous system	15	7.5
	Cancer Stage	Stage 1	29
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
Family History of Cancer	Yes	29	14.5
	No	161	80.5
	Don't know	10	5.0
Kind of Treatment Consulted at the first Time	Spiritual	109	54.5
	Medical	38	19
	Both together	53	26.5
Received Social Support from	Spouse/partner	55	27.5
	Family	117	58.5
	Friends	18	9
	Healthcare professionals	10	5

crucial to conduct a research survey specifically on Muslim spiritual and social support practices along with its impact on health related QoL in cancer patients.

METHODS

This cross-sectional survey was approved by the Advanced Studies and Research Board (ASRB), University of Peshawar and was conducted from 15th July to 31 August 2018 at the Institute of Radiotherapy and Nuclear Medicine (IRNUM) hospital, Peshawar. A structured questionnaire was used for quantitative data and collected through a purposive sampling technique. A sample size of 200 respondents out of 415 patients was selected for data collection purpose according to Sekaran²¹ sample size. An individual diagnosed as a cancer patient, age of 18 years or above and Muslims were included while those with any mental/psychological were excluded from this study. Firstly, the questionnaire was developed in the English language and translated into Urdu for the understanding of the enrolled respondents in order to achieve the required information. Illiterate patients were interviewed for the research tool while among rest the tool was self-administered. For measuring the patients', levels of spirituality, the Peterman et al.²² 12-items scale (Functional Assessment of Chronic Illness Therapy-Spiritual wellbeing scale (FACIT-Sp) was adopted. Likewise, the Berlin Social Support Scale (BSSS) was used to measure the social support aspects.²³ For QoL, the Functional Assessment of Cancer Therapy (FACT) scale was used.²⁴ All the responses were measured by a five-point Likert scale ranging from 0= not at all to 4= very much and same was interpreted as per interpretation available in literature.²²⁻²⁴

After data collection, extraction was made which was then examined through SPSS V.20. Descriptive statistics were applied for categorical and numerical variable. In bi-variate analysis, all the selected variables were indexed properly and then evaluated by Pearson's Correlation Coefficient test. Spirituality and social support were

TABLE III: SPIRITUAL DISTINCTIVENESS OF THE RESPONDENTS

	Variable	Frequency (n=200)	Percentage
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/ Zam Zam water	4	2.0
Specific Quranic verses practiced	Surah Ar-Rahman	14	7
	The 4 Quls (Surah Al-Kafiroun, Al-Ikhlās, Al-Falaq, An-Nas)	36	18
	واذا امرضت فهو يشفين (1)	112	56
	ونزل من القرآن ما هو شفاء (2)	38	19
Tend towards spiritual practices	Before diagnosis	20	10
	After diagnosis	168	84
	Never changed and as usual	12	6

1. And when I am ill, it is He Who cures me ; 2. What We have sent down of the Qur'an is a healing

TABLE IV: MEAN AND STANDARD DEVIATION OF THE VARIABLES

	Variable	Mean±S.D
Spirituality	Meaning	2.55±0.825
	Peace	2.65±0.813
	Faith	2.45±0.861
	Spirituality	2.42±0.596
Social Support	Emotional Support	2.45±0.855
	Instrumental Support	2.31±0.888
	Informational Support	2.42±1.024
	Need for Support	2.37±0.778
	Support Seeking	2.08±0.850
	Social Support	2.19±0.568
Quality of Life	Physical Wellbeing	2.38±0.747
	Social Wellbeing	2.44±0.655
	Emotional Wellbeing	2.67±0.703
	Functional Wellbeing	2.39±0.721
	Quality of Life	2.37±0.494

taken as independent and QoL as a dependent variable.

RESULTS

In 200 respondents as per gender classification, majority of the patients were males (n=151, 75%) while in age group, majority of respondents were

from the 49-58 age group (n=70, 35.0%) and only (n=5, 2.5%) were below the age of 70 years, rest details are based on table I. The clinical information of the participants shows that majority of the patients had Laryngeal cancer (n=24, 12%) and (n=23, 11.5%) patients had breast

cancer. In stages of carcinoma, majority of the patients had Stage-III cancer (n=77, 38.5%) and (n=29, 14.5%) patients had Stage-I cancer patients rest details can be seen table: II. In spiritual specifications majority of the patients were highly spiritual (n=73, 36.5%) and (n=68, 34%) were very high spiritual patients. Additionally, patients practiced various categories of spiritual practices for healing purposes and majority of the respondents practiced the recitation of specific Quranic verses (n=72, 36%) and only (n=4, 2%) used Zam Zam water (Holy water) for healing purposes, details given in table: III. Table IV of the result section shows mean±SD calculated for different variables of the study.

In the end, correlation analysis (direction/strength of the relationship denoted by (r) and significance by (p) of the selected variables) was conducted. After indexation of variables, correlation was calculated. The outcomes showed that the association was insignificant between overall spirituality and with both physical wellbeing (p=.742) and social wellbeing (p=.994) aspects of the QoL. Whereas, spirituality has a positive and significant relationship with both emotional wellbeing (p=.001) and functional wellbeing (p=.000). The details are based on Table V.

DISCUSSION

The present research survey focused on investigating the impacts of spirituality and social support on cancer patients' health-related QoL. The outcomes showed that cancer patients have high level of belief in spirituality/spiritual practices (70%). The parallel results also recorded by Burt,²⁵ that patients with cancer have high spiritual level and rely on spiritual healing practices due to the chronic condition of illness. Also, (36%) patients practice the recitation of the Holy Quranic verses and (10%) perform prayers for cure. It further reveals that majority of the patients become spiritual after the disease diagnosed (84%) and they consider it a source of strength, healing and have positive impacts on a patient's wellbeing. The present study has also similar results with that of McSherry²⁶

TABLE V: PEARSON'S CORRELATION ANALYSIS OF VARIABLES

Independent Variables	Dependent Variables (Indexed Values)	
1. Spirituality	Physical Wellbeing	
	1) r= .023 p= .742	2) r= .153 p= .030
2. Social Support	Social Wellbeing	
	1) r= .001 p= .994	2) r= .226 p= .001*
	Emotional Wellbeing	
	1) r= .237 p= .001*	2) r= .255 p= .000*
	Functional Wellbeing	
	1) r= .353 p= .000*	2) r= .166 p= .018
	Quality of life	
	1) r= .289 p= .000*	2) r= .238 p= .001

*Significant at the 0.05 level (2-tailed).

that people move to spirituality when they are facing diseases, injury and deprivation. In addition, majority of the patients were Muslim and they have strong belief that illness and healing are Allah's power and ultimately spirituality/spiritual practices are the key coping mechanisms for healing.

The social support variable got a higher mean score (M=2.19). Kim et al.²⁷ found in their study that during chronic illness patients need high social support. Whereas overall QoL got greater mean score (M=2.37) and it indicates that respondents have better overall QoL. These findings were also confirmed by the study of Melo-Filho et al.²⁸ that their selected respondents have also high-level QoL during the chronic illness.

The correlation results highlighted that spirituality plays a significant (p=.000) role in cancer patients' overall health-related QoL. Spirituality is constantly associated with better health effects, in the present study as well as previously conducted studies.²⁹ The prior study of Sawatzky et al.³⁰ also found that spirituality is a helpful ingredient and positively predicted patients' health-related outcomes. Besides, another study finding confirms that those having high belief in spirituality were also less amount of fear regarding the disease and its worse effects.³¹

The results further indicate the correlation of spirituality with the sub-aspects of QoL. It has been found that spirituality has a positive and significant relationship with the emotional wellbeing (p=.001) and functional

wellbeing aspects of QoL (p=.000). Whereas a non-significant relationship has been found between spirituality and physical wellbeing (p=.742), and social wellbeing aspects (p=.994). Our study findings are in accordance with study of Koenig,³² that spirituality has a positive and significant relationship with cancer patients' QoL.

One of the key purpose of cancer treatment is the improvement of patients' health-related QoL through supportive and palliative care.³³ For many patients, social support is a key factor either they are receiving from their family members, society or healthcare professionals have a positive influence on the patients' health. The existing study correlation outcomes display that social support is a significant (p=.001) predictor of the overall QoL. It indorses that the selected cancer patients have received high social support and consider supportive measures as a helpful component for better coping of the disease. The findings of other studies also have similar results as the Lim and Zebrack³⁴ found that social support positively affects the QoL and reduces mental stress of the breast and gynecological cancer patients. Moreover, the survey study of Filazoglu and Griva³⁵ have also the same findings and reported that social support was positively related to better QoL in Turkish cancer patients. In addition, the analysis reveals that QoL has significantly influenced by spirituality and social support. The studies done in the past which also identified such coping strategies having a helpful role

and improving patients' health-related QoL.³⁶

This research survey has certain limitations as all of the respondents were receiving treatment from the selected hospital only. Thus the results could not be generalized to other religious groups and cultures as it was a mono-institutional study and conducted within a homogeneous sample group of Muslim cancer patients. Therefore, more multi-institutional and multi-ethnic studies need to be done to know the overall impacts of spirituality and social support on cancer.

CONCLUSION

This study summarized that cancer patients were found highly spiritual and they performed different idiosyncratic spiritual practices and social support strategies during treatment. Majority of the respondents became spiritual and tend towards spiritual practices after the disease diagnosed. Patients have received high social support from spouse/family members and less support recorded by healthcare professionals. Spirituality and social support have been found as a beneficial predictor for improving cancer patients' QoL. It could be concluded from the outcomes of the present survey that such practices are highly vogue in our society, therefore, healthcare professionals needed to understand the significance of spirituality and social support as a part of coping therapy for the improvement of cancer patients' QoL.

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AUTHORS' CONTRIBUTIONS

Following authors have made substantial contributions to the manuscript as under:

AA: Conception and study design, acquisition of data, drafting the manuscript, final approval of the version to be published.

NM: Study design, critical review, final approval of the version to be published.

IUK: Analysis and interpretation of data, drafting the manuscript, final approval of the version to be published

Authors agree to be accountable for all aspects of the work in ensuring that questions related to the accuracy or integrity of any part of the work are appropriately investigated and resolved.

CONFLICT OF INTEREST

Authors declared no conflict of interest

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