

Spirituality as a Predictor for Fear of Recurrence Among Cancer Patients

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Abstract

This study's primary objective was to evaluate the impact of spirituality on the fear of cancer recurrence among cancer patients. A structured interview schedule was used and data from 200 cancer patients were collected employing a purposive sampling technique. SPSS V-20 was used to analyze the data. For the demographic information, simple percentages, frequency, and mean scores were employed. The relationship between the variables was examined by using Pearson's correlation test. The results show that most of the cancer patients (75%) were men in the age range of 49 to 58 (35%), were single (58%), and (42%) were members of joint families. According to the clinical feature data, stage III (38%), patients were found in the majority, throat cancer (12%), while 80% had no family history of the disease. According to an analysis of patients' spirituality, the majority (37%) were extremely spiritual people, and (36%) used the recital of sacred Quranic verses to promote healing. According to the univariate analysis, total spirituality received a higher mean score (M=2.4) and FCR (M=2.60). In a correlation study, spirituality shows a substantial negative relation ($r=-0.65$; $p=.000$) with fear of relapse and a significant positive link ($r=0.485$; $p=.000$) with intrusiveness. The findings also show a negative and significant relationship between the independent variable and FCR in patients ($r= -0.532$; $p=.000$). The study concludes that patients performed various spiritual practices as a supportive mechanism to avoid the fear of recurrence. This study recommends that healthcare professionals need to understand the significance of spirituality as an essential coping therapy and provide holistic care to reduce cancer patients' FCR.

Keywords: Cancer recurrence, Fear of recurrence, Progression, Healthcare

Introduction

Chronic diseases are a growing burden and a significant problem for healthcare systems around the world (World Health Organization, 2002). One of the critical health issues that persist despite significant advancements in medical technology and care is cancer. However, the disease is still progressing, and according to research, 10 million cases of mortality and 19.3 million new cases were registered globally in 2020 (Sung et al., 2021). Cancer becomes a major cause of death in rich nations, and it ranks second to heart disease in impoverished countries. Pakistan is a cancer-emerging nation as well, with only 178388 new cases reported there in 2020 alone, with 13% of those cases being recurrences (International Agency for Research on Cancer, 2020).

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The WHO report states that the expanding cancer problem supports a serious prerequisite for the deterrence of disease and its care (Plummer et al., 2016). The experience of cancer diagnosis and treatment can be astonishing and can shake one's sense of life experience (Girgis et al., 2013). Patients with cancer were dealing with many issues, including worry, fear for the future, hesitation, remission of cancer, alterations in sexual and reproductive function, as well as changes in one's social role within the family and other relations affect their QoL and make dealing with diagnosis and treatment of cancer difficult (Institute of Medicine, 2013).

Several research studies have recognized that fear of recurrence is a unique and prominent dilemma for all cancer patients, irrespective of the period of cancer diagnosis, stage, and since diagnosis (Pistrang & Barker, 1992; Vickberg, 2000; Cameron et al., 2007). Even among patients who are at present getting cancer treatment, fear of recurrence is recorded as the utmost source of psychological stress, higher than the practice of being diagnosed with cancer or the effects of treatment (Antoni et al., 2006). Several research studies point out that the greatest worries for a female with initial-stage of breast cancer are the probability of the disease recurrence. The diagnoses of breast cancer often compel females to face fear, insecurity, and more thinking about their death (Spencer et al., 1999). Furthermore, high levels of fear of recurrence hinder daily life routine, an indicator of maladaptive adjustment and distress experienced by cancer patients (Stanton, Danoff-Burg & Huggins, 2002).

Simard, Thewes & Humphris (2013) studied FCR and its relationship with psychological stress in patients who had been diagnosed with prostate, breast, and colorectal cancer within the previous 10 years. It is assumed that greater levels of FCR were considerably connected with greater anxiety ($r=.64$) and depressive symptoms ($r=.43$). According to Frost et al. (2000) research study, recurrence was associated with a greater degree of hesitancy, a greater number of stress-related symptoms, as well as less hope (Samsi, 2008; Vickburg, 2000). Besides, in cancer patients, post-traumatic stress disorder is linked to a greater fear of recurrence (Leiderman-Cerniglia, 2002; Mehnert, Berg, Henrich, & Herschbach, 2009; Vickberg, 2003). Lee-Jones et al. (1997) theorized that patients who observed their cancer as an enduring fact, with destructive and irrepressible consequences, were likely to involve in additional emotional health fear and have a greater fear of cancer recurrence.

There is some evidence of the common-sense model in dealing with the fear of recurrence; patients who consider they are exposed to cancer are further emotionally at risk and show higher levels of fear of recurrence, while the adaptive coping mechanism is connected with lesser fear of recurrence (Llewellyn et al., 2008). Mahon, Cella & Donovan (1990) reported that more patients in their study found the reappearance of cancer to be more disappointing than the first time diagnosis and that they were less optimistic than they were at the stage of the first time of diagnosis. According to Carver et al. (2005), increased stress and social and sexual disorders are associated with a fear of recurrence. Patients practiced various coping strategies to minimize the harmful effects of cancer disease and decrease the level of fear of cancer recurrence. Patients applied various coping mechanisms, but there are slight research studies on the direct association between spirituality and fear of cancer recurrence. The outcomes of the two studies support a favorable connection between the two notions. Among prostate cancer patients' spirituality negatively predicted fear of recurrence and level of stress (Krupski et al., 2005). Samsi (2008) stated that spirituality added significantly to the prediction of recurrence in Caucasian and African American patients. In specific, a shortage of spirituality leads to death uncertainties, health fears, and womanhood suspicions connected to cancer remission. They further claimed that it is particularly significant to study the association between fear of recurrence and spirituality as it includes stressful existential

problems such as death and alterations in the household role. Breast cancer patients frequently utilized different spiritual practices to manage this chronic disease and its related socio-psychological stress.

A longitudinal study of 80 cancer patients indicated that using spiritual practices and coping reduced FCR (Stanton, Danoff-Burg & Huggins, 2002). Observing the guidelines of Islamic principles, Iranian females have strong faith that cancer is the willpower of God. Even though they freely accept this as a portion of their spiritual beliefs, their faith was reported to support them, and agree with their diagnosis and anticipation of a cure (Fasishi-Harandy et al., 2010). These women take benefits and depend on prayer to fight for FCR. A study of African American women noted that they were inclined to utilize prayers to support them and cope with the FCR (Thompson et al., 2006). This study is mainly interested in shed light on spirituality's role and spiritual practices in coping with cancer patients' fear of cancer recurrence.

Methods

This study adopts the quantitative correlational study design and data collected from the IRNUM cancer hospital, Peshawar, KP. This hospital was established in 1975, becoming the leading cancer institute to diagnose and treat cancer patients and deliver them comprehensive cures. Owing to the sensitive and complex nature of the study, the researcher was ethically bound not to misuse any findings. They were guaranteed the privacy of data taken from them and the pseudo-names of the respondents were used to protect their identities. For the quantitative data, a structured interview schedule was followed. The figure and flow of patients fluctuate from time to time, whereas a sample size greater than 30 and less than 500 is suggested by Roscoe (1975) for this kind of research. A sample of 200 cancer patients was chosen using the purposive sampling method because it was challenging to access and collect data from such a sensitive population. A demographic data sheet was developed for the selected respondents and the researcher visited personally the unit of the study to attain the basic and required information. Patients' level of spirituality was measured through Peterman et al. (2002) (Functional Assessment of Chronic Illness Therapy-Spiritual wellbeing scale (FACIT-Sp) consists of three subscales: Meaning, Peace, and Faith. While the Concerns About Recurrence Scale (CARS) was used to evaluate the fear of cancer recurrence among cancer patients. This scale has furthermore three subscales: fear of relapse, awareness, and intrusiveness (Vickberg, 2003). Response choices for both scales were based on a 5-point Likert scale that ranges from 0 to 4. The quantitative data was punched into the SPSS V.20 datasheet. Descriptive statistics (percentages and frequencies) were used to study the basic demographic information of the respondents. The descriptive analysis comprised means and standard deviations (SD) of the selected scales. Pearson's Correlation test was applied for measuring the relationship between spirituality and FCR in cancer patients.

Results

Table-1: Demographic Information of the Respondents (n=200)

Gender	F	%	Gender	F	%
Male	151	75.5	Female	49	24.5
Age Group			Educational Level		
18-28	35	17.5	Illiterate	19	14.2
29-38	34	17.0	Primary School	52	38.8
39-48	44	22.0	High School	37	27.6
49-58	70	35.0	Higher Secondary School	15	11.2
59-68	12	6.0	Bachelor	10	7.5
Above 68	5	2.5	Master	1	.7
Marital Status			Structure of Family		
Widower/widow	20	10.0	Nuclear family	37	18.5
Unmarried	116	58.0	Joint Family	84	42.0
Married	63	31.5	Extended family	79	39.5
Divorced	1	0.5	(Field Data)		

Table 01 shows the basic demographic data of the 200 selected respondents through a simple frequency and parentage. In the total selected sample size, 151 (75.5%) were men and 49 (24.5%) were women respondents. In the age group, the greater difference was observed as the majority of 70 (35.0%) respondents were from the 49-58 age group and only 5 (2.5%) participants were from the above 68 age group. In terms of marital status, 116 people (58%) were single, and only 1 (0.5%) were divorced respondents. In educational qualification, a significant number of 52 (38.8%) participants were primary level education and followed by 1 (0.7%) has master levels of education. Moreover, the family structure consisted of nuclear, joint, and extended families. Among the three categories, 84 (42%) were belonging to a joint family and 37 (18.5) were living in a nuclear family setting.

Table-2: Clinical Information of the Respondents (N=200)

Type of Cancer	F	%	Cancer Stage	F	%
Colon	16	8.0	Stage 0	13	6.5
Breast	23	11.5	Stage 1	16	8.0
Prostate	12	6.0	Stage 2	52	26.0
Lung	18	9.0	Stage 3	77	38.5
Throat	24	12.0	Stage 4	42	21.0
Lymphoma	13	6.5	First Time Diagnosed		
Myeloid	11	5.5	Yes	140	70.0
Liver	17	8.5	No	60	30.0
Gastric	15	7.5	Family History of Cancer		
Bladder	15	7.5	Yes	29	14.5
Leukemia	11	5.5	No	161	80.5
Kidney	10	5.0	Don't know	10	5.0
Brain/CNS	15	7.5	(Field Data)		

Table-02 points out the clinical characteristic of the participants, such as; type of cancer, cancer stage, time of diagnosis, and family history of cancer. Among the cancer types, throat and breast cancer encompass the majority of the samples with 24 (12%) and 23 (11.5 %) of the total sample size respectively, and kidney got the lowest 10 (5.0%) rank among the study

sample. While in cancer stages, 77 (38.5%) cancer patients were having stage-III cancer and only 13 (6.5%) was belonging to stage-0. Whereas, in response to the question is the first time diagnosed? Mostly 140 (70%) answered the question with a positive option and 60 (30%) mark the question with a negative option and shows that they were the victim of the cancer remission. Moreover, regarding the family history of cancer, 161 (80.5%) respondents believed that they have no family cancer history, 29 (14.5%) said that some of their family members had been diagnosed with various kinds of cancer, and only 10 (5%) don't know about their prior family cancer history.

Table-3: Levels and Spiritual Practices of the Respondents (n=200)

Spirituality level	F	%	Recitation of holy scripts	33	16.5
Low	14	7.0	Rosary	14	7.0
Medium	45	22.5	Spells	12	6.0
High	73	36.5	Amulet	13	6.5
Very High	68	34.0	Visit a Spiritual Healer	10	5.0
Spiritual / Religious Practices			Specific Quranic Verses	72	36.0
Petitionary prayer	21	10.5	Fasting	13	6.5
Pray	8	4.0	Holy water/ Zam Zam water	4	2.0

The above table shows the spiritual specifications of the study participants. Regarding the spiritual level, mostly 73 (36.5%) cancer patients cared about themselves and were highly spiritual, and 14 (7%) mark a low level of spirituality. Generally, the result indicates that cancer patients practice many types of spiritual therapies for recovery. Only 4 (2%) patients employed Holy water/Zam Zam water for healing, while 72 respondents (36%) practiced the recitation of particular Quranic scripts. The previous study also reported that patients become spiritual and perform various spiritual practices when they are diagnosed as cancer patients as it provides them the courage to cope with their cancer situations throughout treatment and survivorship (Puchalski, 2012).

Table-4: Mean and Standard Deviation of the Variables

Variables	M	SD	Variables	M	SD
Meaning	2.55	.825	Fear of Relapse	2.91	.766
Peace	2.65	.813	Awareness	2.51	.721
Faith	2.45	.861	Intrusiveness	2.33	.810
Spirituality	2.42	.596	Fear of Cancer Recurrence	2.60	.601

In the table-4 the study participants' perceived levels related to the study variables were assessed through means and standard deviations. To detect the different levels of selected variables and find their average means. The participants represent their attitude for each variable from 0 to 4 (*not at all* to *very much*) on a five-point Likert scale. The greater the score specifies the higher the level of variables and a lesser average score (M=1.99) indicates the lower level of the variable. In the above table, spirituality received the high (M=2.45) score, while, the sub-scales, such as meaning (M=2.55), peace (M=2.65), and faith (M=2.45) also got a higher mean score respectively. It denotes that patients have a higher score for overall spirituality and its subscales. While the Burt, (2010) study result shows that patients with cancer have a great spiritual level and rely on spirituality/spiritual healing practices due to the chronic condition of illness.

The average FCR score for the patients was very high (M=2.60), which demonstrates that cancer patients have a greater fear of the disease returning. The sub-scales such as fear of

relapse got (M=2.91), awareness (M=2.51) and intrusiveness got (M=2.33) mean scores. These findings suggest that FCR is one of the main concerns that is faced by cancer patients from diagnosis till the end of life and further produces several health issues. While the former study by Simard et al. (2013) indicated that up to 79% of cancer patients considered FCR to be the most common fear among cancer patients during and after treatment phases.

Table -5: Correlations between Independent and Dependent Variables

I. Variable	D. Variable	r	p
Spirituality	Fear of Relapse	-0.651	.000
	Awareness	0.518	.189
	Intrusiveness	0.485	.003
	Fear of Cancer Recurrence	-0.532	.000

Table-5 indicates the direction and degree of the relationship between the variables. The results indicate that spirituality has a substantial negative connection ($r=-0.65$; $p=.000$) with fear of relapse and a significant positive correlation ($r=0.485$; $p=.000$) with intrusiveness. While awareness and spirituality had a weak correlation ($r=0.518$; $p=.189$), respectively. Further, the outcomes also show that the independent variable has a negative and significant relationship ($r= -0.532$; $p=.000$) with FCR in patients. The previous study by Koral & Cirak (2021) also indicated that spirituality is a mediating factor and a negative correlation was observed between spirituality and FCR ($\beta=-0.22$, $P=0.04$). Furthermore, the study by He, Li & Hong (2020) showed that spirituality is a negative predictor for FCR among cancer patients.

Discussion

Cancer diagnosis is a serious and ongoing problem that has an impact on the patient's entire health both during and after treatment. A patient's health improvement through various and efficient methods is one of the main goals of cancer treatment. The current study looked into how spirituality affected cancer patients' fear of recurrence of the disease. According to the study's findings, 36% of cancer patients were high and 34% of very high spiritual patients expressed a belief in spirituality. Additionally, (36%) of patients regularly recited sacred Quranic verses, and (10)% of respondents prayed for health. They considered spiritual practices as a positive source of strength and healing for a patient. The univariate analysis reveals that the FCR received a higher mean score overall (M=2.60), indicating that it is one of the most important issues for patients who have been diagnosed with cancer. The correlation results reveal that spirituality significantly and negatively influences cancer patients' overall fear of cancer recurrence ($r= -0.532$; $p=.000$). Spirituality is constantly associated with lesser fear of cancer recurrence in the present study as well as previously conducted studies. A research of 551 Caucasian cancer patients noted that 59% of the respondents had FCR, but those patients who considered themselves as very much spiritual had a lesser amount of FCR (Cannon et al., 2011). Likewise, in an empirical study with 130 breast cancer patients, Schreiber (2011) reported that belief in God's existence was related to a low level of FCR. The results further display that spirituality has a negative and significant correlation ($r= -0.651$; $p= .000$) with fear of relapse and a positive significant relationship ($r= 0.485$; $p= .003$) with intrusiveness. Krupski et al. (2005) conducted a research study on prostate cancer patients and found that patients' spirituality negatively predicted fear of recurrence and the degree of anxiety associated with the fear. Furthermore, the same result was also found in a study by Ashing-Giwa (2004) which demonstrates that African American women rely on their spiritual beliefs to help them deal with the FCR. Moreover, several other

studies reported that spiritual coping was considerably connected with lower FCR (Mirabeau-Beale et al., 2009; Matulonis et al., 2008; Schreiber, 2011).

Conclusion

The impact of spirituality on cancer patients' fear of cancer recurrence was assessed and summarised in this study. The findings demonstrate that cancer patients engaged in a variety of unconventional spiritual practices to improve their health and reduce their fear of cancer recurrence. The study found that spirituality plays a significant role in cancer patients' FCR and to overcome their health-related problems attached to the disease and increasing their well-being. Therefore, this study recommends that healthcare professionals need to understand the importance of spirituality as well as other allied healthcare strategies as an integral coping therapy and provide holistic care to minimize cancer patients FCR.

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