

Impact of Spirituality on the Quality of Life in Cancer Patients:

A Case Study of INOR Abbottabad, Pakistan

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Abstract

Spirituality has been found to have positive impact on the overall quality of human life. This study was conducted to know the impact of spirituality on the quality of life in cancer patients. For this purpose, a total of 134 cancer patients in the Institute of Nuclear Medicine Oncology and Radio therapy (INOR) Abbottabad were interviewed through interview schedule. Spirituality was taken as independent variables while life quality and its sub aspects including social, emotional, physical and functional well-being were selected as dependent variables.

A univariate and bivariate analysis were carried out to calculate the responses. Results of the mean test show a higher level of spirituality (M=3.26) and quality of life (M=2.93) of the study participants. Correlation test shows that social aspect has positive correlations and emotional aspect has negative correlations with spirituality. Similarly, physical aspect has moderate significant and functional aspect has non-significant correlations with spirituality. It is concluded that patients with higher level of spirituality have better quality of life.

Keywords: Spirituality, Human, Social, Cancer, Patients

Introduction and Background

About 7.4 million people have been reported as cancer victim in 2004 globally (World Health Organization, 2012) in which 3.7 million were reported in the United States (American Cancer Society, 2008). A total of 3 million new cases and 2 million deaths have been caused by cancer in Asia (Mackay et al., 2006). Pakistan is also considered as the worse affected region but statistical data on cancer is not available. However, the Karachi Cancer Registry (KCR) reported that during 2000-08, 48% cancer patients were male and 52% were female. It was further reported that 33% male patients having neck cancer while 39% cases of breast cancer were accounted among female

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in the province of Sindh only (Hanif et al., 2009).

Due to the deadly nature of the disease, cancer patients are confronted with many socio-psychological and physical issues which seriously undermine their general well-being. The patients are overridden by certain negative emotions such as anxiety, depression and fear which further exacerbate their health conditions. In order to muddle through these conditions, patients adopt strategies to create some favorable attitudes and behaviors. Some patients refer to spiritual practices like meditation; yoga and spiritual healing and the same are considered as favorable methods (Bonevski et al., 2000).

This paper was planned to investigate the effect of spirituality on the quality of life in cancer patients. Spirituality is perceived as the level of individual understanding about his/her relations with supernatural authority such as; God, supernatural power or deity (Aldrige, 1993). Generally spirituality is a package of some positive attributes which includes hope, purpose and peace visualized by the individuals for achieving goodwill in their lives. Quality of life is the overall satisfaction and well-being in life consisted of physical, functional, social and emotional aspects (Fayers & Machine, 2007)

Physical aspect of life quality refers to the positive or negative changes or disruptions which take place in a human body especially featured by comfort, pain and fatigue etc (Friedman et al., 2005). Likewise, functional well-being is the daily basis behavior, abilities and energies for performing various daily routine functions. Social well-being is the perceived level of social relationships and support from family and friends and which also includes participation in leisure activities (Holland, 1989b). Emotional well-being refers to the internal conditions of an individual which includes hope, peace, satisfaction and contentment. Its negative sides include anxiety, depression and maladaptive thinking (Chochinov, 2003).

Spirituality and its relationships have been reported in various studies and it has been maintained that people are now more inclined towards spirituality (Bussing et al., 2008). Generally, spirituality is viewed as a potential defender against pessimistic attitudes such as; anxiety, depression and

hopelessness which are often sprouted in patients with chronic health issues. Moreover, spirituality is a positive predictor for health outcomes particularly within cancer patients (Thune-Boyle et al., 2011). Patients having higher level of spirituality have been reported in better conditions of social and psychosocial adjustment as a result of which their overall quality of life gets improved. Besides, researchers agreed that spirituality improves physical and mental health by removing patient's confusion and discourage the side effects of their illness (O'Connell & Skevington, 2005).

During a self reported survey, patients had reported that their spiritual beliefs and practices help them to develop a sense of control over their emotions and enhance their network of social relations. Few spiritual practices such as prayers, belief on Deity, church and religious participation were found in association with better quality of life in patients (Edmondson et al., 2008). Researchers had tested many assumptions that quality of life and spirituality have strong positive linkages. It has been observed during a study on cancer patients that the patients having higher level of spirituality has demonstrated low level of depression and better quality of life. Furthermore, the relationships of spirituality were also measured in breast cancer patients and 20% variance was found in their quality of life (Lagman et al., 2014).

Study Instruments and Measurement Scales

In this study, spirituality has selected as an independent variable while quality of life has taken as dependent variable. Quality of life was further operationalized through physical, social, emotional and functional aspects to estimate the impact of spirituality on each aspect. To test the selected variables, few scales were identified, its suitability was examined and then certain aspects were adopted. Functional Assessment of Cancer Illness Therapy-Spiritual Well-being (FACIT-Sp) was adapted to measure patient's level of spirituality and quality of life. Quality of life and its sub-aspects were operationalized and different research items and questions were developed to statistically measure the physical well-being, functional well-being, social well-being and emotional well-being. The scales

were measured through five point Likert scale ranging from (0= not at all, 1= a little bit, 2= somewhat, 3= quite a bit, 4= very much). Higher score indicates greater level of those items; mean score of 3.00 or high shows high level while mean score 2.00 or less would determine lower level of the selected item.

Study Population and Sample Size

Unit of analysis for this study was cancer patients of the Institute of Nuclear Medicine Oncology and Radiotherapy (INOR), Abbottabad. At the time of our data collection, a total 223 cancer patients have been admitted in which 134 patients were interviewed through interview schedule by adopting purposive sampling procedure. Descriptive and inferential statistics were utilized for data analysis. Mean and standard deviation test was conducted at univariate level to obtain the value of quality of life and spirituality in patients. The data was also treated with the help of Pearson’s correlation coefficient to measure the correlation between two variables (X) independent and (Y) dependent variables. Results are given in the tables below.

Table-1: Demographic Data of the Respondents (N=134)

| Gender | F | % | Marital status | F | % |
|------------------|----------|----------|--------------------------|----------|----------|
| Male | 87 | 64.90 | Single | 40 | 30 |
| Female | 47 | 35.10 | Married | 94 | 70 |
| Age group | | | Educational level | | |
| 20-30 | 35 | 26.10 | Illiterate | 52 | 39 |
| 31-40 | 39 | 29.10 | Primary | 19 | 14 |
| 41-50 | 34 | 25.20 | Metric | 37 | 28 |
| 51-60 & above | 26 | 19.00 | HSSC & above | 26 | 19 |

Table-01 shows personal information of the study participants in frequencies and parentages. Out of the total 134 study participants, 87 (69.90%) were male and 47 (35.10%) were female. A vast majority 94 (70%) were married, 40(30%) were unmarried. 39(29.10%) of the participants were from the age group (31-40), whereas 35(26.10%) were in the (20-30). A substantial number of 52 (39%) participants were illiterate and followed by 37 (28%) were qualified as matriculate.

Table-2: Clinical and Spiritual Distinctiveness of the

Respondents (N=134)

| Type of Cancer | F | % | Cancer Stage | F | % | Spiritual Practices | F | % |
|----------------|----|-------|--------------|----|-------|---------------------|----|-------|
| Colon | 13 | 09.70 | 0 Stages | 23 | 17 | Petitioner prayer | 22 | 16.40 |
| Lung | 25 | 18.70 | 1 Stage | 34 | 25 | Pray (Dua) | 43 | 32.10 |
| Breast | 20 | 14.90 | 2 Stage | 31 | 23 | Recitation | 39 | 29.10 |
| Prostate | 15 | 11.20 | 3 Stage | 26 | 20 | Rosary (Ziker) | 30 | 22.40 |
| Throat | 11 | 08.20 | 4 Stage | 20 | 15 | | | |
| Lymphoma | 13 | 09.7% | Liver | 21 | 15.6% | Gastric | 16 | 12% |

Table-02 indicates clinical features of the patients such as; type, cancer stage and their spiritual practices. Majority of the sample 25(18.70%) and 20(14.90%) were lung and breast cancer patients respectively, colon, 13(9.70%), prostate, 15(11.20%), throat, 11(8.20%) lymphoma, 13 (9.70%), liver, 21(15.60%) and gastric, 16(12%) in participants. Out of the total, 34(25%) patients were having the (stage 1) cancer history and 31(23%) reported (stage 2). Majority study participant reported that 43(32.10%) patients perform pray or (Dua), 39(29.10%) patients were regularly reciting the Holy scriptures.

Table-3: Cumulative Mean and St.D Values of Spirituality and Quality of Life Aspects

| Statistical Values | Spirituality | Quality of Life | Social Well-being | Emotional Well-being | Functional Well-being | Physical Well-being |
|--------------------|--------------|-----------------|-------------------|----------------------|-----------------------|---------------------|
| Mean | 3.26 | 2.93 | 3.34 | 3.06 | 2.62 | 2.68 |
| St. D | 1.22 | 1.42 | 1.04 | 1.38 | 1.45 | 1.58 |

Table-03 shows mean and standard deviation values of the

perceived level of spirituality and quality of life of the study participants. The average mean value of spirituality (M= 3.26; S.D= 1.22) denotes higher level of spirituality among patients. Similarly, the overall mean value of quality of life (M= 2.93 S.D=1.42) depicts that patients were having a better quality of life. Among the subscales of quality of life, social aspect (M= 3.34, S.D= 1.04), emotional well-being (M=3.06, S.D= 1.38). The data indicates minimum cumulative mean values for functional well- being (M= 2.62, S.D= 1.45) and physical well-being (M= 2.68, S.D= 1.58).

Table-4: Correlation Analysis of Spirituality with Physical and Social Well-being

| <i>Physical well-being</i> | <i>r</i> | <i>P value</i> | <i>Social well-being</i> | <i>R</i> | <i>P value</i> |
|----------------------------|----------|----------------|--------------------------|----------|----------------|
| Lack of energy | -0.068 | 0.001 | Close to friends | 0.156 | 0.007 |
| Trouble in needs | -0.060 | 0.000 | Emotional support | 0.520 | 0.000 |
| Having pain | -0.061 | 0.000 | Support from friends | 0.100 | 0.908 |
| Bothered by side effects | -0.066 | 0.000 | Satisfied with family | 0.410 | 0.000 |
| Feel ill | -0.071 | 0.05 | Feel closer to partner | 0.505 | 0.000 |
| Feel forced for bed rest | -0.049 | 0.211 | P < 0.05 | | |

Table-4 presents correlations between spirituality, physical and social well-being aspects of life quality. In physical aspects, lack of energy (r= -.068, p= 0.001), trouble in peace of mind (r= -.060, p= 0.000), having pain (r= -.061, p= 0.000), bothered by side effects (r= .066, p= .000) and feel ill (r= -.071, p= 0.05) have negative but significant correlation with spirituality. Furthermore, correlation between spirituality and social well-being items including get emotional support (r= .520, p= .000/ p > 0.05), satisfaction with family (r= 0.410, p= 0.000) and feel

closer to life partner ($r= 0.505$, $p= 0.000$) were found in significant relationships with spirituality.

Table–5: Correlation of Spirituality with Emotional and Functional Well-being

| <i>Emotional well-being</i> | <i>r</i> | <i>P value</i> | <i>Functional well-being</i> | <i>r</i> | <i>P value</i> |
|-----------------------------|----------|----------------|------------------------------|----------|----------------|
| Not satisfied with coping | 0.093 | 0.000 | Able to work | - 0.012 | 0.552 |
| Losing hope in illness | -.035 | 0.000 | Fulfilling my works | - .118 | 0.174 |
| Feel nervous | - .055 | 0.000 | Able to enjoy life | 0.033 | 0.708 |
| Worry about dying | -.118 | 0.000 | Sleeping well | 0.299 | 0.254 |
| Condition get worse | -.129 | 0.000 | Food give me energy | -.120 | 0.167 |
| | P < 0.05 | | Content with my life | 0.157 | 0.005 |

Table- 5 shows correlations between spirituality and the emotional and functional well-being of the study participants. The emotional well-being items: not satisfied with coping ($r= .0093$, $p= 0.000/ p > 0.05$), losing hope in illness ($r= -.035$, $p= 0.000$), feel nervous ($r= 0.055$, $p= 0.000$) worry about dying ($r= -.118$, $p= 0.000$) and condition get worse ($r= -.129$, $p= 0.000$) have negative though significant correlations with spirituality. Additionally, functional well-being aspects which include the items such as able to work ($r= -.012$, $p= .552/ p > 0.05$), fulfilling the household task ($r= -.118$, $p= 0.174$), food give me energy ($r= -.120$, $p= 0.167$) and enjoy things of fun ($r= -.141$, $p= 0.103$) have no significant correlation with spirituality.

Discussion

Majority of the cancer patients were religious and they were regularly performing religious activities for their healing. In table-2, a total of 32% of all the respondents were engaged in performing pray, while 29% were doing recitation and the remaining 22% were involved in rosary for healing of their illness. These findings are found consistent with the results of

previous research of Groeneveld et al, (2007) who reported from their studies that majority of the participants were religious who were attempting to develop certain personality attributes through spiritual activities. In table-3, patient's spirituality got higher mean score which shows that they claim firmly that their spiritual views help them in coping with their illness.

Similar results have also reported by Burt (2011) that cancer patients have high level of spirituality and involvement in the religious practices, because their spirituality helped them to shed up pessimism and make them hopeful. The univariate level analysis of our study suggest that spirituality develops certain positive personality attributes in patients as a result of which their social and emotional well-being is improved and they found themselves in intimate relations with their family and friends. Besides, their overall physical well-being increases with the decrease in their pain and they do not feel their body as liability. However, spirituality and spiritual views have been found to have little impact on the overall functional well-being of patients

Results of correlation given in table-4 denote that spirituality has significant correlations with quality of life and its sub-aspects such as; physical well-being has negative but significant correlation with spirituality. In (FACT) scale, negative items for physical aspects such as lack of energy, trouble in needs, having pain, bothered by effects and forced for bed, therefore these were found in negative relations with spirituality. It is deduced from the result that as spiritual views enhances, it reduces negative physical aspects in cancer patients. The prior findings of Sawatzky et al., (2005) support positive correlation of spirituality with quality of life in patients due to the mediating role of other factors such as, age, stage of cancer, better physical condition, pain, fatigue, energy, nutritional aspect, treatment, medicine and care.

The results of social well-being aspect of life quality propose that spirituality has positive significant relationship and shares their part in social well-being aspects. Furthermore, our study suggests that spirituality has negative but strong significant correlation with emotional well-being. Powerful spiritual views discard negative feelings such as fear of death,

despair and nervousness. Patients were not doubtful about their lives that may disrupt their emotional strength which necessitates better mental functioning.

Spirituality gives birth to certain personality attributes such as hope, peace and calmness and protects patients from becoming panic, anxious and pessimistic. Study found no positive correlations between spirituality and functional aspect and the negative relation in this study may because of the selected items and other intervening factors such as physical disability, mental health issues and nature of the disease.

Conclusion

Result and conclusion of this study testifies the generally held views and popular opinion on the positive relationships between spirituality and quality of life especially among cancer patients. It was reviewed that patients diagnosed with cancer put to medication process but the impact of the disease is so overwhelming that patients supplement to heal their illness by developing certain personality attributes through spiritual practices. Spirituality is a facilitator in creating hope, peace, sociability and contentment which are helpful in mitigating the negative effect of the disease.

It is evident from the result of this study that spirituality is a potential predictor for improving the quality of life in cancer patients and it has strong influence on patient's social, emotional, physical and to the some extent on the functional well-being. Based on the findings, spiritual therapy may be included in the mainstream medical practices in cancer hospitals and therapeutic centers.

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