

# A Correlational Study of Psychosocial & Spiritual Well Being and Death Anxiety among Advanced Stage Cancer Patients

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**Abstract** Present study investigated the relationships among psychosocial, spiritual well being and death anxiety among advanced stage cancer patients in order to improve the prognosis and quality of life as well as reduce their sufferings. By studying various well beings and death anxiety, it would be possible to identify the psychological needs of cancer patients in order to help the treatment of cancer patients and make them mentally strong to cope with their disease. Data was collected from a sample of 80 advanced stage cancer patients, from six exclusive cancer hospitals of western and central zones of India. Patients were identified as advanced stage patients as per clinical details (treatment history, diagnostic profile & records) and diagnosis was done by treating doctors of the hospital. Results were analyzed to identify the psychological needs of cancer patients. Obtained results were analyzed using SPSS for descriptive and variance analysis followed by multiple correlation. Results revealed negative correlation between psychosocial well being and death anxiety and also same results were found between spiritual well being and death anxiety. It indicates that enhancing the psychosocial and spiritual well being of cancer patients can reduce their death anxiety and promote better quality of life. Palliative care and Cognitive Behaviour therapy can play a very important role in this regard.

**Keywords:** psychosocial well being (PSWB), social well being (SOWB), emotional well being (EWB), functional well being (FWB), spiritual well being (SPWB), death anxiety (DA)

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## 1. Introduction

Recent times have seen an increase in the incidence of cancer, mainly attributed to urbanization, industrialization, lifestyle changes, population growth and many other unknown reasons. In spite of good advancements for diagnosis and treatment, cancer is still a big threat to the society (Kotnis et al., 2005). This is the second most common disease after cardiovascular disorders for maximum deaths in the world (Jemal et al., 2007). It accounts for about 23 and 7% deaths in USA and India, respectively. Projections based on the GLOBOCAN 2012 estimates predict a substantive increase to 19.3 million new cancer cases per year by 2025, due to growth and ageing of the global population. The myth that cancer affects people mostly in the developed countries is being broken by the fact that, more than half of all cancers (56.8%) and cancer deaths (64.9%) in 2012 occurred in less developed regions of the world, and these proportions will increase further by 2025.<sup>1</sup>

Deaths from cancer worldwide are projected to continue rising, with an estimated 13.1 million deaths in 2030. The cancer burden in developing countries is reaching pandemic proportions. Cancer is one of the leading causes of death in India, with about 2.5 million cancer patients, 1 million new cases added every year and with a chance of the disease rising five-fold by 2025. Indian Council of Medical Research (ICMR) has urged the Government of India to make cancer a disease requiring notification. There is a high probability of treating cancers if detected early -- in Stage I or Stage II.<sup>2</sup>

**Risk Factors of Cancer-** According to epidemiological studies, 80-90% of all cancers are due to environmental factors of which, lifestyle related factors are the most important and preventable. The major risk factors for cancer are tobacco, alcohol consumption, infections, dietary habits and behavioral factors. Tobacco consumption, either by way of chewing or smoking, accounts for 50% of all cancers in men. Studies have shown that appropriate changes in lifestyle will reduce the mortality and morbidity caused to cancer. About 30% of cancer deaths are due to the five leading behavioral and

<sup>1</sup> [http://www.iarc.fr/en/media-centre/pr/2013/pdfs/pr223\\_E.pdf](http://www.iarc.fr/en/media-centre/pr/2013/pdfs/pr223_E.pdf)

<sup>2</sup> <http://www.moneycontrol.com/gestepahead/article.php?id=965373>

dietary risks: high body mass index, low fruit and vegetable intake, lack of physical activity, tobacco use, alcohol use.<sup>3</sup> The increasing trend of cancer in recent decades and its adverse effects on the physical, emotional, spiritual, social, and economic aspects, introduced cancer as a major health problem of the century. Most of these patients would experience more severe mental problems such as anxiety or depression, which can reduce their quality of life and their daily activities (Pedram, 2011).

**Causes of Cancer-** Cancer is primarily an environmental disease with 90–95% of cases attributed to environmental factors and 5–10% due to genetics. Environmental, as used by cancer researchers, means any cause that is not inherited genetically, not merely pollution. Common environmental factors that contribute to cancer death include tobacco (25–30%), diet and obesity (30–35%), infections (15–20%), radiation (both ionizing and non-ionizing, up to 10%), stress, lack of physical activity, and environmental pollutants. It is nearly impossible to prove what caused cancer in any individual, because most cancers have multiple possible causes. For example, if a person who uses tobacco heavily, develops lung cancer, then it was probably caused by the tobacco use, but since everyone has a small chance of developing lung cancer as a result of air pollution or radiation, then there is a small chance that the cancer developed because of air pollution or radiation.<sup>4</sup>

Cancer patients suffer from a variety of problems, socially and psychologically. Socially, the illness, treatment and its consequences (tiredness, lack of energy, feeling ill) may result in social isolation. This can be increased by the fear and uncertainty of by-standers how to approach the patient, what to say to him, and what to expect from him. Psychologically, the patient has to cope with the emotional consequences of the illness, such as changes in life perspective, mourning his lost health, and anxiety and uncertainty about the future.

**Well Beings and Cancer-** Well being is not just the absence of disease or illness but a complex combination of a person's physical, mental, emotional and social health status. It is strongly linked to happiness and life satisfaction. In short, well being could be described as how one feels about oneself and one's life. The aim of all humanitarian responses, from a psychosocial perspective, is to provide an environment that will enable people and communities to heal after a traumatic event. Psychosocial well being, including social, emotional and functional well being, reflects the dynamic relationship between psychological and social processes. Psychological processes are internal; they include thoughts, feelings, emotions, understanding and perception. Social processes are external; they are comprised of social networks, community, family and environment. Cancer affects the psychological well-being of a patient, which mainly results in depression and anxiety (Costanzo et al., 2009). A great amount of cancer patients suffer from social, emotional, and psychological distress due to the diagnosis and treatment of cancer (Carlson & Bultz, 2003; Podmore, et al., 2009; Smith et al., 2007). Long-term supportive care services should provide support to both patients and their partners in relation to their unmet needs, screening them

for psychological disorders, referring them appropriately and timely and optimizing symptom management in order to improve the patients' QOL (Molassiotis et al., 2011).

Social well being refers to the ability to interact successfully within a community and throughout a variety of cultural contexts while showing respect for self and others. To achieve social well being, one can acquire the skills to communicate effectively, resolve conflicts, transcend differences, and provide leadership in community. The social difficulties remain present at all the stages of the disease (Wright et al., 2005) and every stage has its own difficulties to overcome. The distress which patients experience is also reflected in their surroundings, as cancer not only affect the patient, but also close family and friends.

Emotions play an important role to cope with illness, such as potential effects of positive emotional states on health-related behaviors. The implications of decreased emotional well-being are related to mental health concerns such as stress, depression, and anxiety. These in turn can contribute to physical ill-health such as digestive disorders, sleep disturbances and general lack of energy. On the positive side, enhanced emotional well-being is seen to contribute to upward spirals in increasing coping ability, self-esteem, performance and productivity at work, and even longevity. The diagnosis and treatment of cancer is a stressful and threatening experience, which can be emotionally devastating to person and set off a chain of events and trigger emotions that will change every aspect of life. Patients must make many important decisions about medical care and life, often under intense emotional stress.

Enhancing daily functioning and well-being is an increasingly advocated goal in the treatment of patients with chronic disease. It is the ability of a person to perform the usual tasks of daily living and to carry out social roles. Advances in early detection, diagnosis, and treatment have led to prolonged survival for many individuals with cancer. The treatment of cancer has increased in complexity, leading to new kinds of functional problems. Surgical procedures are often less extensive than in preceding decades in an attempt to preserve organ function. Furthermore, functional impairment from cancer and its treatment is particularly important in the elderly population, a group in which cancer is being diagnosed and treated more aggressively (Sweeney, 2006). Functional status and quality of life have been fundamental concerns of oncology practice since 1949, when Karnofsky & Burchenal developed a clinical scale to quantify the functional performance of cancer patients (Karnofsky, 1949 & 1984). It was found that higher levels of religiosity/spirituality predicted higher levels of well-being, and very high levels of religiosity/spirituality, which were significantly, positively correlated with dimensions of HRQOL (Spiritual Well Being, Functional Well Being, and Relationship with Doctor). Furthermore, these high levels of religiosity/spirituality predicted better functional well being and satisfaction with the patient doctor relationship while controlling for potentially confounding variables (Wildes et al., 2009).

Spiritual well being is about inner life and its relationship with the wider world. To be spiritually well, will mean a positive engagement with others, and self

<sup>3</sup> <http://www.who.int/mediacentre/factsheets/fs297/en/>

<sup>4</sup> <http://en.wikipedia.org/wiki/Cancer>

environment. It is an integral part of mental, emotional and physical health. It is considered to be a primary coping resource on the journey of recovery and healing. It can or cannot be associated with a specific religion and is merely one's own journey to discover things of importance in life as well as one's place among them. Spiritual well-being is a state in which the positive aspects of spirituality are shown. Through spiritual well-being classes, people become empowered and realize that even though they have issues, stressors, and challenges, they are not defined by these circumstances. A study provides evidence that breast cancer survivors in Iran experience a poor quality of life across a broad spectrum of health domains, particularly social, emotional, and spiritual, indicating that psychosocial-spiritual support should be considered in caring for patients with breast cancer (Jafari et al., 2012). Spiritual well-being plays an important role for cancer patients when faced with psychosocial adjustment related to life with colorectal cancer and a colostomy (Li et al., 2012). Spiritual well being was significantly associated with psychosocial adjustment (Lin et al., 2012). It was found that greater spirituality was associated with better health related quality of life (Zavala, 2009).

Anxiety is a normal reaction to cancer which may increase feelings of pain, interfere with one's ability to sleep, cause nausea and vomiting, and interfere with the patient's (and his or her family's) quality of life. If left untreated, severe anxiety may even shorten a patient's life. The level of anxiety experienced by one person with cancer may differ from the anxiety experienced by another person. This may be due to the fear of death or lifelong treatment related morbidity. As an existential issue, death anxiety stems from the conscious awareness of one's own mortality (Solomon, et al., 2000) and may be defined as "negative emotional reactions provoked by the anticipation of a state in which the self does not exist" (Tomer et al. 1996). According to Maddi (1980), death anxiety arises not only by actual confrontations with death but also from experiences of unwanted endings, limitations of time or energy, or disproved ideals that threaten the meaning of life.

Suffering comes in many ways for patients confronting cancer. One of these is an unspecified fear about death, which is an existential issue. The aim of this study was to investigate the relationship between death anxiety and its correlates in cancer patients. Death anxiety was associated with anxiety, depressive symptoms, and beliefs about what will happen after death. In conclusion, death anxiety could not be regarded as a natural consequence of having cancer; it is associated with the unresolved psychological and physical distress (Gonen, 2012). Present study made an effort to find out the role of well being among advance stage cancer patient and how well being plays a role to reduce the death anxiety of the cancer patients.

## 2. Method

**Sample** - Sample was collected from six exclusive cancer hospitals from western and central zone of India however, patients' group represented different states of northern and eastern India too. 95 adult patients at the advance stage of cancer were selected through purposive

sampling technique out of which 80 adult patients (45 male, 35 female) (age range 18 to 72 years  $M=45$  years), expressed their willingness to participate in the study. Patients were identified as advance stage patients as per clinical details (treatment history, diagnostic profile & record) and diagnosis done by treating doctors of the hospital.

**Tools and Techniques**- Primary data was collected through survey technique, using descriptive and inferential statistics to investigate the objectives of this study.

Functional Assessment of Cancer Therapy- General (FACT-G), Functional Assessment of Chronic Illness Therapy-Spiritual Well Being (FACIT-SP), and Death Anxiety Scale were used to assess the well beings and death anxiety of the subjects. Psychosocial well being was measured through FACT-G, comprising of 27 items under the 4 domains: physical well being (PWB, seven items), functional well being (FWB, seven items), social /family well being (SFWB, seven items), and emotional well being (EWB, six items). Functional well being assesses the degree to which the respondent can participate in and enjoy the normal daily activities; social/family well being questions assess social support and communication; and the emotional well being measures mood and emotional responses to illness. FACT-G has a one week test-retest reliability of  $r = 0.92$  (Cella et al., 1993). Internal consistency reliability of the sub scales ranged from  $\alpha = 0.69$  (social well being) to  $\alpha = 0.82$  (physical well being) with an overall internal consistency of  $\alpha = 0.89$  for the 27 items. Spiritual well being is 12-item scale (Cronbach  $\alpha=0.87$  in this study) was designed to measure important aspects of spirituality, such as a sense of meaning in one's life, harmony, peace- fullness, and a sense of strength and comfort from one's faith (Fitchett et al., 1996, Peterman et al., 2002). Death anxiety of the patients was assessed through DAS comprising of 15 items (Conte et al., 1983). Internal consistency of this scale was found to be 0.83 and test-retest reliability was 0.87.

**Procedure**- Data collection started with preliminary discussion with doctors regarding patient's current condition and whether patient is in the position of providing the data required for the study. It was followed by seeking willingness of patient and his/her relatives to participate in the study as they generally help the patient to provide the required information. Confidentiality of responses and respondent was adequately assured. After that questionnaire was provided to the patients and instructions were given. Some patients respond himself but few of them were unable to read or write on the questionnaire and for those patients, items were read by the investigator and a color code response sheet was shown to them for seeking their responses. The obtained data was analyzed using descriptive and inferential statistics to obtain findings for the objectives of this study, using multiple correlation, and regression analysis through SPSS.

## 3. Results and Analysis

In reference to cancer patients, well being plays an important role in improving their physical and mental health. Present study explored the relationships among

psychosocial, spiritual well being and death anxiety among advance stage cancer patients. The main objective of any treatment is to cure the disease /provide symptomatic relief to the patient in order to improve the quality of life and well being. All well beings were categorized in three levels- low, moderate and high using quartile distribution through which less than 35 score was categorized as low level of psychosocial well being, 35 to 60 moderate, and above 61 score indicated high level of psychosocial well being. Similarly, for social, emotional, functional and spiritual well being, less than 11 score was categorized as low, between 11- 20, moderate level and above 21 score denoted high level of respective well beings. In regard to Death anxiety, score below 11 indicated low level of death anxiety, 11 to 18 as moderate level and 19 and above score exhibited high level of death anxiety.

When compared together, relatively higher level of psychosocial well being (PSWB) was found in advance stage cancer patients with the scale average of 2.04 in comparison to spiritual well being (SPWB) with scale average 1.88. Only 7% of the patients were found to be experiencing high PSWB and rest of 93% were from moderate to low level of well being (Figure 1).

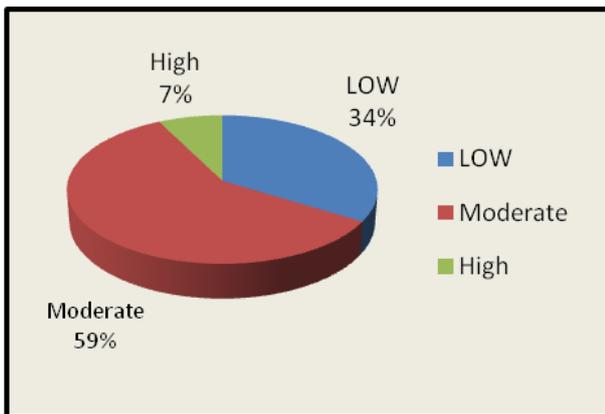


Figure 1. Levels of Psychosocial WB

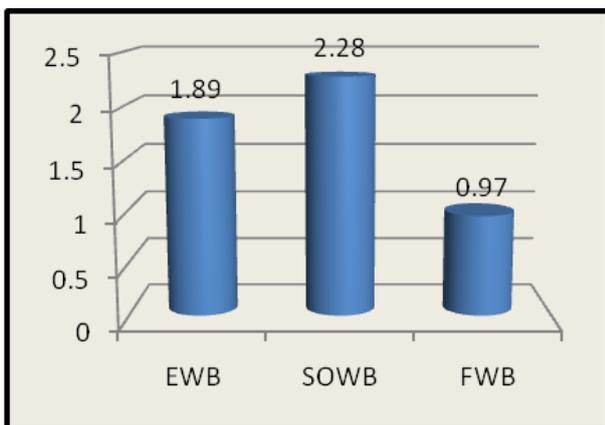


Figure 2. Means of Component of PSWB

PSWB is further divided in three components social well being (SOWB), emotional well being (EWB) and functional well being (FWB). Among these components, level of SOWB was found to be highest in subjects (M=2.28) as compared to EWB (M= 1.89) and FWB (M= 0.97) (Figure 2). About 10% of the patients were found to be experiencing high SOWB and rest of the 90% were

from low to moderate category (Figure 3). These results indicated that cancer patients generally remain isolated from normal human beings in view of their frequent hospitalization and physical condition, so their social contacts and other activities which were important for their social life, gradually get reduced affecting their PSWB and further quality of life.

In regard to the second component of PSWB, i.e., EWB, which talks about the feeling of sadness, satisfaction with coping style, nervous feeling, anxiety related to physical condition and dying etc., about 95% of the sample was experiencing low to moderate EWB and only 5% patients were experiencing higher EWB. A lack of emotional support was strongly related to higher level of depressive symptoms in cancer patients whereas the availability of someone with whom the individual can discuss their illness-related concerns seems to be of great importance for patients' adjustment (Robinson & Turner, 2003).

In regard to the third component of PSWB, i.e., FWB, which is ability to manage work at home and office, enjoying life, good sleep and overall quality of life, about 98.8% of the patients were feeling low to moderate level of FWB and only 1.2% of the patients were at the high level. Wildes et al. (2009) found that high level of religiosity/spirituality predicated better FWB. Lin & Bauer (2003) indicated that health professionals can play an important role in enhancing well being like self awareness, coping and adjusting effectively with stress, relationships, sense of empowerment and confidence and living with meaning and hope.

Spirituality is an important resource to cope with illness, particularly for cancer patients. It plays an important role in helping people stay healthy, at least at the psychological level. SPWB has been assessed by the peace of mind that the patients are experiencing, sense of purpose, productive works, sense of harmony, belief in god, inner strength, acceptance of disease due to belief in spiritual power etc. About 63.8% subjects of the total sample were found to be experiencing higher level of SPWB and rest of 36.3% were having moderate to low level of SPWB (Figure 3). SPWB can facilitate patients' healing and recovery by enhancing their inner strength, comfort, peace, wellness, wholeness, and coping abilities and by alleviating depressive symptoms promoting mental health, increasing energy, and decreasing cancer related distress (Woods et al. 1999 & Yanez et al., 2009).

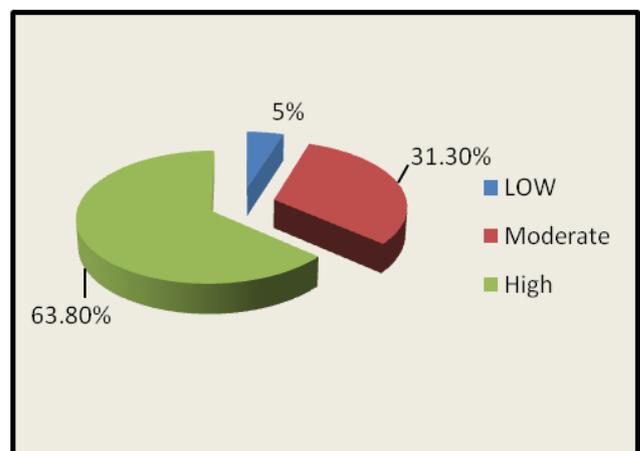


Figure 3. Levels of Spiritual Well Being

About 18.8% of the subjects were found to be experiencing high DA and rest of the 81.2% were from low to moderate (Figure 4). Tsai et al. (2005) suggested that reducing death anxiety through comprehensive palliative care can contribute towards good and peaceful death. They found in their study that as death anxiety level decreased the scores on total good death scale increased significantly.

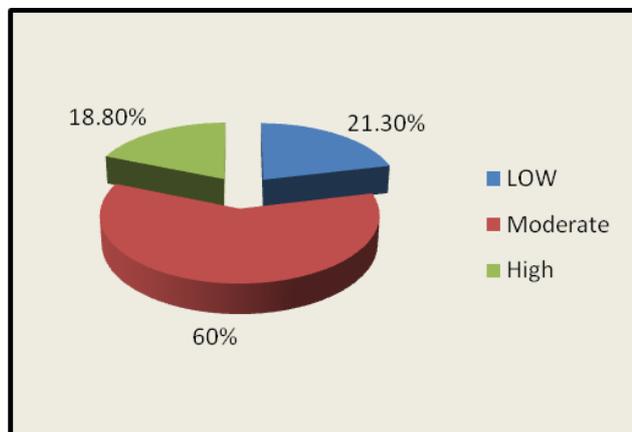


Figure 4. Levels of Death Anxiety

In regard to DA and PSWB, the negative relationship was found ( $r = -0.105$ ) indicating that with the decreasing DA, the PSWB was increasing. Similarly for SPWB ( $r = -0.122$ ), the correlation was found to be negative indicating that with the increase in PSWB and SPWB, DA was reducing, though, this relationship was statistically not significant. It is very important for cancer patients' care that their all types of well being are ensured through social support/palliative care, so that their anxiety level gets reduced and they are able to experience a better mental health and relief from sufferings.

The correlation between PSWB and SPWB ( $r = 0.437^{**}$ ), PSWB and SOWB ( $r = 0.340^{**}$ ) revealed that all well beings are positively correlated with each other which they are bound to be. Similarly, PSWB and EWB ( $r = 0.626^{**}$ ), PSWB and FWB ( $r = 0.656^{**}$ ), FWB and EWB ( $r = 0.255^*$ ), EWB and SOWB ( $r = 0.124$ ) are also positively correlated.

It indicates that the changes in one well being can be responsible for the positive change in the other well being too. Though all well being are significantly correlated, but some just have a trend of positive relation. Relation between PSWB plays a very important role in regard to physical health. If a person is socially active and have a good social circle, it also helps to keep him healthy and happy even though disease outcome is not good as they get the good outlet for their suffering through talking cure and released emotions. In the PSWB, subjects have reported different supports like emotional, social and mental which can help them learn to cope with psychological stress. Such supports can reduce the level of depression, anxiety and disease and treatment symptoms among patients. People in good mental health have the ability to recover effectively from illness, change or misfortune. The findings show that the subject who have obtained higher score in SPWB, have higher score in other WBs too. Spirituality is a very important resource to cope, particularly for patients with cancer where they learn to cope with their problems and beat it with spiritual strength.

In cancer patients, spirituality may be beneficial for maintaining self esteem, providing a sense of meaning and purpose, giving emotional comfort and providing a sense of hope (Thune et al., 2006). Danhuer et al. (2009) found that although spirituality was related to higher well being, quality of life did not influence spirituality. McClain et al. (2003) mentioned that the relationship between spirituality and psychological well being could differ between patients of different ethnic or religious background and become stronger as illness progresses.

Linear regression analysis was calculated to make the prediction of possible relationship between well being and death anxiety. To see the strength of relationship between well being (dependent variable) and death anxiety (Independent variable) multiple correlation coefficient was computed. The value of multiple  $R^2$  of 0.44 ( $F(6, 73) = 9.562, p.0001$ ) was found, indicating that 44% of the variance in well being is to be accounted for by these variables. Multiplying beta weights by corresponding  $r$ , each variable's contribution can be seen (Guilford, 1956). Per unit increase in DA was found to decrease WB by 0.786 units indicating that WB reduces DA in a significant manner.

Coefficient of multiple correlation was computed to know the relationship between death anxiety (dependent variable) and well being (independent variable). The value of multiple  $R^2$  of 0.188 ( $F(5, 74) = 3.425, p < 0.008$ ) was found which indicates that 18.8% of the variance in death anxiety is to be accounted for by this variable. WB is strongly associated with happiness and life satisfaction. If someone is happy and satisfied with their life, he has less of anxiety and other mental stresses. Results indicated that every one unit increase in WB will cause DA to decrease by 0.055 units.

## 4. Discussion

Cancer is often associated with a great deal of psychological distress and mood disturbances affecting quality of life and well being. Cancer treatments are not always curative; there are effective strategies for improving cancer patients' coping and quality of life, even in low resource settings (Zabalegui et. al., 2005). Health-related quality of life (QOL) has emerged as a significant medical outcome measure, and its enhancement is an important goal in oncology and other clinical disciplines. Hence, there is a need to understand better, the relative contributions of several factors affecting patients' perceptions and reports of well-being and satisfaction with life. All types of wellbeing, including psychosocial and spiritual, become instrumental in making person think positively towards life and not much anxious about what will happen in future, no matter, they are at the advanced stage of cancer. Spiritual well-being is a potentially influencing factor on patients' quality of life. As it was found in the present study that spiritual well being enhances other well being and reduces death anxiety. Several studies have shown that religious involvement and spirituality are associated with better health outcome, coping skills, and health related quality of life, as well as lower rates of anxiety, depression, and suicide, and that addressing the spiritual needs of the patient may enhance recovery from illness. Moreover, research has confirmed

that spiritual well being is positively associated with quality of life, fighting-spirit, but also fatalism, yet negatively correlated with helplessness/hopelessness, anxious preoccupation, and cognitive avoidance (Cotton et al., 1999). It is strongly recommended that for cancer patients, there is a need for holistic health care plan based on spiritual development for enhancing their psycho-social, emotional wellbeing, spiritual well being and in turn, the physical well being too, to some extent. All resources, including spiritual resources, that encourage healing, adjustment, and a better quality of life for patients should be addressed in the arena. In this way, attempt can be made to reduce their anxiety and thus enhance their health outcomes and quality of life to some extent.

## 5. Conclusion

The study has explored various psychological dimensions of cancer health care by highlighting the importance of well beings. Overall results indicated that relatively higher level of psychosocial well being was found in subjects in comparison to spiritual well being. The level of social well being was higher in subjects as compared to functional and emotional well being. All the subjects reported higher level of death anxiety and the inverse relationship was found between death anxiety and well being. With the decreasing death anxiety, the psychosocial and spiritual well being increased and subjects were able to experience a better mental health and relief from disease related sufferings. Psychosocial well being was found to be significantly correlated with SPWB, SOWB, EWB and FWB. Similarly functional well being was found to be significantly correlated with EWB. Rest of the components of wellbeing exhibited a trend of positive relation which was statistically not significant. Therefore, enhancing the psychosocial and spiritual well being can help in reducing the anxieties associated with death and can improve the health outcomes and quality of life of cancer patients. Efforts are needed on the part of family members and other support extending people like counsellors, health psychologists, medical doctors and paramedical staff and above all palliative care workers to create congenial treatment environment for enhancing their well being which will be a true service to the society.

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