Chapter 1
Introduction
CHAPTER ONE

INTRODUCTION

1.1 Background of the study

The everyday life of a number of people across the globe is being wrecked and restricted by prolonged diseases like cardiac disease, stroke, cancer, persistent breathing problems, and diabetes. This truly does not actually happen only in high-income nations. Four of five chronic disease demises today can be found in low and middle-income nations. People who live with a chronic disease like cancer have a greater risk of developing anxiety and/or depression. Physical health, psychological well-being and mental health are badly affected by chronic diseases like cancer. Distress and other psychological problems are common in cancer patients (Carlson, Groff, Maciejewski, & Bultz, 2010; Turner, Kelly, Swanson, Allison, & Wetzig, 2005). The identification of cancer represents a traumatic experience that can create apprehension, insecurity, sorrow and distress. Women and younger cancer patients were found high on psychological distress (Lynch, Steginga, Hawkes, Pakenham, & Dunn, 2008). Although in modern times technology provide us essential information about the disease, but we can’t keep individual’s personal and social context away from the disease like cancer (Bowling, 2007).

The identification of cancer is said to have the maximum possibility of altering psychological functioning of a patient (Polsky et al., 2005). Previous studies have shown that psychological distress connected with cancer has labeled it as the sixth fundamental indication in cancer care (Carlson et al., 2010). Even if psychological distress following the identification of cancer is expected, the appraisal and supervision of patients’ psychological requirements have remained as a challenge right through the cancer journey (Absolom et al., 2011). The literature has recognized...
multiplicity of personal, environmental and behavioral factors to predict and interpret mental adjustment to cancer (Williams, Neal, Morrison, Hood, & Wilkinson, 2012), but the integrated role of perceived social support and meaning in life is not clearly evident.

The available empirical and theoretical research studies have shown that perceived social support plays an important role in enhancing physical and mental health of the patients suffering from chronic illnesses (Wills & Shinar, 2000). Furthermore, many researchers have found that higher levels of perceived social support are linked with fighting spirit, a positive and beneficial type of mental adjustment among cancer patients (Cicero, Lo Coco, Gullo, & Lo Verso, 2009).

The medical diagnosis and effects of a life-threatening health problem, namely, cancer have the ability to crush self-perceptions, thought patterns of life, specific beliefs of an individual and value structures and could slow down the understanding of autobiographical unity and comprehension (Janoff-Bulman, 1992). Therefore, it can certainly inhibit the sustaining determination and meaning in life, especially in longer-term survivorship (Holland & Reznik, 2005). It is observed in the last couple of years in psychosocial cancer research, more importance has been switched to existential concerns akin to cancer patients, especially upon the role of meaning-making problem management in psychosocial adjustment (Lee, 2008). The advised elegance of existential meaning in the framework of adjustment to a life-threatening health problem was determined by the fundamental notion that, because of cancer diagnosis as well as interrelated problems, individuals might find meaning in the context of previously held beliefs and assumptions (Holland & Reznik, 2005). For that reason, the re-examination of life goals, the perception of death and assimilation
of traumatic incidents into a well-defined autobiography can be considerable concerns through the course of cancer (Breitbart, Gibson, Poppito, & Berg, 2004).

Moreover, meaning in life has also been found a significant factor which safeguards a person from unpleasant effects of stress and has been found positively correlated with the psychological well-being of individuals (Lyon & Younger, 2001).

It is expected that the results from this research will help in improving mental adjustment of cancer patients. A better understanding of the role of perceived social support and meaning in life in adjustment to cancer will contribute to awareness on interventions to improve the quality of life and psychological well-being which are the main focus in psycho-oncology.

1.2 Statement of the problem

The present study purports to investigate “perceived social support and meaning in life in relation to mental adjustment among cancer patients”. The present research endeavor is conducted to fulfill the gap in the role of perceived social support and meaning in life in mental adjustment among cancer patients. The variables selected for the present study are related with the positive psychological states. It is expected that perceived social support and meaning in life will offer cancer patients something to live for and boost their positive mental adjustment qualities and decrease their negative tendencies of mental adjustment. We anticipate that there is practical advantage in studying these variables collectively as it will lead to an intervention program for cancer patients.

1.3 Cancer

Cancer is medically known as malignant tumor. It is characterized by unusual or unrestrained dissection and development of cells, caused by pathological
breakdown in the progression of cell production (Steward & Kliehues, 2003). The cells in our body grow normally and segregate in a restricted way in order to carry on the body functioning normal. As soon as normal cells get spoiled, they expire, and new cells acquire their position. However, all of this practice may fail to produce new cells when the human body may not transact with them, or that the spoiled cells may not expire the way they are supposed to. The expansion of additional cells frequently forms an accumulated tissue called a bulge or tumor. Thus, tumor is the result of the progression concerning consecutive generations of cells, which gradually proceed towards cancerous growth. All tumors enlarge in volume but few of them develop rapidly and others grow gradually. The cancer cells often shift and split from the location of the mass or tumor and penetrate into the bloodstream thereby scattering the illness to new areas of the body and such process is known as metastasis (Steward & Kliehues, 2003).

Broadly, cancer is often categorized into the following types:

**Carcinoma** - cancer which has typically started in the tissues or skin that often cover internal body organs.

**Sarcoma** - cancer that commences in bone, fat, cartilage, blood vessels, muscle, or other supportive tissue.

**Leukemia** - cancer which typically begins in blood-forming tissue, for example, the bone marrow and causes a lot of abnormal blood cells that access the blood.

**Lymphoma and myeloma** - cancer which has typically started within the cells of one's immune system

**Central nervous system cancers** - cancers which start inside the tissues of one's spinal cord and brain (Cancer Tutor, 2017).
1.3.1 Signs and symptoms of Cancer

Symptoms of cancer are determined by location of the tumor. In the beginning there are no signs and symptoms in cancer patients but signs and symptoms become apparent when tumor continues to grow up. The symptoms of the cancer can be divided into two categories:

**Local Symptoms:** Local symptoms come about simply because of the presence of a cancerous tumor. For instance, lung cancer may cause obstruction of one’s bronchus, which results into pneumonia or cough; esophageal cancer may cause contraction of one’s esophagus which makes it complicated to eat; and moreover colorectal cancer can lead to contraction within the bowel leading to the alterations in bowel patterns. Masses of breast or testicles can be easily seen. Other local symptoms may include coughing up of blood, blood inside the urine, as well as in the uterus to genital bleeding (Michael & Michael, 2009).

**Systemic symptoms:** Systemic symptoms may take place as a consequence of special effects of the tumor that are not typically linked to metastatic. The majority of these symptoms may incorporate: quick weight reduction, being excessively tired, fever, and alterations to the skin (Michael & Michael, 2009).

1.3.2 Causes of Cancer

Cancer is mainly an ecological illness with 90–95% of incidents caused because of environmental components and 5–10% because of hereditary factors (Anand et al., 2008). General environmental factors that are the reasons of the cancer incorporate diet and obesity (30–35%), tobacco (25–30%), stress, infections (15–20%), radiation (both ionizing and non-ionizing, up to 10%), environmental pollutants, and lack of physical activity, (Anand et al., 2008; Kinzler, Kenneth,
Vogelstein, 2002). Besides environmental factors, genetics, diet and lifestyle factors also play a fundamental part in cancer (Lichtenstein et al., 2000).

Psychosocial factors may also influence the beginning of cancer through the exposure to stress. A particular kind of stress (lack of social support) has also been attached to both higher occurrence of cancer (Thomas & Duszynski, 1974) and also a rapid course of illness (Reynolds & Kaplin, 1986).

1.3.3 Stages of cancer

Staging is basically a technique of unfolding the extent of a cancer and how far it has expanded. Staging is essential since it assists the treatment team to recognize which treatment plans an individual needs. There happens to be two most significant kinds of staging techniques for cancer. These are generally the TNM technique and the number technique.

TNM refers to Tumor, Node, and Metastasis. This method identifies how large initial cancer is (the primary tumor), whether it has expanded towards the lymph nodes, and whether or not it has expanded to several parts of the body (metastasized). This system makes use of numbers to characterize cancer.

T is defined as the size of cancer and how far it has spread in the adjacent tissue—it might be 1, 2, 3 or 4, with 1 being small and 4 large.

N pertains to whether cancer has expanded towards the lymph nodes – it could be in between 0 (no lymph nodes contain cancer cells) and 3 (a large number of lymph nodes contain cancer cells).

M can be described as whether cancer has expanded into another part of the body – it may either be 0 (cancer has not expanded) or 1 (the tumor has expanded).
Number staging techniques commonly make use of the TNM system to divide cancers into stages. Almost all kinds of cancer have 4 stages, labeled with numbers from 1 to 4. Quite often doctors record the stage down in Roman numerals. So it's possible you will find out stage 4 documented as stage IV (American Cancer Society [ACS], 2015).

Here is a concise description of what the stages mean for many kinds of cancer.

**Stage 1** commonly indicates that a cancer is comparatively small and present in the organ it started in.

**Stage 2** commonly implies that cancer has not yet begun to expand into the adjacent tissue; however, the tumor is larger sized compared to in stage 1. Often times stage 2 implies that cancer cells have expanded to lymph nodes that are adjacent to the tumor. This relies on the specific kinds of cancer.

**Stage 3** commonly implies that the cancer is larger sized. It could have begun to expand in the adjacent tissues and there also are cancer cells in the lymph nodes in the area.

**Stage 4** implies that cancer has expanded from where it began to an additional body organ. In fact, this is called secondary or metastatic cancer (ACS, 2015).

**1.3.4 Prevalence of Cancer**

It has been predicted that cancer will likely to be a fundamental possible cause of mortality rate and morbidity across the world in next few years. Moreover, it is predicted that the number of cases of the latest cancer cases is going to advance from 12.7 million cases in the year 2008 to 21.4 million by 2030, and almost two-thirds of them will appear in low-to-middle income nations (GLOBOCAN, 2013). It is expected that there will be about 2 million to 2.5 million cases related to cancer in India at any given point in time, with around 7-9 lakh new cases being identified.
every year. More or less the majority of these cases expire every year (Park & Park, 2011). This burden is going to be double in 2026 (ICMR, 2003-2004). Bruder (1993) proposed that by 2020, upto 70% of the 20 million new cases annually are predicted to come about in the developing countries. Out of 1, 40, 67,894 cases of cancer worldwide in 2012, India reported 10,57,204 cases (“Every 13th new cancer patient”, 2015). The annual incidence of cancer in Kashmir is seventy per one lakh while as it is 100 in India and 300 in word. According to Regional Cancer Center (RCC), Sheri-Kashmir Institute of Medical Sciences (SKIMS), Soura, Srinagar, the quantity of new cancer patients registered in RCC was 3687 and in 2016 it increased to 4336. Nearly 15 new cases get recorded every day in RCC, SKIMS (Maqbool, 2016).

1.4 Mental Adjustment

The term adjustment to cancer or mental adjustment refers to the absence of psychological morbidity and retuning to premorbid functioning (Hatchett, Friend, Symister, & Wadhwa, 1997). Adjustment is basically a change from one particular state to another; nonetheless, research has generally focused on the end point as opposed to the progression of change (Brennan, 2001).

Watson et al. (1988) made use of the concept of “mental adjustment” which refers to coping methods of persons when confronted with a diagnosis of cancer. Greer and Watson (1987) described mental adjustment to cancer as “the cognitive as well as behavioral reactions expressed by a person towards the diagnosis of cancer”.

Mental adjustment includes (1) appraisal, i.e. the manner through which the affected person views the effects associated with cancer and (2) the ensuing reactions, i.e. what exactly the sufferer feels and does to manage harm and threat posed by the illness (Greer, Moorey, & Watson, 1989).
1.4.1 Mental Adjustment vs. Coping

Mental adjustment is linked with the more extensively spread theories related to coping, which in turn emerges from investigation relating to stress. Overall the curiosity about how people manage demanding events goes back to the start of the past century when attention turned out to be mainly on unconscious mechanisms. To illustrate, Freud made use of the idea of defense mechanism to clarify unconscious processes formerly used to cope with internal threats as well as conflicts (Parker & Endler, 1992). Overall the most commonly used theories related to coping have already been suggested by Lazarus and Folkman. They describe coping as “constantly changing cognitive and behavioral efforts to manage specific external or internal demands that are appraised as taxing or exceeding the resources of a person” (Lazarus & Folkman, 1984).

The theory of Lazarus and Folkman encompasses 3 (three) normal practices: primary appraisal; secondary appraisal; and coping. Primary appraisal is generally considered as understanding several things being a threat. The secondary appraisal includes the process related carrying up into mind an appropriate response to the threat, whereas coping is the process of operating that specialized response. As reported by Lazarus and Folkman (1984), what is considered as demanding is dependent upon both, the environmental surroundings and the capabilities of a particular person. By explaining coping as persistently changing, Lazarus and Folkman suggest that coping is in fact concerned over the situational context, and consequently changes in this particular context. Most often, coping is process-oriented and due to that reason, sometimes their theory is labeled as the transactional theory of coping.
People deal with the diagnosis related to cancer via a cognitive series of actions by appraising the characteristic of a given stressor (e.g. warning), real danger and sometimes they are found in a position to manage it. They seek information about treatment options. Appraisal as well as reappraisal, take place through the entire cancer journey. The management of treatment side effects such as fatigue and physical limitations may change expectations of life. Cancer patients may grieve over their normal life before cancer, and worry about cancer recurrence, which leads to reappraising their expectations of functioning (Hoffman, Lent, & Raque-Bogdan, 2013). Cancer survivors who employ high threat appraisal and low coping appraisal experience more fear of recurrence of cancer (McGinty, Goldenberg, & Jacobsen, 2012). Rand et al. (2012) suggested that illness appraisal is significantly connected with psychological reaction to more advanced cancer in comparison to the patients or illness characteristic. Psychological well-being can be improved by helping patients to appraise their illness. The kind of appraisal may predict depression in cancer patients. The higher depressive symptoms can be predicted by appraisal of harm/loss and greater use of escape/avoidance coping in breast cancer patients (Bigatti, Steiner, & Miller, 2012).

Coping as well as mental adjustment are generally examined in psychosocial investigations along with cancer; nonetheless, each of these concepts are frequently not clearly described (Nordin, Berglund, Terje, & Glimelius, 1999). Nordin et al. (1999) illustrated that mental adjustment is different from the definition of coping of Lazarus and Folkman (1984). They declared that coping is a willful cognitive or behavioral effort, whereas the mental adjustment might be involuntary emotional reactions to frightening events. In mental adjustment, the cognitive appraisal and the ensuing reactions cannot be differentiated.
1.4.2 Types of Mental Adjustment

People respond to the diagnosis of cancer in different psychological ways. Within a prospective 5 year study, Greer, Morris, and Pettingale (1979) made use of semi-structured interviews and standard psychological examination to figure out 69 early breast cancer patients’ reactions towards the medical diagnosis of cancer prior to surgery, three and twelve months right after surgery, and subsequently yearly for 4 years. These people explained four types of psychological responses:

**Denial:** The active rejection of any facts regarding the medical diagnosis is apparent.

**Fighting Spirit:** A particular optimistic attitude with regards to the illness along with a pursuit of information and facts.

**Stoic acceptance:** The medical diagnosis is acknowledged without any inquiry for more information. The health problem and any signs and symptoms are not being taken into account.

**Feeling of helplessness/hopelessness:** Feeling sick and most commonly being eliminated. Everyday life is just wrecked merely by cancer and terrifying thoughts of death. There is certainly an apparent emotional distress. All of these classifications come up with a number of attitudinal, intra psychic and behavioral characteristics connected with adjustment to the diagnosis of breast cancer.

In a separate research study in Denmark by Morris, Blake, and Buckley (1985), 170 newly observed participants who have the beginning of breast cancer, as well as lymphoma, were actually approached. Three different types of outcomes were pointed out:

**Appraisal Statements:** These statements illustrate patients’ analysis of their own medical diagnosis
Mitigating Statements: These statements exhibit patients’ intention to manage their personal thinking about the medical diagnosis

Facilitating Statements: These statements describe the ways patients encourage themselves to think positively without the potential harm of the cancer diagnosis on their lives.

Greer and Watson (1987) developed the mental adjustment to cancer (MAC) scale by using the four authentic kinds of mental adjustment, i.e., ‘fighting spirit’, ‘cognitive avoidance’, ‘hopelessness/helplessness’ and ‘fatalism’ with another additional category, which Watson et al. (1988) identified as ‘anxious-preoccupation’.

Fatalism: The medical diagnosis can be regarded as a slight threat which actually is not possible to control. There are no confrontative techniques and of course, the illness is acknowledged quietly. The patient is unable to search for additional information and assumes a fatalistic attitude. The examples include: “I know what it is often; I know it is cancer, but I’ve just got to carry on as normal; there is nothing I can do; I don’t dwell on it and try to think about it; I leave it all to the doctor”.

Fighting Spirit: This is a confrontative coping response and patient is affirmative regarding the future and believes in possible control on the health problem. The diagnosis of cancer is completely acknowledged and the term “cancer” is made use of. The patient is determined to handle the health problems and attempts to discover as much important information as he/she possibly can. This is often seen as a difficult task and an affirmative analysis is applied. A few examples are as following: “I won’t let cancer beat me; I’m trying everything to get better; I go to these classes to learn to relax and to think positively; At first I was devastated, but now I realized I’ve got too much to live for…; I believe with the help of the doctors, I can get well”.
Cognitive Avoidance (denial): The patient believes in a minimum threat regarding the diagnosis and there is an optimistic view of the prognosis. Patient refuses to accept diagnosis of cancer and avoid using word ‘cancer’. Examples are: “The doctors just took my breast off as a precaution; there could have been a few cancer cells but it wasn’t serious; there’s nothing to worry about”.

Helplessness/hopelessness: Patient perceives the diagnosis as unavoidable and detrimental. He/she seem to feel it is not possible to manage the illness. There are no working strategies for struggling with the illness. Patient constantly thinks about the illness and cannot contemplate something else. Fear of death has ruined everyday life, as well as a wholly pessimistic mindset is adopted. Just for example: “There’s nothing they can do; I am finished; I feel hopeless a lot of the time; I keep worrying about it and cry a lot; I can’t get it out of my mind; I don’t know what to do”.

Anxious-preoccupation: There is always an uncertainty over the management of the disease. The illness is viewed as a serious threat. Searching compulsively for self-esteem and confidence is regarded as behavioral coping responses. The patient responds towards the diagnosis of cancer with anxiety and depression. He/she searches for important information but can certainly interpret that pessimistically. Any kind of pain or aches are interpreted as outbreaks of cancer. He/she attempts to search for different ‘cures’ such as alternative treatments. The Examples are: “I keep worrying about it coming back; I get this pain in the shoulder here, what do you think it is doctor?; I know it’s cancer, I can’t stop thinking about it; I’ve gone to this man who does acupuncture and someone told me about meditation, do you think it helps? 

Different research studies revealed that psychological adjustment influences psychological morbidity. Grassi, Travado, Moncayo, Sabato, and Rossi (2004) explained ‘anxious-preoccupation’ as well as ‘hopelessness’ are the most prominent
coping patterns connected along with psychosocial morbidity; but nevertheless, the role related to ‘fighting spirit’ is not really considerable. Nosarti, Roberts, Crayford, McKenzie, and David (2002) explained pre-diagnostic general overall health, the absence of social support, sense of personal responsibility in addition to avoidance forecast psychological morbidity, and emotional adjustment attitude. They found that ‘fighting spirit’ is connected to higher emotional adjustment, conversely ‘anxious-preoccupation’ and ‘hopelessness/helplessness’ are related to lower emotional adjustment and very high emotional distress. Psychological response to cancer can also have an influence on time-span of survival (Watson, Haviland, Greer, Davidson, & Bliss, 1999). Until recently it was suggested that the construct of mental adjustment is related with the healthcare and psychological consequence in cancer patients (Watson et al., 1988).

A majority of people clinically recognized as having cancer encounter some degree distress during the course of their illness (Hulbert-Williams, Neal, Morrison, Hood, & Wilkinson, 2012). Prior research suggests that diagnosis of cancer associated with feelings of threat and hesitations and anxiety might be a consequence of fear of suffering and death (Gil, Costa, Hilker, & Benito, 2012). Adjustment responses say for example fighting spirit is likely to be beneficial; conversely, the consequences of hopelessness/helplessness on quality of life are negative (Ferrero, Barreto, & Toledo, 1994). There is a seemingly endless discussion on the practical consequences of responses that include avoidance, fatalism and anxious-preoccupation on quality of life and mental health (Nordin & Glimelius, 1998). The relationship among the mental adjustment and death, and survival and recurrence is disputable (Cordova et al., 2003; Ganz et al., 2003; Grassi et al., 2004). The changing characteristic of cancer and its treatments have an impact on cognitive appraisals and adjustment responses as time
passes and additionally the strength of the different adjustment responses varies at different time periods. Therefore, the varying status at several time points should be evaluated once mental adjustment to cancer is explored (Johansson, Rydén, & Finizia, 2011).

There are few investigations regarding the role of each and every mental adjustment strategy with regard to wellness along with their effect on quality of life among cancer patients. Yeung and Lu (2014b) in a cross-sectional research study of 238 cancer survivors in America confirmed the fact that an increased level of ‘fighting spirit’ is connected with a higher quality of life, conversely increased level of ‘fatalism’ was associated with a lower quality of life. In a similar way, Kershaw, Northouse, Kritpracha, Schafenacker, and Mood (2004) explained active coping being a predictor for good quality of life, whereas avoidance was associated with lower quality of life among the cancer patients. Ferrero et al. (1994) confirmed that ‘fighting spirit’ as well as ‘denial’ were correlated with more desirable quality of life, whereas ‘helpless/hopeless’, ‘anxious-preoccupation’ as well as ‘fatalism’ were negatively associated with quality of life. This research observed an intense relationship of mental adjustment with the physical indications.

In a similar way, in the United States, Dukes and Holahan (2003) found a negative correlation between ‘avoidance coping’ and psychological well-being. However, in accordance with these research studies, we can find an understanding toward the part of the mental adjustment, which can include ‘fighting spirit’, ‘anxious-preoccupation’ and ‘hopelessness/helplessness’ upon the quality of life. The findings have identified the consequences of mental adjustment relating to the quality of life with regards to cancer patients. Ferrero et al. (1994) indicated that ‘fighting spirit’ in addition to ‘denial’ are connected with the more desirable present as well as
the forthcoming quality of life, but ‘fatalism’ ‘helplessness/hopelessness’, as well as ‘anxious-preoccupation’ tend to be negatively connected with well-being.

Johansson et al. (2011) explored association between mental adjustment and health-related quality of life among cancer patients and figured out that individuals using ‘anxious-preoccupation’ and ‘helplessness/hopelessness’ encounter a lot of depression and anxiety and decrease in health-related quality of life.

1.4.3 Predictors of Mental Adjustment

Cancer is highly associated with alterations in psychological functionality compared to several other health-related problems (Polsky et al., 2005). A couple of research studies have explored the consequences of mental adjustment styles on adjustment outcome and on the psychological recovery. Mental adjustment varying with time was revealed to be linked to anxiety as well as depression symptoms (De Fazio et al., 2013). Seok et al. (2013) claimed that ‘helplessness/hopelessness’ and ‘anxious-preoccupation’ are the most prominent variables predicting distress among the cancer patients. However, Nordin and Glimelius (1998) revealed that ‘fighting spirit’ appeared to be associated with more emotional well-being whereas anxious-preoccupation and helpless/hopeless techniques have an inverse effect.

Schnoll, Harlow, Brandt, and Stolbach (1998) checked out association within mental attitude and emotional adjustment and reported that ‘fighting spirit’ was associated with well emotional adjustment whereas ‘hopeless/helpless’ and ‘anxious-preoccupation’ result in reverse effect. Moreover, in many studies anxious-preoccupation and helplessness/hopelessness were found to be linked with depression (Watson et al., 1988). Whereas, fighting spirit has also been linked to considerably less distress (Watson et al., 1991).
There is the evidence that the majority of these constructs, as well as coping patterns, are essential moderating aspects concerning the adjustment to cancer. Harandy et al. (2009) conducted a study to find out the coping techniques used by breast cancer survivors. They reported that the subjects were unable to change their perception since they believed the disease is a part of their personal fate. The fatalistic idea was informed being a facilitator with regards to medical treatment follow-up as well as therapy involvement. Also, Cheng et al. (2013) carried out a study to evaluate the role of ‘fatalism’ with regard to management of cancer. Those cancer patients believed in ‘fatalism’ and acknowledged their incapacity to alter the ultimate consequences of cancer. Those patients expressed fatalistic beliefs, their acknowledgment of the conditions as they are and additionally the exertion of private efforts over the circumstances. Both, the studies of Harandy et al. (2009) and Cheng, Sit, Twinn, Cheng, and Thorne (2013) figured out that a fatalistic outlook has a constructive effect on controlling the difficulties related to cancer.

However, a number of studies revealed that high levels of perceived social support are linked with significantly better adjustment to cancer (Akechi, Okamura, Yamawaki, & Uchitomi, 1998; Cicero et al., 2009; Eom et al., 2013; Helgeson, Snyder, & Seltman, 2004; Schnoll et al., 1998). Accordingly, Ganz et al. (2003) expressed that significantly better physical health, mental health and better emotional social support forecast greater self-perceived health.

1.5 Perceived Social Support

Social support has actually been explained and operationalized in different ways (Monat & Lazarus, 1991) and is repeatedly recommended to be essential in maintaining mental health and is said to play a significant role in the adjustment to
cancer (Holland & Holahan, 2003; Helgeson et al., 2004). According to Holland and Hohan (2003) “Social support includes interpersonal interactions aimed at helping an individual to achieve positive outcomes”.

Hobfoll and Stokes (1988) described social support as social interactions or relationships that provide individuals with the actual assistance or with a feeling of attachment to a person or a group that is perceived as loving or caring. Dumont and Provost (1999) refers social support to the support received (e.g. informative, emotional, or instrumental) or the sources of support (e.g. family or friends) that enhance recipient’s self-esteem or provide stress-related interpersonal aid.

It is certainly a multidimensional concept that is often conceptualized typically from a quantitative-structural viewpoint of social networks, for instance, quantities of people and recognized connections with them, and from a qualitative–functional viewpoint of social support, for example, the perceived content and accessibility of associations with significant others (Helgeson, 2003, Nausheen, Gidron, Peveler, & Moss-Morris, 2009). The qualitative-functional viewpoint of social support implies the availability of emotional, instrumental and informational support and is the outcome of service offered by the structural support components (Helgeson 2003; Finfgeld-Connett, 2005). Social support is generally considered as a resource offered by other people with a purpose to help individuals in challenging circumstances (Sęk & Cieslak, 2004). It plays an essential part in managing the chronic diseases. It facilitates the expression of pessimistic thoughts, improves thoughts of intimacy, preserves relations, boosts psychological well-being, as well as supports the selection of proficient coping techniques. Overall, the function of social support is essentially serving the troubled personnel to organize all resources in order to manage their circumstances in a competent way (Sęk & Cieslak, 2004).
Earlier researchers illustrated that social support consists of both structural as well as functional components. The structural component of social support includes formal as well as informal support (for example, the strength of a particular person's social network, the regularity of communication with network personnel, the availability and quality of reciprocal support). On the other hand, the functional component comprises of the perceived degree of support attained (e.g., tangible and psychological support) (Goebert, 2009). Both of these components can precisely be identified as “received social support” (i.e., objective) and “perceived social support” (i.e., subjective) support, and certainly they are both necessary for the individual’s well-being (Aranda, Castaneda, Lee, & Sobel, 2001). Perceived social support is known for having a persistent beneficial effect on health (Uchino, 2004; Wills & Shinar, 2000) while as the consequences of received support are significantly more uneven and sometimes involved with negative effects on health outcomes (Forster & Stoller, 1992).

Zimet, Dahlem, and Farley (1988) described perceived social support as an individual’s perception of how resources can work as a buffer in between the demanding incidents and symptoms. As stated by Zimet, Dahlem, Zimet, and Farley (1988) perceived social support is comprised of three dimensions, namely, friends, family and significant others. Friends and family are self-explanatoriy, whereas significant others might be a leader, co-worker, peer or some other individual, not normally described, but with whom the person has to get in touch with on daily basis.

Social support is considered as a stress buffer as it protects an individual against the possibly demanding happenings. Cohen and Willis (1985) recommended that social support might mediate between demanding incident and the stress response by the prevention of a stress appraisal reaction.
1.5.1 Models of Social Support

1.5.1.1 The Additive Model

The additive or direct effects model demonstrates that negative and positive social relationships have additive consequences on psychological health and well-being. This perspective explains that positive relationships have a favorable effect on well-being, whereas, negative relationships have a detrimental effect (Dohrenwend & Dohrenwend, 1981; Cohen & Syme, 1985). The existing view among research scientists is that negative social relationships have a stronger effect on psychological wellness compared to the positive relationships (Hobfoll & Stephens, 1991). It has also been illustrated that the unavailability of negative social relationships might be more important with regards to well-being compared to the presence of positive social relationships (Schuster, Kessler, & Aseltine, 1990). Researchers have generally discovered that negative relationships happen less frequently as compared to positive relationships but are quite often far more predictive of mental well-being. Nonetheless, many research studies indicate that positive social relationships are more crucial with regards to positive mental health benefits (Okun & Keith, 1998).

1.5.1.2 The Buffering Model

The moderator or buffering model posits that social support safeguards or alternatively buffers the consequence of stressful life incidents on adjustment. The stressful incidents happening in presence of social support are generally hypothesized to create far less distress as compared to if they happen in the absence of social support (Thoits, 1982). The moderator model presumes that positive social relationships buffer the detrimental effect of negative social relationships on
psychological well-being. Research studies utilizing this model tended to analyze one among three things:

(1) The degree by which positive social relationships buffered the influence of stress relating to psychological wellness (Revenson, Schiaffino, Majerovitz, & Gibofsky, 1991);

(2) Whether adverse social relationships could be buffered by positive social relationships (Lepore, 1992); and

(3) The degree by which negative social relationships intensified the impact of stress on psychological wellness (Rauktis, Koeske, & Tereshko, 1995).

1.5.1.3 The combination Model

Due to the multidimensional characteristics of social support, it is sometimes feasible that the combination of both the additive and buffering models can illustrate many associations between social support and demanding life happenings. Hope, friendliness, and regular emotional support can directly boost adjustment, and as a matter of fact, cognitive reappraisal associated with a traumatic experience during anxiousness may eliminate its impact. The combination model (additive and buffering) hypothesizes that psychological support has a direct impact on a person's mental set, while as tangible support could possibly buffer traumatic life events by facilitating resources to decrease their effect (Kornblith et al., 2001).

1.5.1.4 The Analytical Model

Hussain and Nazam (2018) proposed an analytical model of social support based on acronym. This model suggests the following dimensions of social support; structural support, others support, community support, informational support, affective (emotional support), life support, spiritual support, unconditional support,
parental support, perceived support, organizational support, received support and tangible support.

**Fig 1. Models of Perceived Social Support**

1.5.1.1 The Additive

1.5.1.2 The Buffering Model

1.5.1.3 The Combination Model
1.5.2 Perceived Social Support and Cancer

Prolonged sickness can possibly be remarkably traumatic and the perceived social support may have numerous affirmative effects on the patients. Diagnosis related to cancer is known for an excessive amount of emotion as well as apprehension of troubles. Social support can affect the path of the illness, positively or perhaps even adversely. Cancer patient’s requirement with regard to support is frequently stretched far beyond preliminary medical identification and effectively into the therapy phase and sometimes far beyond the elimination of the disease. Cancer together with its accompanied remedies might need a significant change in the lifestyle, which generally, requires an individual to question their own individual identification and self-confidence. It is essential to take into consideration the extent and kind of social support which tend to be out there as an adjustment when the cancer is identified (Price, 2003).

Researchers have illustrated that social support plays an important part in minimizing the seriousness and development of existing health issues. People who find themselves lonelier and are not having a social network arise to be the group having a remarkable death rate (Durkheim, 1951; Carter & Glick, 1970). Social support has also been connected with favorable effects on overall health such as minimizing death rate and boosting recovery from severe health problems (Bliese & Brett, 2001; DeVries, Glasper, & Detillion, 2003). Moreover, social support contributes in particular illness progression as well as problem management (Bliese & Brett, 2001; Glass et al., 2000). It plays an important role in the promotion of health, well-being and protection against illness. It really has been proven to remain influential in preserving the well-being and reducing illness for both women and
men along with helping them to manage and adapt to many different medical issues (Glass et al., 2000).

The increasing availability of a social support has a constructive effect on longevity and in the reduced death rate (Berkman & Syme, 1979). Perceived social support, i.e., the awareness of having people who might provide assistance in an adversity appears an essential determining factor of highly effective coping with distress and resulting in constructive improvements than the accessibility to the support itself. Simply being certain of getting support aids in selecting more effective coping techniques. Searching for support, both emotional and instrumental, is linked generally with figuring out new opportunities in life and enhancing associations with other people. Perceived social support has also been proved to be a predictor of posttraumatic growth of patients with rheumatoid arthritis (Dirik & Karanci, 2008).

1.6 Meaning in Life

Meaning in life continues to be a topic of well-off practical inquiry for several years. A considerable number of experts have revealed that meaning in life plays an important part in protection against undesirable health consequences from stress and also provides guidance for achievement in life (Antonovsky, 1987; Wortman, Silver, & Kessler, 1993). The rise of meaning as one of the important and vital variables has actually come out from the Frankl’s (1963) work, especially Man’s Search for Meaning (Wong & Fry, 1998). Meaning in life is not just a philosophical or theoretical idea but the health and well-being of human beings mostly depends upon its existence and absence. It has been asserted that nonexistence of meaning is associated with psychopathology. It has been authenticated with an empirical
investigation that to survive without meaning, objectives or sometimes valuable goals provoke substantial distress (Yalom, 1980).

A very interesting question emerges, what exactly makes life meaningful? A particular generic response to this query is not feasible to decide mainly because the meaning of life varies from person to person, day after day and even from one situation to another. Thus, the meaning of life as a whole does not matter that much, somewhat the particular meaning of an individual's life at a very specified moment matters a lot (Frankl, 1970). Frankl (1970) supports the originality of meanings; the character just not only associated with a situation but actually of overall life because of the fact that life is a substantial amount of unique circumstances. Frankl hypothesized that in fact, man's search for meaning is probably the primary inspiration in his lifespan but not a "secondary rationalization" related to instinctual ambitions (Frankl, 1970). Meaning is connected with a wide range of processes in the lives of human beings (Frankl, 1992).

Quite often meaning gives an inspiration to our everyday lives. Moreover, it provides beliefs or morals that can be designed to estimate our own behaviors. Afterwards, it furnishes us a feeling of control on the happenings of our life. Ultimately, it facilitates people along with self-worth. A large number of emotional problems develop typically from failure to attain meaning in life which can easily be settled actually by discovering something to create the life worthy of living (Frankl, 1992).

Human beings are the only species who have the ability to question their unique existence and are enthusiastic about the meaning of life and attempting to make their existence more meaningful ever since the onset of their life. To find out the purpose and meaning in life is the utmost question which we are still aspiring to
resolve typically for a very long time and are still unable to attain at the general vantage point. Each and every person of any creed, caste, and religious faith works hard enough to understand the meaning of life at any anonymous phase of their existence. Some individuals understand the meaning of life too early while other are too late in doing so. However, there is a section of people on the earth who are not in a position to understand meaning of their lives, for they are so busy with the concern of attaining the basic requirements of their living which stops them from knowing this essential quest of life. Several philosophies and religions along with other disciplines have been attempting to pave the way to quest for meaning in life (Pope, 1999; Sezer, 2012).

Meanings are unquestionably at the core of our life experiences as well as at the core of anything we do. We can understand our existence actually by means of meaning to discover this mooted mystery. We discover meaning with the understanding of purpose that will make life productive and creative. Without having meaning techniques “we would be lost in the murk of chaotic experience and probably would not survive as species in any case” (Bruner, 1990). Living a purposeful and meaningful life appears to be among the many fundamental aspects linked with emotional well-being (Ryff & Singer, 1998). On the contrary, inadequate meaning in life is linked to many different negative consequences (Mascaro & Rosen, 2008).

Steger, Frazier, Oishio, and Keller (2006) have explained that theoretical explanations of the origins of well-being and have time and again failed to incorporate meaning in life in it. Thus, the vast majority of theoretical approaches explained the focus on living with meaning as well as having the experience of meaning, not upon the strategy of discovering it. Steger (2012) demonstrates that meaning approaches
usually have a cognitive or alternatively motivational source in them that often undergirds the search operation. He explains the ways in which, from a psychological viewpoint, the meaning is primarily a sequence of associations as well as explanations we ascribe to life experiences; in fact it's how most of the people cognitively have the desire to make understanding of their identification and the way they deal with this world and everything inside it. In a similar way, Bering (2003) has recommended that a root of critical cognitive competencies is required before people will recognize meaning in life by making use of naturally-occurring events. Steger et al. (2006) gave the concept identical to the presence of meaning as well as search for meaning. Presence of meaning occurs when we feel that our lives have some aim and elegance, and search for meaning is probably the collection of several attempts used to improve existent meaning along with attempts to find more meaning.

Presence of meaning has already been extensively researched and a number of approaches for understanding its characteristics have been suggested, but still, there isn't any convergence on just one description of this construct (Steger et al., 2006). But nevertheless, there's agreement that should be an important component of life, primarily for the well-being of the individuals (Steger, 2012; Zika & Chamberlain, 1992). A frequently acknowledged description of meaning in life is the idea that it can be the cognizance of order, coherence, and the pursuit and attainment of worthwhile goals, purpose in one’s existence, and an accompanying sense of fulfillment (Reker, 2000, p. 41).

As explained by Steger and colleagues (2006), searching for meaning represents an independent but still correlated construct, that has mostly been neglected ever since Frankl’s influencing narrative of meaning. Thus, the search for meaning hasn't been illuminated in the exact level just as the presence of meaning, as well as
general opinion is inadequate on the subject of the aim of the procedure, the way it will enlighten a meaningful life, and if by chance it is a positive endeavor. Frankl (1963) claimed that the quest for meaning was natural and a necessary and constructive aspect of figuring out life. On the contrary, it's also known to come about because of unmet requirements (Baumeister, 1991), once other people's behavior and mood is incongruent together with an individual’s set of assumptions for becoming familiar with this world (Bruner, 1990), or once one’s life pattern for creating understanding of this world does not offers a useful arrangement (Thompson & Janigian, 1988).

Existence of meaning, as well as search for meaning, are unquestionably known as separate and distinct constructs, but still they are interrelated because they have an opposite relationship (Steger et al., 2006; Steger, Kashdan, Sullivan, & Lorentz, 2008). It is inferred that in case meaning is not accomplished, individuals compensate for the same by trying to find meaning for being the solution to meaninglessness (Markman, Proulx, & Lindberg, 2013). Research has checked out how the search for meaning and presence of meaning are associated with one another, just for example, whether lower meaning instigates an exploration for meaning, or perhaps even whether we consistently search so that we can experience slightly deeper and more gratifying meaning in life (Steger et al., 2008). Steger et al. (2008) examined two possible parallel models, the presence-to-search model that captured the remuneration strategy which is evident when we look for meaning due to the fact that the whole level is depleted and having the search-to-presence model illustrates the accretion of meaning evident within the technique of searching for meaning as a way to accomplish better presence levels. The brief description of these two models is discussed as under:
1.6.1 Models of meaning in life

1.6.1.1 Presence-to-Search Model

This model on meaning in life postulates that it is a greatly preferred psychological quality which motivates people to search for the purpose of their existence when they experience the lack of meaning in their lives. According to this model the relation between presence and search is affected by other vulnerabilities and strengths. Generally, it is considered that the individuals who have psychological strengths will be very likely to experience the presence of meaning. Among these individuals, the dearth of meaning will possibly not urge an intense search for meaning due to the fact that their several other qualities of life are rewarding. Probably individuals lacking skills or characterized by weaknesses, lack of meaning could possibly flare a stronger search for meaning. Basically, once an individual experiences meaning in life, one searches for meaning in life to a smaller extent (Steger, Kashdan, Sullivan, & Lorentz, 2008). This model explains that whenever individuals experience their existence have minor meaning, or once they lose meaning, they will search for it; this dynamic is best described as a compensatory model (Steger et al., 2008).

1.6.1.2 Search-to-Presence Model

The notion of the second model postulates that searching for meaning directs towards undergoing greater meaning. Search for meaning should be positively related to presence of meaning. A healthy search is usually portrayed as grounded in people’s aspirations and insights they derive from engaging life’s challenges. In contrast, a dysfunctional search is customarily said to be imprinted by people’s inability to employ with and resolve negative or challenging experiences. In other words, when a person lacks meaning in life, he/she searches for meaning in life more intensely than
the person who already has meaning in life. By its very nature, positive experiences or to seek to avoid negative experiences may influence the outcome of searching for meaning. According to this model, seeking meaning leads to the experience of greater meaning and this dynamic is best described as an accretion model (Steger et al., 2008).

1.6.2 Meaning in Life and Cancer

The illness like cancer can challenge people’s personal beliefs with regard to their daily life and understanding of well-being. Issues of meaning in life are essential for the individuals because of the threat associated with a severe illness, remedy measures, and the possible confrontation with the finiteness of their personal lives (Xuereb & Dunlop, 2003; Bower et al., 2005). The breakthrough and effects of a life-threatening health problem like cancer can destroy life attitudes, self-perceptions, value systems and individual assumptions and may diminish the understanding of meaning in life, permanence, and comprehension. Constructive moods can potentially predispose each of them to believe that life is meaningful and could even maximize their feeling towards the meaning relevance to a situation.

Previous research studies figured out that considerable number of cancer patients acknowledged their requirement for meaning and purpose in life, hope, spirituality, and death and dying (Jenkins, Fallowfield, & Saul, 2001). Concerns of meaning in life and spirituality are necessary constituents of the experience of individuals facing severe diseases (Breitbart, Gibson, Poppito, & Berg, 2004; Folkman, 2008). Meaning in life is an essential factor for the protection and enrichment of physical, psychological, and mental health (Fry, 2001). Moreover, many researchers have revealed that meaning in life has a positive role in enhancing
the psychological well-being, happiness and life satisfaction as well (Frankl, 1967; Steger, Mann, Michels, & Cooper, 2009; Diener, Fujita, Tay, & Biswas-Diener, 2012).

1.7 Significance of the Study

Social support is amongst the well-documented psychosocial factors affecting physical as well as mental health outcomes (Uchino, 2004). Epidemiological research illustrate that individuals who have poor levels of social support have higher mortality rates, especially from diabetes, cardiovascular disease, and cancer (Rutledge et al., 2004; Williams et al., 1992). However, there is also evidence linking higher levels of social support to lower mortality rates from cancer and infectious disease (Lee & Rotheram-Borus, 2001).

Numerous theories have acknowledged the consequences of both cognitive as well as social factors on health behaviors and adjustment to chronic illnesses. The consequences of self-efficacy and social support have already been effectively reported in oncology; however, it appears that the worth of outcome expectations and self-regulation ought to have even more research primarily in the context of adjustment to a diagnosis of cancer (Graves, Wang, Mead, Johnson, & Klag, 1998). In the past few years coping and mental adjustment have become the core part of the health-related investigation and additionally, the curiosity about how individuals manage or adjust to cancer has grown. To a certain point, the studies probably have been concentrating on finding out attainable aspects predisposing various coping responses.

Already in the 1950s research studies relating to coping with cancer were actually published and throughout the 1980s the volume of publications boomed (Dunkel-Schetter, Feinstein, Taylor, & Falke, 1992; Heim, 1991). Since that time
there has been a gradual increase in the quantity of publications about this issue, also in the majority of studies cancer is handled as an unvarying state. But nevertheless, it is essential to take into consideration that cancer is basically a multifaceted illness along with a number of challenges and issues depending on medical finding and treatment method, therefore, lead to the wide variety of adjustment responses. The present research endeavor aims to find out the role of positive psychological states like perceived social support and meaning in life in the mental adjustment of cancer patients. No such research has been conducted in Indian context in assessing the perceived social support, meaning in life and mental adjustment among cancer patients. And no research has been conducted in order to understand the effect of perceived social support and meaning in life on mental adjustment in the Indian cancer patients. The present study has taken precedence in highlighting the literature that forms the foundation in identifying the role of perceived social support and meaning in life in mental adjustment among cancer patient.

**1.8 Research Objectives:** The present research aimed at:

1. To examine the relationship of perceived social support and meaning in life with mental adjustment among cancer patients.
2. To examine the relationship of dimensions of perceived social support (support from family, support from friends and support from significant others) with five sub-scales of mental adjustment (fatalism, fighting spirit, cognitive avoidance, helplessness/hopelessness and anxious-preoccupation) among cancer patients.
3. To examine the relationship of dimensions of meaning in life (presence of meaning in life and search for meaning in life) with five sub-scales of mental
adjustment (fatalism, fighting spirit, cognitive avoidance, helplessness/hopelessness and anxious-preoccupation) among cancer patients.

4. To examine perceived social support and meaning in life as predictors of mental adjustment among cancer patients.

5. To examine the dimensions of perceived social support (support from family, support from friends and support from significant others) as predictors of five sub-scales of mental adjustment (fatalism, fighting spirit, cognitive avoidance, helplessness/hopelessness and anxious-preoccupation) among cancer patients.

6. To examine the dimensions of meaning in life (presence of meaning in life and search for meaning in life) as predictors of five sub-scales of mental adjustment (fatalism, fighting spirit, cognitive avoidance, helplessness/hopelessness and anxious-preoccupation) among cancer patients.

7. To examine the difference between the mean scores of male and female cancer patients on perceived social support and its dimensions (Support from family, support from friends and support from significant others).

8. To examine the difference between the mean scores of male and female cancer patients on meaning in life and its dimensions (presence of meaning in life and search for meaning in life).

9. To examine the difference between the mean scores of male and female cancer patients on mental adjustment and its five sub-scales (fatalism, fighting spirit, cognitive avoidance, helplessness/hopelessness and anxious-preoccupation).

10. To examine the difference between the mean scores of cancer patients living in rural and urban areas on perceived social support and its dimensions (Support from family, support from friends and support from significant others).
11. To examine the difference between the mean scores of cancer patients living in rural and urban areas on meaning in life and its dimensions (presence of meaning in life and search for meaning in life).

12. To examine the difference between the mean scores of cancer patients living in rural and urban areas on mental adjustment and its five sub-scales (fatalism, fighting spirit, cognitive avoidance, helplessness/hopelessness and anxious-preoccupation).

13. To examine the difference between the mean scores of cancer patients belonging to joint and nuclear family on perceived social support and its dimensions (Support from family, support from friends and support from significant others).

14. To examine the difference between the mean scores of cancer patients belonging to joint and nuclear family on meaning in life and its dimensions (presence of meaning in life and search for meaning in life).

15. To examine the difference between the mean scores of cancer patients belonging to joint and nuclear family on mental adjustment and its five sub-scales (fatalism, fighting spirit, cognitive avoidance, helplessness/hopelessness and anxious-preoccupation).

1.9 Hypotheses:

On the basis of the understanding gained through the review of relevant research, the following hypotheses have been framed for the current study:

\( H_{A1} \): There will be positive relationship of perceived social support and meaning in life with mental adjustment among cancer patients.

\( H_{A2} \): There will be positive relationship of dimensions of perceived social support (support from family, support from friends and support from significant others) with
five sub-scales of mental adjustment (fatalism, fighting spirit, cognitive avoidance, helplessness/hopelessness and anxious-preoccupation) among cancer patients.

**Hₐ3:** There will be positive relationship of dimensions of meaning in life (presence of meaning in life and search for meaning in life) with five sub-scales of mental adjustment (fatalism, fighting spirit, cognitive avoidance, helplessness/hopelessness and anxious-preoccupation) among cancer patients.

**Hₐ4:** Perceived social support and meaning in life will predict mental adjustment among cancer patients.

**Hₐ5:** Dimensions of perceived social support (support from family, support from friends and support from significant others) will predict five sub-scales of mental adjustment (fatalism, fighting spirit, cognitive avoidance, helplessness/hopelessness and anxious-preoccupation) among cancer patients.

**Hₐ6:** Dimensions of meaning in life (presence of meaning in life and search for meaning in life) will predict five sub-scales of mental adjustment (fatalism, fighting spirit, cognitive avoidance, helplessness/hopelessness and anxious-preoccupation) among cancer patients.

**Hₐ7:** There will be difference between the mean scores of male and female cancer patients on perceived social support and its dimensions (Support from family, support from friends and support from significant others).

**Hₐ8:** There will be difference between the mean scores of male and female cancer patients on meaning in life and its dimensions (presence of meaning in life and search for meaning in life).

**Hₐ9:** There will be difference between the mean scores of male and female cancer patients on mental adjustment and its five sub-scales (fatalism, fighting spirit, cognitive avoidance, helplessness/hopelessness and anxious-preoccupation).
HA10: There will be difference between the mean scores of cancer patients living in rural and urban areas on perceived social support and its dimensions (Support from family, support from friends and support from significant others).

HA11: There will be difference between the mean scores of cancer patients living in rural and urban areas on meaning in life and its dimensions (presence of meaning in life and search for meaning in life).

HA12: There will be difference between the mean scores of cancer patients living in rural and urban areas on mental adjustment and its five sub-scales (fatalism, fighting spirit, cognitive avoidance, helplessness/hopelessness and anxious-preoccupation).

HA13: There will be difference between the mean scores of cancer patients belonging to joint and nuclear family on perceived social support and its dimensions (Support from family, support from friends and support from significant others).

HA14: There will be difference between the mean scores of cancer patients belonging to joint and nuclear family on meaning in life and its dimensions (presence of meaning in life and search for meaning in life).

HA15: There will be difference between the mean scores of cancer patients belonging to joint and nuclear family on mental adjustment and its five sub-scales (fatalism, fighting spirit, cognitive avoidance, helplessness/hopelessness and anxious-preoccupation).

1.10 Operational Definitions

Perceived Social Support: Zimet, Dahlem, and Farley (1988) define perceived social support as an individual’s perception of how resources can act as a buffer between stressful events and symptoms. According to Zimet et al. (1988), perceived social support consists of three dimensions, namely, family, friends and significant others.
Perceived social support is assessed by the Multidimensional Scale of Perceived Social Support (Zimet et al., 1988).

**Meaning in Life:** It is defined as “the sense made of and significance felt regarding the nature of one's being and existence” (Steger, Frazier, Oishi, & Kaler, 2006). Meaning in life is assessed by the Meaning in Life Questionnaire (Steger et al., 2006).

**Mental Adjustment:** Mental adjustment is the measure of the cognitive and behavioral responses to cancer. Mental adjustment scores will be derived from Mini-Mental Adjustment to Cancer Scale (mini-MAC) (Watson et al., 1988). Mental adjustment and its following five-subscales will be taken as the criterion variables for the current study:

**Fatalism:** It is when the affected person places himself/herself under the control of the lord and accepts a single day at any given time. It has been defined as mindset of positiveness when confronted with a realistic assessment of one’s health problems. e.g., I’ve put myself in the hands of God (Watson et al., 1988).

**Fighting Spirit:** It is generally defined by the enthusiasm to face the health problem as well as the adaptation of an affirmative mental set e.g., I see my illness as a challenge (Watson et al., 1988).

**Cognitive Avoidance:** It is often defined as the condition wherein the patient distracts himself/herself as well as stops the thoughts related to the health problems. e.g., I deliberately push all thoughts of cancer out of my mind (Watson et al., 1988).

**Helplessness/Hopelessness:** It is marked by style of discarding and engulfment by realization of the diagnosis along with a pessimistic way of thinking. e.g., I feel like quitting (Watson et al., 1988).
Anxious-preoccupation: It has been defined by consistent preoccupation with cancer as well as emotions of devastation, nervousness, panic and distress. e.g., it is a dreadful feeling (Watson et al., 1988).

Cancer: A neoplasm described by the unrestrained growth of anaplastic cells that tend to attack adjoining tissue and to metastasize to distant body sites (Anderson, Anderson, & Glanze, 1998).