CHAPTER-3

RELEVANCE AND OBJECTIVES OF THE STUDY

Cancer is a major illness affecting a large population, physically as well as psychologically. Researchers have reported that spirituality (Sharma, 2011), mindfulness (Arch and Craske, 2010), and social support (Prajapati, et al., 2011), are associated with better recovery from illness, greater longevity, coping skills, health-related quality of life, less anxiety and less stress. Investigators like (Kaul et al., 2010; Ullah and Ahmad, 2011) have found that lower social support lead to higher stress, higher anxiety, and greater risk of developing physical and psychological health problems. Maheshwari et al. (2011) found that mindfulness, awareness and attention of the present moment had moderating effect on the psychological health and the survival of the individuals.

According to "bio-psychosocial" model, socio-cultural factors as well as biological factors (e.g gender) play an important role in one's reaction to adverse life events. Whereas some researchers (Pandey et al., 2006; Voigtmann et al., 2010) have found that male and female cancer patients differ on stress and anxiety, others have failed to find the differences (Carlson et al. 2004; Pikler and Brown, 2010). Studies have revealed that females with cancer as compared to males with cancer reported more stress (Chaturvedi, 1994; Diwan et al., 2004), higher anxiety (Chandu et al., 2005), higher spiritual involvement (Pandey et al., 2006), reported having more social support (Andersen et al., 2007), and higher rates of mindfulness awareness (Donald et al. 2006). However, Maselko and Kubzansky (2005); Vidhubala et al. (2006) found male patients with cancer to be higher on stress, anxiety and, spiritual well-being as compared to female patients with cancer. But, there are no conclusive results on gender differences on variables like stress, anxiety, spiritual well-being, social support and mindfulness, especially in cancer patients from rural population in India.

Some health professionals have stated that the environment of the individual, influences coping and provide social resources for acting on the

problematic situations that create stress and anxiety. Researchers (like, Lesley and Barbara, 2008) found that psychological stress was higher in subjects living in rural areas as compared to those who were living in urban areas. In contrast, Barquero et al. (1982); and Walters et al. (2003) revealed that those who were living in urban environments had higher risk of anxiety and general psychological distress. However, Parikh et al. (1996); and Howat et al. (2006) reported that urban and rural patients did not differ on social support and stress.

Contemporary health psychology emphasizes that social support from others can reduce or eliminate the adverse consequences of life events upon health or well-being (Cohen and Wills, 1985; Sarason et al., 1990; Coyne and Downey, 1991). Researchers have found social support to buffer the effects of life stressors on the individual (Kashyap et al., 2011), and proposed some cognitive processes that may mediate the effect of social support on well-being (Lakey and Cassady, 1990; Lakey, Moineau and Drew, 1992). Some researchers found social support, (Shourie et al., 2010), spiritual well-being (Jain, 2010; Sinclair and Chochinov, 2012), and mindfulness (Hofmann el al., 2010) to act as a moderators in the relationship of stress and anxiety. However, Weissbecker et al. (2004) reported that mindfulness does not moderate psychological distress in patients.

Rani (2008) in a study on relationship of stress and anxiety reported that in healthy subjects and in females, anxiety was positively related with total negative stress and negatively related with positive stress any time and total positive stress. In males, anxiety was positively related with negative stress last year and total negative stress, and negatively related with positive stress last year, positive stress any time, and total positive stress. However, in cancer patients, the relationship of stress and anxiety was not significant.

Though studies have been done to examine the relationship between cancer, anxiety, stress, spiritual well-being, social support and mindfulness, yet few studies have been done, on the role of social support, spiritual well-being, and mindfulness as moderators in the relationship of stress and anxiety in patients with cancer, from low middle socio economic strata in India,

especially from the rural areas, a population, generally neglected by the researchers. A review of literature revealed that there is a dearth of studies done on comparison of rural and urban patients of cancer in India. Besides, there are no conclusive results on gender differences on variables like stress, anxiety, spiritual well-being, social support, and mindfulness, especially in cancer patients in India. A need was felt to carryout an investigation to explore spiritual well-being, social support, and mindfulness as moderators in relationship of stress and anxiety in cancer patients belonging to low middle socio – economic groups from rural as well as urban backgrounds.

The objective of the present study was to explore the role of mindfulness, social support and spiritual well-being in the relationship of stress and anxiety in patients with cancer and participants with no terminal illness (healthy controls), from low to middle socio-economic strata in India, belonging to rural and urban areas. The following research questions were framed:

1. Will there be any relationship between stress and anxiety?
2. Does spiritual well-being and its two dimensions viz. religious well-being and existential well-being moderate the relationship of stress and anxiety in various groups viz. cancer patients (including rural cancer patients, urban cancer patients, male cancer patients, female cancer patients); healthy controls (including rural healthy controls, urban healthy controls, male healthy controls, female healthy controls); males and females; rural (including rural males, rural females); urban (including urban males, urban females)?
3. Does social support moderate the relationship of stress and anxiety in various groups viz. cancer patients (including rural cancer patients, urban cancer patients, male cancer patients, female cancer patients); healthy controls (including rural healthy controls, urban healthy controls, male healthy controls, female healthy controls); males and females; rural (including rural males, rural females); urban (including urban males, urban females)?

4. Does mindfulness moderate the relationship of stress and anxiety in various groups viz. cancer patients (including rural cancer patients, urban cancer patients, male cancer patients, female cancer patients); healthy controls (including rural healthy controls, urban healthy controls, male healthy controls, female healthy controls); males and females; rural (including rural males, rural females); urban (including urban males, urban females)?
5. Will there be any difference between cancer patients and healthy controls on: a) stress, b) anxiety, c) spiritual well-being overall, religious well-being, and existential well-being, d) social support, e) mindfulness?
6. Will there be gender differences on: a) stress, b) anxiety c) spiritual well-being overall, religious well-being, and existential well-being, d) social support e) mindfulness?
7. Will there be any difference between rural and urban subjects on: a) stress, b) anxiety, c) spiritual well-being overall, religious well-being, and existential well-being, d) social support e) mindfulness?

Hypotheses

On the basis of review of literature the following hypotheses were proposed:

A) It was expected that there would be:

$H_{1:}$ a positive relationship between anxiety and negative stress (negative stress last year, negative stress any time and total stress negative).

$H_{2:}$ a negative relationship between anxiety and positive stress (positive stress last year, positive stress any time and total stress positive).

B) It was expected that:

$H_{3:}$ Spiritual well-being and its two dimensions viz. religious well-being and existential well-being would to moderate the relationship of stress and anxiety in various groups viz. cancer patients (including rural cancer patients, urban cancer patients, male cancer patients, female

cancer patients); healthy controls (including rural healthy controls, urban healthy controls, male healthy controls, female healthy controls); males and females; rural (including rural males, rural females); urban (including urban males, urban females).

$H_{4:}$ Social support measured by its two dimensions viz. SSQ-N and SSQ-S would moderate the relationship of stress and anxiety in various groups viz. cancer patients (including rural cancer patients, urban cancer patients, male cancer patients, female cancer patients); healthy controls (including rural healthy controls, urban healthy controls, male healthy controls, female healthy controls); males and females; rural (including rural males, rural females); urban (including urban males, urban females).

$H_{5:}$ Mindfulness would to moderate the relationship of stress and anxiety in various groups viz. cancer patients (including rural cancer patients, urban cancer patients, male cancer patients, female cancer patients); healthy controls (including rural healthy controls, urban healthy controls, male healthy controls, female healthy controls); males and females; rural (including rural males, rural females); urban (including urban males, urban females).

C) It was expected that patients with cancer as compared to healthy controls would be:

$H_{6:}$ higher on stress, and anxiety.

$H_{7:}$ lower on overall spiritual well-being, religious well-being and existential well-being.

$H_{8:}$ lower on SSQ-N (numbers of support) and SSQ-S (satisfaction with support).

$H_{9:}$ lower on mindfulness.

D) It was expected that females as compared to males would be:

$H_{10:}$ higher on stress and anxiety.

$H_{11:}$ different on spiritual well-being and its two dimensions viz. religious well-being and existential well-being.

$H_{12:}$ different on SSQ-N and SSQ-S.

$H_{13:}$ different on mindfulness.

E) It was expected that rural subjects as compared to those from urban subjects would:

$H_{14:}$ differ on stress and anxiety.

$H_{15:}$ differ on spiritual well-being and its two dimensions viz. religious well-being and existential well-being.

$H_{16:}$ differ on SSQ-N and SSQ-S.

$H_{17:}$ differ on mindfulness.