

## CHAPTER-7

### SUMMARY, IMPLICATIONS AND SUGGESTIONS

In present investigation, an attempt has been made 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 middle socio-economic strata in India, belonging to rural and urban areas. Besides, the present study also aimed to find out whether there were any differences between cancer patients and healthy controls, males and females, rural and urban on stress, anxiety, spiritual well being, social support and mindfulness.

#### **Hypotheses**

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

A) It was expected that there would be:

H<sub>1</sub>: a positive relationship between anxiety and negative stress (negative stress last year, negative stress any time and total stress negative).

H<sub>2</sub>: 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<sub>3</sub>: Spiritual well-being and its two dimensions viz. religious well-being and existential well-being 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<sub>4</sub>: 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<sub>5</sub>: Mindfulness 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).

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

H<sub>6</sub>: higher on stress, and anxiety.

H<sub>7</sub>: lower on overall spiritual well-being, religious well-being and existential well-being.

H<sub>8</sub>: lower on SSQ-N (numbers of support) and SSQ-S (satisfaction with support).

H<sub>9</sub>: lower on mindfulness.

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

H<sub>10</sub>: higher on stress and anxiety.

H<sub>11</sub>: different on spiritual well-being and its two dimensions viz. religious well-being and existential well-being.

H<sub>12</sub>: different on SSQ-N and SSQ-S.

H<sub>13</sub>: different on mindfulness.

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

H<sub>14</sub>: differ on stress and anxiety.

H<sub>15</sub>: differ on spiritual well-being and its two dimensions viz. religious well-being and existential well-being.

H<sub>16</sub>: differ on SSQ-N and SSQ-S.

H<sub>17</sub>: differ on mindfulness.

For the purpose of investigation, 240 adults (120 males and 120 females) in the age range of 30-40 years, married, educated, belonging to low middle socio-economic strata, from rural and urban areas, and staying in nuclear families. 120 males were further subdivided as 60 males with cancer and 60 healthy males (without any terminal illness) with equal number each from rural and urban areas. Likewise, 120 females included equal number of females with cancer and without any terminal illness, with equal number each from rural and urban areas. Cancer sample (throat/ blood), who were newly diagnosed (6 months to 1 years) was drawn from the hospitals of Haryana. Other participants (without terminal illness) were taken from the rural and urban areas of Haryana.

Participants were contacted personally and scales were administered individually to them two at a time. The subjects were assured that their results and the information would be kept strictly confidential, and information would be used for research purpose only. Stressful life events scale (Singh and others 1984), Aatam mulyankan prashnavali (Spielberger, Sharma, and Singh, 1973), Spiritual well-being scale (Paloutzian and Ellison, 1982), Social support questionnaire (SSQ) by Sarason and others (1983) and Mindfulness

scale (Brown and Ryan, 2003). Scales were administered to the participants individually.

Stepwise moderator regression analysis, mean, SD, t- test and ANOVA were applied to the data on different variables. The aim was to see whether the relationship between stress and anxiety is moderated by spiritual well-being, social support and mindfulness. The high and low groups on each moderator variable were found in case of cancer patients, healthy controls, males and females, as well as rural and urban. The comparison between these groups were made on anxiety. Besides, analysis of variance was employed to explore the difference in stress, anxiety, spiritual well-being, social support and mindfulness of the subjects as grouped by their health condition (cancer patients and healthy controls), place of living (rural and urban) and gender (males and females). Following were the main findings:

- Positive correlation between anxiety and negative stress (viz. negative stress last year, negative stress anytime and total stress negative) was found to be significant in all groups but relationship between negative stress last year and anxiety was not significant in urban cancer patients, male healthy controls, and rural healthy controls.
- Significant negative correlation of anxiety with positive stress (positive stress last year, positive stress any time and total stress positive) in all groups except cancer patients.
- Overall spiritual well-being, religious well- being and existential well-being was found to moderate the relationship between negative stress and anxiety, in all groups (cancer patients, healthy controls, males, females, rural and urban).
- Spiritual well-being, religious well-being and existential well-being did not moderate the relationship between positive stress and anxiety in rural cancer patients, urban cancer patients, female cancer patients, male healthy controls and rural healthy controls, rural females, urban males.
- It was found that with high spiritual well-being, males, females and rural subjects experienced less anxiety.

- It was found that with high and low spiritual well-being did not make any difference in cancer patients and healthy controls.
- Religious and existential well-being, have been found to lower the anxiety levels in urban subjects.
- Religious well-being failed to make any difference in anxiety levels of rural males and rural females.
- Social support, measured through SSQ-N and SSQ-S, moderated the relationship between stress and anxiety in all groups (cancer patients, healthy controls, males, females, rural and urban).
- In relationship of positive stress and anxiety, SSQ-N and SSQ-S did not act as moderators in case of sub groups, (e.g. male cancer patients, female cancer patients and urban cancer patients, male healthy controls, urban males, and in urban females).
- In male (healthy controls), SSQ-N did not buffer the relationship of negative stress last year and anxiety.
- It was found that with high SSQ-N and SSQ-S group experienced less anxiety in all groups.
- Mindfulness was found to be a significant moderator in the in the relationship of stress and anxiety in all groups (cancer patients, healthy controls, males, females, rural and urban).
- However, mindfulness did not moderate the relationship of positive stress and anxiety in female cancer patients.
- In rural healthy controls, mindfulness did not moderate the relationship between anxiety and stress (e.g positive stress last year, negative stress last year, positive stress any time, total stress positive).
- High mindfulness reduces anxiety in healthy controls, males, females, rural and urban.
- Rural cancer patients with high mindfulness experienced less anxiety.
- Cancer patients were scored higher than healthy controls on negative stress last year, negative stress any time, total stress negative as well as anxiety.
- On positive stress last year, positive stress any time and total stress positive, healthy controls scored higher than cancer patients.

- Females were higher on anxiety than males.
- Non-significant gender differences were found on stress, spiritual well-being, religious well-being, existential well-being, SSQ-S and mindfulness.
- Urban subjects were higher on positive stress as compared to rural subjects.
- However, on anxiety and negative stress, rural subjects were higher than urban subjects.
- Healthy controls were higher on spiritual well being, social support and mindfulness as compared to cancer patients.
- Males were higher on SSQ-N than females.
- Rural subjects scored higher than urban subjects on spiritual well being, social support as well as mindfulness.
- In cancer patients, females scored higher on SSQ-N than males.
- In case of healthy controls, males were higher on SSQ-N than females.

An overview of the obtained findings leads to the conclusion that there was a positive correlation between anxiety and negative stress in all groups. However, relationship between negative stress last year and anxiety was not significant in urban cancer patients, male healthy controls, and rural healthy controls. Anxiety was negatively correlated with positive stress (positive stress last year, positive stress any time and total stress positive) in all groups, except cancer patients.

Another conclusion, drawn on the basis of the present findings is that the relationship of negative stress and anxiety is moderated by spiritual well-being, social support, and mindfulness. Subjects who were high on spiritual well-being, social support and mindfulness were lower on anxiety, except in case of cancer patients. But, cancer patients with higher social support were lower on anxiety. Cancer patients were higher on negative stress (negative stress last year, negative stress any time, and total stress negative) and anxiety as compared to healthy controls. On positive stress (positive stress last year, positive stress any time, and total stress positive), healthy controls

were higher than cancer patients. Cancer patients were lower on spiritual well being, social and mindfulness than healthy controls.

The study also examined the gender differences and differences between people who are living in rural areas and urban areas on stress, anxiety, spiritual well-being, social support and mindfulness. Rural subjects were higher than urban subjects on negative stress, anxiety, spiritual well being, social support as well as mindfulness. Females were higher on anxiety than males. On SSQ-N, males were higher than females. But non-significant gender differences were found on stress, spiritual well-being, and mindfulness.

### **IMPLICATIONS AND SUGGESTIONS FOR THE FUTURE RESEARCH**

Any research can be useful to the society only when it is able to suggest something for improving the conditions of the population studied in the research. The information being provided by the findings of the present study can be of immense importance for the psychologists working with cancer patients. It may give insight to the psychologist that spiritual well-being, social support and mindfulness help cancer patients to reduce stress and anxiety. These findings have important implications for cancer patients, who are facing ill effects of their ailment, by giving them some spiritual and mindfulness based interventions. One important implication of the study is to design some programmes so as to make people aware about spiritual healing, social support and mindfulness based interventions which can help them to reduce their stress and anxiety. To conclude, it can be stated that the findings of the present study, when incorporated in the intervention programs might be associated with better recovery from illness, greater longevity, coping skills, health-related quality of life, less anxiety and less stress in cancer patients.

This study revealed that cancer patients were lower on spiritual well-being, social support and mindfulness. It was found that high mindfulness and spiritual well-being reduces negative stress and anxiety. Such information can be useful for mindfulness and spiritual-based intervention on cancer patients.

The present study had its limitation as it was not able to compare working and non-working, as well as single and dual earning couples on these variables and comparison with other ailments.