The previous chapter dealt with the discussion and interpretation of the findings obtained in the present study. The purpose of the study was to measure stress (positive and negative) and quality of life (QoL) as experienced by the patients of CVD groups. The patient groups included coronary heart disease. (CHD), hypertension (HT) and combined disease group (CDG). Now, the findings in brief are described in this chapter.

The sample of the study was formed from outdoor patients registered in different hospitals of Jaunpur district. Each group was comprised with 50 patients including males and females both. A normal group of 50 was also included in the present study to compare the patient groups (CHD, HT & CDG) with this group on the psychological measures used in this research.

The effect of stress in terms of positive and negative effects were measured with life experience survey (LES). This scale consists of 47 items. Its Hindi version developed by Singh (2003) was used. It also contains the same number of items. There are some blank points to express the unlisted changes. The section for students consists of 10 items. Its psychometric properties are well established.

The quality of life among the participants was measured with PGI Qol Scale developed by Moudgil et.al. (1986). It consists of 26 items. The reliability and validity of the test have been reported to high. Role of social support in stress and QoL was assessed with DGI social support scale by Nehra et.al.

The data obtained were subjected to descriptive and statistical techniques for their analyses. The data were statistically treated keeping in view the design of the study. The data were further analysed by dividing the patients into male and female groups to compare the gender based

patients groups on the scales of stress and quality of life. Besides, role of social support was also assessed for the CVD patients.

Finding in Brief –

The findings of the present study are briefly described here for the convenient perusal by anyone. The hypotheses formulated in this study for empirical verification are accepted as the differences between the different groups, on the scales used, were found to be statistically significant. The findings are stated as under in concised forms. Though gender did not emerge as a determinant of stress and QoL among CVD patients, but social support was found to be a strong determinant of stress and quality of life.

1. The coronary heart disease patients exhibited much lower positive effects of stressor as compared to their normal counterparts. It seemed as if the CHD patients do not feel the expected positive impact of even positive events in their life. The burden that they seem to feel due to the serious threat to their lives as a result of CHD problems, reduces the pleasure of good events also. t-value is significant.

    When CHD patients were compared with their normal counterparts on negative effect, the scenario changed. They were found to be seriously suffering from negative effects of stress in comparison to the normal participants. They scored much higher on this aspect of stress and t-value was found to be significant, thus approving the hypothesis.

2. The comparison of CHD patients and normal participants on QoL scale yielded a significant t-value. The QoL was found to be much lower in CHD patients as compared to their normal counterparts. They seemed in much more need of caring, and social support. The proposed hypothesis is confirmed.

3. A comparison of hypertension group of patients with the normal participants on stress yielded significant differences on the both aspects of stress. When compared on positive effect, the HT group exhibited lower impact of positive events in their lives while control group showed higher positive effects of such stress. t-value was found to be significant.

   The above groups also differed significantly on the negative effects of stress. HT group scored higher on this aspect as compared to the normal group and t-value was found to be significant. Hence, the hypothesis proposed in this context is approved.

4. The hypertension (HT) group and control groups also differed significantly on the quality of life scale (QoL). The mean of HT group was found to be much lower than that of the normal group. HT patients appeared to be minimally satisfied with life and t-value is significant. The proposed hypothesis, is therefore, accepted.

5. The combined disease group (CDG) also reported lower effects of positive events in their lives as compared to the normal group. This result is also according to the assumption of the present study. The t-value was found to be statistically significant.

   The comparison of the above groups on the negative aspect of the stress also yielded significant difference between the two means. The CDG scored much higher than the normal group on the negative aspect of stress. The t-value was found to be statistically significant. The proposed hypothesis is, therefore, accepted.

6. The CDG and normal participants when compared on quality of life scale, again the t-value was found to be significant. The CDG scored much lower QoL mean as compared to their normal counterparts and t-value was found to be significant. Hence, the proposed hypothesis is accepted.

7. The three cardiovascular disorder (CVD) groups were also compared with one another on the scales of stress (positive and negative effects) and quality of life (QoL) as well. Their comparison on positive effects of stress revealed that hypertension group (HT) scored highest on it followed CHD and combined disease groups (CDG) respectively. The CDG reported the lowest positive effect, thus being the worst affected from stress. The F-ratio between them was found to significant, which suggests that they differ significantly in experiencing positive stress even in the same situation. So, the hypothesis is accepted.

    When they were compared on the negative aspects of stress, in this case picture was found to be relatively different. Although F-ratio was found to be significant but in this comparison CHD patients showed highest level of negative experiences, followed by CDG and HT groups respectively. Thus, the results revealed significant difference between the three CVD groups on negative dimension also of stress. The related hypothesis is accepted in this case also.

8. As regards their comparative status on quality of life (QoL) scale, the highest mean was obtained by CDG group followed by HT and CHD groups respectively. Thus, the CHD group exhibited lowest level of QoL. This group appears to be the worst sufferer from the disease and as a result of it, relatively more declining trend in QoL has been obtained. The F-ratio on QoL scale between the three CVD groups was found to be significant. Hence the proposed hypothesis is accepted.

9. The scores of three CVD groups were also analysed on the basis of the gender of the patients. This was done to see whether the gender of patients influenced stress and quality of life differentially. The male and female CHD patients were firstly compared on positive and

negative aspects of stress. But, significant differences between their means on stress scale were not obtained on any of the two aspects. Hence the proposed hypotheses is rejected.

10. But the male and female CHD patients were found to differ significantly on the QoL scale. The t-value was found to be significant. The male CHD patients exhibited higher level of QoL as compared to their female counterparts. The female CHD patients were found to derive poor satisfaction from their life circumstances. The proposed hypothesis is, therefore, accepted.

11. A comparison of male and female HT patients on the stress scale revealed that the two groups were not found to differ significantly on any of the aspects of stress-positive or negative. So, the proposed hypothesis is rejected. The two groups appeared to be equally affected by stress.

12. The comparison of male and female HT patients on QoL scale also did not yield significant difference. Both the groups appeared to be more or less equally affected by life events and in deriving satisfaction from various circumstances. The proposed hypothesis is, therefore, rejected.

13. The male and female combined disease patients, when compared on stress scale, they were not found to differ significantly on positive dimension of stress but they differed significantly, in negative effects. The proposed hypothesis, is, therefore, only partially accepted.

14. The comparison of male and female CDG patients on QoL scale again did not yield significant difference. The t-value was not found to be significant. Thus the two group appeared to be deriving more or less similar satisfaction in their lives. Hence, the proposed hypothesis is rejected.

15. Role of social support in reducing negative effects of stress while enhancing positive effect and quality of life is strongly observable in the present study. The social support extended to the CVD patients by their social relations and networks proved to be like panaces for them in reducing the negative effects of stress and enhancing the positive effects in their lives. Except HSG and LSG belonging to CDG on negative dimension of stress, all other comparisons yielded significant difference between the means suggesting the moderating role of social support in managing stress effects.

16. The social support also emerged as a very important predictor of quality of life among CVD patients. The CVD patients when divided into two groups on the basis of social support received by them (High & Low social support : groups HSG vs LSG), very clear cut differences were noticed between these two groups of three CVD patients categories (i.e., CHD, HT & CDG). In all the three comparisons, significant differences between their means were obtained on QoL scale. This makes it obvious that supportive sources can reduce the ill effects of health problems and at the same time are very much instrumental in improving health status and quality of life of affected people. According to some researches Yoga is very much useful in managing the ill effects of stresses and improving health status. Its practice leads to very fruitful health outcomes (Verma & Mittal, 2012). Its success rate in healing the negative effects is very high.

Limitations and Suggestions –

Although each and every researcher tries his or her level best to make the study undertaken by him or her flawless, yet, it can not be guaranteed that the study has no limitations. It is so, because all the aspects related to the selected topic cannot be put together and in some specific

cases, sample size also happens to be a great problem. So, inspite of all possible precautions, weaknesses may be inherent in the study conducted by any researcher. So, this section deals with some of the limitations and also suggestions for future researchers.

Limitations of the Present Study –

The main limitations of the present study are underlined here.

1. This study tapped only cardiovascular disorders (CHD, HT, CDG) as the independent variables, as a result of it coverage of independent variable is relatively limited. Besides, the patients covered for testing were outdoor patients of varied background. The indoor patients could not be contacted for testing.

2. Size of the sample in each case of disease was limited to 50 only. It is felt that some more cases, if covered, would have been better from the point of view of more useful findings. Small samples are attributed for inconsistencies in the results.

3. The patients belonged to a specific area i.e. Jaunpur. This limits the generalizability of the findings, as a more widespread sample would have been much better, but it could not be done due to some limitations.

4. It is a single shot study and such studies suffer from some problems. The variations in the responses of the participants may occur, if the testing is repeated. The single shot studies are said to be affected by this condition. The present study can not be said to be an exception to it.
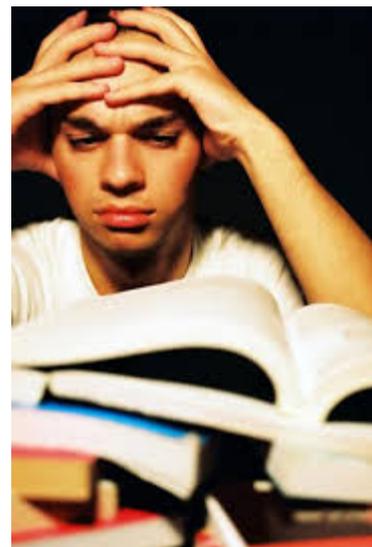
5. The sample when divided into male and female participants, their strength was further reduced. The smaller sample has its own limitations. Only two t-ratios were found to be significant (i.e. male vs female CHD) groups on QoL and male and female CDG on negative effect of stress. The small samples of male and female patients appear to be responsible for it.

6. The group of dependent variables covered stress and quality of life only. The number of dependent variables is only two. This may also be listed as one of the limitations of the present study.

7. The study employed descriptive and inferential statistical methods only. Keeping in view the design of the study, correlational method could not be used.

Suggestions for Future Research -

The following suggestions can be given for further researches in this area.

1. It is felt that in addition to cardio-vascular disorders, other psycho-physiological disorders be also tapped as the causal variables to ascertain their relative importance in influencing health status of the affected people.

2. The present study is a single shot study. Such studies suffer from hidden limitations. So, in order to get more useful results, testing may be repeated, if possible, to reduce variations in the responses of the patient participants.

3. It can also be suggested that larger samples would be more useful in providing relatively a better understanding of the cardiovasculars disorder regarding their effects on health of our people.

4. The sample should also be widespread in geographic distribution, so that more useful information about health related problems could be obtained. The limitations of localized samples are obviously clear.

5. A larger sample if taken, can be broken-down into different groups and by doing this it would be easier for the researchers to plan intensive comparisons. If the strength of sub-groups are sufficient, more useful findings can be obtained.

6. The future researchers should cover more dependent variables related with patients for more comprehensive understanding of the health problems caused by cardiovascular disorders.

7. It is also suggested that future researchers should plan such studies in this area which in addition to descriptive and inferential statistics, should also use correlational methods to establish relationship between the related variables.

8. It also seems to be advisable that psychological intervention based studies should also be planned to train the affected people to manage their stresses and also improving the quality of life. Yoga may be very much instrumental in it (Verma and Mittal 2012).

9. There is general lack of studies tapping CVD in relation to demographic variables like age, social context, socioeconomic status and gender etc. The future researchers are suggested to plan some studies from this point of view also.

10. Some researches have revealed that life style and personality factors also play crucial role in the cousation of cardiovascular disorder. So, it would be a good contribution to this area of research, if future researchers tap these variables also in their studies on CVD (Kaplan, 1993, Sarmienta et.al. 2012; Sandoo, 2011; Cramer & Giles, 2011; Cunha et.al. 2011).

To recapitulate, it can be remarked that stress and quality of life are among the important variables associated with cardiovascular disorder. So, it is felt that suitable psychometric tools be used to asssss the health related problems of such people and all possible efforts be made to improve the health status of our people. Yudkin et.al. 2000; Alexander, 1994; Yudkin et.al. 1999; Brunner et.al. 1997; Crousos & Gold, 1998; Schlock et.al. 2002).

If we get success in this regard, it would be very-very useful for not only those who are affected, but also for the families of the patients and society as well. Thus, it requires increased attention of medical experts, the government agencies and the related NGOs also to ensure a better health status to our people and to enhance their efficiency (Cavallo et.al. 2005; Haqquist & Andrich 2004; Croog et.al. 1986; Bakas et.al. 2012; Mandzuk & McMilan, 2005; Janz et.al. 2001; Mathisen, et.al. 2007; Angerman et.al. 2012). The world Health organization has made appreciable efforts in this regard and the countries of the world are expected to follow its move to ensure a better well-being climate for their citizens (WHO 1995, 1998, 1997; Andrews 1974; Brislin, 1993; Brown, 1997; Campbell, 1981; Myers, 2000; Danchin et.al., 2003). It is greatly needed that mental health status of such people be enhanced and social support be extended to them to manage their stresses and improving quality of life (Nateghian, 2008; Hassan et.al. 2008; Sullivan et.al., 2009).