

# INTRODUCTION

India is one of the largest and most populated countries in the world. Acute and chronic diseases have always been a serious threat to health in our country. Cardiovascular diseases have now become the leading cause of morbidity and mortality in India. The incidence of cardiovascular disease in any population is associated with its biological, psychological and psychosocial factors.

All most all human beings experience stress from some source, one time or the other. Most of them do react to it as a problem. They either try to avoid it or control it by resorting to some sort of adaptation, adjustment or coping. The sources of stress could be either from outside of the individual or inside him. All the same he has to find a way to manage it. Off course, different people manage stress in different ways depending not only upon the nature and quantity of resources available to them, but also upon their habits, personality, dispositions and contexts.

Folkman and Lazarus (1980) defined coping as the cognitive and behavioral efforts made to master, tolerate or reduce external and internal demands and conflicts among them. Problem Solving coping style includes making alternative plans, taking specification to deal directly with the situation, learning more skills directed at the problem and negotiating and compromising to try to resolve the issue.

Gender differences in coping styles are the ways in which men and women differ in managing psychological stress. There is evidence that males often develop stress due to their careers, whereas females often encounter stress due to issues in interpersonal relationships. When coping responses were categorized according to four modes viz. intra psychic, inaction, direct action and information seeking significant difference was found between male and females in coping modes and life-stress categories (Chovan and Chovan, 1985). When groups were combined, significant correlations were noted between life stresses, particularly health-related stress and the coping modes of intra psychic and information seeking they used. Potentially stressful life events affect every one almost daily. Hamarat et al., (2001) found that perceived stress decreases with age and that older people reported more effective coping styles than younger people.

Surgical and non-surgical cardiovascular patients experiences stress related to factors such as anxiety, fear regarding outcome of the surgery and health status of the individual, dietary modifications, physical activity, pain, fatigue, depression and prognosis of disease. Surgical or non-surgical patients who utilize the multi- dimensional coping factors will experience low stress levels and they combat with the situation. Long term recovery from surgery will involve managing risk factors dietary habits, exercise, life style changes, support groups, relaxation technique's help to manage heart healthy life.

In view of the above, the present investigation was carried out with the following objective

• To find out the influence of gender, age and nature of patients on problem solving coping style among cardiovascular patients.

### HYPOTHESES

- 1. Gender would significantly influence problem solving coping style among cardiovascular patients
- 2. Age would significantly influence problem solving coping style among cardiovascular patients
- 3. Nature of patients would significantly influence problem solving coping style among cardiovascular patients

## SAMPLE AND TOOL

The sample consisted of 120 (60 male and 60 female) cardiovascular patients in the age group of 40-60 years, drawn randomly from various Districts of Andhra Pradesh, India. Subjects were personally interviewed and data was collected using coping styles inventory developed by Tobin (1984).

#### VARIABLES STUDIED

In the light of the hypotheses formulated, the following variables are studied

#### Independent variables

- 1. Gender (Male and Female)
- 2. Age (40-50 years and 50-60 years)
- 3. Nature of patients (Surgical and non-surgical)

#### **Dependent variable**

1. Problem solving coping style

## ANALYSIS OF DATA

The obtained data treated statistically in order to test the hypotheses. The Means and SDs (standard deviations) of the scores were calculated. To find out the influence of the independent variables (Gender, Age and Nature of patients) on dependent variable (problem solving coping style) the data were subjected to ANOVA (Analysis of variance).

#### **RESULTS AND DISCUSSION**

# Table-I : Means and SDs of Problem Solving coping style scores for eight groups

Age		Gender	Gender				
		Male	Male		Female		
		Nature of	Nature of Patients		Nature of Patients		
		Surgical	Non- Surgical	Surgical	Non- Surgical		
40-50	Mean	9.90	10.05	9.65	10.00		
years	SD	2.77	2.59	1.49	1.53		
50-60	Mean	11.40	11.45	10.07	10.42		
years	SD	2.91	2.78	2.06	1.90		

#### Means of the groups variable wise

Male=10.70 Surgical=10.25 Female=10.03 Non-Surgical=10.48 40-50 years =9.90 50-60 years =10.83

A close observation of table -I shows that the male non-surgical

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cardiovascular patients in the age group of 50-60 years have obtained high score (M=11.45), indicating that these subjects used problem solving coping style more frequently compared to the other groups. Female surgical cardiovascular patients in the age group of 40- 50 years have obtained low score (M=9.65) indicating that these subjects used problem solving coping style less frequently compared to other groups.

It is evident from the table-I that the male cardiovascular patients (M=10.70) used problem solving coping style more frequently than female cardiovascular patients (M=10.03). Non-surgical cardiovascular patients (M=10.48) used problem solving coping style more frequently than surgical cardiovascular patients (M=10.25). Cardiovascular patients in the age group of 50-60 years (M=10.83) used problem solving coping style more frequently compared to Cardiovascular patients in the age group of 40-50 years (M=9.90) and it is illustrated in the figure-I.



Figure-I Graphical representation of problem solving coping style scores in relation to gender, age and nature of patients

There are differences in mean scores of the groups related to problem solving coping style. However, in order to test whether gender, age and nature of patients have any significant impact on problem solving coping style among cardiovascular patients, the data were further subjected to analysis of variance and the results are presented in table II.

# Table-II: Summary of ANOVA for scores on Problem Solving coping style.

Source of Variance	Sum of Squares	df	MSS	'F'
Gender (A)	35.206	1	35.206	6.52**
Nature of Patients (B)	4.039	1	4.039	0.74@
Age (C)	70.162	1	70.162	12.99**
(A x B)	1.256	1	1.256	0.23@
(A x C)	20.933	1	20.933	3.87*
(B x C)	.049	1	.049	0.09@
(A x B x C)	.049	1	.049	0.09@
Within	1684.657	312	5.400	
Corrected total	1816.487	319		

\*\*-Significant beyond 0.01 level

\*- Significant at 0.05 level

@-Not significant

# The first hypothesis stated that **gender would significantly influence problem solving coping style among cardiovascular patients.**

It is evident from table II that the obtained 'F' value of 6.52 for gender is significant at 0.01 level implying that gender has significant influence on problem solving coping style among cardiovascular patients. As the 'F' value is significant the first hypothesis, which stated that, gender would significantly influence problem solving coping style among cardiovascular patients, is accepted as warranted by the results. Male cardiovascular patients (M= 10.70) used problem solving coping style more frequently than female cardiovascular patients (M= 10.03).

Coping has been described as an individual's attempts to us cognitive and behavioral strategies to manage and regulate pressures demands and emotions in response to stress (Folkman and Lazarus, 1980). Since norms of behavior for men and women differ in Indian culture it is likely that the way cope with stressful situations also differ to the extent they depended on sex role and sex appropriate behavior. Usually men use more effective coping styles as compared to women. Men are relaxed, hopeful, optimistic and physically and psychologically less fatigued as compared to females. Hallman (2003) stated that women use less active coping styles compared to men.

Several studies have found that women tend to use coping styles that are aimed at changing their emotional responses to a stressful situation, whereas men use more problem focused or instrumental methods of handling stressful events [Endler and Parker (1990), Bennet et al., (2005), Cohen, (2002)].

Findings of the present study corroborate with the earlier findings Denollet, 1992), Changiz Mohiyeddini et al., (2013), who found that there were sex differences in the ability to cope with the stress.

# The second hypothesis stated that **Age would significantly influence problem solving coping style among cardiovascular patients.**

It is evident from table II that the obtained 'F' value of 12.99 for age is significant at 0.01 level implying that age has significant influence on problem solving coping style among cardiovascular patients. As the 'F' value is significant the second hypothesis, which stated that age would significantly influence problem solving coping style among cardiovascular patients, is accepted as warranted by the results.

Cardiovascular patients in the age group of 50-60 years (M=10.83) used problem solving coping style more frequently than cardiovascular patients in the age group of 40-50 years (M=9.90).

The reason might be older people know how to arrange their daily activities in a systematic way to reduce problems at first. Younger adults with more energy can rush around from crisis to crisis. Older adults with their more limited energy and with experience learned how to prevent the problems. Hence age group of 50-60 years people used problem solving coping style more frequently compared to age group of 40-50 years.

Findings of the current study corroborate with the earlier findings of Mccrae, (1982), who found that older people uses problem solving coping styles more frequently to combat stressful life experiences.

# The third hypothesis stated that **nature of patients would** significantly influence problem solving coping style among cardiovascular patients.

It is evident from table II that the obtained 'F' value of 0.74 for nature of patients is not significant at 0.05 level implying that nature of patients has no significant influence on problem solving coping style among cardiovascular patients. As the 'F' value is not significant the third hypothesis, which stated that, nature of patients would significantly influence problem solving coping style among cardiovascular patients, is not accepted as unwarranted by the results.

Non-surgical cardiovascular patients (M=10.48) used problem solving coping style more frequently than surgical cardiovascular patients (M=10.25) and the difference is not significant.

The reason might be that surgical and non-surgical cardiovascular patients responded similarly to control or overcome the stress occurred due to chronic disease condition. Hence there is no significant influence of nature of patients on problem solving coping style among cardiovascular patients.

## CONCLUSIONS

- 1. Gender has significant influence on problem solving coping style. Male cardiovascular patients used problem solving coping style more frequently compared to female cardiovascular patients.
- 2. Age has significant influence on problem solving coping style among cardiovascular patients. The subjects in the age group of 50-60 years used problem solving coping style used more frequently compared to age group of 40-50 years.
- Nature of patients has no significant influence on problem solving coping style among cardiovascular patients.

## IMPLICATIONS

The results of the present study have several significant implications for individuals suffering from cardiovascular disease. It can help in developing stress management programs in which the perceived stress

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can be reduced by teaching the patients to use different coping techniques along with increasing the social support structure, healthy dietary habits and improving the inter personal relationships. Happy and relaxed patients have more tolerance and adaptive skills along with good immune system to deal with stress. Awareness campaigns and counseling sessions can be generated by highlighting how these stressors related to health threats can be reduced by both increased information and development of good coping skills. With this awareness, psychologists, counselors, social workers and clinicians can work on rehabilitation plans and attempt to improve stress management programs among the growing number of cardiovascular patients to improve their health condition.

#### REFERENCES

- Bennet, K.K., Compas, B.E., Beckjord, E., Glinder, J.G. (2005). Self-blame and distress among women with newly diagnosed breast cancer. J.Behav.Med; 28: 313-323. 1.
- Changiz Mohiyeddini, Stephanie Bauer and Stuart Semple.(2013). Displacement 2. Behaviour is associated with reduced stress levels among men but not women. PLoS; 8(2):355
- Chovan, M.J.R. and Chovan, W. (1985). Stressful events and coping responses among 3. older adults in two socio-cultural groups. Journal of psychology; 119(3): 253-260.
- Cohen, M. (2002). Coping and emotional distress in primary and recurrent breast cancer patient. J Clin Psychol Med settings; 9: 245-251. 4.
- patient. J Chin Psychol Med settings; 9: 243–251.
  Denollet, J., De Potter, B. (1992). Coping subtypes for men with coronary heart disease: relationship to well-being, stress and Type-A behaviour. Psychol Med; 22(3): 667-84.
  Endler, N.S., Parker, J.A. (1990). Multi-dimensional assessment of coping: A theoretical analysis. J Pers. Soc Psychol ;58: 844–854.
  Folkman, S. and Lazarus, R.S. (1980). An analysis of coping in a middle aged communicumped. LHest M Soc Polycol ;210: 2020. 5.
- 6.
- 7.
- 8.
- Folkman, S. and Lazarus, R.S. (1980). An analysis of coping in a middle aged community sample. J Health Soc Behav, 21: 219–239. Hallman, T. (2003). Stress burnout and coping: differences between women with coronary heart disease and healthy matched women. J. Health Psychol; 433-45. Hamarat, E., Thompson, D., Zabrucky, K.M., Steele, D., Mathemy, K.B., Aysan F. (2001) perceived stress and coping resources availability as predictors of life satisfaction in purpose middle-codered. Uncertainty doing Devention 10. 100 (2000). 9. young, middle aged and older adults. Experimental Aging Research; 27:181-196. Mc. Crae R.R. (1982). Age differences in the use of coping mechanisms. Journal of
- 10. Gerontology; 37:454-460. Tobin David L. (1984). User manual for coping strategies inventory International 11.
- Retrieved from www.academia.edu