

ANGER EXPERIENCE AND EXPRESSION IN RELATION TO CARDIAC STATUS

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Abstract

The intensity of anger expression and the direction of its expression among group of Cardiac Patients and non-Cardiac controls have been investigated in this theory. The Anger expression Scale of Spielberger and cardiac status evaluations were used as tools for the study. One way Analysis of Variance on a sample of 252 subjects revealed significant difference between the cardiac cases and controls with reference to the intensity of anger experienced and the direction of its expression. Age and occupation of the group did not contribute significantly to this negative emotion, however, the males and females do differ in their expressiveness of Anger.

INTRODUCTION

The link between heart and emotions are well accepted in the Indian Medical traditions. Charaka, the ancient ayurvedic Vaidya, describes the close relationship of the emotions to heart. Charaka Samhita, a classical text on Indian Medicine by Acharya Charaka describes the pathological changes in the heart due to emotions. He says that sudden accession of desire, anger, fear-greed, infatuation, excitement, grief, anxiety stimulate humors to occlude the channels of heart and the sense organs. These men fall into the attacks of Apasmara (Charaka samhita II - 8/4).

Modern Medical literature has been trying to establish scientifically this link between emotional stages and heart diseases. This is one of the key issues in the field of psychology and coronary health. There are many variables that mediate the relationship between personality factors and heart

diseases. The Epidemiological surveys on physiological and life style factors have strongly supported that cigarette smoking, high blood pressure and elevated cholesterol are definite contributors to the coronary Heart diseases (CHD). However, there is still a great need for supportive evidence linking personality traits and stressors to CHD.

The pionering efforts of Sanfrancisco cardiologists Friedman and Rosenman have contributed the concept of coronary prone behaviour termed as type A behaviour as significant risk for CHD. Researchers following this hypotheses have been both supportive of type A components such as speed, impatience, hostility and aggression as precursors for CHD. (Williams, et,al, 1985, Dembroski, 1985). Similarly studies relating to anger suppression Gently, et, al, (1981/82) Johnson (1987), Engebreston (1992), have been supporting the negative emotions and their impact on health.

The literature also reveals the effect of negative emotions on the life styles of the individuals. Studies demonstrate poor health habits such as smoking, drinking, over eating and obesity among high hostility group. High cholesterol and body weight are found to be related to emotional states. Booth - Kewley, et al, (1987), did a quantitative review on the personality variables studied in relation to CHD. The strongest associations were found for Type A, behaviour and also for anger, hostility, aggression and anxiety. The picture of coronary proneness revealed by this review is not one of a hurried, impatient workoholic, but instead is one of a person with one or more negative emotions.

The possibility of looking at a negative or disease prone personality characterised by anger as the root of coronary disease is the basis for this study.

METHOD :

In order to realise this explorative objective, the anger experience and expression styles of cardiac patients were studied. The clinical cases were

selected from the private and government hospitals from Madras. The non-clinical controls, were selected from the general population accompanied by the patients.

The Criterion for Selection : A definite diagnosis of CHD, was the main criterion for including in the group. The non-clinical group was free from coronary events, diabetes and high blood pressure during the time of the study. Cardiac cases with multiple clinical conditions were excluded from the study.

TOOLS :

The detailed case history, cardiac status examination, semistructured interview schedule and spielberger's anger expression scale (1979) were the assessment tools used for the study.

The subjects were met individually and were administered the test followed by the case history and interview schedule.

RESULTS :

One way analysis of variance and multiple regression analysis were carried out to statistically summarise the findings.

Table 1 Sample Characteristics (n:252)

	Age		df	F. value
	M	SD		
Cardiac Group	49.44	8.05	250	3.00
Control Group	45.32	9.84		

The cardiac sample in this study belonged to higher age group than the control group. Typically, the age is a major risk factor for coronary disease and thus greater representation of older subjects.

Men and women do not differ significantly with reference to the intensity of anger experience. However, when provoked, men tend to react more, either by internalising or externalising than women. This difference can be attributed to the fact that women in our culture are trained to tolerate frustrations better than men. On the other hand men are provided opportunities to be more vocal and expressive physically in showing their feelings and emotions.

It is interesting to note that men have scored high on anger control responsiveness than females. Anger control in true sense may also reflect a pathological suppression of anger and a social desirability set. There is a thin line differentiating between anger internalisation and anger control. This highlights the importance of anger management, where anger control does not signify its suppression or expression. Efficient management of anger involves an ability to be proactive and not reactive. Anger control score should reflect the proactive behaviour but in this group of males it denotes a high reactivity.

Table 2 Showing the Anger Scores of Males and Females

	Anger-in		Anger-out		Anger-control		Anger-expression	
	Mean	SD	Mean	SD	Mean	SD	Mean	SD
Males N=169	14.06	5.40	14.81	5.90	19.42	7.88	24.10	10.8
Females N=88	8.20	7.37	8.65	7.90	11.39	10.38	24.42	10.2

Table 3 Showing Anger expressions among cardiac and control groups

	Anger-in		Anger-out		Anger-control		Anger-exp	
	Mean	SD	Mean	SD	Mean	SD	Mean	SD
Cardiac Group	14.10	4.14	16.15	4.95	18.88	5.77	27.13	9.72
Control Group	11.34	7.36	11.61	7.60	15.97	10.59	22.53	11.70
F Ratio	7.52		18.98		4.32		6.05	
Sig	.007		.00		.03		.01	

The cardiac cases were significantly higher on anger experience ($F:6.05$ $p>0.01$ level). The scores obtained in this study is much higher than the mean score of 19.35 obtained by Spielberger and his colleagues (1979) on a sample of 364 adults. Anger internalisation and outward expression of feelings and thoughts are higher among cardiac cases. They were also found to be high on anger control. Though this high score reflects an effort on the part of cases to manage anger, sometimes it can also reflect a pathological suppression of anger. The overlapping of anger internalisation of behaviour and anger control can be found in this sample.

Further, when the anger expression scores of the total sample was correlated with the somatic complaints, the intensity of Anger experience was found to be modestly yet reliably associated with the clinical symptoms. Thus, these findings revealed that whenever a person experiences negative emotions and expresses it, then he is at a risk for disease.

Anger is a normal emotion, but to discharge it in a manner which will not affect the internal body system is an important issue for health psychologists to tackle.

REFERENCE

- Booth-kewley, S. & Friedman, H.S. (1987). Psychological predictors of heart disease - A quantitative review. *Psychological Bulletin*, 101, 343 - 362.
- Dembroski, T.M., Macdougall, J.M. Williams, R.B., Haney, T.L., & Blumenthal, J.A. (1985). Components of Type A, hostility, and anger-in relationship to angiographic findings. *Psychosomatic Medicine*, 47, 219-233.
- Engenbretson, J.O. and Mathews, K.A. (1992). Dimensions of hostility in men, women and Boys. Relationships to personality and cardiovascular responses to stress *Psychosomatic Medicine*, 54, 311-323.
- Gently, W.D., Chesney A.P., Gary H.G. & Harburg, E. (1981). Effect of habitual anger coping patterns on blood pressure in black/white, high/low stress area respondents. *Psychosomatic Medicine*, 43, 88.
- Gently, W.D., Chasney, A.P., Gary, H.G., Hall, R.P., & Harburg, E. (1982). Habitual anger coping styles. I. Effect on mean blood pressure and risk to essential hypertension *Psychosomatic Medicine*, 44, 195-202.
- Johnson, E.H., & Broman, C.L. (1987). The relationship of anger expression in health problem among black Americans in a national survey. *Journal of Behavioural Medicine*, 10, 103-116.
- Spielberger, D. (1979). *The Anger expression scale manual*.
- Williams, R.B., Jr., Barefoot, J.C. & Shekelle, R.B. (1985). The health consequences of hostility. IN M.A. Chesney, & R.H. Roseman. (Eds) *Anger and hostility in Cardiovascular and behavioural disorders*. (PP:173-185). New York: Hemisphere/MC Graw - Hill.