

PERSONALITY PROFILES OF CORONARY CASES

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SUMMARY

Fifty coronary heart disease cases along with an equal number of controls, matched in age and educational levels were studied using Middlesex Hospital Questionnaire, Somatic Inkblot Series I and Command Hospital Questionnaire. They were between 20 and 55 years of age. Obsession and somatic personality traits measured on SIS variables were found to be statistically significant in coronary cases compared to controls. However the subject belief in the philosophy of "Karma" when measured on command hospital questionnaire did not show any difference between the two groups.

INTRODUCTION

Coronary Heart disease (CHD) is a major cause of morbidity and mortality. While a number of risk factors have been identified, preventive strategies have not been very effective, as several of these factors are difficult to modify. Smoking is the most important known modifiable risk factor for heart disease. 30% of all coronary deaths are related to smoking (Surgeon General, 1983). It also constitutes a significant interface between physiological and psychological risk factors, as Eysenck's seminal contribution asserted over two decades ago (Eysenck, 1973). The relationship between personality and psychological stress versus CHD is well recognized (Haynes, 1980; Anggard et al, 1986).

Coronary prone type "A" behaviour pattern is perhaps the most highly researched area in psychosomatic medicine (Verghese et al, 1985; Singh & Thapa, 1989; Ghulam et al, 1990). Several studies have attempted to highlight the role of specific factors such as hostility (Shekelle et al, 1983), frustration and aggression (Seth, 1979), extroversion, introversion, neuroticism (Katiyar et al, 1989) and stressful life events (Singh, 1987). The complexity of the problem and the diversity of contributory variables is reflected in a number of reports which focus attention on the role of vocation (Khorana, 1989), marital status (Chandra et al, 1983) and interaction of risk factors (Kumar et al, 1988).

A few workers have discussed the feasibility of altering type A behaviour pattern through behavioral counselling (Friedman et al, 1987) and relaxation procedures along with changes in life styles (Singh & Thapa, 1989). The findings of an elaborate and well designed prospective study involving follow up of 1457 subjects by Haines et al (1987) suggested a nodal role for a phobic anxiety in relation to CHD. Somatization is, however seen much more frequently than free floating anxiety or depression per se in our culture. This empirical observation is supported by a mass of published material (Teja & Agrawal, 1971; Chadda & Bhatia, 1990). Similar trends have been reported from other developing countries (Kirmayer, 1984; Lipowski, 1988). These aspects have not been specifically investigated in most of the earlier studies relating to the psychosocial matrix which underlines CHD.

Another culture related area which we feel, merits further inquiry is the role of the philosophical concept of "karma" as enunciated in the Bhagwad Gita

(Childbhavananda, 1971), i.e. "Seek to perform your duty, but lay not claim to its fruits. Be you not the producer of the fruits of Karma, neither shall you lean towards inaction". The individual, who is now becoming an increasingly assertive component of the modern Indian social scenario, is an antithesis of the traditional "action is your duty, reward is not your concern" motif. Empirical observation leads us to believe that this philosophical transition has generated high levels of anxiety in the "emancipated Indian" and contributes to the rising incidence of CHD.

The present inquiry is an attempt to explore the three parameters outlined above. For monitoring levels of anxiety and its phobic component, we have employed the Middlesex hospital Questionnaire. (Crown & Crisp, 1966). In the somatic aspect, Cassell's Somatic Inkblot Series No.I (Cassell, 1990) appeared to be the ideal instrument. Apart from its specificity and relative simplicity in interpretation, its structured inkblot content is more suited for the comparatively unsophisticated subject, as compared to the more abstract forms of the Rorschach Cards (Dubey & Cassell, 1990).

The third parameter (Karma) posed a greater problem as no ready made instrument was available. We have therefore devised a new self administered questionnaire -the "Command Hospital Questionnaire" for assessing this aspect.

MATERIAL AND METHODS

Fifty coronary heart diseases cases with an equal number of controls matched in age and education levels served as the material for this study. They were in the age group of 20 to 55 years. All of them were able to understand English and Hindi. In the control group none was on any treatment at the time of the study. The following instruments were used to study both the groups:

Middlesex Hospital Questionnaire (MHQ): This is a well documented personality test questionnaire which provides the basic personality factors for study such as 1. Free floating anxiety 2. Phobia 3. Obsession 4. Somatic symptoms 5. Depression and 6. Hysterical Personality traits. Its reliability, validity simplicity and clinical significance is well documented.

Somatic Inkblot Series (SIS-I): The somatic aspect of the personality profile of coronary and normal cases were measured on the latest projective technique, the SIS-I (Cassell, 1990). The SIS-I brings out the "inner cry of the body". The cards (20 in number) consist of figures,

black and white and colored, which are less threatening and semi-ambiguous in nature. The figures suggest an idea related to the subject's inner world. This series is helpful in correlating the findings observed in MHQ.

Command Hospital Questionnaire (CHQ): To study the role of the subject's belief in the philosophical concept of "Karma" as enunciated in the Bhagwad Gita in precipitation of coronary heart disease. A self-administered questionnaire of 10 items was used. The responses were rated as 1. always 2. sometimes and 3. never. The maximum score possible was 30.

The study was conducted on a double blind basis by allotting the subjects index numbers so that the tester had no prior knowledge of the individual physical status. The above instruments were administered individually as per the protocol laid down in the manuals. The data thus obtained was statistically analyzed.

RESULTS AND DISCUSSION

The results obtained are shown in Tables 1 to 3. As reflected in the results, the personality profiles of coronary cases do not differ from their normal counterparts except in respect of two traits/symptoms.

Differences in obsession and somatic concern on the MHQ were statistically significant (Table 1). The significance of phobic anxiety in coronary heart cases as reported by Haines et al (1987) was not seen in our study probably due to the influence of cultural and environmental factors (Teja, 1971; Chadda, 1990).

Table 1
Personality profiles of CHD and Non-CHD Cases on MHQ.

No.	Personality Dimensions	CHD		Non-CHD		P
		M	SD	M	SD	
1.	Anxiety (FF)	4.1	2.02	4.0	2.04	NS
2.	Phobia	5.14	2.26	4.54	2.13	NS
3.	Obsession	9.44	2.43	5.88	2.61	<.01
4.	Somatic	5.96	2.44	4.14	2.03	<.01
5.	Depression	5.18	2.27	4.9	2.21	NS
6.	Hysterical	7.28	2.69	6.96	2.64	NS

Table 2
SIS Profiles of CHD and Non-CHD

SIS Variable	CHD (N-50)		Non-CHD (N-50)		T-Value
	M	SD	M	SD	
R	23.56	4.85	20.24	5.31	.05 NS
Rt	24.29	4.92	23.18	4.81	.81 NS
H	3.8	1.75	3.6	1.8	.39 NS
A	5.28	2.29	6.28	2.44	.40 NS
Ant	5.96	2.44	12.76	3.57	8.00**
Sex	1.04	1.01	7.08	2.66	10.76**
Other	5.16	2.27	5.28	2.29	.30 NS
Rel	3.32	1.82	1.8	1.3	3.45**

** P<0.01

On SIS, eight major factors were considered (Table 2); only three of these were found to be statistically significant. Coronary cases showed significantly lesser number of sex and anatomical responses as compared to the normals. This observation is rather paradoxical as one would ordinarily expect heart cases to have a greater degree of somatic concern. This is, however, balanced somewhat by the interesting finding that coronary cases gave most of the anatomical responses on cards 5, 7, and 8 which pertain mainly to heart and lungs. Rejection rate was significantly higher among coronary cases which indicated some element of depression and constriction in the range of interest. They also projected their poor self image on card 2. This observation is contrary to the findings on the MHQ. This observation is contrary to the finding on MHQ. This is not surprising, as self-administered questionnaire data seldom accord with those derived from formal projective tests and this is well accepted.

Table 3
Belief in Karma of CHD and Non-CHD Cases (CHQ)

Belief (Type)	CHD		T-Value
	N:50	N:50	
Firm (21-30)	41	45	0.18 NS
Moderate (11-20)	9	5	1.14 NS
Negative (0-10)	0	0	-
Mean	24.02	24.78	0.77 NS
SD	4.90	4.97	-

Typical responses were also relatively less in coronary cases as compared to the normals (35 responses in CHD compared to 84 in controls) thereby indicating impaired adjustment capacity. As regards the subjects belief in the philosophy of "Karma," our preliminary findings (Table 3) do not indicate any significant difference in the two groups. This aspect, however, merits further inquiry.

CONCLUSION

The preliminary finding in our study indicates that SIS is an useful tool in assessing the somatic component in coronary cases who show greater preoccupation with the heart and related organs. The range of their human interest appears to be constricted and there is some impairment of interpersonal relationships.

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