

NEUROTICISM PROFILE IN CORONARY HEART DISEASE

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SUMMARY

Thirty seven cases of coronary heart disease and 30 normal healthy controls were administered Hindi version of MHQ. The coronary heart disease patients scored significantly higher on total neuroticism, free-floating anxiety and somatic anxiety subscales of MHQ.

The specific personality and behaviour pattern of coronary heart disease subjects have been studied by various researchers (Dunbar, 1943; Kemple, 1945).

Friedman and Rosenman (1959 and 1960) and Rosenman and associates (1961, 1964, 1967 & 1968) have described coronary heart disease patients characterized by a specific type A behaviour pattern. Studies with M M P I on coronary heart disease patients revealed that patients scored higher on Hs (hypochondrias) Hy (Hysteria) and D (depression) sub-scales (Brozek *et. al.*, 1966, Mordkoff and Rand, 1968; Bakker and Lavenson, 1967).

An association between coronary disease and anxiety was reported by Mertens and Segers (1971). Thiel *et. al.* (1973) reported patients with coronary heart disease scored higher on anxiety and depression subscales and more often reported feelings of nervousness, sleep disturbances and dyspnoea.

Segers *et. al.* (1974) reported that the man with coronary heart disease scored higher on scales for total anxiety, manifest anxiety and covert anxiety.

The present study was conducted to explore the neuroticism profile of coronary heart disease patients.

disease and 30 healthy controls were administered Hindi version of Middlesex Hospital Questionnaire (Srivastava and Bhat, 1974). The patient group was further sub-divided into two groups according to diagnosis. There were 24 cases of myocardial infarction and 13 cases of angina pectoris. The results are presented in tables below.

TABLE I—Neuroticism profile of the patients and controls.

Neuroticism Profile	Patients (N=37) Mean± S.E.	Controls (N=30) Mean± S.E.	t
Neuroticism (MHQ)	37.78±1.38	29.3±0.72	5.17*
FFA	5.57±0.44	3.83±0.18	3.35@
OBS	8.57±0.52	7.80±0.38	1.16
PHO	5.11±0.53	4.23±0.24	1.43
SOM	7.81±0.57	3.60±0.23	6.40*
DEP	6.19±0.57	5.60±0.25	0.89
HYS	4.54±0.33	4.27±0.20	0.67

*d.f. = 65 p < 0.001

@d.f. = 65 P < 0.01

MATERIAL AND METHOD

Thirty seven patients of coronary heart

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TABLE II—*Neuroticism profile of patients of angina pectoris and myocardial infarction.*

Neuroticism profile	Angina pectoris (N=13) Mean±S.E.	Myocardial infarction (N=24) Mean±S.E.	't'
Neuroticism (MHQ)	39.15±2.53	37.04±1.73	0.72
FFA	6.15±0.87	5.25±0.53	0.97
OBS	7.69±1.13	9.04±0.54	1.26
PHO	5.62±0.86	4.96±0.71	0.58
SOM	8.92±0.83	7.33±0.78	1.33
DEF	5.8±1.07	6.12±0.72	0.23
HYS	5.00±0.66	4.12±0.39	1.25

DISCUSSION

In the present study patients of coronary heart disease had significantly higher neuroticism score on MHQ than the controls. Further, the patient scored significantly higher on MHQ sub-scales for free-floating anxiety and somatic concomitants of anxiety than the controls. The findings are in conformity with the findings of Segers *et al.* (1974) who report a significant correlation between coronary heart disease and anxiety, manifest and covert. No significant differences were found in neuroticism between patients of angina pectoris and myocardial infarction.

It is rather difficult to say as to whether high neuroticism is as a result of the disease or it is a long standing pattern of life style. The items on MHQ measure both the traits as well as the symptoms. The patients were interviewed after 3 weeks of acute episodes. They had significantly high scores only on the sub-scales for free-floating anxiety and the somatic concomitants of anxiety. This suggests that probably the high scores are a result of illness. The significance of the finding can be understood in the light of the fact that increased anxiety may hamper quick recovery of the patient and it may prolong invalidism. Psychotherapeutic intervention at this stage may lead to better recovery and less chances of psychic invalidism.

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