COMPARATIVE STUDY OF FAMILY STRESS AMONG PATIENTS SUFFERING FROM DIABETES, CORONARY HEART DISEASE-CHD AND CANCER

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ABSTRACT

The main aim of the present research is to study and Compare family stress among patients suffering from Diabetes, CHD and Cancer. The sample of 360 Diabetes, CHD and Cancer patients were selected for the present study. 180 male and 180 female Diabetic, CHD and Cancer patients from urban and rural areas were taken from the various hospitals of Sabarkantha and Ahmedabad district. The age range of patients was 40 to 50.

Battery of family stress scale by Dr. Panchal and Dr. Shukla was used for data collection. To analyze the data analysis of variance was used. Results clearly indicate that male patients significantly differ on frustration, conflict, pressure, anxiety and total family stress as compared to female patients. Urban patients differ significantly on anxiety as compared to rural patients. Diabetic patients differ significantly on pressure and anxiety as compared to CHD and Cancer patients.

INTRODUCTION

In our society serious psychosomatic disorders like coronary heart diseases, diabetic and cancer have been seen. There are some predisposing factors for CHD, Diabetics and Cancer. Research reports shows that there are some psychological factors which may also be involved in progression of these diseases. The psychosomatics aspects of CHD, Diabetics and Cancer are very important issue as it is one of the prevalent conditions in present times.

Wheller, Wagaman & McCord (2012) revealed a pattern of significant correlations between the Conscientiousness and neuroticism personality domains and one or more self-reported adherence behaviors. In addition, correlations were also found between one facet of extraversion and one facet of agreeableness. These suggestive results, if replicated in larger studies, provide useful information to clinicians as they design and monitor individualized diabetes management regimens for adolescents.

Antoniou and Cooper (2005) revealed that personality has been long considering major moderators of stress in organizational behavior. Blonna (2010) Shows that stress is prototype of emotional status and physiological reaction taking place in response to difficulty from within or outer surface of organization.

Piepers (2011) looked at the various personality traits in 2152 men and 3143 women between 42 and 66 years of age. Testing discovered 316 of the men and 213 of the women were pre-diabetic.

- It was found that men with low antagonism, or high agreeableness, had a lower risk of having diabetes or pre-diabetes than those with high antagonism.
- Among both men and women, the lowest risk of pre-diabetes and diabetes was found among those with a high capacity for feeling pleasure: who had strong feelings of happiness and had learned to be aware of their feelings.

Steptoe and Kivimaki (2013) studies published until 2011 show a 1.5-fold (95% confidence interval 1.2-1.9) increased risk of coronary heart disease among adults experiencing social isolating and a 1.3-fold (1.2-1.5). Excess risk for workplace stress; adverse metabolic changes are one of the underlying possible mechanisms. Stress, anger, and depressed mood can act as acute triggers of major cardiac events; the pooled relative risk of acute coronary syndrome onset being preceded by stress is 2.5 (1.8-3.5) in case-crossover studies. Stress is also implicated in the prognosis of cardiovascular disease and in the development of stress (takotsubo) cardiomyopathy. A major challenge over the next decade is to incorporate stress processes into the mainstream of cardiovascular path physiological research and understanding.

Halford et al., (1990) indicate that type-A diabetics experiencing high level of stress show poorer blood glucose control than type-B diabetics under control.

Prem Kumari Mona and Babita Gupta (2001) indicates that Type-A behavior pattern plays an important role in causing diabetes. Diabetics are more aggressive, hard, driving/competitive, time-regent, hostile and job centered than non-diabetics.

K.A.Matthews and Rodin, (1992) found that elevations in female reproductive hormones also diminish blood pressure responses to stressful circumstance because they diminish sympathetic nervous system activity.

Abikoye (2010) indicated that neuroticism was positively related to illness intrusiveness while age and duration of illness were negatively related to illness intrusiveness. Results also indicated that male patients reported significantly higher on illness intrusiveness than females, $t(2,119) = 4.83$; $p<0.05$.

Polock 2005 examined the association between the presence of personality variables implicated in the pathogenesis of eating disorders and the presence of eating disorder symptoms in 51 women with type 1 diabetes. Subjects were assessed with interview instruments and self-report questionnaires, including scales measuring eating disorder symptoms, borderline personality characteristics and perfectionism. Fourteen subjects displayed moderate to severe eating disorder symptoms. Perfectionism was related to attitudinal aspects of eating disorders and borderline personality characteristics were related to disordered behaviours and poor glycemic control. The results suggest that personality factors are related to disorder eating and poor glycemic control in diabetic women.

OBJECTIVES

1. To study and compare male and female diabetic and cancer patients with regards to various family stress components like, frustration, conflict, pressure and anxiety.
2. To study and compare urban and rural diabetic and cancer patients with regards to various family stress components like, frustration, conflict, pressure and anxiety.
3. To study and compare difference among diabetic, CHD and cancer patients with regards to various family stress components like, frustration, conflict, pressure and anxiety.
4. To study and compare interaction effect between sex and area of residence of diabetic, CHD and cancer patients with regards to various family stress components like, frustration, conflict, pressure and anxiety.
5. To study and compare interaction effect between sex and type of patients with regard to various family stress components like, frustration, conflict, pressure and anxiety.
6. To study and compare interaction effect between area of residence and type of patients with regards to various family stress components like, frustration, conflict, pressure and anxiety.
7. To study and compare interaction effect among sex, area of residence and type of patients with regards to various family stress components like, frustration, conflict, pressure and anxiety.

HYPOTHESES

1. There will be no significant difference between male and female diabetic and cancer patients with regards to various family stress components like, frustration, conflict, pressure and anxiety.
2. There will be no significant difference between urban and rural diabetic and cancer patients with regards to various family stress components like, frustration, conflict, pressure and anxiety.
3. There will be no significant difference among diabetic, CHD and cancer patients with regards to various family stress components like, frustration, conflict, pressure and anxiety.
4. There will be no significant interaction effect between sex and area of residence of diabetic, CHD and cancer patients with regards to various family stress components like, frustration, conflict, pressure and anxiety.
5. There will be no significant interaction effect between sex and type of patients with regard to various family stress components like, frustration, conflict, pressure and anxiety.
6. There will be no significant interaction effect between area of residence and type of patients with regards to various family stress components like, frustration, conflict, pressure and anxiety.
7. There will be no significant interaction effect among sex, area of residence and type of patients with regards to various family stress components like, frustration, conflict, pressure and anxiety.

METHODOLOGY

Sample :

The sample of 360 patients was randomly selected for the present study. 180 male and 180 female Diabetic, CHD and Cancer patients from urban and rural areas were taken from the various hospitals of Sabarkantha and Ahmedabad district. The age range of patients was 40 to 50.

Tools:

For data collection Battery of family stress scale by Dr. Panchal and Dr. Shukla was used.

Procedure:

After establishing a rapport Battery of family stress scale was administered on selected sample of diabetic, CHD and Cancer patients. Then scoring was done as per scoring key of the Battery of family stress scale. To analyze the data analysis of variance was used.

Source of Variance	df	Family Stress Component				Total Family Stress
		Frustration	Conflict	Pressure	Anxiety	
Ass	1	13.41**	10.16**	2.01	62.52**	30.25**
Bss	1	1.62	0.09	2.09	5.13*	0.49
Css	1	3.72	0.35	7.22**	29.95**	1.48
A * B	2	0.04	1.372	4.85**	21.80**	7.24**
A * C	2	0.73	5.54**	7.09**	20.93**	12.78**
B * C	2	5.88**	1.67	2.31	9.70**	7.30**
A * B * C	2	4.04*	4.43	2.87	15.21**	9.70**
Wss	348					
Tss	359					

*significant at .05 level **significant at .01 level

Ass = Sex , Bss = Area of Residence, Css= Type of patients

RESULTS AND DISCUSSION

Results clearly indicates that male patients significantly differ on frustration, conflict, pressure, anxiety and total family stress as compared to female patients. Urban patients differ significantly on anxiety as compared to rural patients. Diabetic patients differ significantly on pressure and anxiety as compared to CHD and Cancer patients. Sex and area of residence

significantly interact each other on family stress components like pressure and anxiety and total family stress. Sex and Type of patient significantly interacts each other on family stress components conflict, pressure, anxiety and total family stress. Area of residence and type of patient significantly interact each other on family stress components like frustration, anxiety and total family stress. Sex area of residence and type of patient significantly interact each other on family stress components like pressure, anxiety and total family stress. K.A.Matthews and Rodin, (1992) found that elevations in female reproductive hormones also diminish blood pressure responses to stressful circumstance because they diminish sympathetic nervous system activity.

CONCLUSION

Thus we can affirm conclusively that patients suffering from diabetes, CHD and cancer have need special psychological help to improve their personality and suitable intervention by stress management as well as medical treatment. It is also suggesting that the family environment should be need to be improve.

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