FREQUENCY OF PSYCHIATRIC MORBIDITY AMONGST PATIENTS WITH DIABETES MELLITUS IN A MEDICAL OUTPATIENT

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ABSTRACT

The present study was conducted to find the frequency of psychiatric morbidity among diabetes mellitus patients in medical outpatient department. This represents an observational study based on the patients reporting to a hospital OPD. This study lasted for over one month at Combined Military Hospital Nowshera.

Patients attending diabetic clinic (n=50) were screened with the General Health Questionnaire. Present State Examination was applied to the positive cases for the consistency of the psychiatric diagnosis. A control group (n = 50) was selected amongst the attendants of the patients and the same instruments were applied. The frequency of psychiatric morbidity was found out along with individual psychiatric diagnoses.

54 % of diabetics had significant psychiatric morbidity. Only 24 % of the control group had psychological problems (p = 0.0038). The common disorders among the diabetics were adjustment disorder, depressive disorder and generalized anxiety disorder.

It is concluded that the increased frequency of psychiatric morbidity among the diabetics raises the need for early diagnosis and prompt treatment.

Keywords: Diabetes mellitus, psychiatric morbidity

INTRODUCTION

Every person reacts emotionally to a physical disorder. If this disorder is severe, troublesome and incurable, the mental state of that person is badly disturbed [1]. Such is the case with diabetes mellitus. The psychological reaction is usually a transitional process moving from initial shock and denial to a gradual assimilation of information and adjustment to a new disease state. Individuals vary in their response; adjustment disorders, depressive reactions and anxiety states are the common consequences [2]. Diabetes mellitus is chronic metabolic disorder characterized by persistent hyperglycaemia. The quality of life of the patient is adversely affected due to the knowledge about the course of illness, restriction of diet and activity, closely monitored management schedules and the continued risk of acute and chronic life threatening complications [3]. He has to face life long difficulties in work, leisure and social activities. He has physical, financial and psychological stresses [4]. The possible causes could be psychological including adjustment reactions, chronic autonomic pain, erectile dysfunction in males [5], some shared neuroendocrine dysfunction e.g., disturbances in hypothalamic pituitary adrenal axis [6], cerebral vascular changes, cognitive deficits [7], effect of hypoglycaemic agents or repeated hypoglycaemic episodes with its own consequences [8]. The prompt diagnosis of psychiatric disorders in these patients will improve the overall quality of life of the patients. The burden of the psychiatric disorder will decrease [9]. Taking in to view the above general considerations, the author conducted the study to find the prevalence of psychiatric disorders among diabetics.

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PATIENTS AND METHODS

The study was carried out at the department of psychiatry Combined Military Hospital Nowshera in liaison with department of internal medicine, over a period of one month. A total of

50 patients suffering from diabetes mellitus were included in the study, along with a control group of another 50 apparently healthy attendants of the index patients, to match for socioeconomic class. The diabetics included both insulin dependent and non-insulin dependent patients and this variable was not considered to avoid complications in the study. Important demographic details were taken. General Health Questionnaire was used as the screening instrument. The standardized urdu translation of Present State Examination (PSE) [10] was applied for the consistency of the diagnosis. Nomenclatures from the tenth edition of International Classification of Diseases (ICD-10) [11] were used. The frequency of psychiatric disorders was determined in both the groups. The diabetic patients who suffered from any other chronic disorder were excluded, as were those who were unwilling to participate.

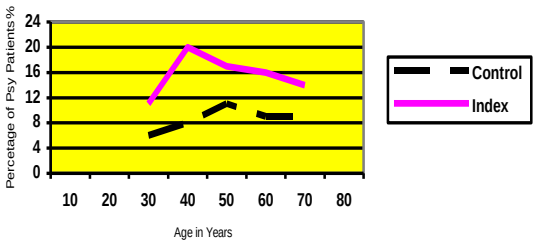

Fig. 1: Age wise distribution of psychiatric disorders

Table-1: The frequency of psychiatric morbidity

Group	No of patients With Psychiatric Morbidity	Percentage of patients With Psychiatric Morbidity
Index group n = 50	27	54%
Control group n = 50	12	24%

p value = 0.0038 (highly significant)

Table-2: The frequency of individual psychiatric disorders

Psychiatric disorders	Index group n = 50		Control group n = 50	
	No of patients	Percentage	No of patients	Percentage
Adjustment disorder	08	16 %	01	02 %
Depressive episode and recurrent depression	07	14 %	05	10 %
Generalized anxiety disorder	04	08 %	03	06 %
Mixed anxiety and depressive disorder	02	04 %	00	00 %
Dysthymia	01	02 %	01	02 %
Panic disorder	01	02 %	00	00 %
Psychoses	01	02 %	00	00 %
OCD	01	02 %	01	02 %
Phobic disorders	01	02 %	00	00 %
Conversion (Dissociative) disorder	00	00 %	01	02 %
Other diagnoses	01	02 %	00	00 %

The diagnosis of diabetes mellitus was based on the criteria of WHO published in 1998. Finally, the compiled results were subjected to statistical analysis through SPSS.

As exclusion criteria, patients with past history or family history of diabetes mellitus in both the groups were not included in this study. Similarly, patients suffering from other physical disorders were also excluded, as were those who were unwilling to participate. Efforts were made to match the control population with the index group in terms of age, gender and social class, as psychiatric morbidity varies immensely with these variables.

RESULTS

Fifty four percent diabetics were found to have psychiatric morbidity (table-1). Among the non diabetic control group twenty four percent people had some kind of psychiatric disorder (p=0.0038) i.e., highly significant. Individual breakdown of psychiatric disorders among the diabetics (index group) revealed that adjustment disorder (16%) was the most common presentation, followed by depressive disorder (14%), generalized anxiety disorder (8%), mixed anxiety and depressive disorder (4%) and to a lesser extent other psychiatric disorders. Among the control group, the most common diagnoses were depressive disorder (10%) and generalized anxiety disorder [6]. See table-2 for details.

As depicted in fig. 1, psychiatric morbidity in the diabetics, i.e., index group was the greatest in comparatively younger age group (median of 40 years) as compared to the control group (median of 48 years). Depressive disorder was almost twice as common in females as compared to males in both the groups.

DISCUSSION

It is seen that diabetics have slightly more than twice the frequency of psychiatric disorders as compared to non-diabetics. The results were comparable to contemporary research [12]. Lloyd and Brown found that all psychiatric disorders especially depression was much more common in diabetics than in non diabetics. The prevalence was twice as high in women. Kovacs M et al [13] had previously found a prevalence of psychiatric disorders as 47.6 among diabetics, which was highest especially soon after the diagnosis. Depression and generalised anxiety disorder were the leading diagnoses. They recommended that monitoring for psychiatric morbidity be done in the newly diagnosed diabetics, more so in the first year of the diagnosis.

All types of psychiatric disorders were more frequent among the diabetics; however adjustment disorder, depression and generalised anxiety disorder stood out in particular. This is again comparable to the western literature [14]. Diabetics of all ages are affected by psychological problems, ranging from children [15] and adolescents [16] to the old [17]. The reasons for increase in the frequency of psychiatric disorders are multi-factorial. Being chronic illness diabetes leads to psychological stress [18]. Life long diet restrictions, limited social activities, sexual dysfunction and threat of dangerous complications [19], all lead to breakdown in psychiatric illness. There is evidence of an unknown metabolic abnormality in the hypothalamic pituitary adrenal axis [20] in diabetics and the same HPA axis is also implicated in aetiology of depression. Moreover treatment with hypoglycaemic medicines [21] may lead to severe anxiety. We found that psychiatric breakdown was slightly earlier in those with diabetes. Our study also revealed that phobic disorder and panic disorder were also more likely in diabetes mellitus patients.

An important confounder in the study was the effect of hypoglycaemic agents in producing psychiatric symptoms. These could include hypoglycaemia, anxiety, restlessness, panic attacks, headache, slurring of speech, vertigo fits, coma, etc. Other variables included type of personality and the presence of recent life events. The population in both the groups was heterogeneous in demographic characteristics, so as to avoid any bias.

Limitations of this study were the small group of study population, fewer numbers of female subjects, the confounding variables including psychiatric symptoms due to hypoglycaemic agents, and lack of consideration for the type of diabetes mellitus, i.e. type I or type II.

Early diagnosis of psychiatric disorders will lead to prompt treatment and a better life for the diabetics. Psychological interventions [22] as well as pharmacotherapy might prove wonders. Integrating psychological counseling [23] in routine diabetic care will help the patient and his family.

Further studies on this important subject may bring more evidence that consultation liaison psychiatry could change the lives of millions of sufferers of this chronic and debilitating metabolic disease having a common co-morbidity with psychiatric disorders [24].

CONCLUSION

It is concluded that the increased frequency of psychiatric morbidity in diabetics should ring bells in our ears. Psychiatric misery is added upon an already devastating metabolic disease. Careful psychological screening is the answer to this problem. Psychiatric interventions like education, counselling and treatment could be the missing link in the overall management of the patients suffering from diabetes mellitus.

More community based studies are required to assess the magnitude of the problem and to lay down principles to help such patients.

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