



POIGNANCY OF DIABETIC PATIENTS – THE EMOTIVE EXHAUST

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ABSTRACT

Research Question: Are you emotionally deprived because you are diabetic? Background: “Diabetes”- the preponderant metabolic disease that transforms an individual to morbidity. The populace are concern and have awareness about the harmful effects of diabetes associated with other co-morbid illnesses. But they are ignorant about the risks of emotional distress that are caused by diabetes. **Objectives:** To assess the prevalence of Emotional burnout among diabetic patients and its associated risk factors. **Materials and Methods:** This study was done as a hospital based cross sectional study using pre-tested questionnaire among known diabetic patients of all ages and both gender in a randomly selected Diabetic care hospitals using PAID scale questionnaire. The calculated sample size was 100 and the individuals were interviewed after getting proper informed consent. The data was entered in MS excel sheet and analysis was done using SPSS software. **Results:** Approximately 112 known diabetic patients were interviewed of which 53% were males with the mean age of 57 years and 78% of them were on oral hypoglycemic drugs while 22% were on Insulin treatment. Majority 80 (71.4%) of them consult a diabetologist for treatment. Sleep disturbances were present among 30% and diabetic complications were seen among 11% of the study participants. As far as the glycemic status was concerned the recent mean fasting and post-prandial blood glucose was 152 and 246 respectively. Emotional burn out among the study participants was found to be 21% and it was associated with duration of diabetes, diabetic complications and treatment duration. **Conclusion:** This study has explored the burden of Emotional distress among the diabetic population which was moderately high, suggesting that diabetic patients need not only diet counselling and also psychological counselling to live with the disease.

KEYWORDS: Diabetes, PAID Scale, Depression.

INTRODUCTION

Diabetes

The prevalence of diabetes is rising rapidly especially in the urban population in India. Since 1971 to 2000, a 10 fold increase has been observed.^[1] Rapid growth of developing nations has not only invented social and economic transition but also luxurious life style with less strenuous activities, improper dietary habits that has caused the prevalence of diabetes in millions throughout the nation. The genetic susceptibility nature of the disease travels through families as how asset reaches the next generation. Population diagnosed as diabetic are prone for depression due to the co-morbidities associated with the illness. Substantially, the affect in emotional feelings like irritability, sadness, depression and fear of co-morbid conditions are found exaggerated in the diabetic patients rather than the normal populace when compared. Doctors and caregivers are concerned about the physical welfare and hence less attention is given for their psychological feelings, thus they are undiagnosed

and untreated. Hence, this study aims to emphasize the need of counselling for the diabetic patients for their mental well-being.

AIMS AND OBJECTIVES

- To assess the prevalence of Emotional burnout among diabetic patients
- To study the impact of associated risk factors on emotional distress due to diabetes like.
- Duration.
- Complications.
- Poor glycemic control.
- Any other chronic illness.

EXCLUSION CRITERIA

- Our study excluded the Diabetic patients with the following criteria:
- Diagnosed any other psychological disorders
- Patients who were not ready to participate
- Family history of depression

MATERIALS AND METHODS

This study was done as a hospital based cross sectional study at Chennai during September 2015 to November 2015 with the objectives of assessing the prevalence of Emotional burnout and its associated risk factors among diabetic patients. The investigator of the study solicited the officials of randomly selected private hospitals in Tambaram and Kelambakkam areas to elucidate the objectives of the study. 6 administrative officials accepted to conduct the study in their hospitals. The scrutineer of the research visited the respective hospitals during the study period where individuals suffering from diabetes were administered with questionnaire after getting their assent. The questionnaire includes socio-demographic data; diabetes related questions and validated PAID scale [Problem Areas In Diabetes Scale]. The questionnaire was also translated into Tamil for better understanding for the participants. The goal of the research was completely explained to the partakers. The participants were assured that their identity will not be declared to anyone. The investigator maintained strict confidentiality throughout the study as ensured. Data collection was done by questionnaire and direct interview method using a standardized questionnaire. Astonishingly, all the volunteers who participated in this study were very co-operative throughout the study. They also added that the questionnaire and PAID scale would absolutely explore the emotional distress among the diabetic populace and requested us to inform them about the outcome of this research. The data were entered in MS excel sheet and analyzed using SPSS software – 17.

PAID SCALE: [Problem Areas In Diabetes Scale]^[2]

PAID Scale is used to assess the emotional burnout. This scale has high acceptability and scientific validity with high sensitivity and specificity as evidenced by more than 60 scientific papers and scientific research abstracts.^[3]

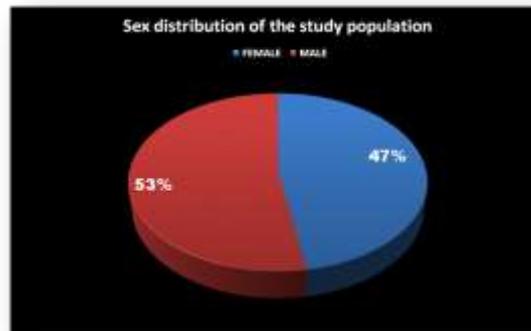
SCORING METHODS

- Each question has five possible answers with a value from 0 to 4, with 0 representing “no problem” and 4 “a serious problem”.
- The scores are added up and multiplied by 1.25, generating a total score between 0 – 100.
- Patients scoring 40 or higher may be at the level of “emotional burnout” and warrant special attention.^{[1][2]}

RESULTS

SOCIO - DEMOGRAPHIC PROFILE

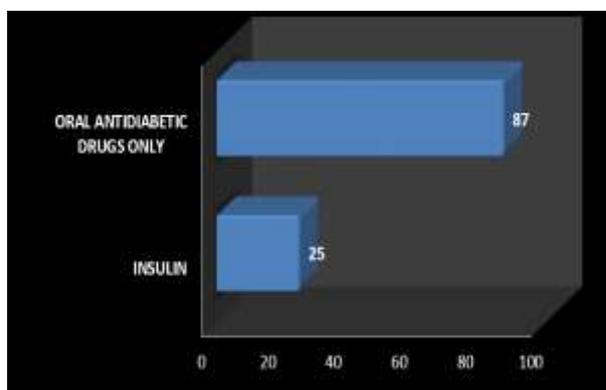
Out of 112 Patients 59 (53%) were Male and 53 (47%) were Female with the mean age of 57 years. (Figure – 1).



DIABETIC REGIMENS

Of 112 diabetic patients, 78% (87) were on oral anti-diabetic drugs while 22% (25) were on insulin. (Figure – 2)

Figure 2 – representing treatment taken by study population.



CONSULTATION FOR DIABETES

Our study explored that majority of the study participants 71% (80) consulted Diabetologist that signifies the awareness of the community. 28% of the patients consulted General practitioners. (Figure – 3).

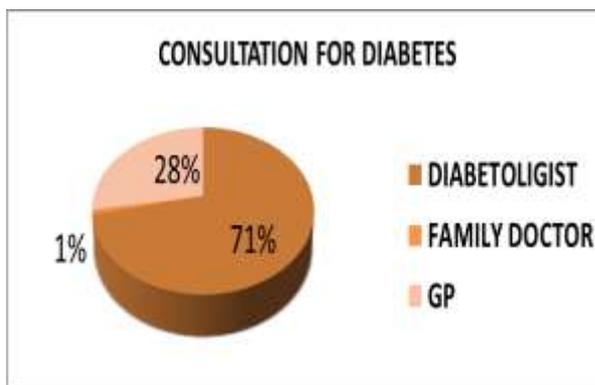
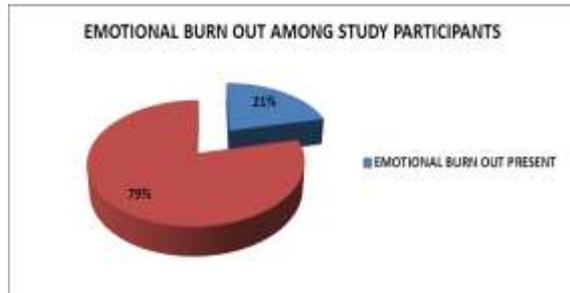


Figure 3 – showing study population consulting for diabetes.

MEANS OF THE STUDY POPULATION: The mean age of the study population was 57 with the mean BMI 25.2, mean FBG - 152, PPBG - 246, mean HBA1C – 7.24 and paid score 27.25 respectively.

EMOTIONAL BURNOUT

Nearly 21%(28) of the study participants were found to be with emotional burnout. (Figure – 4).



DISCUSSION

Depression negatively affects the outcome of the treatment. The prevalence of depression among the participants in our study was found to be 21%. This was lower than the findings of other studies where it ranged from 33% to 41%.^{[5], [6],[7],[8],[9]} No association was seen between marital status and depression in the present study which is similar to the observations made in a study done in Bahrain.^[6] Educational status was not found to be associated with depression in the present study which is consistent with the findings of few other studies.^{[5],[13]} But many other studies found significant association between the two.^[7] In this study there is no significant association between depression and the respondent's employment status which is similar to the study done in US.^[12] Our study has no association between age and depression which is consistent with the results of several studies.^{[6],[7],[10],[11],[12]} In the study done in US no significant association was found between depression and monthly income which is similar with our study observations.^[12] Presence of complications among the study participants was found to be significantly associated with depression in our study which is similar to the observations made in a study done in Bangladesh.^[7]

CONCLUSION

This study has explored the burden of Emotional distress among the diabetic population which was moderately high and it was associated with the Duration of diabetes, Diabetes complications and Treatment Duration. Hence our study proves the rapid rise in the prevalence of diabetes related distress all over the globe at an alarming rate. Therefore the Diabetic patients need not only diet counseling but also psychological counseling to live with the disease.

Conflict of interest

NIL.

REFERENCES

1. Ramachandran A, Snehalatha C, Vijay V. Explosion of type 2 diabetes in the Indian subcontinent. *International Diabetes Monitor*, 2003; 15: 1-6.
2. Polonsky WH, Anderson BA, Lohrer PA, Welch GW, Jacobson AM: Assessment of Diabetes-related

emotional distress. *Diabetes Care*, 1995; 18: 754-760.

3. Polonsky WH, Jacobson AM, Welch GW; The Problem Areas in Diabetes Scale. *Diabetes care*, May 1997; 20: 760-766.
4. Joseph N, Unnikrishnan B, Raghavendra Babu Y P, Kotian M S, Nelliyanil M. Proportion of depression and its determinants among type 2 diabetes mellitus patients in various tertiary care hospitals in Mangalore city of South India. *Indian J Endocr Metab*, 2013; 17: 681-8.
5. Raval A, Dhanaraj E, Bhansali A, Grover S, Tiwari P. Prevalence and determinants of depression in type 2 diabetes patients in a tertiary care centre. *Indian J Med Res*, 2010; 132: 195-200.
6. Nasser J, Habib F, Hasan M, Khalil N. Prevalence of depression among people with diabetes attending diabetes clinics at primary health settings. *Bahrain Med Bull*, 2009; 31: 1-7.
7. Rahman M, Rahman MA, Flora MS, Rakibuz-Zaman M. Depression and associated factors in diabetic patients attending an urban hospital of Bangladesh. *Int J Collaborat Res Intern Med Public Health*, 2011; 3: 65-76.
8. Sotiropoulos A, Papazafiropoulou A, Apostolou O, Kokolaki A, Gikas A, Pappas S. Prevalence of depressive symptoms among noninsulin treated Greek type 2 diabetic subjects. *BMC Res Notes*, 2008; 1: 101.
9. T.éllez-Zenteno JF, Cardiel MH. Risk factors associated with depression in patients with type 2 diabetes mellitus. *Arch Med Res*, 2002; 33: 53-60.
10. Lloyd CE, Dyer PH, Barnett AH. Prevalence of symptoms of depression and anxiety in a diabetic clinic population. *Diabet Med*, 2000; 17: 198-202.
11. Larijani B, Bayat MK, Gorgani MK, Bandarian F, Akhondzadeh S, Sadjadi SA. Association between depression and diabetes. *German J Psychiatry*, 2004; 7: 62-5.
12. Anderson RJ, Freedland KE, Clouse RE, Lustman PJ. The prevalence of comorbid depression in adults with diabetes: A meta-analysis. *Diabetes Care*, 2001; 24: 1068-78.
13. Agbir TM, Audu MD, Adebowale TO, Goar SG. Depression among medical outpatients with diabetes: A cross-sectional study at Jos University Teaching Hospital, Jos, Nigeria. *Ann Afr Med*, 2010; 9: 5-10.
14. Miyaoka Y, Miyaoka H, Motomiya T, Kitamura S, Asai M. Impact of sociodemographic and diabetes related characteristics on depressive state among non-insulin-dependent diabetic patients. *Psychiatry Clin Neurosci*, 1997; 51: 203-6.