



A STUDY ON COMORBIDITIES AND LIFE STYLE ASSOCIATED WITH DIABETES PATIENTS

Meenu Vijayan^{1*}, Gayathri Madhu S², Gisna John³, Shalini S Das⁴, Roshni PR⁵, Remya Raghu⁶
 Department of pharmacy practice, Amrita School of Pharmacy, Amrita Vishwa Vidyapeetham University,
 AIMS Health Care Campus, Kochi, India

Email: meenu.vijayan@gmail.com

Article Received on: 11/02/13 Revised on: 09/03/13 Approved for publication: 01/04/13

DOI: 10.7897/2230-8407.04530

IRJP is an official publication of Moksha Publishing House. Website: www.mokshaph.com

© All rights reserved.

ABSTRACT

The present study focused on the co morbidities and lifestyle associated with diabetes patients. It was a non experimental prospective study and done in outpatient department of endocrinology, Amrita Institute of Medical science. Sample size was 136. Patients who have diagnosed with diabetes included and not willing to participate excluded. Majority of the people (18.4%) having hypertension followed by combination of hypertension and dyslipidaemia (15.4%). Majority of them are non vegetarians (79.41%) and having irregular exercise (65.44%). 13.9% of patients were consuming alcohol and 10.3% were smoking. So the study provides data to advice health care providers to pay more attention towards the diabetes patients.

KEY WORDS: Co morbidity, diabetes, life style, food habits

INTRODUCTION

Diabetes is a part of the growing epidemic of non communicable disease, expected to present one of the 21st century's biggest challenge.^{1, 2} This disease affects nearly 150 million adults worldwide and nearly 11 million in the United States in 2000. Because of the prevalence of obesity and diabetes and associated vascular complications, preventing even a small proportion of cases would save thousands of lives and billions of dollars in healthcare costs and lost productivity.³ So the researcher gives more attention to this area. This type of growth is mainly due to the change in the lifestyle; the way we live, the habits we inculcate, and the way we deal with the various aspects of life^{4, 5} so life style modifications are necessary to preventing and treating the disease.

Due to the lifestyle changes the co morbidities associated with diabetes also increase⁶. Ignoring the disease management of co morbidities can lead to the ineffective control of diabetes specific risk factors and may miss

opportunities to improve patient's functioning, quality of life and mortality risk⁷.

The purpose of the study to assess the frequency of co morbid conditions and lifestyle associated with diabetes patients. So the study provides data to advice health care providers to pay more attention towards the diabetes patients.

MATERIALS AND METHODS

This was a non-experimental (observational), prospective study and was carried out on patients with diabetes seen at the endocrinology outpatient department of AIMS. Sample size was 136. A standardized data collection form was prepared and necessary data obtained from the patients by interviewing through telephone and examination of patient medical record. All the patients diagnosed to have diabetes were included in the study and those who were not willing to co operate were excluded. Then the data collected was analyzed for the life style and co morbidities associated with diabetes patients. The results were presented as percentage.

TABLE 1: CO MORBIDITIES ASSOCIATED WITH DIABETIC PATIENTS

Co morbidity	Number of patients	Percentage of patients (%)
Hypertension	25	18.4
Dyslipidemia	18	13.2
Hypertension + Dyslipidemia	21	15.4
Congestive heart failure	7	5.1
Hypertension+Congestive Heart failure	4	2.9
Thyroid disorder	7	5.2
Diabetic Neuropathy	10	7.3
Diabetic Foot Problem	2	1.5
Nil	42	30.9
Total	136	100

TABLE 2: HABITS ASSOCIATED WITH DIABETIC PATIENTS

Habits	Number of patients	Percentage of patients (%)
Consuming alcohol	19	13.9
Smoking	14	10.3
Chewing	5	3.7
Alcohol + Chewing	7	5.2
Alcohol + Smoking	4	2.9
Chewing + Smoking	2	1.5
No Habit	85	62.5
Total	136	100

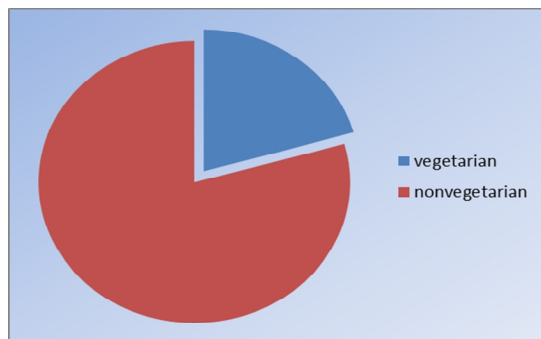


Figure 1: food habits of diabetic patients

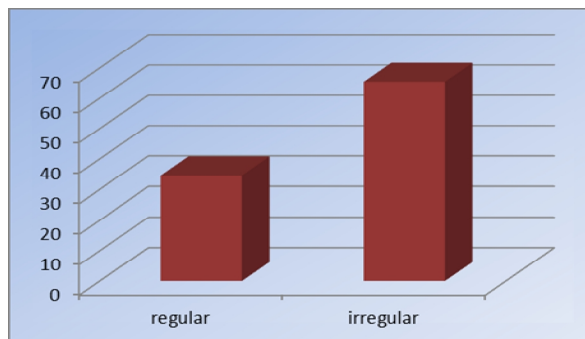


Figure 2: diabetic patients with exercise

RESULT

Out of the 136 patient studied maximum numbers were males (79) than females (57). Of the patients, 25 patients having hypertension (18.4%), 18 having dyslipidemia (13.2%), 21 having both (15.4%), 7 having congestive heart failure (5.1%), 4 having hypertension and congestive heart failure (2.8%), 7 having thyroid (5.2%), 10 having diabetic neuropathy (7.3%) and 2 having diabetic foot problem (1.5%) as co morbidities. 42 patients having no co morbidities (30.9%) (Table 1). In the assessment of life style on 136 patients majority (108) of the patients were non vegetarians (79.41%) and rest of them were vegetarians (20.59%) (figure1). Majority (89) of the patients having irregular exercise (65.44%) (figure 2). Of the 136 patients, 19 patients were consuming alcohol (13.9%), 14 were smoking (10.3%), 5 were chewing (3.7%), 7 were consuming alcohol and chewing (5.2%), 4 were consuming alcohol and smoking (2.9%) and 2 were smoking and chewing (1.5%). No these type of habits seen in 85 patients (62.5%) (table 2).

DISCUSSION

The present study reveals that majority of the patients (18.4%) having hypertension as co morbidity followed by hypertension + dyslipidemia (15.4%) and 13.2% having dyslipidemia. Other studies also shows that the majority of the patients having hypertension as the major co morbidity.^{8,9} The life style assessment among the diabetes patients shows that 79.41% were non vegetarians and 20.59% were vegetarians. Previous studies also reveal that the majority of the patients belong to non vegetarians and the red meat consumption was positively associated with hyperglycemia.^{10,11} Out of 136 patients, only 34.55% of patients having regular exercise and remaining (65.45%) of them having irregular exercise. Result of the present study almost similar to that of the previous studies.^{10,12} In the present study 13.9% people were consuming alcohol, smoking (10.3%) and 62.5% of patients having no habits . A study from south Malabar region of Kerala shows that 10.19% of people were smoking followed 3.9% of patient were consuming alcohol.¹³ In this study some of the patients do not show any interest to reveal their habits.

ACKNOWLEDGEMENT

The authors are thankful to Department of Endocrinology, Amrita Institute of Medical Science, Cochin, for their support and facility to carry out the research work.

REFERENCES

- 1 Marie Clark. Life style self management in patients with type 2 diabetes. *J Diabetes nursing*; 2002; 6: 182-87.
2. Animesh biswas. Prevention of type 2 diabetes-life style modification with diet and physical activity Vs physical activity alone-A comparative literature review; Revised version. Karolinska institute, Master of public health education, Department of public health science
3. Lydia a Bazzano, Mary Serdula, Simin Iivi. Prevention of type 2 diabetes by diet and life style modification. *journal of the American college of nutrition*. October 2005;24;5: 310-319
4. Ronald dyck. prevalence, Risk factors and co morbidities of diabetes among adults in rural saskatchewan: the influence of form residence and agricultural related exposures .*BMC public health*.13: available from <http://www.biomedcentral.com/1471-2458/1317>
5. Dev senapati. Life style modification in diabetes mellitus; simple tips to fight diabetes .Jan 1 ;2009 www.yahoo.com
6. Aleksandra Gilis-Januszewka Jagiellonian university, Medical college, department of endocrinology. co-chair of prevention of diabetes in primary care round table in the 7th world congress on Prevention of diabetes and its complications
7. John. D. piette, Eve. A. Kerr. The impact of co morbid chronic conditions on diabetes care. *Diabetes care*. March 2006 ; 29: 3725-731
8. Michael F Pallak, Fanta W. Purayidathil, Susan C Bolge . Patient reported tolerability issues with oral anti diabetic agents: association with adherence: treatment satisfaction and health related quality of life. *Diabetes research and clinical practice*. 2010; 87: 204-210 <http://dx.doi.org/10.1016/j.diabres.2009.11.023>
9. Devin M. mann, Diego Ponieman. Predictors of adherence to diabetes medications: the role of disease and medication beliefs. *J Behav Med*. (2009);32: 278-289 <http://dx.doi.org/10.1007/s10865-009-9202-y>
10. Sanjay Kumar Gupta, Zie Singh, Anil J Purty, M Kar. Diabetes prevalence and its risk factors in rural india of tamil nadu. *Indian journal of community medicine*. 2010 ; 35; 3:396-399 <http://dx.doi.org/10.4103/0970-0218.69262>
11. Bays H e, Chapman RH, Grang S. The relationship of body mass index to diabetes mellitus, hypertension and dyslipidaemia comparison of data from two national surveys. *International journal of clinical practice*. 2007 May; 61(5): 737-47 <http://dx.doi.org/10.1111/j.1742-1241.2007.01336.x>
12. Naglaa. m. Abdo, Mohammed E Mohammed. Effectiveness of health education program for type 2 diabetes mellitus patients attending zagaig university diabetic clinic. *J. Egypt Public health Care*. 85; 3&4; 2010; 114-130
13. Muhammed Shihabudheen K, Prasanth NV, Dilip C. Assesment of risk factors among type 2 diabetic populations in south Malabar region of kerala. *Archives of applied Science Research*. 2010; 2(4): 313-323 available on: www.scholarresearchlibrary.com

Cite this article as:

Meenu Vijayan, Gayathri Madhu S, Gisna John, Shalini S Das, Roshni PR, Remya Raghu. A study on comorbidities and life style associated with diabetes patients. *Int. Res. J. Pharm.* 2013; 4(5):148-149