

# A study to evaluate the conditions leading to diagnosis of type 2 diabetes mellitus in men in a medical college

H S Pathak<sup>1</sup>, Ankan Pathak<sup>2\*</sup>, Nirmalya Roy<sup>3</sup>

<sup>1</sup>Professor And Hod, Department of Medicine, College of Medicine And JNM Hospital, Kalyani.

<sup>2</sup>2nd Year Post Graduate Trainee, <sup>3</sup>Professor, Department of Medicine, KPC Medical College and Hospital, Jadavpur.

Email: [ankan.manu@gmail.com](mailto:ankan.manu@gmail.com)

## Abstract

Diabetes is one of the most important public health problems. There is a scarcity of data with regards to diabetes and men. The present study endeavors to throw some light on the problem. A cross sectional and retrospective study including 321 subjects performed at a tertiary care hospital in eastern India. A total of 321 male patients diagnosed with diabetes over a period of 4 months were included. Out of these only 3.73% of the subjects had the classical osmotic symptoms suggestive of diabetes. A substantial number of patients were diagnosed during general healthcare checkup.

**Key Word:** Diabetes Mellitus.

## \*Address for Correspondence:

Dr. Ankan Pathak, 2nd Year Post Graduate Trainee KPC Medical College and Hospital, Jadavpur.

Email: [ankan.manu@gmail.com](mailto:ankan.manu@gmail.com)

Received Date: 13/09/2019 Revised Date: 22/10/2019 Accepted Date: 06/11/2019

DOI: <https://doi.org/10.26611/10211235>

Access this article online	
Quick Response Code:	Website: <a href="http://www.medpulse.in">www.medpulse.in</a>
	Accessed Date: 09 December 2019

functioning (eg self-efficacy and coping skills), behavioural skill( blood glucose monitoring and physical activity) , diabetes knowledge ( eg basic procedures to manage hypoglycemia) and social support ( eg sources and quality of emotional support) primarily among women. Male focussed diabetes research is scarce because study participants in large diabetes research trials have been primarily female and few studies have exclusively targeted male participants. Diabetes related health issues from a male perspective have been either inadequately investigate or not investigated at all. Thus, more epidemiological, anthropological, behavioral and clinical studies are needed. Further research would help identify less understood casual pathways that influence intermediate outcomes (eg, diabetes knowledge, psychological and behavioral effects), short term outcomes (physiological and quality of life measures ) and long term outcomes ( morbidity and mortality) in men.<sup>4</sup>

## AIM

The main aim of this study was to evaluate the various conditions which lead to the diagnosis of diabetes in men; the age group in which the diagnosis is most common and the associated comorbidities, if any.

## INTRODUCTION

According to Lodewick, Biermann and Toohey <sup>1</sup> in the *The Diabetic Man*, “Diabetes is a bear in every sense of the word. Deny its existence, pretend it isnt there, walk right through it and you can wind up mauled and destroyed. Unrealistic though this approach may be, it’s exactly the approach a number of men take towards diabetes.” This study is dedicated to addressing diabetes and mens health issues in an effort to help men adopt more optimistic views and effective management skills for diabetes. Diabetes is one of the most important public health problems. Many published studies have examined women’s health issues in terms of diabetes.<sup>2</sup> These studies have examined various aspects of psychological

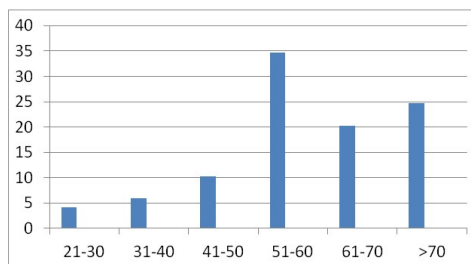
## METHODS

- A cross sectional study utilized administrative data of KPC Medical College and Hospital, Jadavpur and BM BIRLA Hospital accumulated over a period of 4 months
- Diabetes is diagnosed according to the American Diabetes Association (ADA) diagnostic criteria with presence of any one or more of the following :
  - Fasting plasma glucose concentration  $\geq$  126mg/dl
  - Plasma glucose concentration  $>200$  mg/dl
  - Symptoms of hyperglycemia

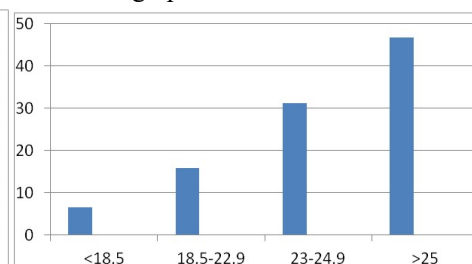
- Random plasma glucose concentration  $> 200$  mg/dl
- Glycosylated haemoglobin  $> 6.5\%$

## INCLUSION CRITERIA

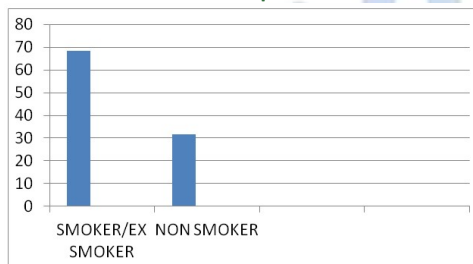
- Individuals reporting that they were not diagnosed with diabetes earlier
- Individuals who consented to share their data
- Descriptive statistical analysis was carried out
- Significance was assessed at the 5% level
- SAS (statistical analysis system) version 9.2 for windows and SPSS version 20.0 was used for analysis of the data
- Microsoft word and Excel was used to generate graphs and tables.



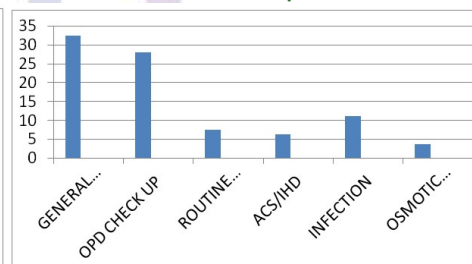
Graph 1



Graph 2



Graph 3



Graph 4

**Graph 1:** Diagnosis of diabetes of various age groups; **Graph 2:** Association with BMI; **Graph 3:** Association with smoking; **Graph 4:** Conditions leading to diagnosis

## DISCUSSION

Type 2 Diabetes Mellitus can be present for many years before being diagnosed and in most of cases complications are often found at the time of diagnosis. In this study, the maximum cases were detected during general health check up (32.39%). As many as 6.23% of subjects had ACS or IHD at the time of diagnosis. One possible explanation for the late detection of diabetes happens to be the absence of osmotic symptoms which occurred in only 3.73% of the subjects. As expected, diabetes was found to be twice as more common in smokers rather than non smokers in our smoking. The emergence of men's health as a distinct discipline within internal medicine is founded on the wide

consensus that women and men differ across their lifespan in their susceptibility to disease, in the clinical manifestations of disease and response to treatment. <sup>4</sup>

## REFERENCES

1. Lodewik PA , Bierman J , Toohey B : The Diabetic Man : A Guide to Health and Success in all areas of your life , 3rd edition. Pg-81
2. Owens MD: Diabetes and womesns health issues(Preface) Diabetes Spectrum 16 : 146-147 , 2003.
3. Jack L Jr : Diabetes self management education research : an international review of intervention methods, theories , community partnerships and outcomes .
4. Harrisons principles of Internal Medicine 20th Edition, Men's health, pg 2828.

Source of Support: None Declared  
Conflict of Interest: None Declared