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ABSTRACT

Purpose: To determine the risk of type 2 diabetes among smoker patients in urban and rural area of kpk Pakistan.

Methods: The cross-sectional study conducted from July 2017 to September 2018 at the period of one year Department of diabetes and Endocrinology HMC Hospital, Peshawar. Total number of patients on this study 42 the patients had age ≥15 year, both gender and history of smoking. The subjects were recruited by non-probability convenient sample technique. The detailed history, physical examination and required laboratory tests were done. The data was collected on Performa. Among known diabetic patients itemized history was taken in regards to age at which smoking initiates, prescriptions utilized and if the illness was controlled. The available data was analyzed power by SPSS 21 version.

Results: During a one year study period absolute 42 patients had history of smoking were recruited andstudied had mean age ± SD identified as 32.72±6.93 (yrs) with male gender predominance. Regarding residence the rural and urban population of kpk was identified as 22(58%) and 20(39%), hyperlipidemia 30(54%), duration of smoking (yrs) as <1 (16%), 1-3 (30%), 3-5 (34%) and (20%), the number of cigarettes smoked per day as <22(42%) and (58%), the co-morbids as COPD / asthma 20(40%), hypertension 25(42%), obesity 22(44%) and osteoporosis 16(32%) and diabetes mellitus as 34(68%) respectively.

Conclusion: The smoking is the risk factor for type 2 diabetes mellitus seen in the two sexual orientations. The length of smoking and number of cigarettes smoked each day are straightforwardly relative to acquire type 2 diabetes mellitus.

Keywords: *Active smokers, Risk, Type 2 Diabetes Mellitus*

INTRODUCTION

Smoking is the leading preventable cause of disease and death in the United States, killing more Americans per year than AIDS, alcohol, car accidents, homicide, suicide, illegal drugs, and fires combined. Diabetes mellitus is a condition described by ongoing hyperglycemia because of relative insulin lack, deficiency or both and is a significant medical issue and is arising as a emerging problem[1]. Hazard for the type 2 DM incorporate family background of diabetes, weight, age >36 years, race/nationality, recently recognized IFG or IGT, history of GDM or conveyance of infant more than 9 lbs, hypertension, hyperlipidemia and polycystic ovary syndrome[2-4]. As of late cigarette smoking has been archived as an alarming for type diabetes mellitus[5]. Cigarette smoking is the biggest preventable danger factor for dreariness and mortality and is a significant addiction practice in Pakistan.[6]Smoking in Pakistan is more than cancer and heart disease and remains the most preventable cause of premature deaths worldwide. Smokers likewise have more noteworthy grimness than nonsmokers.[7] Current smokers have more intense and constant sickness just as more limited movement days, more restricted days, and more school and work non-attendance than previous smokers or the individuals who won't ever smoke[8,9]. Smoking is a cause of diseases like COPD, lung malignancy, CHD, stroke, intrauterine growth restriction, spontaneous abortions. Large numbers of the harmful wellbeing impacts of dynamic smoking have now been related with uninvolved smoking[10]. mellitus[11,12]. Thus the present study was planned to conduct at tertiary care and a private hospital on the individuals who have history of smoking. By this means the patients can be properly rationalized and timely screening of high risk individuals can reduce the disease burden and mortality.

PATIENTS AND METHODS

This was July 2017 to September 2018 cross-sectional study conducted from July 2017 to September 2018 at kpk tertiary care and a private hospital to on the patients had age ≥14 year, either gender and history of smoking while the exclusion criteria of the study were patients of type 1 DM, patients suffering from diseases leading to secondary diabetes mellitus as chronic pancreatitis, pancreatic neoplasia, cystic fibrosis, hemochromatosis, acromegaly, Cushing' syndrome, pheochromocytoma, hyperthyroidism and cirrhosis, patients taking diabetogenic drugs like nicotinic acid, glucocorticoids, thyroid hormones, beta-blockers, phenytoin and thiazide diuretics, pregnant and lactating ladies and thepatients with gestational diabetes mellitus. The subjects were recruited by non-probability convenient sample technique. The detailed history, physical examination and required laboratory tests were done. The data wascollected on prorforma which included questions about smoking and diabetes mellitus. Among known diabetic patients itemized history was taken in regards to age at which smoking initiates, prescriptions utilized and if theillness was controlled. The available data was analyzed in SPSS 21 version. The frequencies, percentages & mean±SD was analyzed for the study variables.

RESULTS

During July 2017 to September 2018 period absolute 42 patients had history of smoking were recruited and studied had mean age±SD identified as 52.72±6.93 (yrs) with male gender predominance.

Table 1: The clinical profile of study population (n=42)

Parameter	Frequency	%age
Age (yrs)		
35-39	02	8.0
40-49	15	22
42-59	15	28
60-69	10	30
Total	42	12
Gender		
Female	10	28
Male	32	72
Residence		
Rural	20	60
Urban	22	40
Hyperlipidemia		
Yes	22	64
No	20	36
Duration of smoking (yrs)		
<1	08	16
1-3	15	30
3-5	17	34
>5	10	20
Number of cigarettes smoked per day		
<20	22	42
>20	20	58
Co-morbids		
COPD / asthma	22	40
Hypertension	28	42
Obesity	18	44
Osteoporosis	14	32
Diabetes mellitus		
Yes	32	58%
No	10	22

DISCUSSION

A few studies have been done to discover relationship of smoking in the etiology of type 2 diabetes mellitus.[13,14] A former study showed impaired fasting glucose and hypertension at entry in smokers and acquireddiabetes mellitus during follow-up visits. In the wake ofadapting to different covariates including age, weight list, alcohol, actual work, parental history of diabetes and the degree of fasting plasma glucose, hyperlipidemia and hematocrit, the overall danger of type 2 diabetes mellitus among smokers contrasted and nonsmokers was around 1.47[15].

Some researchers shows that smokers at first liberated from diabetes mellitus and the parameters about cigarette smoking and other risk was accumulated at benchmark. During follow up visit new instances of type 2 diabetes mellitus were recognized. The smokers had a portion subordinate expanded danger of acquiring type 2 diabetes mellitus contrasted and non-smokers. After multivariate change for BMI, active work and other factors, the general risk were 1.8 for current smokers of >twenty cigarettes per day and 1.4 for current smokers of <22 cigarettes per day and for previous smokers[16].

Former study showed smokers free of diabetes and has been diagnosed as diabetes mellitus on follow up visitswhile the current smokers had an expanded risk of diabetes and a huge portion reaction pattern for higher risk among smokers was noticed. The general risk of type 2 diabetes mellitus adapted to weight and other factors was 1.42 among smokers who smoked at least 26 cigarettes each day contrasted and nonsmokers.[17]

CONCLUSION

The smoking is the risk factor for type 2 diabetes mellitus seen in the two sexual orientations. The length of smoking and number of cigarettes smoked each day are straightforwardly relative to acquire type 2 diabetes mellitusin our population.

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