

# PREVALENCE OF DIABETIC RETINOPATHY AMONG PATIENTS WITH DIABETES MELLITUS IN ZAYED MILITARY PRIMARY CARE CENTRE IN THE UNITED ARAB EMIRATES: CROSS SECTIONAL STUDY

ALSHEHHI S, ALAMERI F, ALMESMARI S, ALSUWAIDI R

Zayed Military Primary Health Care Centre, Zayed Military Hospital, Abu Dhabi, UAE



## INTRODUCTION

The increased prevalence of diabetic retinopathy is a clear reflection of the rise in diabetes mellitus patients in the United Arab Emirates. There was an estimation of a total number of 29,000 patients suffering from type 1 diabetes mellitus and 288,000 with type 2 diabetes mellitus in the United Arab Emirates. Furthermore 155,000 were estimated to be having undiagnosed type 2 diabetes mellitus (T2DM) (MENA, 2015). The aim of this study is to measure the prevalence of diabetic retinopathy among patients with diabetes mellitus in Zayed Military Primary Health Care Centre (ZMPHCC) in Abu Dhabi and to find out how the condition relates to socio-demographic, health and lifestyle.

## METHODOLOGY

A cross sectional study which was carried out in Zayed Military Primary Health Care Centre (ZMPHCC) during the period of 2016 to 2017 to find out the prevalence of diabetic retinopathy in patients with diabetes mellitus (DM). A sample of 231 randomly selected diabetic patients of Zayed Military Primary Health Care Centre (ZMPHCC) was used. The data was collected using questionnaires which included socio-demographic, health and lifestyle data to study the correlation between developing diabetic retinopathy and demographic and lifestyle.

## RESULTS

The prevalence of Diabetic Retinopathy (DR) in patients with diabetes mellitus (DM) is 10.2%. Lifestyle is an important contributing factor to the acquisition of diabetic retinopathy. It is prominent more in patients who always have perceived stress (11.8%), smoke daily (13.6%), exercise for <150 minutes per week (15.4%), dyslipidemia (11.5%) and in whose diet is mixed (11.9%). P values are 0.973, 0.405, 0.260, 0.168 and 0.905 respectively. There is no significant relationship between diabetic retinopathy and age, nationality, occupation and education level and P values are 0.746, 0.607, 0.629 and 0.319 respectively.



Figure 1: The prevalence of Diabetic Retinopathy (DR) in patients with diabetes mellitus

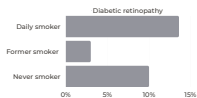


Figure 2: The relationship between diabetic retinopathy (DR) and patient's smoking status

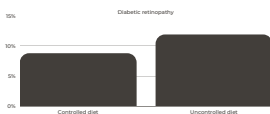


Figure 3: The relationship between diabetic retinopathy (DR) and diet

## CONCLUSION

There is an association between lifestyles and the control level of diabetes mellitus and developing diabetic retinopathy. Screening programme for Diabetic Retinopathy (DR) is done in Zayed Military Primary Health Care Centre (ZMPHCC) in diabetic patient. Results of diabetic retinopathy (DR) fundus photo is reviewed by an ophthalmologist and recommendation is done depending on findings, then patients are asked to follow up in ophthalmology department if indicated. Furthermore, plans and pathway need to be created to improve patients knowledge about control of diabetes mellitus and the association of lifestyle in developing diabetic retinopathy and referring them to diabetic nurse educator and dietician for advice.

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