

Prevalence of diabetic retinopathy and the effect of expanding the screening interval at primary care centres

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Abstract

Introduction: Diabetes mellitus is one of the most prevalent diseases all over the world. Diabetic retinopathy is the most frequent micro vascular complications known to be a leading cause of blindness, the prevalence of diabetic retinopathy ranged from 19% to 36% in Saudi Arabia. Primary care centres in Saudi Arabia follow the National Saudi Diabetic Guidelines for medical care of diabetes for primary care that recommends primary prevention of diabetic retinopathy by controlling its risk factors and annual screening. We aimed to study the prevalence of diabetic retinopathy and its risk factors in addition to estimate the effect of expanding the screening interval on the rate of detection of diabetic retinopathy.

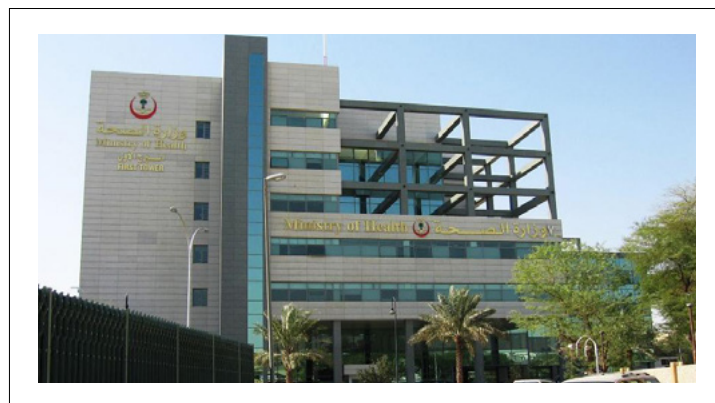
Objectives: To determine the prevalence of diabetic retinopathy and its risk factors among diabetic patients attending primary care centres and to assess the effect of expanding the screening intervals for diabetic retinopathy.

Methodology: This is a cross sectional study using patients' medical records. 167 medical records that fulfilled the inclusion criteria were randomly selected from three primary care centres in Jeddah city during the period from April 2015 till April 2018 and data was collected regarding age, sex, diabetes type and duration, BMI, HbA1C, smoking status, blood pressure measurement, treatments prescribed, documented follow-up visits, ophthalmological referral and the results of the screening tests mainly the HbA1c, LDL level, creatinine level and those with positive findings in the ophthalmologist reports

Results: Prevalence of diabetic retinopathy in the sample was 21.6% (95% CI, 15.6% to 28.6%). The 36 cases with retinopathy had a mean age of 61 ± 11 years (95% CI, 57.28% to 64.72%), while the mean age for those who had no retinopathy was 54 ± 10 years (95% CI, 52.27% to 55.73%) and this was statistically significant ($P = .001$). Gender, type of diabetes, obesity and smoking status had no significant statistical correlation with diabetic retinopathy, while HbA1C level and being controlled diabetic, hypertension, insulin use; dyslipidaemia and nephropathy had significant correlations with diabetic retinopathy. 54% referred once per year and 15% found to have in comparison with 21% referred only once every three years and 36% found to have diabetic retinopathy (P value=0.05). There was no significant relation of diabetic retinopathy to the frequency of follow up visits (P value=0.364).

Biography

Wedad Bardisi MBBS, SB&AB FM, Family Medicine Consultant is working in Saudi Arabia, Ministry of Health. He is an academic trainer in the Joint Program of postgraduate studies and researches for family medicine. Jeddah, Saudi Arabia. He has many published researches on diabetes mellitus and supervised students research.



[International Conference on Diabetes and Endocrinology](#) | August 18-19, 2020

Citation: Wedad Bardisi, Prevalence of diabetic retinopathy and the effect of expanding the screening interval at primary care centres, Diabetes Congress 2020, International Conference on Diabetes Research & Endocrinology, Aug 18-19, 2020, 2020, Page No: 07