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Title of the abstract:	
Factors Associated With Diabetic Retinopathy Among Type 2 Diabetes Mellitus (T2DM) Patients In Sabah Primary Health Clinics, Sabah Malaysia	
Submitter(=Presenter)	
Surname, first name:	JEFFREE, M SAFFREE
University :	UNIVERSITI MALAYSIA SABAH
Position:	MEDICAL LECTURER
Country:	MALAYSIA
e-mail:	saffree@ums.edu.my
Phone:	+6088-320000
Co-authors:	
1. Nurul Athirah Naserudin, Sabah Health Department	
2. Nirmal Kaur Singh, Sabah Health Department	
3. Mohd Yusof Ibrahim, Universiti Malaysia Sabah	
4. Khamisah Awang Lukman, Universiti Malaysia Sabah	
5. Than Myint, Universiti Malaysia Sabah	
Introduction:	
T2DM is a chronic progressing disease that often complicates with macrovascular and microvascular complications. Diabetic retinopathy is the leading cause of blindness in the world. 422 million adults suffer DM, lead to 2.6% of global blindness and 1.5 million deaths. In Malaysia, DM increases to 15.2% from 2011 survey and prevalence of diabetic retinopathy was 36.8%. Limited study about retinopathy in Sabah and Malaysia. The objectives are to determine the prevalence of diabetic retinopathy and major associated risk factors among T2DM patients in primary health clinic, Sabah.	
Methods:	
A cross sectional study design. Secondary data review on Sabah T2DM patients profiles that were registered in National Diabetes Registry from the year 2008 to 2015. The study was conducted from 5thMay-23rd May 2016. N=22,435 of T2DM patients from 46 primary government health clinics in Sabah. Respondents defined as T2DM patients who were managed at primary health clinic and entered in National Diabetes Registry. It is updated on new occurrence of complications, comorbidities, loss of follow up and death. Diagnosis by qualified medical doctor. T1DM, IGT, GDM were excluded. Diabetic retinopathy is a disturbance in visual acuity of a diabetic patients and pathological changes seen by fundoscamera.	
Results:	
The mean age is 61 years old and at the range of 50-69 years old. 59% are female. Chinese has the highest proportion with 22.9%. More than three quarter has hypertension, dyslipidaemia and has BMI>25.0, with mean of 27.5. The highest complications is retinopathy with 18.5%, followed by nephropathy 6.6%, IHD 1.8%, and <1% of CVA, amputation and foot ulcer. Out of 11 variables, there are 7 significant variables associated with diabetic retinopathy. There are duration of diabetes aOR 1.06(95%CI 1.05-1.07), older age of patients aOR 1.01(95%CI 1.00-1.02), hypertension aOR 1.6(95%CI 1.4-1.9), dyslipidaemia aOR 1.3(95%CI 1.2-1.4), higher than normal level HBA1c aOR 1.3(95%CI 1.1-1.4), nephropathy aOR 2.5(95%CI 2.1-2.9) and diabetic foot ulcer aOR 3.0(95%CI 2.0-4.8).	
Conclusion:	
Prevalence of diabetic retinopathy among T2DM patients in primary health clinic Sabah is 18.5%. Duration of diabetes, older age of patients, hypertension, dyslipidaemia, higher than normal level HBA1c, nephropathy and diabetic foot ulcer are the associated factors for diabetic retinopathy. The importance of clinical audit on diabetic eye screening and HBA1c monitoring among patients has to be strengthened in primary health clinics, especially patients nearing the pensioner age. Optimisation and control of blood pressure and lipid level could help to reduce the risk of developing diabetic retinopathy.	
Keywords	<i>Diabetic retinopathy, factors associated, primary health clinics</i>