**Mock Abstract**

**The risk of getting Diabetic Retinopathy among patients with type 2 Diabetes Mellitus and Hypertension**

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**Abstract**

**Background**: Both Diabetes Mellitus and Hypertension were the common type of non communicable diseases and it was found mostly among people with sedentary lifestyle. Like others non communicable diseases, these two diseases cause the patients to have target organs damages (complications) such as nephropathy and retinopathy if the patients were poorly controlled for long duration. There were many evidences of indentified risk factors concerning with getting complication (retinopathy) i.e. uncontrolled sugar level, hypertension, physical inactivity and smoking etc., but the estimating the magnitude of risk of getting retinopathy among patients with these risk factors was lack behind the knowledge.

**Objective**: To investigate the risk of getting target organ damages (Diabetic retinopathy) among patients with type 2 Diabetes Mellitus and Hypertension

**Methods**: This study was hospital based cross-sectional study and the study population was those patients diagnosed with type 2 Diabetes and hypertension visiting hospitals in care of Ministry of Public Health and Bangkok Metropolitan Administration in Thailand during 2011, 2012 and 2013. Total numbers of study population were xxxxx from specialist clinics, general medical clinic, general practice clinic and others. Patients were diagnosed having diabetic retinopathy by physicians within 12 months of study period and HbA1c was also examined by laboratory within 12 months of last visit.

**Results**: Among study population, xx.x% of patients had had diabetic retinopathy (95% CI: xx.x% to xx.x%). Multiple logistic regression was done and it was found that patients with HbA1c level ≥ 7% had had retinopathy x.xx times more than that of HbA1c < 7% (OR = x.xx, 95% CI: x.xx to x.xx, *P* = x.xx) and patients with their blood pressure > 130/80 mmHg had had retinopathy x.xx times more than that of > 130/80 mmHg (OR = x.xx, 95% CI: x.xx to x.xx, *P* = x.xx). The mean disease duration of patients with diabetic retinopathy was significantly longer than that of patients without retinopathy (xx ± x.x & xx ± x.x) respectively. Patients with HbA1c level ≥ 7% and blood pressure > 130/80 mmHg had had x.xx times more than that of patients with HbA1c level <7% and < 130/80 mmHg (OR = x.xx, 95% CI: x.xx to x.xx, *P* = x.xx).

**Conclusions**: Hence the risk of getting retinopathy among patients with type 2 Diabetes Mellitus and Hypertension was predicted by HbA1c, blood pressure and disease duration.

**Key words:** diabetic retinopathy, HbA1c,