**Summary of the Risk Factors for Incidence of Dementia in Primary Care Settings**

My project used electronic medical records from the Canadian Primary Care Sentinel Surveillance Network to create a Canadian cohort to conduct a retrospective analysis to (1) determine the number of incident diagnoses of dementia among community-dwelling seniors; (2) describe demographic and clinical characteristics of people living with dementia in community; (3) describe current situation of modifiable cardiovascular risk factors being managed in primary care; and (4) compare the risk of developing dementia in seniors (aged 65 and older) with and without modifiable cardiovascular risk factors.

The cohort identified 39,066 patients who were 65 or older and did not have a dementia diagnosis in or before 2009. During nine years of follow-up, 4,935 individuals developed dementia. Overall, the number of patients with dementia or heart disease risk factors increased slightly but steadily over the nine-year follow-up period.

Age were associated with an increase in risk for incidence of dementia in all ages, HR = 1.13 (95% CI, 1.12-1.14) and 1.05 (95% CI, 1.04-1.06), respectively, for people aged 65-79 and people aged 80 and over. History of depression also increase dementia risk by 38% and 34%. There was association with social index, smoking history, osteoarthritis and diabetes mellitus in people aged 65 to 79 but not in those aged 80 and older. Sex, hypertension, obesity and dyslipidemia diagnosed and managed in primary care did not significantly predict dementia onset. Antihypertensive and statin use was not associated with risk of diagnosis. People with dementia are more likely to weigh less and to lose more weight than those who have not been diagnosed with the disease.

Diabetes mellitus and underweight increase the risk of dementia developing. Monitoring BMI and managing change in BMI in primary care may help to diagnose dementia earlier which might be a good reference for family medicine and public health to plan an advanced treatment strategy for people in need. Routine screening for cognitive decline on older adults with those two conditions might benefit to provide early diagnosis and support for those in needs.