

## Epidemiology / Prevalence, incidence, and outcomes of MCI and dementia

## In support of a national dementia plan: A follow-up study for dementia incidence and risk profiling in Filipino homes

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## Abstract

**Background:** Dementia is a growing public health priority. Alzheimer's disease, the most common dementia subtype, is expected to hit 12 million seniors in Southeast Asia by 2050. In the Philippines, a baseline community study found a 10.6% prevalence. (Dominguez et al, 2018) Despite the results, a national dementia plan is yet to be developed. To support the initiative, the study quantifies the dementia incidence of community-based seniors and determines its risk factors.

**Method:** This study employed a prospective cohort design, a continuation of the baseline (2009) Marikina Memory and Aging Project (MMAP) in Metro Manila. A total of 1,222 participants were seen to be eligible for follow-up based on baseline cognition (normal or Cognitively-Impaired-Not-Demented (CIND) status). For dementia incidence, person-years were calculated. To determine the risk factors, Cox regression was used. Characteristics evaluated were demographics, medical history, and other factors (e.g. living arrangements and MCI status). All analyses were at 95% confidence level.

**Result:** A total of 831 (60.8%) participants were reassessed and the most common reasons for exclusion were migration and unavailability of respondent. The mean follow-up time for this study was 3.2 years. Incidence rate was at 16 (CI: 13 to 20) cases per 1,000 person-years (pyr) with 17 (CI: 12 to 21) per 1,000 pyr for females while 14 (CI: 9 to 21) per 1,000 pyr for males. About 4 in every 5 incident cases were Alzheimer's disease. Note that male seniors had longer years in education, more comorbidities, and more self-reported alcohol abuse. On the other hand, female seniors experienced more depressive episodes and more of them reported living alone compared to males. Dementia incidence was significantly associated with MCI status and requiring living assistance (controlling for age, sex, and education). Specifically, having such characteristics doubled the risk of having the disease.

**Conclusion:** The Philippines is projected to be one of the countries that would experience the consequences of the rise in dementia cases if left unprepared. The National Dementia Plan must then consider the current state of dementia in the country and the risk factors associated to it for better planning and disease management.