## Prevalence of dementia in Lebanon: Preliminary data from Beirut, Shouf, and Aley

Kieu T. T. Phung<sub>1</sub>, Monique Chaaya<sub>2</sub>, Samir Atweh<sub>3</sub>, Khalil El Asmar<sub>2</sub>, Georges Karam<sub>4</sub>, Rose Mary Khoury<sub>2</sub>, Lilian Ghandour<sub>2</sub>, Hussam Ghusn<sub>3</sub>, Martin Prince<sub>5</sub>, Gunhild Waldemar<sub>6</sub>,

1Copenhagen University Hospital Rigshospitalet, Copenhagen, Denmark; 2American University of Beirut, Beirut, Lebanon; 3American University of Beirut Medical Center, Beirut, Lebanon; 4Institute for Development, Advocacy, and Applied Care (IDRAAC), Beirut, Lebanon; 5King's College London, London, United Kingdom; 6Rigshospitalet - Copenhagen University Hospital, Copenhagen, Denmark, Denmark.

Background: In the Middle East, studies about dementia occurrence and the risk and protective factors for dementia specific to the region are few. We have validated the 10/66 Dementia Research Group (DRG) one-phase diagnostic assessment in Arabic and shown that it has excellent discriminatory ability to diagnose dementia among older people in Lebanon (92.0% sensitivity, 95.1% specificity). Our aim was to carry out a pilot study in two governorates of Lebanon, using the validated 10/66 DRG diagnostic assessment for case ascertainment, to generate preliminary data about dementia prevalence, and assess the feasibility of conducting a large longitudinal community-based cohort study about dementia epidemiology. Methods: A random sample of 510 participants from Beirut governorate and two districts of Mount Lebanon governorate (Shouf and Aley) were recruited. The number of participants recruited in each district and governorate was proportional to the estimated proportion of people older than 65 years residing there. A multi-stage cluster sampling was employed. Beirut was divided into 594 clusters containing 50 residential buildings and seven clusters were randomly selected. Within the selected clusters, the field workers knocked on every door to recruit participants. In the Shouf and Aley districts, a number of villages or administrative sectors was randomly chosen and weighted according to their respective sizes. The field workers door-knocked every fourth households and interviewed any person who were older than 65 years and their caregivers. In addition to the 10/66 DRG diagnostic assessment, back ground and risk factor questionnaires were administered. Results: Data collection started in June 2013 and was concluded in early January 2014. The preliminary data analysis of the first 162 participants whose data had been entered showed a dementia prevalence of 10.5%. In this sample, 55.6% were men and 44.4% were women. The breakdown of age groups was: 65-74 years old 61.7%, 75-84 years old 30.7%, and 85 years old and above 7.4%. 21.6% had no formal education. Conclusions: Preliminary data analysis showed a high prevalence of dementia. Data entry is ongoing and the final results of data analysis will be presented at AAIC in July 2014.