Do older adults obesity and overweight prevent dementia risk?: A new population-based cohort study from China

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Background: There is a debate on whether overweight and obesity in older age increase or reduce the risk of late-life dementia. Little is known on gender differences in the impacts of overweight and obesity in older age on the risk of dementia.

Methods: Data was examined from the Anhui cohort of 3336 participants aged ≥65 years and they were randomly recruited from the rural and urban communities of China. Using a standard method we interviewed them to record general health and risk factors, measure body weight, height and waist circumference (WC) and diagnose dementia. They were followed up until 2011 in 3 surveys at 1, 7 and 10 years after baseline.

Findings: Among 2,430 participants with no baseline dementia, 271 developed dementia over 10 years of follow-up. Compared to those with BMI <24 kg/m2, multivariate-adjusted odds ratio (OR) for incident dementia in participants with overweight (BMI 24-<28.0) and obesity (BMI ≥28) were 1.06 (95% CI 0.79-1.42) and 1.00 (0.63-1.57). The matched figures in men were 2.16 (1.33-3.51) and 2.63 (1.28-5.42) and in women 0.66 (0.45-0.98) and 0.52 (0.28-0.97) respectively. After excluding data of <=1 year incident dementia, these ORs in men were 3.09 (1.65-5.77) and 4.19 (1.75-10.03) and in women 0.74 (0.43-1.27) and 0.72 (0.32-1.64). Data from WC showed similar patterns of the impacts of overweight and obesity on the risk of dementia.

Interpretation: Overweight and obesity in older age increased the risk of late-life dementia in men but not in women. Controlling body weights in older age may prevent dementia worldwide.

Biography
Isaac M Danat is a PhD student in epidemiology and global health research under the supervision of Professor Ruoling Chen at the University of Wolverhampton (UoW), UK. Isaac holds a Master of Public Health degree (MPH) from UoW UK and also MBA and BPharm degrees from Nigeria. He was a speaker at various conferences including the 6th International Epidemiology and Public Health Conference at Paris, France in September 2017. Isaac is a co-author of a paper published in a peer review journal titled "The prevalence and determinants of undetected dementia in the community: A systematic review and a meta-analysis".

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