Abstract: Introduction: There are paradoxical findings of association between body mass index (BMI) and dementia in different ages and Waist circumference (WC) measurement as a genuine adiposity index has been suggested by numerous studies. In this study, the relation of late-life BMI, waist circumference with incident dementia risk has been investigated in a group of Iranian elderly individuals.

Material and Methods: In this cross-sectional study 107 elderly residents of Kahrizak Charity Foundation aged ≥80 were studied. Dementia was assessed using standardized Mini-Mental State Examination (MMSE) questionnaire and diagnosis was based on DSM-IV criteria. Height, weight, and waist circumference were measured. BMI was computed by weight (kg)/height (m^2). Subjects were also categorized into 4 groups: underweight (BMI<18.5), normal (18.5<BMI<24.9), overweight (25≤BMI<29.9), and obese (BMI ≥ 30).

Results: Overall prevalence of dementia was 71%. 65.4% had mild and moderate dementia whereas 5.6% had severe dementia. Multivariate logistic regression analysis of the association between BMI and risk of dementia showed that late-life overweight was an independent and significant protective factor against developing dementia [Odd Ratio (OR):0.24, 95% Confidence Interval (CI): 0.06-0.93]. There was no significant association between waist circumference and risk of dementia in multiple logistic regression models.

Conclusion: Although according to previous studies overweight in midlife is a potential risk factor for developing dementia in the forthcoming years; this study shows that overweight in the elderly subjects is a protective factor against dementia later in life. This finding is in concordance with few other investigations in the elderly population.

Dementia, Body mass index, Waist circumference, Elderly

Presentation: Poster