



LARGER BODY MASS INDEX AND WAIST CIRCUMFERENCE ARE ASSOCIATED WITH LOWER MORTALITY IN CHINESE LONG-TERM CARE FACILITY RESIDENTS

長照機構住民較大的身體質量指數與腰圍有較低的死亡率

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OBJECTIVES: To investigate the association between body mass index (BMI) and waist circumference (WC) and all-cause mortality of Chinese residents in long-term care facilities in Taiwan.

DESIGN: Prospective cohort study.

SETTING: Eight long-term care facilities in Taiwan.

PARTICIPANTS: Three hundred fifty-four residents aged 60 and older (median 78.4, range 60-101; 156 men, 198 women) were recruited during the study period.

MEASUREMENTS: Anthropometrics and metabolic parameters were measured at baseline. Mean BMI was 21.7 ± 4.2 kg/m² (range 11.6-35.3 kg/m²), and mean WC was 82.4 ± 10.9 cm (range 55.0-124.0 cm). Mortality data were from the Department of Health in Taiwan.

RESULTS: There were 219 deaths during the 5 years of follow-up. After adjusting for age, sex, albumin, Karnofsky performance status scale, hypertension, and diabetes mellitus, subjects in the highest quartile of BMI (27.3 ± 2.8 kg/m²) and WC (96.7 ± 7.4 cm) had a significantly lower mortality rate than did subjects in the lowest quartile (BMI, 16.7 ± 1.7 kg/m²); WC, 69.6 ± 4.2 cm). After further stratification according to central obesity status, the subjects in the two highest BMI quartiles had a lower mortality rate than those in the lowest BMI quartile but only in the central obesity group (≥ 90 cm in



men or ≥ 80 cm in women). The adjusted relative risk for all-cause mortality in the highest versus lowest BMI quartile was 0.17 (95% confidence interval = 0.05-0.57).

CONCLUSION: BMI and WC were negative predictors for all-cause mortality in older Chinese adults living in long-term care facilities. Participants with higher WC and BMI had lower all-cause mortality.