

Association of Psychological Resilience and Frailty in Middle-Aged and Older Adults: A Prospective Cohort Study

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Abstract

Background Association between psychological resilience and frailty risk is known, but whether the frailty risk is affected by psychological resilience remains unclear. We aim to estimate association of the psychological resilience with frailty risk and explore their effect mechanism among middle-aged and older adults in a prospective cohort. Methods A population-based prospective cohort study was conducted of 15110 participants from the Health and Retirement Study (HRS). Frailty was assessed by the Fried frailty phenotype. Psychological resilience was measured by the simplified resilience score from available items in the HRS. Psychological resilience was divided into Q1, Q2, Q3 and Q4 according to the quartiles. Cox regression model was used to estimate the association of psychological resilience and the risk of frailty. Results Among American population with a median age of 63 years (IQR: 56~73) and 8717 females (57.69%), compared with the Q1 level of psychological resilience, its Q2, Q3, and Q4 decreased the risk of frailty by 20% (HR = 0.80, 95%CI: 0.73~0.88), 35% (HR = 0.65, 95%CI: 0.58~0.72) and 53% (HR = 0.47, 95%CI: 0.42~0.54), respectively. There was a dose-response relationship revealed by restricted cubic splines between them. A significant interaction effect was observed, indicating that the association between psychological resilience and frailty risk was stronger in middle-aged adults than in older adults. Conclusions Higher levels of psychological resilience were associated with a reduced risk of frailty. Middle-aged individuals with lower psychological resilience may be important target populations for the prevention and management of frailty. Psychological resilience emerges as a promising predictor for early frailty screening, prognosis assessment, and a potential therapeutic target for intervention strategies.

Keywords: Frailty, Psychological resilience, Prospective cohort

How to Cite

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