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This study examined the association between metabolic syndrome (MetS) and frailty status in relatively healthy community-dwelling older adults. Participants included 19,114 individuals from the "ASPirin in Reducing Events in the Elderly" (ASPREE) trial. The diagnostic criteria for MetS were according to the International Diabetes Federation Task Force on Epidemiology and Prevention and the American Heart Association/National Heart, Lung, and Blood Institute (2009); and comprised any three of five parameters: waist circumference, triglycerides, fasting blood glucose, high-density lipoprotein cholesterol or hypertension. Frailty and prefrailty were defined using a modified Fried phenotype (FP) comprising exhaustion, body mass index, grip strength, gait speed and physical activity and a deficit accumulation frailty index (FI) of 66 items. The association between MetS and frailty was examined using multinomial logistic regression. At baseline, 51.1% of participants met the criteria of MetS; of those, 41.8% and 2.5 % were prefrail and frail, respectively, according to Fried phenotype, while 49.6% and 11.8 % were prefrail and frail, respectively, according to FI. MetS at baseline was associated with an increased likelihood of prefrailty (RRR: 1.25; 95% CI: 1.17, 1.33) and frailty (RRR: 1.60; 95% CI: 1.28, 2.01) compared to no frailty after adjustment for potential confounders according to Fried phenotype, while the association was stronger for prefrailty (RRR: 2.74; 95% CI: 2.55, 2.94) and frailty (RRR: 5.30; 95% CI: 4.60, 6.11) according to FI. Overall, at baseline, more than half of the participants had MetS, and the presence of MetS was significantly associated with pre-frailty and frailty.

TRANSPLANT CENTERS THAT MEASURE FRAILTY AS PART OF CLINICAL PRACTICE HAVE BETTER OUTCOMES

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Frailty predicts adverse outcomes for kidney transplant (KT) patients; yet the impact of clinical assessments of frailty on center-level outcomes remains unclear. We sought to test whether KT centers that measure frailty as part of clinical practice have better pre- and post-KT outcomes. We conducted a survey of US transplant centers (11/2017-4/2018), 132 KT centers (response rate=65.3%) reported frequencies of frailty assessment at candidacy evaluation and KT admission. Center characteristics and clinical outcomes were gleaned from the national registry (2017-2019). Poisson regression was used to estimate incidence rate ratios (IRRs) of waitlist mortality rate and transplantation rate in candidates and graft loss rates in recipients by frequency of frailty assessment. All models were adjusted for case mix and center characteristics. Given similar center characteristics, centers assessing frailty at evaluation had a lower waitlist mortality rate (always=3.5, sometimes=3.2, never=4.1 deaths per 100 person-years). After adjustment, centers assessing frailty at evaluation had a lower rates of waitlist mortality (always IRR=0.91, 95% CI:0.84-0.99; sometimes=0.89, 95% CI:0.83-0.96) and transplantation (always IRR=0.94, 95% CI:0.91-0.97; sometimes=0.88, 95% CI:0.85-0.90) than those never assessing frailty. Centers that always assessed frailty at KT admission had 0.71 (95% CI:0.54-0.92) times the rate of death-censored graft loss than their counterparts never assessing frailty. Assessing frailty at evaluation is associated with lower transplantation rate but better waitlist survival; centers always assessing frailty at admission are likely to have better graft survival. Research is needed to explore how routine assessment of frailty in other clinical practices benefits broader patient populations.

VALIDATION OF PERCEIVED MENTAL FATIGABILITY USING THE CHINESE VERSION OF THE PITTSBURGH FATIGABILITY SCALE

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Background: Recently we validated the simplified-Chinese version of the Pittsburgh Fatigability Scale (PFS) Physical subscale. Next step is to validate the PFS Mental subscale in order to introduce a reliable measure of perceived mental fatigability among Chinese community-dwelling older adults. Methods: This cross-sectional study was conducted in an urban community in Beijing. Internal consistency of the PFS Mental subscale was evaluated by Cronbach's alpha. The participants were divided in half to evaluate the factor structure validity by exploratory factor analyses and confirmatory factor analysis. Convergent validity and discriminant validity were evaluated against cognitive function (assessed by MOCA) and global fatigue from FRAIL Scale. Results: Our study included 370 participants (mean=83.8 years). The simplified-Chinese version of PFS Mental subscale showed strong internal consistency (total Cronbach's alpha=0.82, each items Cronbach's alpha ranged from 0.78 – 0.83). The results of exploratory factor analysis showed all 10 items loaded on two factors: moderate to high and low intensity activities, which explained 60.8% of the total variance. Confirmatory factor analysis showed fit indices: SRMSR = 0.090, RMSEA = 0.120, CFI = 0.89. PFS Mental scores demonstrated moderate concurrent and construct validity against cognitive function (r = - 0.24, P<.001). Additionally, the PFS Mental subscale had strong convergent validity, discriminating according to established cognitive impairment or FRAIL Scale fatigue testing cut points, with differences in PFS Mental scores ranging from 3.2 to 8.4 points. Conclusions: The PFS Mental subscale