Fear of Falling and Subjective Cognitive Decline Are Predictors of Fall Risk in Community-dwelling Older Adults Living in Low-income Settings

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Abstract: Falls are the leading cause of disability and hospitalization in low-income older adults. Fear of falling is present in 20% to 85 % of older adults and has been identified as an independent risk factor of fall risk, activity restriction, and loss of independence. About 12% of American older adults have subjective cognitive decline. Cognitive impairment is also an established factor of fall risk. However, it is unclear whether measures of fear of falling and subjective cognitive decline have the greatest association with fall risk in low-income older adults. The aim of this study was to evaluate the association between fear of falling, subjective cognitive decline-functional performance (SCD-FP), and fall risk using simple screening tools. In this cross-section study, we collected data from community-dwelling older adults 60 years or older in low-income settings in Central Florida, and 86 participants were included in the data analysis. Fear of falling was assessed by the Short Fall Efficacy Scale-International (Short FES-I) with seven items. Subjective cognitive decline-functional performance (SCD-FP) was assessed by a self-reported experience of worsening or more frequent confusion or memory loss in the past 12 months and its functional implications. Fall risk was evaluated by the Centers for Disease Control and Prevention (CDC)'s Stay Independent checklist with 12 items. The majority of participants were female, and more than half of the participants were African American. More than half of the participants had a higher school degree or higher, and less than 20% had no financial problems. Less than 30% of the participants perceived their general health as very good- excellent. More than half of the participants lived alone, and less than 15% lived with a partner or spouse. About 60% of the participants had hypertension, 40% had diabetes, 16% had cancer, and 50% had arthritis. About 30% of the participants had difficulty walking up ten steps without resting, more than 40% felt unsteady when walking, and 30% had been advised to use a cane or walker to get around safely. Regression analysis showed that fall risk was associated with fear of falling (\square = .524, p < .001) and subjective cognitive decline-functional performance ($\square = .465$, p = .027). The structure coefficient showed that fear of falling (rs2 = .922) was a stronger predictor of fall risk than subjective cognitive decline-functional performance (rs2= .200). Fear of falling and subjective cognitive declinefunctional performance are growing public health issues, and addressing those issues is a public priority. Proactive screening for fear of falling and subjective cognitive decline-functional performance is critical in fall prevention. A combination of all three self-reported tools (Short FES-I, SCD-FP, and CDC's Stay Independent checklist) takes less than 5 minutes to complete. Primary care providers or public health professionals should consider including these tools to screen fear of falling and subjective cognitive decline-functional performance as part of fall risk assessment, especially in low-income settings. Thus, encouraging older adults and healthcare professionals to discuss fear of falling, subjective cognitive decline, and fall risk during routine medical office visits.

Keywords: falls, fall risk, fear of falling, cognition, subjective cognitive decline, low-income, older adults, community,

screening, nursing, primary care

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