Correlates of frailty in late middle-aged patients with schizophrenia

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BACKGROUND

- Frailty is a condition characterized by an increased vulnerability to external or internal stressors and reflecting an age-associated decline in multiple physiological systems.
- Individuals with schizophrenia have accelerated physical aging compared with the overall population. In addition to normal age-emergent factors that influence physical capacity, disease-related characteristics may place schizophrenia patients at risk of developing frailty.

OBJECTIVE

This study aims to assess the prevalence rates of physical frailty components and related factors in late middle-aged patients with schizophrenia.

PARTICIPANTS

- Patients with a diagnosis of schizophrenia spectrum and other psychotic disorders, aged between 55-64 years were recruited.
- Patients who had neurocognitive disorders, anxiety disorders, substance-related and addictive disorders; whose medication profiles had changed within 4 weeks immediately preceding the enrollment date; with an electroconvulsive therapy within 6 months preceding the enrollment date; or with conditions of fall or may hamper their ability to carry out the physical tests (e.g., physically disabled, hip replacements, vertigo, recent injury or acute onset of disease of the musculoskeletal system, visual impaired, unstable gait) were excluded.

MEASUREMENTS

- Exhaustion
  Exhaustion was assessed using two items from the Center for Epidemiological Studies Depression Scale (CES-D). Participants who answer “some or a little of the time” or “most of the time” to either the following two statements were categorized as exhausted: (a) I felt that everything I did was an effort, and (b) I could not get going.
- Weight loss
  Weight loss was identified as the participants experienced unintentional weight loss of greater than 5% of body weight of the previous year.
- Gait speed
  Gait speed was measured via the five-meter walking time.
- Depressive severity
  Depressive severity was assessed using the Center for Epidemiological Studies Depression Scale (CES-D).
- Cognitive function
  Cognitive function was assessed using the Short Portable Mental Status Questionnaire (SPMSQ).

RESULTS

- A total of 147 patients were assessed. Participants ranged from 55 to 64 years of age with a mean age of 59.19 years. 61.2 % of the participants were female. Characteristics of participants were presented as Table 1.
- The prevalence rates of physical frailty components were low gait speed (32.0%), exhaustion (26.5%), and body weight loss (5.4%). There was no significant difference in the percentage of number of each component between genders (Table 2).
- Results of multivariate logistic regression shows that depressive severity (aOR = 1.06, 95% CI = 1.01–1.11) significantly associated with gait speed after adjustment for age, sex, BMI, chronic disease, fall history, and cognitive function. Similarly, depressive severity and cognitive function significantly associated with weight loss after adjustment for confounders (aOR = 1.14, 95% CI = 1.06–1.22; aOR = 0.63, 95% CI = 0.49–0.82, respectively) (Table 3).

CONCLUSIONS

Low gait speed was the most prevalent frailty component in late middle-aged patients with schizophrenia. More than 39.46% of participants reported at least one component of physical frailty. Results of this preliminary study suggest a relationship between frailty, depression and cognitive function.