

Fatigue is Associated with Suicidal Thoughts in Multiple Sclerosis

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Abstract

<u>Objectives:</u> To investigate how suicidal ideation in persons with MS may be related to different types of fatigue.

<u>Methods:</u> Retrospective chart review of patients (N = 65) from a large tertiary MS center in New Jersey was conducted. Presence of suicidal thoughts was determined by responses on item 9 the Patient Health Questionnaire – 9 (PHQ) and Beck Depression Inventory – II (BDI), where a response of 1 or higher on either scale was considered an endorsement of suicidal ideation. Patients had completed the Fatigue Scale for Motor and Cognitive Functions (FSMC). A series of Mann-Whitney U tests was conducted to compare scores between patients endorsing and not endorsing suicidal thoughts.

<u>Results:</u> FSMC composite fatigue score, as well as scores on the FSMC cognitive fatigue and motor fatigue subscales, were significantly higher in patients who endorsed suicidal ideation than those who did not.

<u>Conclusions:</u> Fatigue appears to be associated with suicidality in persons with MS. Healthcare providers and family members should be aware that highly fatigued patients have a greater likelihood of having suicidal thoughts and assess risk accordingly.

Background

Individuals with multiple sclerosis (MS) are considerably more likely than those in the general population to attempt and commit suicide.¹ Fatigue is among the most common MS complaints, with patients often counting it among their most disabling symptoms.² To date, little research has investigated how feelings of fatigue may contribute to thoughts of suicide in the MS population.

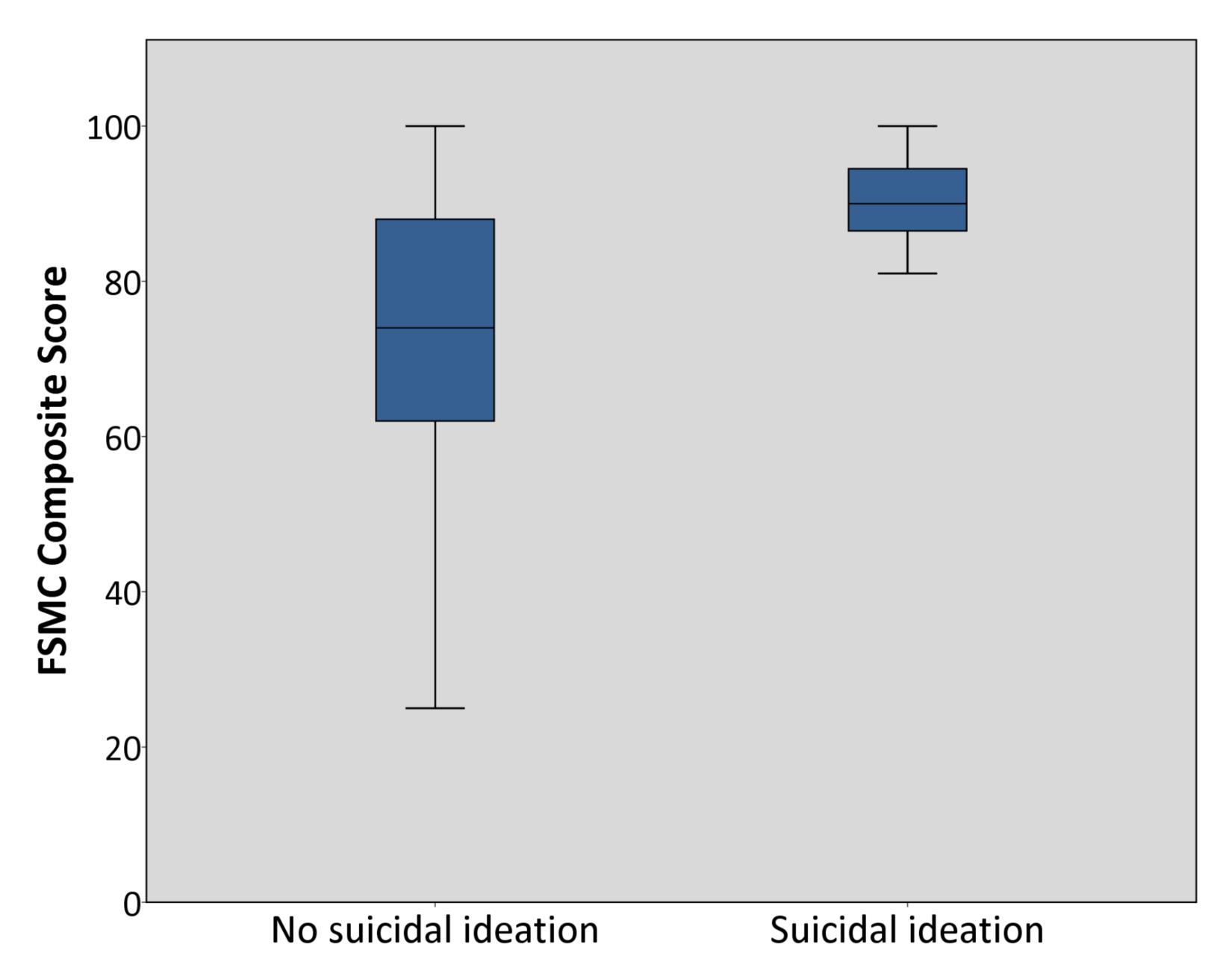
	M	S	D	Range
Age (years)	48.7	12.1		19 – 81
FSMC	76.3	17.7		25 – 100
Gender	Female: $n = 50 (76.9\%)$		Male: $n = 15$ (23.1%)	
Suicidal Ideation	No: <i>n</i> = 54 (83.1%)		Yes: $n = 11 (16.9\%)$	

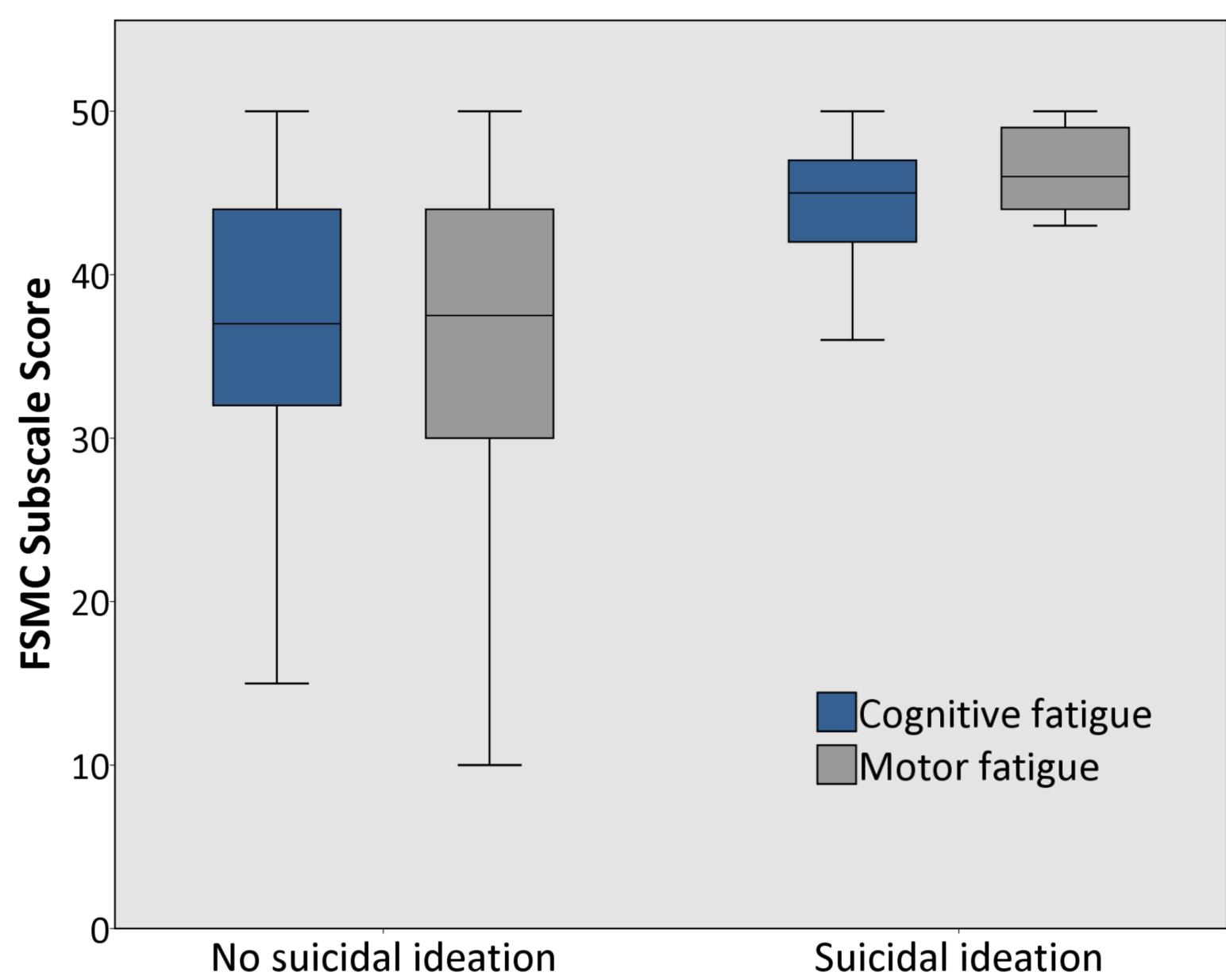
Methods

- Patients undergoing neuropsychological testing were assessed for complaints of depression using self-report inventories (the PHQ or BDI). Responses were used to dichotomously code the presence of suicidal thoughts.
- Means on the FSMC were compared between individuals endorsing suicidal ideation and those not endorsing suicidal ideation.
- Comparison of mean rank tests were conducted for the composite score on the FSMC, rating total fatigue; the cognitive fatigue subscale; and the motor fatigue subscale.

Results

- Average fatigue for the total sample was high. The mean FSMC total of 76.3 falls in the severe qualitative range.
- Patients endorsing suicidal ideation had higher overall fatigue (M = 88.5, SD = 10.0) than non-suicidal patients (M = 73.9, SD = 17.9). The difference between groups was statistically significant (p = .004).





- Patients endorsing suicidal ideation had significantly higher levels (p = .008) of cognitive fatigue (M = 43.2, SD = 6.1) than non-suicidal patients (M = 36.5, SD = 9.0).
- Patients endorsing suicidal ideation had significantly higher levels (p = .001) of motor fatigue (M = 45.3, SD = 4.5) than non-suicidal patients (M = 36.7, SD = 9.5).

Conclusions

- While fatigue is a severe symptom found in many MS patients, the rates of both cognitive and motor fatigue are particularly high in individuals with thoughts of suicide.
- Caregivers for patients with high levels of fatigue should be mindful that this symptom may be disabling enough to provoke thoughts of self-harm.

References

- 1. Feinstein A, Pavisian B. Multiple sclerosis and suicide. *Mult Scler.* 2017:1-5.
- 2. Krupp L. Fatigue is intrinsic to multiple sclerosis (MS) and is the most commonly reported symptom of the disease. *Mult Scler*. 2006;12(4):367-368.