

**Faintly Tired: A Systematic Review of Fatigue in Patients with Orthostatic Syncope**

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**BACKGROUND**  
 Orthostatic syncope (fainting when standing) is common and negatively affects quality of life<sup>1</sup>. Many patients with syncope also report experiencing fatigue, which may further impact their quality of life. However, the incidence and severity of fatigue in patients with syncope remains unclear.

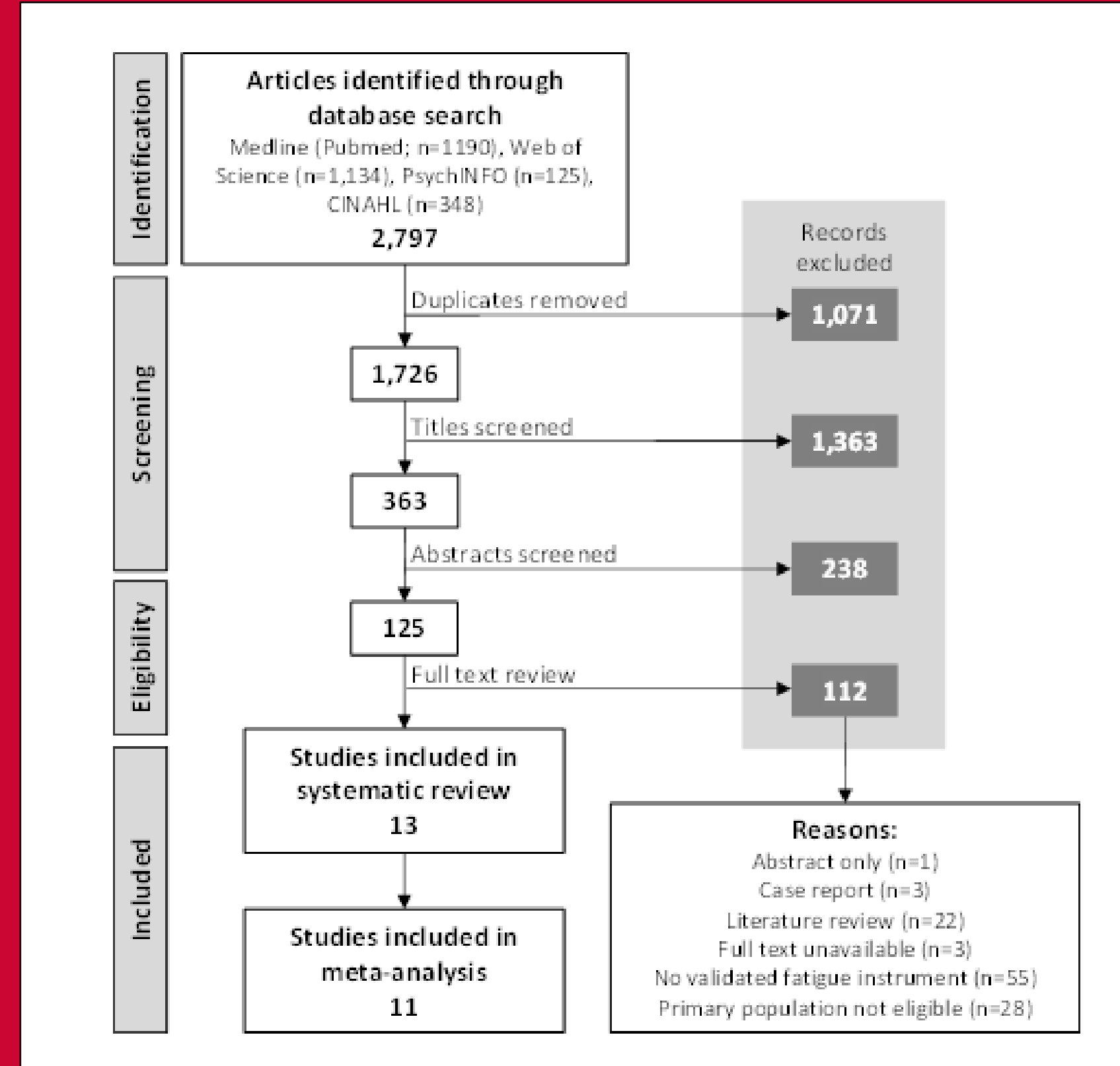
**METHODS**  
 We performed a comprehensive literature search (May 2021) of four academic databases. We included 13 articles that evaluated the association between orthostatic syncope (postural orthostatic tachycardia syndrome [POTS], vasovagal syncope [VVS], orthostatic hypotension [OH]) and fatigue.

**RESULTS**  
 Patients with orthostatic syncope presented with more fatigue than healthy controls. Fatigue severity was dependent on the subtype of syncope, and patients with POTS were especially affected by fatigue. Fatigue was determined to be multidimensional, with each dimension contributing equally to increased fatigue.

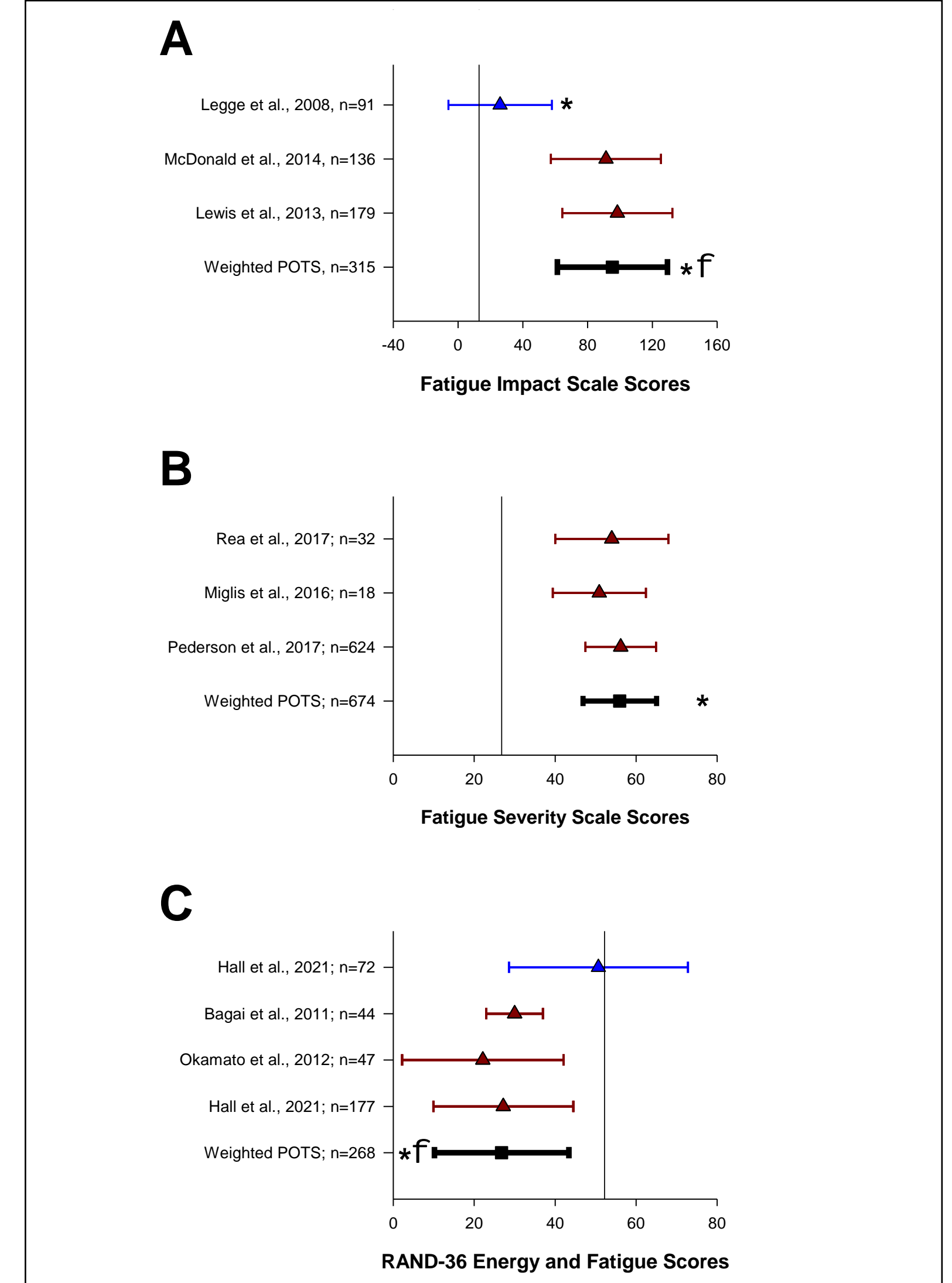
**DISCUSSION**  
 In conditions of orthostatic syncope, fatigue is prevalent and debilitating, especially in patients with POTS. The specific cause of fatigue is unknown but may be related to cerebral hypoperfusion<sup>2</sup>. Consideration of fatigue in patients with orthostatic disorders is essential to improve diagnosis and management of symptoms, thus improving quality of life for affected individuals.

**REFERENCES**  
 1. Hockin et al (2022) Front Cardiovasc Med 9: 834879.  
 2. Bagai et al (2011) J Clin Sleep Med 7: 204-210.

# In patients with conditions of orthostatic syncope (fainting), *fatigue* is prevalent and *debilitating*.



**STUDY CHARACTERISTICS**  
 The primary populations within the included articles were as follows: 10 POTS (n=1226); 1 VVS (n=91); 1 OH (n=40); and one study examined both patients with POTS and VVS (n=249). Most studies (n=11) were conducted in young adult populations, with a mean age between 20-40 years. Two studies examined older adults with VVS and OH. Two studies considered the possible interplay between POTS and chronic fatigue syndrome (CFS). In total 10 distinct fatigue instruments were used.



**Figure 1. Meta-analysis of Fatigue Impact Scale (A), Fatigue Severity Scale (B), and RAND-36 Energy and Fatigue scores (C) in patients with VVS and POTS compared to normative data.**  
 Mean scores from patients with POTS (red) and VVS (blue) are represented by triangles, with whiskers denoting the standard deviation. Circles indicate the relative sample size. Weighted means and pooled standard deviations for patients with POTS are denoted with black squares and whiskers. Mean scores and standard deviation of reference data for each scale are represented by the vertical line and shading, respectively. \* denotes significant difference from reference data (p<0.05). φ denotes significant difference from VVS (p<0.05).