DO WE KNOW ENOUGH ABOUT POST-STROKE FATIGUE TO PERFORM TREATMENT TRIALS?

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Studies have reported prevalence rates of post-stroke fatigue between 23% and 75%. Several studies have found a relationship between higher levels of post-stroke fatigue and more depressive symptoms, higher dependency in activities of daily living, lower health-related quality of life, a history of pre-stroke fatigue, and sleep disturbances. Post-stroke fatigue is a debilitating symptom in a relatively high proportion of stroke patients and is believed to impact the rehabilitation process negatively. Thus, there is an urgent need for developing evidence-based treatments.

When developing intervention studies to treat post-stroke fatigue, several challenges need to be overcome related to the lack of knowledge about post-stroke fatigue. Firstly, the etiology is not known. Studies of the relationship between post-stroke fatigue and organic factors (e.g., pathological type of stroke, lesion location, and inflammation) have reported inconsistent findings. Secondly, even though a case definition has been published to be used as a tool to determine the presence of fatigue in post-stroke patients in hospital and for patients living in the community, a consensus definition of post-stroke fatigue does not exists. Thirdly, the subjective description of fatigue implies that the patient's self-report is the basis for measuring the phenomenon. Several instruments have been developed to measure fatigue and its impact. The instruments measure different dimensions (i.e., mental, physical, and cognitive fatigue). The multidimensional nature of fatigue creates difficulties for both clinicians and researchers in describing and assessing the patient's condition, designing the best intervention, and implementing the best treatment.

To overcome these problems in a best possible way when developing intervention studies, a homogenous sample of study participants may be helpful. When considering inclusion and exclusion criteria, known co-existing factors to post-stroke fatigue should be considered when deciding which post-stroke fatigue sub-groups should be included in the study and the type of intervention to be tested. For example, patients with post-stroke fatigue and depression may respond differently than patients with post-stroke fatigue without depression on the same intervention. Knowledge gained from studies of different homogeneous sub-groups of patients with post-stroke fatigue may also make more contribution to the body of knowledge than studies on heterogeneous groups.

In conclusion, post-stroke fatigue has consequences in relation to participation in the rehabilitation process. Those patients with pre-stroke fatigue are more vulnerable to post-stroke fatigue. The high correlation between post-stroke fatigue and depression has consequences in patients' quality of life. The complex nature of the post-stroke fatigue experience involving physiological, psychological, cognitive and social aspects requires a careful delineation of interventions. A well-designed clinical trial for non-pharmacological treatment of fatigue would give us critically needed knowledge.