

The role of uncertainty in symptom management and maintenance: a biopsychosocial pathway

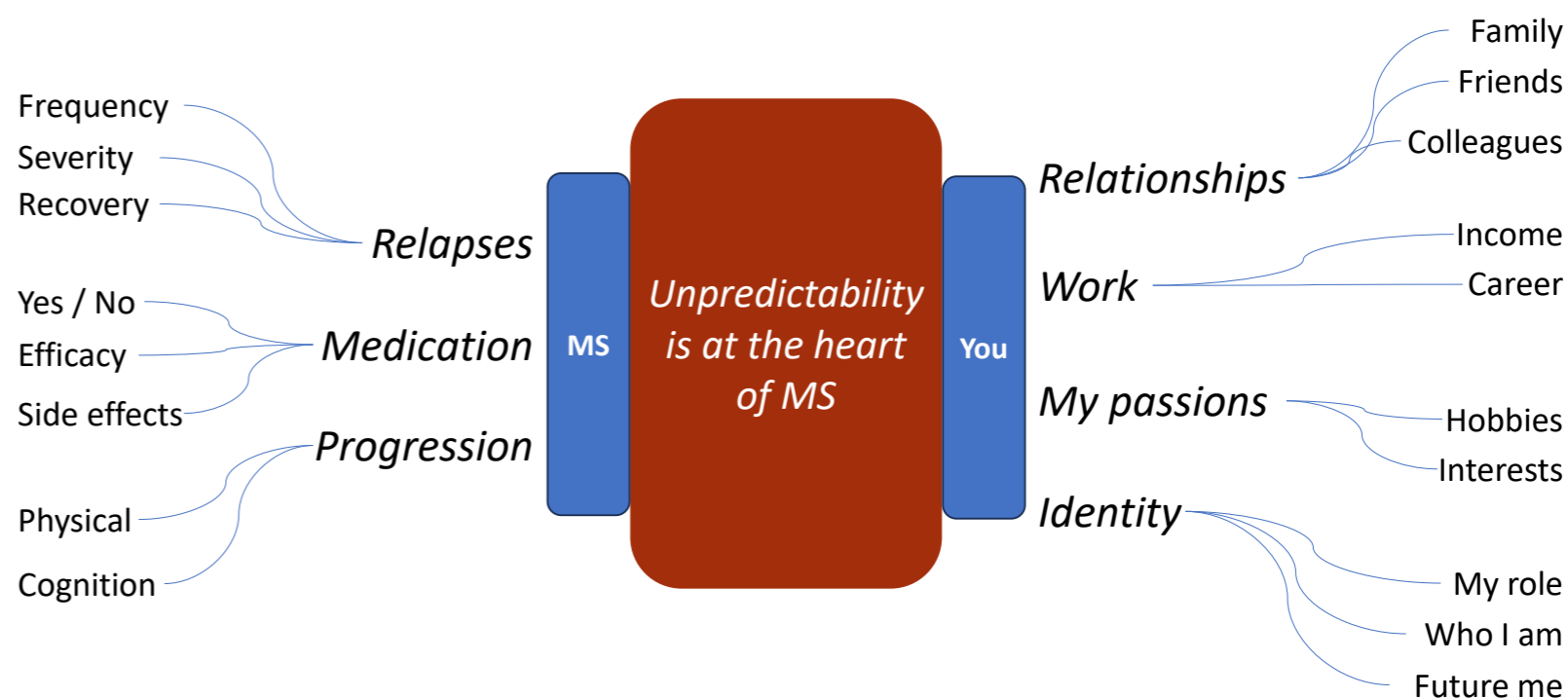
Hunter, R. Faculty of Medicine & Life and Health Sciences, Swansea University, U.K.

White, J. Overcoming Multiple Sclerosis Charity, U.K.

Startin, P. MS-UK Charity, U.K. & Overcoming Multiple Sclerosis Charity, U.K.

Introduction

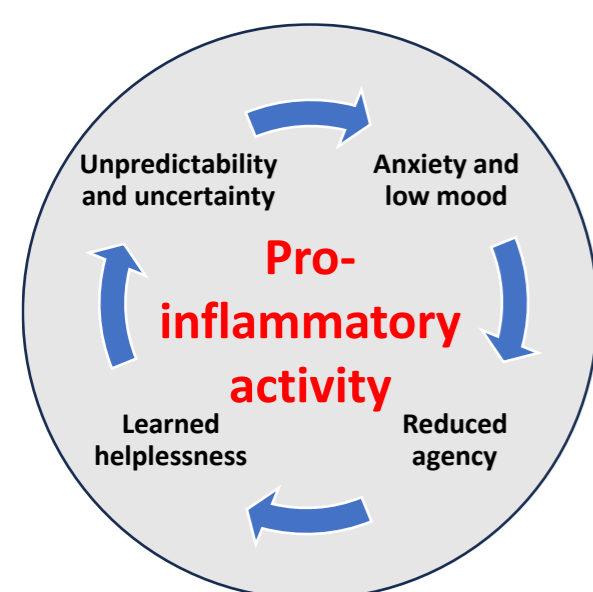
People with MS live with high levels of uncertainty. Both the pathogenesis and trajectory of the condition, and the impact of cognitive and physical changes. Uncertainty occurs independent of MS phenotype, severity, and accumulation of functional loss. Data suggests that immune dysregulation and functional decline seen in MS in part occurs as a result of the production of pro-inflammatory cytokines that can be stimulated by negative emotions such as uncertainty and stress¹. Indeed, psychoneuro-immunological explanations point to a vicious cycle through which stress and uncertainty precipitate and perpetuate disease activity².



Objectives

The impact of uncertainty manifesting to promote disease has far-reaching consequences. From a psychological perspective uncertainty can lead to anxiety, reduced agency and contribute to learned helplessness - disempowering the individual, and lowering overall quality of life. Understanding this pathway from a biopsychosocial perspective may provide potential for intervention and promotion of physical and psychological wellbeing.

Methods

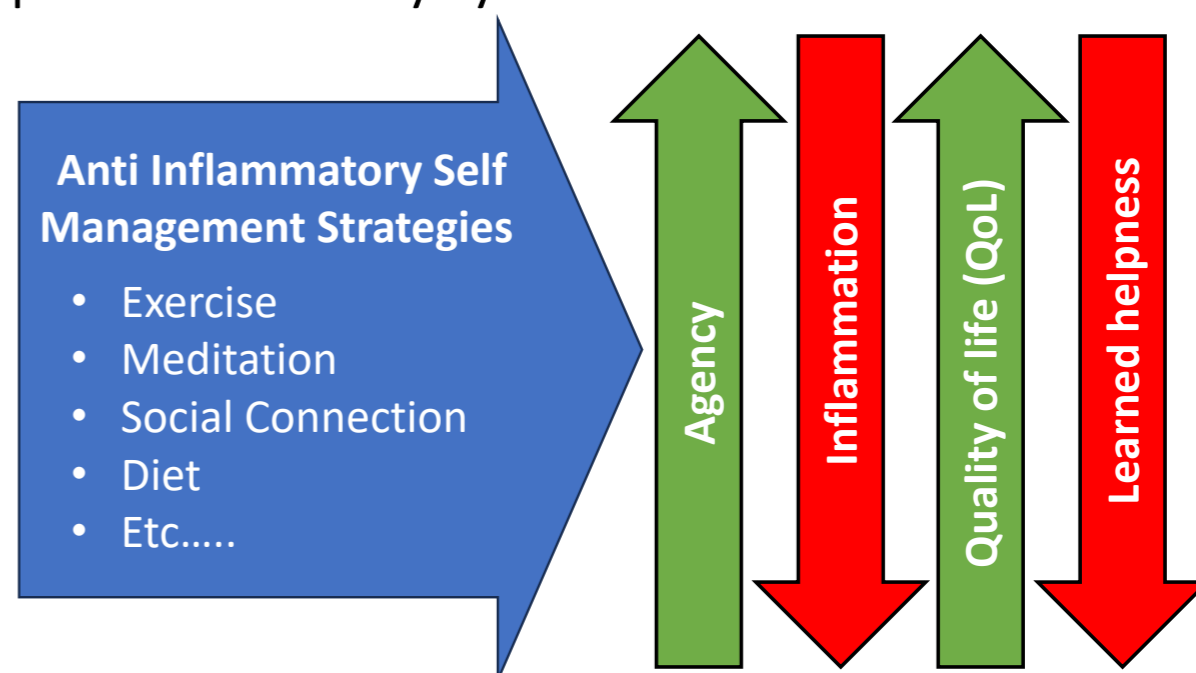


Development of a biopsychosocial model which addresses the role of uncertainty and provides opportunities for anti-inflammatory intervention and management to promote wellbeing. By reducing negative emotions and promoting agency, there may be opportunities to

improve immune regulation and reduce functional and cognitive decline by mitigating proinflammatory and degenerative disease activity.

Results

This biopsychosocial perspective demonstrates how psychosocial interventions can be used to promote symptom management and disrupt the pro-inflammatory cycle.



Conclusions

Outcomes for individuals with MS could be improved by including consideration of the biopsychosocial impact of uncertainty. Symptom management and wellbeing may be enhanced by greater emphasis on biopsychosocial and anti-inflammatory interventions that reduce negative emotions, promote agency and social connection, and challenge learned helplessness.

References: ¹Sorenson, M., Janusek, L., & Mathews, H. (2013). Psychological stress and cytokine production in multiple sclerosis: correlation with disease symptomatology. *Biological research for nursing*, 15(2), 226-233.
²Kendall-Tackett, K. (2010). *The psychoneuroimmunology of chronic disease*. Washington, DC: American Psychological Association.