Title:

Symptoms and the body: A investigative journey into their relationship

Abstract

How does the experience of physical symptoms come about? Afferent information from peripheral physiology is an important source, but a variety of interoceptive processes can make the relationship between symptoms and physiological dysfunction vary from almost perfect to zero. When the latter happens, which is all too often, symptoms cannot or poorly be related to physiological dysfunction, frustrating both the doctor and the patient and leading to excessive health care consumption. We will review experimental evidence demonstrating when symptoms are closely related to peripheral physiology and when and why they are not. This evidence prompts a new way to understand symptom perception. Much as in visual perception, symptom perception is conceived of as a dynamic constructive process balancing afferent peripheral input and information generated by the brain: under some conditions, the eventual percept of a symptom closely reflects the afferent input, while in other conditions it may more closely reflect (implicit) prior expectations. In both cases, however, symptoms rely on the same constructive mechanisms and have the same phenomenal quality of "trueness". This view suggests that current clinical interventions in somatization should broaden their scope. Rather than mainly focusing on treating symptomrelated distress (worrying, rumination, attentional and interpretation biases), interventions are needed that may change the perceptual processes themselves.