Module 1: Lecture 1. Introduction to Phenotypes

Introduction

Increasingly, attention is being paid to personalized treatment, "precision medicine", or personalized pain treatment, as this is thought to lead to better outcomes in health care. Before implementing this approach, the characteristics of individual patients or subgroups of patients that increase or decrease the response to a specific treatment need to be identified. The challenge is to identify the measurable phenotypic characteristics of patients that are most predictive of individual variation in analgesic treatment outcomes, and the measurement tools that are best suited to evaluate these characteristics.

Informing ourselves of the knowledge, skills, and tools needed to deliver personalized treatment is a first step. Applying this knowledge, using clinical reasoning skills, to a specific clinical case is next. This is needed to hone these skills and make them robust for treating a variety of patients. Since there is no "one size fits all", the use of reflection and discussion on real case scenarios is useful. A PeerReview approach can be a helpful tool for this.

This lecture presents how chronic musculoskeletal pain is on the rise and some of the issues associated with this. It also shows the results from a longitudinal observational study which used phenotype analysis to show a novel approach towards musculoskeletal phenotypes.

Learning Outcomes Mapped to EFIC Pain Physiotherapy Curriculum

2.1.2. Demonstrate an understanding of the rationale behind basic biopsychosocial assessments
2.1.4. Demonstrate an ability to identify patient and healthcare provider factors that may influence treatment (patients and healthcare providers' attitudes and beliefs, health literacy levels, patient and their family's response to the experience of pain and illness including affective, cognitive and behavioural response)
2.1.5 Demonstrate ability to utilise a person-centred approach and achieve a deep understanding of how pain affects the life of the patient (biologically, functionally, psychologically as well as work and social relations

Preparation

Each partner prepares a clinical case study on a patient with nociceptive, neuropathic, and/or nociplastic pain.

- The format for the EFIC case study can be used to guide preparation. However, changes in this format, additional information or an alternative way of presenting are welcomed.
- Try to be as rich as possible in presenting the narrative of the patient, but do not feel obliged to be complete. Choose the information you regard as important.
- If possible: video material showing e.g. movement patterns or communication is a great addition to the case. Make sure that it is possible to show just a short excerpt (max. 2 mins).

- Prepare at least one clear question you have on the case that you would like your peers to give input on.

Content

Following an introduction of the use of phenotyping in prognostic and clinical reasoning we will break up into groups for PeerReview of the prepared cases. We will end the session with short presentations of the cases and the output of the discussions.

Follow up / suggestions for processing and practice

Improve your cases with the advice from your peers. Reflect on the lessons learned and how to translate these to clinical practice and teaching.

Reference material

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