Module 2: Lecture 6. Development of cases and the use of case based learning

Introduction

Case-based learning (CBL) is commonly used in physiotherapy curricula. It was found to be a very effective instructional methodology in physiotherapy academic programs to enhance students' learning, problem solving skills, clinical preparedness, and confidence levels (Nelson, 2010). Within the domain of physiotherapy for patients with pain, often complex and chronic, the development and use of cases for CBL might not be easy. How do you describe a realistic case with sufficient detail, while at the same time concrete enough to be used in a pragmatic manner? How do you integrate the ICF model in your case and the subsequent discussions? How do you use a case to engage and guide students in a learning dialogue that supports development of their clinical reasoning and practical skills?

Learning Outcomes Mapped to EFIC Pain Physiotherapy Curriculum

By the end of this session, participants should be able to:

1. Understand, demonstrate and discuss a comprehensive biopsychosocial assessment of the patient and the rationale behind. (2.1.1 – 2.1.5)
2. Understand, demonstrate and choose a critical selection of appropriate valid and reliable physical and psychological assessment and outcome measures across International Classification of Functioning, Disability and Health (ICF) domains. (2.2.1 / 2.2.3)

Participants in their role as teaching-staff should be able to:

1. Guide a learning dialogue and support an external reflective articulation by the student;
2. Prepare case-descriptions for use in CBL-classes;
3. Make a lesson-plan for a CBL-class considering different phases of methodological thinking and the goal of the specific lecture / workshop.

Preparation

Look at your own reflective journal and articulate for yourself what skills, information and confidence you need to guide a learning dialogue with a student on clinical reasoning. Formulate your 'zone of proximal development' (Vygotski) regarding the use of CBL as a teaching tool.

We will make use of the cases that are developed for the lecture "Prognostic and clinical reasoning - phenotyping of patients / analysis of clinical cases". As a preparation you can highlight certain aspects of the case you think can be helpful in starting a learning dialogue.

Content

In this workshop we will work on the development of case-descriptions that are useful for the different purposes within a CBL-class. We will experience how useful these cases are for clinical reasoning, forming hypotheses, methodological thinking and making choices in assessment and treatment. We will practice our role as teachers guiding the learning

dialogue, supporting the external reflective articulation and thereby the development of students' clinical reasoning and practical skills.

Follow up / suggestions for processing and practice

Use what you've learned in developing a case-description for a CBL-class.

Putting external reflective articulation in practice, answer the following questions:

1. In what manner will you implement the use of CBL in your upcoming teaching assignments?
2. What is your next step in the development of your skill as a teacher guiding a learning dialogue?

Reference material

Nelson, T. K. (2010). *Case-based learning (CBL) in selected physical therapy curricula and its perceived effectiveness by students, faculty, and administrators* (Doctoral dissertation, University of New Orleans).

Trommelen, R. D., Karpinski, A., & Chauvin, S. (2017). Impact of case-based learning and reflection on clinical reasoning and reflection abilities in physical therapist students. *Journal of Physical Therapy Education*, *31*(1), 21-30. DOI:10.1097/00001416-201731010-00006