



## Case-based learning & IPE

Jill Thistlethwaite June 2020



















#### Learning outcomes

Describe case studies as a pedagogical method in health professions education

Identify advantages of case studies in the education of health professions

Discuss challenges in implementing case studies in the context of behaviour change support education to facilitate self-care in chronic diseases for nursing, pharmacy and sports sciences students



#### **Definitions:**

- CBL is a learning and teaching approach that aims to prepare students for clinical practice, through the use of authentic clinical cases.
- These cases link theory to practice, through the application of knowledge to the cases, and encourage the use of inquiry-based learning methods.



#### Similar to CBL

- Case-based learning
- Case method
- Case study method
- Problem-based learning



#### Evidence?

 Overwhelmingly students enjoy CBL and think that it enhances their learning. The empirical data taken as a whole are inconclusive as to the effects on learning compared to other types of activity. Teachers enjoy CBL, partly because it engages, and is perceived to motivate, students. CBL appears to foster learning in small groups though whether this is the case delivery or the group learning effect is unclear (Thistlethwaite et al., 2012).



#### And...

- Complements other methods of learning and teaching for health professional students.
- Students prefer explicit learning outcomes and some structure
- As a new method facilitators and students need orientation to what is expected of them (explore HP learning experiences).
- Appears to achieve the aim of linking theory with practice unlikely to be one optimal way of delivering CBL.
- Effectiveness is contextual and depends on preparation, size of groups, learner and facilitator support plus authenticity of cases.



#### PBL v CBL

- PBL: 'learning that results from the process of working towards the understanding of a resolution of a problem. The problem is encountered first in the learning process' (Barrows & Tamblyn, 1980)
- Learners set own learning outcomes
- CBL: more structured (Srinivasan et al., 2007)
- Learning outcomes defined in advance



#### **Experiential & student-centred learning**

- Actively involve learners
- Model professional thinking and action
- Provide direction and feedback
- Create a collaborative learning environment
- Aim to integrate theory with practice

#### **IPE**

- Involve 2 or more professions
- Team-based learning



#### Good cases:

- Based on real patient/client histories (i.e. they are authentic)
- Involve common scenarios based on core learning outcomes
- Tell a story and are logical (which professions?)
- Have educational value (to all professions)
- Are stimulating
- Create empathy with the characters
- Include patients'/clients' sayings (voices) that are credible and add drama and realism
- Facilitate inquiry and problem solving
- Promote decision making
- Link theory with practice
- Inexpensive to produce. (Adapted from, Herreid 1997/98)



#### **Delivery:**

From paper to simulated patients to virtual patients

 Virtual patients are interactive computer simulations of real-life situations for the purpose of health professional education



#### **Developing CBL for IPE:**

- Do you already use cases in your teaching? Do they match the criteria in the box above? What should you change about your existing cases?
- How might you incorporate a CBL with IPL?
- Consider the necessary steps to introduce CBL/IPL: where, when, how and who?
- Consider how CBL/IPL could complement your existing teaching; maybe you could substitute some of your existing delivery with cases.
- How would you involve other professions in development and delivery?



#### Writing the case

- Check that the case will meet the defined learning outcomes (for all professions and for IPE)
- Consider if the case is at the right level for your learners
- Ensure the case is realistic and interesting
- Determine if the material presented will stimulate the necessary questions and/or answers from the students
- Decide what other resources are required for example X-rays, models, websites



#### How students may work in CBL/IPL

- Read the learning outcomes for the case. Are there new learning outcomes? Are some related to previous work that you can now build on?
- Read the case and clarify any terms or concepts with which you are not familiar.
- Consider the members of the group which professions? does there appear to be a difference in level of understanding of the group members and why might this be so?
- Read the questions, which are to help you meet the learning outcomes.
- Work through the questions, dividing up tasks between group members. Where might you find information to help?
- Watch for conflict reflect on collaboration
- Regroup to summarise your answers and prepare your case analysis
- Have you met the learning outcomes?
- What other work do you need to do now?



#### **Facilitation**

- Consider what skills you and your colleagues require for facilitation
- How will you develop these skills if you need to do so?
- What size groups will you work with?
- How will you ensure that all students are involved with each case?
- What additional training/consideration is needed for interprofessional groups?
- Are you comfortable working with interprofessional groups?



#### **Connie Ashgrove age 68**

 Type 2 DM with variable control. Arthritis hip with reduced mobility. Widowed 3 years ago.
BMI 30. BP 154/95. HbA1c 8.4%; 5 medications

 Regularly advised to lose weight; exercise more; change diet; take medication as prescribed.

Event Date 15



#### **CBL**

- Define learning outcomes for this case (could be multiple or focus on behavior change; include IP outcomes)
- What else does the group need to know about Connie? (different 'history' questions of each profession)
- Development management plan
- Theory? (behavior change; self-care)
- Into practice? (real-life scenario what are the challenges?)
- Compare and contrast each profession's approach
- Could use role play for motivational interviewing



### Health care team challenge

- Working together over several weeks, teams develop a management plan which reflects best practice for a 'real' client with complex needs.
- Present that plan to a panel of judges before responding to a range of challenging theoretical, practical and ethical extension questions, all under time conditions.
- The team that demonstrates a master of teamwork and communication over the course of the program is declared the winner.



#### Please contact me...

@jthistlethwaite



jill.thistlethwaite@uts.edu.au





# Train4Health has received funding from the European Union's Erasmus+ Programme under grant agreement no. 2019-1-PT01-KA203-061389

The European Commission's support for the production of this publication does not constitute an endorsement of the contents, which reflect the views only of the authors, and the Commission cannot be held responsible for any use which may be made of the information contained therein.















