Interprofessional team simulations for collaborative care in stroke: constructing knowledge, applying skills, and changing attitudes

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Learning Objectives

This session will overview pre-licensure:

1. Simulation design elements for uni and interprofessional collaborative (IPC) stroke content

2. Methods to prepare learners for the IPC continuum of stroke care

3. Program evaluation results
Background

• **Stroke** in North America
  o leading cause of adult disability
  o third leading cause of death
• Breadth of multi-system challenges
• Large array of professionals along continuum of care
• Stroke Best Practice = Collaborative interprofessional teams

Complex learning needs & training environments are variable
Design Influences

• Stroke best practice guidelines
  • Hebert et al, 2016, Stroke Trialists, 2013,

• Simulation best practice principles
  • Chiniara, 2013; Mori et al. 2015

• Interprofessional competencies (IP)
  • CIHC, 2010
  • Hammick et al., 2007
  • Charles et al., 2010

• Dal Stroke IPE experience
  • MacKenzie et al., 2017
Dal Stroke IPE Overview

Part I
Collaborative Care Plan - 2 hrs
N = 386
- Online Pre-brief
- Care plan deliverable
- Distributed debrief
- Program evaluation

Part II Stroke Clinic - 3 hrs
N = 356
- E Case Pre-brief
- Station I Rehab
- Station II Med Mgnt
- Station & Large Group debrief
- Program evaluation

Preparation
6 Disciplines

Core Curriculum Prep
Online best practice resources
Video Case: Home to hospital care
Methods

• Part I Collaborative Care Plan:
  o 386 students (356 on-site, 30 distance technology)
  o OT, PT, Pharm, Med, Nsg & SLP
  o 60 teams of 5 - 7 students

• Part II Simulated Stroke Clinic:
  o 356 on-site student in same Part I teams
  o 2 Stations
    • OT, PT, SLP – Rehabilitation station
    • Med, Nsg, Pharm – Outpatient Medication management
Methods

Evaluation Documents Part I

• Team Collaborative Care Plan
• Voluntary and anonymous evaluation
  • Interprofessional Collaborative Competency Assessment Scale (ICCAS)
  • free text questions

Evaluation Documents Part II

• Self-reflective skill document (individual & team performance)
• Voluntary and anonymous ICCAS
Results

• A three-way univariate full factorial ANOVA applied to the ICCAS questionnaire factors representing the CIHC competencies
  o all possible interactions (profession and IP experience) as between-subjects factors, and ICCAS pre/post scores as a within-subject factor

Part I (N=378; 98%)
  o Pre-post scores ($p<0.001$) for all factors
  o Differences between Professions ($p<0.05$) for communication

Part II (N=340; 96%)
  o Pre-post scores ($p<0.001$) for all factors
  o Differences between Professions $p<0.05$ for communication, conflict and Team Function
  o Interaction with Factor (Client Centeredness) by Profession $p<0.001$
Results

Part I Collaborative Case Plan Simulation – Text Analysis

• Major themes in understanding in role clarification and team functions

• Within role clarification, comments were focused on understanding each others' skills, respecting diversity and considering others’ perspective

• Constructing their team IP collaborative care plan and how it is delivered daily with the patient drew out how important the team relationship is for facilitating client centred care and outcomes
Results

Part II Simulated Stroke Clinic - Text Analysis

• Deeper understanding of each other’s skills, abilities and roles beyond the role discussions they experienced during the collaborative case simulation

• Students clearly expressed the simulated patient experience solidified the need for interprofessional collaboration, not only for a positive effect on patient care but for effective and efficient team function
Results

“It’s hard to describe what I learned in words, because it wasn’t about the words. It was beyond the words . . .

We had to face our biases head on, and by doing so, we learned the things that we can’t learn without getting messy and taking the leap beyond speaking into doing.”
Simulated Patient Feedback

Simulated patients commented on the cooperation of the students from different professions, and the students’ ability to manage their own strengths and weaknesses to provide the best patient care.
Conclusion

• Both simulations are effective, efficient, and valuable designs for stroke and IP knowledge and practice skills

• Learners expressed deeper learning – particularly in the area of role clarification and team collaboration – from the simulated stroke clinic interactions

• Faculty value the efficient design & impact on learning

• Simulated patients found it a very engaging and positive experience … and would like to do it again!
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Questions?

Stroke IP team simulations positively impact student knowledge, skills & IPC attitudes

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