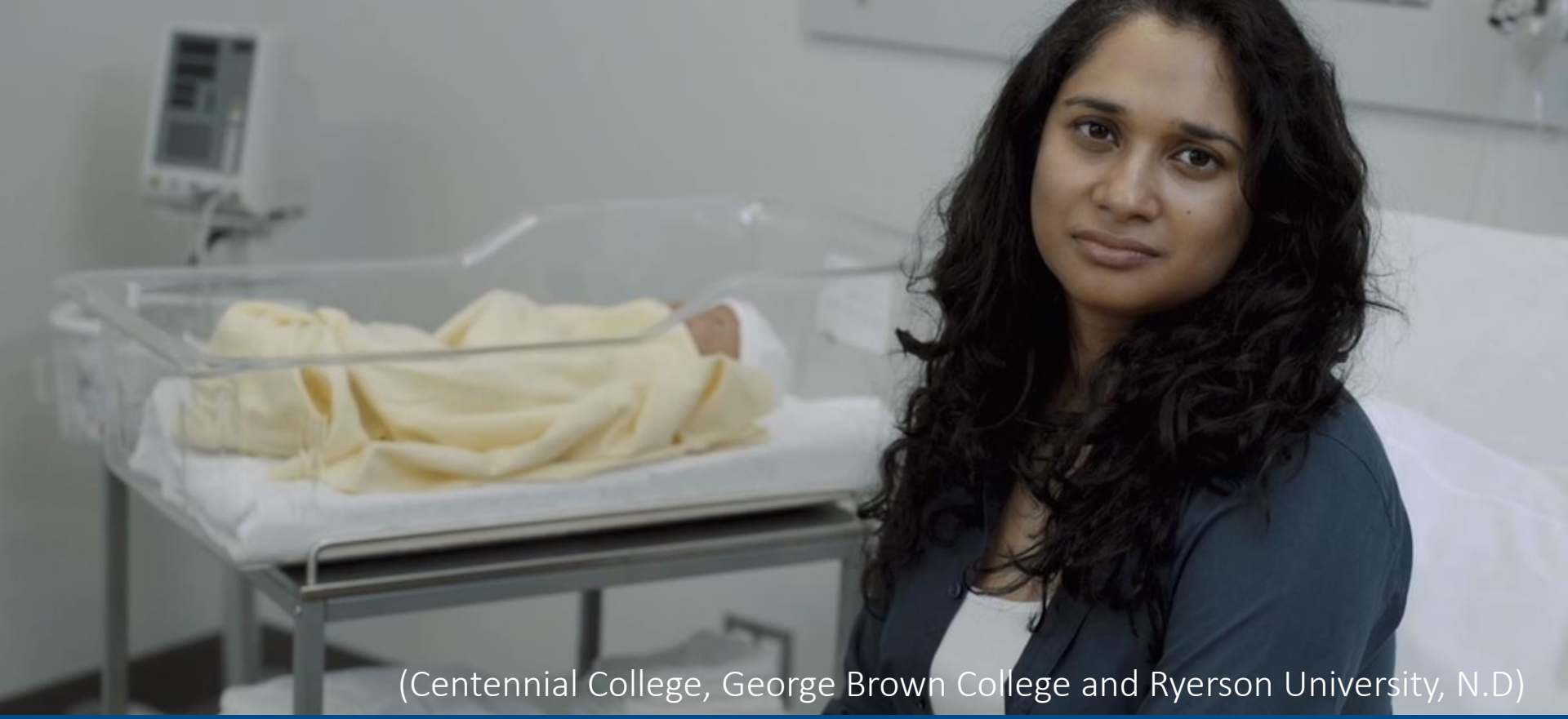
(Centennial College, George Brown College and Ryerson University, N.D)

# Virtual Asynchronous Debriefing as an Effective Method to Support the Development of Clinical Decision Making

Georgian

Stephanie Atthill RN, PHD, Debra Witmer RN, MHSc.

# Learning Outcome

- Explore how asynchronous debriefing methods can be used to support the development of clinical decision making within nursing education.

- Offer recommendations to support the use of asynchronous debriefing as a teaching strategy.

# Background

- Virtual simulation games (VSG) are being used to support learning and to prepare students to enter the clinical setting (Auman, 2011; Verkuyl et al., 2017)

- VSG is linked to increasing student engagement and critical thinking (Auman, 2011; Chiniara et al., 2013; Padilha et al., 2019)

- Structured debriefing following a simulation guides learning by engaging with the domains of CDM (Luctkar-Flude et al., 2018).

- Asynchronous debriefing can offer a useful educational strategy to support debriefing following virtual simulations (Atthill, Witmer, Luctkar-Flude, Tyerman, 2021)

# Considerations in Planning for Asynchronous Debriefing

- Use a theoretical framework to structure the learning experience (Ex. Kolb's Experiential Learning Theory)
- Integrate self-reflection prior to engaging in debriefing
- Use a framework to guide the debriefing process (Ex. 3D's, teamSTEPPS, PEARLS)
- Plan and attend to psychological safety within the asynchronous debriefing environment

# Considerations in Planning for Asynchronous Debriefing

- Time needs to be provided for engagement with the online debriefing.

- Plan for participation by all students in the online discussion. Students should craft their own responses and engage in reflection with their peers and instructor.

- Encourage students to utilize resources and course material to support the debriefing process.

| Application of Kolb | Protocol Map |
| --- | --- |
| **Concrete Experience** | Presimulation Preparation: Reading and Cue Cards |
| | ↓ |
| | Postpartum Virtual Simulation |
| | ↓ |
| **Reflective observation** | Student Self Reflection. Within 12 hours of VSG |
| | ↓ |
| **Abstract** | Asynchronous Debriefing Strategy |
| **Conceptualization** | Faculty facilitated asynchronous debrief using 3D Debriefing Model completed over 48 hours |
| | ↓ |
| **Active Experimentation** | Engagement in class and live postpartum simulation event |

# Recommendations for Setting up Asynchronous Debriefing

Overview of the Learning Strategy:

- **Concrete Experience**:
  - Students complete presimulation preparation – readings and cue cards
  - All students complete OB VSG prior to week in OB simulation lab
  - Students print off VSG performance summary (analytics)

- **Reflective Observation**:
  - All students complete written self-reflection referencing their VSG performance summary within 12 hours of VSG
  - LEARN framework – aligned with Kolb Learning Theory

# Recommendations for Setting up Asynchronous Debriefing

- **Abstract conceptualization**:

  Virtual Debrief:

  - Facilitated through a discussion board within the learning management software
  - Class was divided into smaller debriefing groups and put into private discussion boards
    - 6-8 students per debriefing group
  - 2 posts minimum – one original, one response to peers over 48 hours
  - Completed prior to attending OB sim lab

# Recommendations for Setting up Asynchronous Debriefing

- Students engage in facilitated asynchronous debrief using 3D Model of debriefing (Defusing, Discovering, Deepening)
- Students were provided with all of the debriefing questions within the discussion board
- Responded to all of the debriefing questions within their initial post
- Moderator responsibilities:
  - Responded to individual posts within the thread
  - Clarify misinformation to the entire group
  - Asked further probing questions to support enhanced critical reflection

# Setting up Asynchronous Debriefing - Recommendations for Future Use

- Active Experimentation:
  - All students participate in class and live OB scenario based on VSG

# Challenges to Consider in Planning the Debrief

- Monitoring and responding within the asynchronous debrief is time consuming for faculty

- Difficult to know how often students are returning to the debrief to review comments posted
  - Consider adding a minimum number of responses
  - Having students respond to their peers and the faculty posts
  - Have a minimum timeline to insert their initial post so that others have time to review and respond before the debrief period is over
  - Consider allowing more than 48 hours for the debrief

- Set clear expectations and links within the course syllabus and learning management system so that all student groups have a consistent approach to follow for debriefing
- Consider an incentive to encourage participation

# Future Opportunities for Asynchronous Debriefing

- Supports learning of topics that we don't have time to cover in the face-to-face simulated environment.
- Reinforce theoretical and clinical learning.
- Support the learning process for students who need to make up clinical learning.
- As a tool to prepare students for face-to-face/synchronous simulation experiences.

# Publication

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Featured Article

## Exploring the Impact of a Virtual Asynchronous Debriefing Method after a Virtual Simulation Game to Support Clinical Decision-Making

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**KEYWORDS**
virtual simulation game;
asynchronous debriefing;
face-to-face debriefing;
obstetrical simulation;
nursing education;
simulation

**Abstract**

**Background:** This study explored the impact of virtual asynchronous debriefing after a virtual simulation game on nursing students' perceived anxiety and self-confidence for engaging in clinical decision-making (CDM).

**Method:** An experimental design compared virtual asynchronous debriefing with traditional face-to-face debriefing.

**Results:** Virtual asynchronous debriefing resulted in increased self-confidence and reduced anxiety for CDM related to gathering data, seeing the big picture and knowing and acting. Asynchronous debriefing was comparable with face-to-face debriefing, and resulted in a significantly greater reduction of anxiety in the CDM dimension of data gathering.

**Conclusions:** Asynchronous debriefing is a reliable alternative to face-to-face debriefing.

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