Co-debriefing virtual simulations: an international perspective.

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Co-debriefing Virtual Simulations: An International Perspective

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Abstract
Co-debriefing is a process in which two or more individuals facilitate a simulation debriefing. Debriefing is considered an essential best practice that occurs as soon after a simulation as possible and should be conducted by experienced debriefers. This paper will describe the lessons learned, challenges and future considerations for co-debriefing a virtual simulation experience.

The international co-debriefing team in this study included 11 nursing faculty from five universities in four countries (Canada, England, Scotland and Australia). Primary benefits of co-debriefing included: mentorship for less experienced debriefers and deeper learning for students by providing multiple perspectives. Challenges included consideration of various time zones for international planning meetings and adaptation of the virtual simulation to the country context. Group sizes of six to eight students were optimal for the debrief and a co-debriefing checklist for all co-debriefers helped maintain consistency with the debrief, assisted in developing a game plan among debriefers, and helped in planning contingencies.

Introduction
The process of debriefing in the context of healthcare involves the facilitation of a discussion between two or more individuals to explore and analyze a situation with the aim of gaining insight and improving clinical practice (Cheng et al., 2015). Debriefing is an essential element of best practices in simulated practice that deepens learning and promotes reflection (INACSL, 2016, Fey et al., 2014).

Best Practices in Simulation
To enable optimal debriefing, the Standards of Best Practice in SimulationSM (INACSL, 2016), recommend the process is ‘led by a trained facilitator using an evidence-based debriefing model’ (p.S41), ‘a person(s) competent in the process of debriefing’ (p. S22), who is familiar with the
simulation-based experience and will not be distracted by having to perform other roles and functions during the scenario, and is able to ensure that debriefing takes place in a psychologically safe and supportive learning environment. INASCL Standards (2016) also advise that the debrief facilitation method must follow an evidence-based framework, be relevant to context, simulation objectives, learners’ level of knowledge and experience, and simulation modality.

**Virtual Simulation and Debriefing**

With the evolution of virtual simulation over recent years and its explosion of activity during the Covid-19 pandemic, the virtual simulation modality requires an allied change in debriefing practices (Goldsworthy & Verkuyl, 2021).

Virtual simulation allows students to asynchronously undertake repetitive attempts at a given scenario to scaffold learning, enhance reflection and deepen learning. Whilst resource intensive (Krogh, 2016), co-debriefing involves sharing the workload of the debrief between facilitators from the same or different professional backgrounds or specialties (Cheng et al., 2015). By working together to manage the discussion this may lead to a broader perspective that promotes more effective learning. In the instance of our study, the debriefers were all experienced faculty members and registered nurses from five different countries and thus provided a geographical breadth to the debriefing discussion. To mitigate against the pitfalls of co-debriefing, a checklist was adopted from Cheng and colleagues (2015) co-debrief checklist to guide the co-debriefing in this international deteriorating patient study. The co-debriefing checklist allows debriefers to make a ‘game plan’ and to determine the strategy for the debrief (i.e. who will lead the debrief). The co-debriefing checklist allows co-debriefers to coordinate their efforts by reviewing the learning objectives, deciding on the co-debriefing approach (i.e. follow the leader or divide and
conquer), and discussion of the rules of engagement for learners (i.e. how to handle interruptions and manage transitions).

Method

Aim

This paper focuses on experiences of co-debriefing with an international co-debriefing team that included 11 nursing faculty from five countries (Canada, Australia, England and Scotland). The objective of this teaching and learning innovation was to develop a process for preparing a team of international nursing faculty to co-debrief within the virtual simulation context. A consistent approach to debriefing was applied through the co-debrief checklist developed by Cheng et al (2015) and the INASCL Standards of Best Practices SM:Debriefing (2016). The co-debriefing was part of a larger multi-site international research project that explored the use of virtual simulation among undergraduate nursing students and their confidence and competence in the recognition and response to the rapidly deteriorating patient.

The Facilitator Debrief Team

The facilitator debrief team consisted of 11 nursing faculty members from five university Schools of Nursing. The university sites were international and geographically diverse locations that included Schools of Nursing in Canada, England (two sites), Scotland and Australia. The debrief team had a variety of levels of simulation experience. Most had facilitated synchronous debriefs in the simulation lab but only the lead investigator had experience in facilitated synchronous debriefing within the virtual environment.

Preparation of International Facilitator Teams

To prepare the co-debriefing teams at all sites, current literature describing the co-debrief procedure was provided for review alongside the co-debriefing checklist of which included
guidance for both pre and post-debriefing. Prior to determining the co-debrief dyad and triad teams, a workshop on the debriefing procedure was delivered to the facilitators at each of the research sites by the lead investigator. The workshop included a step-by-step approach to debriefing within the virtual environment followed by a review of the co-debriefing checklist (Cheng et al., 2015).

**Co-debriefing Process**

With the assistance of the Research Coordinator, co-debriefing dyad and triad teams were established and a master schedule of international debriefing times was created. The goal was to enrich the debrief experience by having debriefers from different countries and contexts co-debriefing together. To maintain consistency for the study, the lead investigator was present on the zoom virtual platform at all the sites for the debriefing sessions. The co-debriefing teams reviewed the co-debriefing checklist prior to each debrief and formulated a ‘game plan’ for the debrief which included who would lead the debrief and how transitions would be managed during the debrief.

The co-debriefing checklist enabled the debriefing points and process to be pre-determined to ensure consistency between the facilitators and the five sites. By establishing a shared mental model around debrief we ensured that the debrief was collaborative and organized versus chaotic. The planning and collaboration between debriefers also enabled ground rules about ensuring a safe learning environment mindful of psychological safety principles of: establishing confidentiality and maintaining a culture of respect and inclusion. Field notes were also recorded by co-debriefers about their experience of the process. The co-debriefing team in this study facilitated discussion with a wider scope of perspectives, even though all were nurses, the debriefing team had worked in different specialty areas and had
varied scopes of practice, this allowed for the differences and similarities between practice in the different countries to be acknowledged and explored. Students did not seem to feel outnumbered and were perhaps reassured by the presence of familiar lecturers. It also seemed that the students valued the opportunity to gain a wider perspective from an international expert in the field. From the co-debriefers’ perspectives, this experience of co-debriefing encouraged role modelling of debrief and ‘built in’ mentoring for debriefers from different countries to deepen their skills in virtual simulation debriefing. Co-debriefing also enabled the provision of peer support for less experienced colleagues.

At the conclusion of the debrief and after the students had signed off, the debriefers met to ‘debrief the debriefer’ and to consider whether their technique needed refining for next time. This also demonstrated that, by following the structured approach offered by Cheng et al. (2015), little if any refinement was required, with the same format being followed for each consecutive session. Each site had a total of two to three debriefing periods (during the larger study). Each debriefing session was 30 minutes in duration and utilized a modified PEARLS debriefing method (Eppich & Cheng, 2015).

**Lessons Learned**

There were a number of lessons learned during the co-debriefing sessions:

- Two to four co-debriefers works well and fosters student engagement. We initially thought this might have been intimidating to students but it did not have this impact.

- Utilizing online platforms (i.e. Zoom) is beneficial as debrief can occur in a timely manner and participants can join from anywhere.
Conversely, poor internet connection, or ability to find somewhere private to join the debrief can then be an issue. Therefore, it is important to provide a back up plan if students have internet outages.

• Preparation of facilitators prior to co-debriefing is critical.

• Pre-briefing the co-debriefers in advance and developing a game plan was important to run a smooth, seamless debrief.

• Co-debriefing is a great strategy to mentor and deepen facilitator competency in virtual simulation.

• Creating a supportive, welcoming culture for students at the beginning of the debrief, aids interaction and openness and can be enhanced by having at least one facilitator present who is known to the students.

• For this study, the presence of a UK or Australian and a Canadian facilitator was beneficial as there was some difference between nursing approaches to the simulated scenarios across national boundaries.

Challenges
The challenges with co-debriefing in international teams included the following:

• Time zones and scheduling of planning meetings and debriefings – particularly with the wide variations in time zones evident in this study (Australia, England, Scotland and Canada)

• Terminology and best practice can vary from one country to another. In this study, fresh guidelines had to be developed prior to the simulations to ensure guidance was applicable to local policies and procedures.
Gaining familiarity with the virtual simulation platform can present a challenge since there were nuances with a platform designed for North American use and adaptations needed to be made for the UK and Australian context.

**Future Considerations**
Recommendations for future co-debriefing teams would include: ensure use of checklist for consistency and familiarity with INACSL Standards of Best PracticeSM (2016). In addition, a workshop for all facilitators to discuss the virtual simulation process assists in ensuring the whole team has a clear understanding of the co-debriefing phases. Experienced debriefers are essential for the team and to mentor others with less experience in virtual simulation debriefing.

A structured approach with multiple planning meetings in advance of the debriefing was helpful in ensuring the whole team was prepared. In addition, we recommend that 6-8 students are optimal for student engagement in a virtual simulation debrief. Having three or four debriefers was not overwhelming to the students but rather created a collegial discussion that fostered sharing among learners. Lastly, having an international team of co-debriefers can provide different perspectives for student learning and reflection. Co-debriefers also developed their skill in virtual debriefing when most of the team had not had experience in this format.

**Conclusion**
Co-debriefing in a team, especially within international teams with diverse expertise, can provide a depth of learning from different perspectives. There are challenges such as accommodating various time zones and learning the technology, adapting to each country’s context but the benefits of co-debriefing far outweigh the challenges. Primary benefits of co-debriefing included: mentorship for less experienced debriefers and deeper learning for students by providing multiple perspectives. Group sizes of six to eight student were optimal for the debrief and a co-debriefing checklist for all co-debriefers helped maintain consistency with the
debrief, assisted in developing a game plan among debriefers. In summary, our team found the experience enriching and a tremendous learning experience. We recommend co-debriefing as an effective strategy for virtual simulation debriefing.

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