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Co-debriefing Virtual Simulations: An International Perspective

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1   **Key Words** co-debriefing, debriefing, virtual simulation, nursing students, nursing

2   **Abstract**

3   Co-debriefing is a process in which two or more individuals facilitate a simulation debriefing.

4   Debriefing is considered an essential best practice that occurs as soon after a simulation as

5   possible and should be conducted by experienced debriefers. This paper will describe the lessons

6   learned, challenges and future considerations for co-debriefing a virtual simulation experience.

7   The international co-debriefing team in this study included 11 nursing faculty from five

8   universities in four countries (Canada, England, Scotland and Australia). Primary benefits of co-

9   debriefing included: mentorship for less experienced debriefers and deeper learning for students

10   by providing multiple perspectives. Challenges included consideration of various time zones for

11   international planning meetings and adaptation of the virtual simulation to the country context.

12   Group sizes of six to eight students were optimal for the debrief and a co-debriefing checklist for

13   all co-debriefers helped maintain consistency with the debrief, assisted in developing a game

14   plan among debriefers, and helped in planning contingencies.

15   **Introduction**

16   The process of debriefing in the context of healthcare involves the facilitation of a discussion

17   between two or more individuals to explore and analyze a situation with the aim of gaining

18   insight and improving clinical practice (Cheng et al., 2015). Debriefing is an essential element of

19   best practices in simulated practice that deepens learning and promotes reflection (INACSL,

20   2016, Fey et al., 2014).

21   **Best Practices in Simulation**

22   To enable optimal debriefing, the Standards of Best Practice in SimulationSM (INASCL, 2016),

23   recommend the process is '*led by a trained facilitator using an evidence-based debriefing model*'

24   (p.S41), '*a person(s) competent in the process of debriefing'* (p. S22), who is familiar with the

25   simulation-based experience and will not be distracted by having to perform other roles and

26   functions during the scenario, and is able to ensure that debriefing takes place in a

27   psychologically safe and supportive learning environment. INASCL Standards (2016) also

28   advise that the debrief facilitation method must follow an evidence-based framework, be relevant

29   to context, simulation objectives, learners' level of knowledge and experience, and simulation

30   modality.

31   **Virtual Simulation and Debriefing**

32   With the evolution of virtual simulation over recent years and its explosion of activity during the

33   Covid-19 pandemic, the virtual simulation modality requires an allied change in debriefing

34   practices (Goldsworthy & Verkuyl., 2021).

35   Virtual simulation allows students to asynchronously undertake repetitive attempts at a given

36   scenario to scaffold learning, enhance reflection and deepen learning. Whilst resource intensive

37   (Krogh, 2016), co-debriefing involves sharing the workload of the debrief between facilitators

38   from the same or different professional backgrounds or specialties (Cheng et al.,2015). By

39   working together to manage the discussion this may lead to a broader perspective that promotes

40   more effective learning. In the instance of our study, the debriefers were all experienced faculty

41   members and registered nurses from five different countries and thus provided a geographical

42   breadth to the debriefing discussion. To mitigate against the pitfalls of co-debriefing, a checklist

43   was adopted from Cheng and colleagues (2015) co-debriefer checklist to guide the co-debriefing

44   in this international deteriorating patient study. The co-debriefing checklist allows debriefers to

45   make a 'game plan' and to determine the strategy for the debrief (i.e. who will lead the debrief).

46   The co-debriefing checklist allows co-debriefers to coordinate their efforts by reviewing the

47   learning objectives, deciding on the co-debriefing approach (i.e. follow the leader or divide and

48 conquer), and discussion of the rules of engagement for learners (i.e. how to handle interruptions

49 and manage transitions).

50 **Method**

51 **Aim**

52 This paper focuses on experiences of co-debriefing with an international co-debriefing team that

53 included 11 nursing faculty from five countries (Canada, Australia, England and Scotland). The

54 objective of this teaching and learning innovation was to develop a process for preparing a team

55 of international nursing faculty to co-debrief within the virtual simulation context. A consistent

56 approach to debriefing was applied through the co-debrief checklist developed by Cheng et al

57 (2015) and the INASCL Standards of Best Practices SM:Debriefing (2016). The co-debriefing

58 was part of a larger multi-site international research project that explored the use of virtual

59 simulation among undergraduate nursing students and their confidence and competence in the

60 recognition and response to the rapidly deteriorating patient.

61 **The Facilitator Debrief Team**

62 The facilitator debrief team consisted of 11 nursing faculty members from five university

63 Schools of Nursing. The university sites were international and geographically diverse locations

64 that included Schools of Nursing in Canada, England (two sites), Scotland and Australia. The

65 debrief team had a variety of levels of simulation experience. Most had facilitated synchronous

66 debriefs in the simulation lab but only the lead investigator had experience in facilitated

67 synchronous debriefing within the virtual environment.

68 **Preparation of International Facilitator Teams**

69 To prepare the co-debriefing teams at all sites, current literature describing the co-debrief

70 procedure was provided for review alongside the co-debriefing checklist of which included

71 guidance for both pre and post-debriefing. Prior to determining the co-debrief dyad and triad

72 teams, a workshop on the debriefing procedure was delivered to the facilitators at each of the

73 research sites by the lead investigator. The workshop included a step-by-step approach to

74 debriefing within the virtual environment followed by a review of the co-debriefing checklist

75 (Cheng et al., 2015).

76 **Co-debriefing Process**

77 With the assistance of the Research Coordinator, co-debriefing dyad and triad teams were

78 established and a master schedule of international debriefing times was created. The goal was to

79 enrich the debrief experience by having debriefers from different countries and contexts co-

80 debriefing together. To maintain consistency for the study, the lead investigator was present on

81 the zoom virtual platform at all the sites for the debriefing sessions. The co-debriefing teams

82 reviewed the co-debriefing checklist prior to each debrief and formulated a 'game plan' for the

83 debrief which included who would lead the debrief and how transitions would be managed

84 during the debrief.

85 The co-debriefing checklist enabled the debriefing points and process to be pre-determined to

86 ensure consistency between the facilitators and the five sites. By establishing a shared mental

87 model around debrief we ensured that the debrief was collaborative and organized versus

88 chaotic. The planning and collaboration between debriefers also enabled ground rules about

89 ensuring a safe learning environment mindful of psychological safety principles of: establishing

90 confidentiality and maintaining a culture of respect and inclusion. Field notes were also recorded

91 by co-debriefers about their experience of the process.

92 The co-debriefing team in this study facilitated discussion with a wider scope of perspectives,

93 even though all were nurses, the debriefing team had worked in different specialty areas and had

94   varied scopes of practice, this allowed for the differences and similarities between practice in the

95   different countries to be acknowledged and explored. Students did not seem to feel outnumbered

96   and were perhaps reassured by the presence of familiar lecturers. It also seemed thatthe students

97   valued the opportunity to gain a wider perspective from an international expert in the field. From

98   the co-debriefers' perspectives, this experience of co-debriefing encouraged role modelling of

99   debrief and 'built in' mentoring for debriefers from different countries to deepen their skills in

100   virtual simulation debriefing. Co-debriefing also enabled the provision of peer support for less

101   experienced colleagues.

102   At the conclusion of the debrief and after the students had signed off, the debriefers met to

103   'debrief the debriefer' and to consider whether their technique needed refining for next time.

104   This also demonstrated that, by following the structured approach offered by Cheng et al. (2015),

105   little if any refinement was required, with the same format being followed for each consecutive

106   session. Each site had a total of two to three debriefing periods (during the larger study). Each

107   debriefing session was 30 minutes in duration and utilized a modified PEARLS debriefing

108   method (Eppich & Cheng, 2015).

109   **Lessons Learned**

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

111   • Two to four co-debriefers works well and fosters student engagement.We initially

112   thought this might have been intimidating to students but it did not have this impact.

113   • Utilizing online platforms (i.e. Zoom) is beneficial as debrief can occur in a timely

114   manner and participants can join from anywhere.

115 • Conversely, poor internet connection, or ability to find somewhere private to join the

116 debrief can then be an issue. Therefore, it is important to provide a back up plan if

117 students have internet outages.

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

119 • Pre-briefing the co-debriefers in advance and developing a game plan was important to

120 run a smooth, seamless debrief.

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

122 simulation.

123 • Creating a supportive, welcoming culture for students at the beginning of the debrief, aids

124 interaction and openness and can be enhanced by having at least one facilitator present

125 who is known to the students.

126 • For this study, the presence of a UK or Australian and a Canadian facilitator was

127 beneficial as there was some difference between nursing approaches to the simulated

128 scenarios across national boundaries.

129

130 **Challenges**

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

132 • Time zones and scheduling of planning meetings and debriefings – particularly with the

133 wide variations in time zones evident in this study (Australia, England, Scotland and

134 Canada)

135 • Terminology and best practice can vary from one country to another. In this study, fresh

136 guidelines had to be developed prior to the simulations to ensure guidance was applicable

137 to local policies and procedures.

138   • Gaining familiarity with the virtual simulation platform can present a challenge since

139   there were nuances with a platform designed for North American use and adaptations

140   needed to be made for the UK and Australian context.

141   **Future Considerations**

142   Recommendations for future co-debriefing teams would include: ensure use of checklist for

143   consistency and familiarity with INACSL Standards of Best PracticeSM (2016). In addition, a

144   workshop for all facilitators to discuss the virtual simulation process assists in ensuring the

145   whole team has a clear understanding of the co-debriefing phases. Experienced debriefers are

146   essential for the team and to mentor others with less experience in virtual simulation debriefing.

147   A structured approach with multiple planning meetings in advance of the debriefing was helpful

148   in ensuring the whole team was prepared. In addition, we recommend that 6-8 students are

149   optimal for student engagement in a virtual simulation debrief. Having three or four debriefers

150   was not overwhelming to the students but rather created a collegial discussion that fostered

151   sharing among learners. Lastly, having an international team of co-debriefers can provide

152   different perspectives for student learning and reflection. Co-debriefers also developed their skill

153   in virtual debriefing when most of the team had not had experience in this format.

154   **Conclusion**

155   Co-debriefing in a team, especially within international teams with diverse expertise, can

156   provide a depth of learning from different perspectives. There are challenges such as

157   accommodating various time zones and learning the technology, adapting to each country's

158   context but the benefits of co-debriefing far outweigh the challenges. Primary benefits of co-

159   debriefing included: mentorship for less experienced debriefers and deeper learning for students

160   by providing multiple perspectives. Group sizes of six to eight student were optimal for the

161   debrief and a co-debriefing checklist for all co-debriefers helped maintain consistency with the

162 debrief, assisted in developing a game plan among debriefers. In summary, our team found the

163 experience enriching and a tremendous learning experience. We recommend co-debriefing as an

164 effective strategy for virtual simulation debriefing.

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166 **References**
167
168

169 Cheng, A., Palaganas, J., Eppich, W., Rudolph, J., Robinson, T., & Grant, V. (2015). Co-

170   debriefing for simulation-based education: A primer for facilitators. *Simulation in*

171   *Healthcare*, *10*(2), 69–75. https://doi.org/10.1097/SIH.0000000000000077

172 Cheng, A. Kolbe, M. Grant, V. Eller, S. Hales, R. Symon, B. Griswold, S. & Eppich, W. (2020).

173   A practical guide to virtual debriefings: Communities of inquiry perspective. *Advances in*

174   *Simulation, 5*(18), 1 – 9. https://doi.org/10.1186/s41077-020-00141-1

175 Eppich W., & Cheng, A. (2015). Promoting Excellence and Reflective Learning in Simulation

176   (PEARLS): Development and rationale for a blended approach to health care simulation

177   debriefing. *Simulation in Healthcare, 10*(2), 106 – 115.

178   https://doi.org/10.1097/SIH.0000000000000072

179 Fey, M. K., Scrandis, D., Daniels, A., & Haut, C. (2014). Learning through debriefing: Students'

180   perspectives. *Clinical Simulation in Nursing, 10*(5), e249 – e256.

181   https://doi.org/10.1016/j.ecns.2013.12.009

182 Goldsworthy, S., & Verkuyl, M. (2021). Facilitated virtual synchronous debriefing: A practical

183   approach. *Clinical Simulation in Nursing, 59*, 81 – 84.

184   https://doi.org/https://doi.org/10.1016/j.ecns.2021.06.002
185

186   INACSL Standards Committee. (2016). INACSL Standards of Best Practice: Simulation SM

187   debriefing. *Clinical Simulation in Nursing, 12*, S21-S25.

188   https://doi.org/10.1016/j.ecns.2016.09.008

189   Krogh, K., Bearman, M., & Nestel, D. (2016). "Thinking on your feet"- a qualitative study of

190   debriefing practice. *Advances in Simulation, 1*(12), 1 – 11.

191   https://doi.org/10.1186/s41077-016-0011-4

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