

The Neglected Art of Debriefing: A Reflective Piece on the Lessons Learnt from a Multinational Rescue Simulation Event

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Andrew Makkink

<https://orcid.org/0000-0003-2372-6245>

Department of Emergency Medical Care, University of Johannesburg, Johannesburg, South Africa
College of Medicine and Public Health, Flinders University, Adelaide, Australia

andrew.makkink@flinders.edu.au

Colin Giovanni Mosca

<https://orcid.org/0000-0002-9282-0414>

Department of Emergency Medical Care, University of Johannesburg, Johannesburg, South Africa

colinmosca@gmail.com

Karen Scott

<https://orcid.org/0000-0002-6909-7360>

UK Head of Clinical and Innovation, Gibb Group Medical & Rescue, United Kingdom

karen.scott@gibbgroup.global

ABSTRACT

Simulation-based education (SBE) has become a cornerstone of health professions education, with the methods and strategies used continually evolving as new applications for SBE are realised. In conjunction with this ever-growing aspect of health professions education is the ongoing development and refinement of core competencies embedded in the practice of SBE, one of which is debriefing. In this reflective piece lessons learnt in the art of debriefing, garnered through the observations of the debriefing practices used during a multinational rescue simulation exercise, are shared. Drawing on the lessons learnt, practical recommendations are shared, with the purpose of promoting effective debriefing practices in the SBE space.

Introduction

Within the South African emergency medical care context, medical rescue is a significant component of the curriculum (South African Qualifications Authority (SAQA), n.d.). Rescue, despite being a practical subject, often presents limited opportunities for on-site teaching and learning, and the use of clinical simulation is becoming more prevalent in rescue and other forms of teaching, learning, and assessment within education. Clinical simulation, sometimes referred to as SBE, has become one of the mainstays of preparing healthcare students for practice, and offers several educational advantages for both student and patient over traditional direct-patient interaction (Wheeler & Dippenaar, 2020).

The University of Johannesburg's (UJ's) Department of Emergency Medical Care hosts an annual high-fidelity multinational large-scale medical rescue simulation event, which takes place over eight days. This event takes the form of an operations-based exercise, in that it lasts for a long time and allows for real interactions among participants during the event (Skryabina, Betts, Reedy, Riley & Amlot, 2020). The event takes place at the Gariiep Dam in the Northern Cape Province of South Africa and brings together higher education institutions (HEIs) from across South Africa and the United Kingdom (UK). The participating institutions are involved in the education of undergraduate prehospital healthcare (PHC) professionals, along with delegations from various South African provincial emergency medical service agencies and training colleges. This SBE event represents an inter- and intra-professional learning event, where undergraduate prehospital care learners are placed in mixed teams and are challenged using multiple realistic simulations that involve accessing and rescuing patients from austere environments and then providing appropriate emergency care to these patients. The staff cohorts from the various agencies work together to design, implement, and facilitate realistic simulations and to then debrief throughout the multinational rescue simulation event.



Figure 1: Camp setup

The event follows a consistent pattern, whereby the first two days of the event are comprised of setting up camp, event briefings, technical skills competency preparation, and evaluation. All participants are involved in logistical preparations during the camp setup phase, and once this has happened, the student participants begin rotations through the technical skills stations to ensure that they have the relevant equipment competencies. This is a critical step in ensuring that participants have a similar baseline regarding the equipment, such as all-terrain vehicles, boats, and other heavy-duty machinery and equipment. These stations are run by the staff as stations through which the teams rotate. Once the equipment competency stations are complete, the student participants have a morning to check all their medical equipment and hold team briefings, after which the first simulation commences.

There are two simulation rotations per day and with six scenarios, the participants are exposed to three days of intensive exposure to high-fidelity simulation scenarios. Each simulation scenario is allocated four hours for completion, but the timeline is not absolute given the unpredictable nature of the participants and their approaches to each scenario. Once the scenario is complete, or the participants have failed to meet the time limit, the lead facilitator co-ordinates a debriefing session. Following the debriefing session and in between the simulation scenarios, the teams are required to repack the used equipment, prepare the equipment for the next scenario, eat a meal, and interact with one another to pass on lessons learnt from the scenarios that they have completed. While there have been minor iterations to this process, this reflects the most recent progression of events. Despite the significant resources that are required to bring this event into actuality, there has been no research

into the impact and value of this event on the learner, as well as limited evaluation of the effectiveness of the educational design of the event as an SBE-interprofessional education (IPE) intervention.



Figure 2: Technical skills station with multiple role-players

The lack of research inspired three of the staff (research team) that attended this event in 2023 to meet and document a post-event reflection, based on their experiences and observations of the event. Each staff member brought a different perspective to the reflection cycle, which was notably informed by the differentiated positioning throughout the multinational rescue simulation event. Staff member 1 was a permanent staff member of UJ, in the position of a senior lecturer and Head of Department, and fulfilled the function of a scenario lead co-ordinator for one of the six simulation scenarios, as well as the lead facilitator for the debriefing of learner rescue teams of the given simulation scenario. Staff member 2 was a part-time staff member of UJ, in the position of a research associate, who fulfilled the role of a standardised patient, field observer, interviewer, data collector, and co-facilitator of debriefing throughout the event. Staff member 3 was a full-time member of Keele University in the UK, in the position of lecturer in Paramedicine and Simulation Lead, who fulfilled the role of learner chaperone, standardised patient, field observer, and co-facilitator throughout the event.



Figure 3: Facilitator-led scenario debriefing

The three researchers decided to approach the reflection by means of two scaffolding questions that were pre-defined to give the reflective process scope and focus. The two scaffolding questions that were formulated and used were deliberately generic and stated as: 1) What did I see?, and 2) What would I do differently? The research team met regularly throughout the event and, based on the observations, decided to frame these scaffolding questions in terms of debriefing practices. Thus, this reflective piece presents a narrative analysis of these reflections in the form of lessons learnt.



Figure 4: A simulation exercise

The art of debriefing in simulation-based learning

The role of debriefing in supporting transformational learning, resulting from engaging learners in SBE initiatives, has been well established (Fegran, ten Ham-Baloyi, Fossum, Hovland, Naidoo, van Rooyen *et al.*, 2023). Similarly, the role of debriefing in supporting meaningful IPE is also well established in the literature (van Diggele, Roberts, Burgess & Mellis, 2020). However, despite this knowledge, there is still a wide degree of variability in the uptake and operationalisation of debriefing in healthcare professions education within the South African setting (Makkink & Dreyer, 2021).

Historically, SBE has formed an integral part of prehospital healthcare provider (PHCP) education in South Africa. As a result, the implementation of SBE methodologies has undergone many iterations, leading to the point where the PHCP education sector has played a large role in driving the uptake of SBE methodologies in the wider South African Health Professions education culture. Despite these successes, the role and practice of debriefing still appears to be poorly understood and largely under-used. Recent years have seen a greater uptake of 'debriefing' practices in South African PHCP education, albeit with varying degrees of effectivity. This variability sits at the heart of this reflective piece, whereby the researchers wrestled with the impression that what is known about debriefing does not seem to consistently translate into the practice of debriefing. Fundamentally, there is an art to good debriefing in SBE, and interprofessional learning events, and it is the practice of this art that

we hope to support through the lessons that we are sharing in this reflective piece. It is our hope that these lessons prove useful and meaningful within the context of the evolving space that is SBE.

Lesson 1: We need to foster a culture that values the art of debriefing

The realisation that debriefing is an important aspect of a SBE-IPE event was definitely evident amongst the facilitators and participants of the multinational rescue simulation exercise. We noted that the operationalisation of this realisation seemed to be located in a more action-based approach in 'that the debrief' was done as opposed to a more reflective approach of 'how the debrief' was done. This difference in approach was significant as it demonstrated the need to foster a culture that values the art of debriefing, as being equally important and meaningful as, for instance, the design of a patient's clinical presentation for a rescue scenario. The researchers observed that the debrief seemed 'squashed in' at the end of a scenario and was even termed by one of us as a 'rapid fire' debrief session. This kind of debriefing did not allow for the full strengths and benefits of debriefing to be leveraged towards the participants' or the facilitator's benefits.

As with any other art, the art of debriefing needs a 'time and place' to be fully effective. Fostering a culture that values the art of debriefing means building a specific time and place for debriefing in the SBE-IPE scenario and then valuing the art of debriefing sufficiently to safeguard that time and place for meaningful debriefing. For this to take place, all facilitators involved need to possess a shared belief that debriefing is important and of high value to the depth of the learning experience and to subsequently champion this belief in the SBE-IPE event setting. This mental approach to debriefing would be a necessary antecedent to fostering a culture of debriefing, as well as an effective safeguard against SBE-IPE initiatives that inadvertently undercut the depth and breadth of a learning opportunity in the hands of neglecting an effective debriefing approach.

Lesson 2: Facilitators and participants need to strive for debriefing mastery

Effective debriefing is an art, which requires deliberate debriefing competencies that involve effective listening, reasoning, and communication skills, interfaced with nuanced educational and real-world experiences that are interweaved to create a dialogue of phronesis, in which every person involved can participate (Sahin & Basak, 2021). We often observed that what was considered debriefing were simply extended facilitator-based feedback monologues, interspersed with the occasional participant questions or responses. While the role of feedback cannot be denied, it is crucial to an effective SBE-

IPE event that authentic debriefing takes place 'in and of its own right'. Similarly, we observed that there was limited interaction between the facilitators and participants on the quality and utility of the debriefing experiences. This was evident in that amongst the facilitators themselves, there appeared to be no formal consultative or reflection mechanism for the purpose of exploring and improving debriefing practices. Effective debriefing is assumed to be a mindful practice, which would imply that the need to be cognisant of the actual quality of debriefing through metacognitive debriefing practices is also needed (Kumar, Collins, Oliver, Duys, Park-Ross, Paton *et al.*, 2024).

With respect to the participants, there appeared to be a very cursory engagement with the debriefing sessions post each scenario, with many facilitators struggling with a limited involvement from the participants in the debriefing process. We perceive that additional scaffolding measures should be implemented to encourage and assist learners to deliberately engage with debriefing processes in a manner that is mindful and, at heart, metacognitive (Ahmed; 2019; Cooper, Winton & Farrington-Exley, 2020). Key to the success of this scaffolding is the need to ensure that participants are adequately prepared to recognise and participate with debriefing strategies. To this end, the researchers suggest that a similar degree of preparation is undertaken by the participants in the period leading up to the multinational rescue simulation exercise. These sessions could involve a basic introduction to simple applicable theories related to the art of debriefing, as well as a practical learning guide around how debriefing will be conducted in an actual SBE-IPE event. Further to this, we recommend that both debriefers and those who will be debriefed are schooled in the importance of psychological safety within the space that is the debrief. This may improve interaction within a relationship that during the event was strictly hierarchical between facilitator and student, but one that post event needs to evolve into one of mutual trust, respect, and sharing.

Lesson 3: Debriefing needs to be a practical art

Observing the multinational rescue simulation event, it was clear that there were many moving parts, a wide spectrum of people, skills, and extensive logistics that needed to be well co-ordinated to ensure the success of the event. To this end, the marvel that the multinational rescue simulation event is, was an impressive undertaking to behold and in which to be involved. Stemming from this was a keen sense of appreciation for proportionality in the SBE-IPE event space, which holds true for every component, debriefing included (van Diggele *et al.*, 2020). In the light of this we agreed that debriefing needs to be developed into a practical art, meaning that the implementation needs to be pragmatic, and the operationalisation needs to be practical and achievable. There remain various logistical and

time restraints that are dominant influences in the SBE-IPE event space, which demand facilitators and participants to be adaptive and innovative in the way that the art of debriefing is practised.

When considering this, we reflected on the role of debriefing styles, methods, and tools, and how this might translate into a practical and pragmatic approach to debriefing. At the heart of this is having a realistic expectation of what can be achieved in the given SBE-IPE event and then working out the 'best possible case' in terms of debriefing, thus creating a contextual standard against which the actual debriefing activities can be evaluated (van Diggele *et al.*, 2020; Kumar *et al.*, 2024). Stemming from this is an appetite for innovation in debriefing practices, which includes a flexibility around how and when actual debriefing activities are operationalised in the SBE-IPE event setting. Considering the roles of peer-to-peer debriefing, facilitator-guided debriefing, group debriefing, one-on-one debriefing, and self-debriefing, it is key to construct a contextually relevant, shared, and innovative SBE-IPE event-relevant debriefing process (Kumar & Somerville, 2023). Furthermore, given the evident time pressures observed during the multinational rescue simulation exercise, constructing an appropriately timed and spaced debriefing is another means by which to make debriefing practical and pragmatic. A considered approach to the implementation of debriefing opportunities that take place before, during, and after the event enables a flexibility that integrates well with the geo-temporal demands of the SBE-IPE event setting without compromising the quality of debriefing achieved.

Can we do more?

Absolutely; there is so much opportunity for optimisation of the debriefing practices that we use on the multinational rescue simulation exercise that would align the debriefing component with the excellent standards of the other components of the multinational rescue simulation exercise. Key focus areas for improvement include the scheduling of 'time-protected' debriefing periods post scenarios, the inclusion of peer-to-peer and self-debriefing strategies, the inclusion of debriefing scaffolding mechanisms before, during, and after the event, and the introduction of debriefing evaluation and meta-cognitive debriefing sessions during and post the event. Hopefully, with the success of these interventions in the next iteration of this event, we can present, for your digestion, another set of valuable lessons learnt.

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