

Guiding, Intermediating, Facilitating, and Teaching (GIFT)

A Conceptual Framework for Simulation Educator Roles in Healthcare Debriefing

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Introduction: Use of frameworks for simulation debriefing represents best practice, although available frameworks provide only general guidance. Debriefers may experience difficulties implementing broad recommendations, especially in challenging debriefing situations that require more specific strategies. This study describes how debriefers approach challenges in postsimulation debriefing.

Methods: Ten experienced simulation educators participated in 3 simulated debriefings. Think-aloud interviews before and after the simulations were used to explore roles that debriefers adopted and the associated strategies they used to achieve specific goals. All data were audio recorded and transcribed, and a constructivist grounded theory approach was used for analysis.

Results: 4 roles in debriefing were identified: guiding, (inter)mediating, facilitating integration, and teaching. Each role was associated with specific goals and strategies that were adopted to achieve these goals. The goal of creating and maintaining a psychologically safe learning environment was common across all roles. These findings were conceptualized as the GIFT debriefing framework.

Conclusions: Our findings highlight the multiple roles debriefers play and how these roles are enacted in postsimulation debriefing. These results may inform future professional development and mentorship programs for debriefing in both simulation-based education and healthcare settings.

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Key Words: Simulation, debriefing, health professions education.

Identified as essential for learning in simulation,^{1,2} debriefing represents a complex social activity composed of both an art and a science that challenges even experienced educators. Debriefing is defined as a facilitated conversation that explores and analyzes aspects of performance to inform future clinical practice.² As a complex learning activity, debriefing involves the dynamic and flexible application of various strategies and techniques to facilitate learning, while simultaneously attending to psychological safety.^{3–6} Simulation has increasingly been integrated into health professions curricula, where debriefers have an essential role in helping learners translate their experiences into tangible learnings that can inform future practice.

Best practice guidelines for debriefing recommend application of a framework to structure the debriefing conversation.⁷ Although a number of frameworks have been described,³ their general nature offers limited guidance for specific challenges. These frameworks share many similar elements, including eliciting learners' emotional responses and overall impressions,

describing the events and facts of the simulated scenario, analyzing and addressing performance gaps and strengths, and identifying how the learning from simulation can be translated into future practice.^{2,3,8} Within individual frameworks, authors describe numerous conversational strategies to help facilitate discussion.^{9–12} Other authors examined the relationship between debriefer questions and depth of learner reflection¹³ and described discrete elements of communication that debriefers apply and how learners respond.¹⁴ Healthcare simulation educators require a more nuanced understanding of how to apply these concepts to particular contexts, as well as manage problems and find solutions within those contexts. Offering behavioral strategies within these contexts may benefit and better prepare debriefers to manage the challenges that arise during debriefing conversations.

Role theory offers one lens through which to explore debriefers' approaches to challenges. Role theory represents a family of middle-range theories about the tendency for human behaviors to form characteristic patterns in a given social context.¹⁵ A number of variations on the theory exist within the fields of anthropology, sociology, psychology, and dramaturgy; however, common elements that unify this theoretical perspective include the notion that roles are associated with social positions; roles are induced through the sharing of expectations; roles are contextually bound; roles have characteristic effects or functions; and roles are embedded within complex and dynamic social systems.¹⁵ Within role theory itself, the term "role" has been defined in many ways. For the purpose of this article, we adopt the symbolic interactionist definition: a role comprises an organized set of principles that guide behavior,

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and of which the details are shaped through interactions with others in a particular social context.¹⁶

Simulation debriefing encompasses a number of these concepts—debriefers and learners occupy different social positions with associated expectations and functions, debriefing processes are often structured by a framework, and debriefings take place within familiar settings such as simulation laboratories or workplaces. Role theory may therefore be a useful lens through which to examine and clarify how debriefers debrief. Role theory posits that roles become quite similar among individuals who encounter common problems in similar circumstances.¹⁵ With this in mind, we conducted an exploratory qualitative observational study to identify roles that debriefers adopt in approaching challenges encountered in the actual practice of postsimulation debriefing practice and to describe common debriefing strategies within these roles. A better understanding of debriefer roles would help inform simulation educator training and longitudinal professional development to enhance contextualized debriefing skills.

METHODS

Study Design

Debriefing is a form of communication that involves perception, thought, and emotion and where meaning and learning are co-constructed through conversation.¹⁷ To align with these principles, our research was underpinned by a constructivist paradigm, where knowledge is actively cocreated and constructed through social interactions and relationships.^{18,19} Ethics approval for the research was obtained from the institutional research ethics board (REB 19-0100).

Scenario Design

A simulated clinical case was filmed as a video prompt, depicting 2 learners participating in a resuscitation event where there were a number of teamwork-based performance gaps. The learners were 2 residents in their second and third years of training, with the more senior learner performing the role of team leader on a code blue team. Three different debriefing scenarios were developed for a simulated debriefing of the scenario depicted in the video as a way to identify a range of roles and approaches to debriefing. We selected scenarios typically identified as especially challenging for debriefers²⁰:

1. Scenario 1 (engaged): The learners were engaged in learning, had insight into their strengths and performance gaps, were collaborative in problem solving and identifying solutions, and were responsive to the debriefer.
2. Scenario 2 (conflict): The learners were arguing with one another about team dynamics and performance and defensive toward the debriefer.
3. Scenario 3 (distress): One learner was emotionally distressed about their suboptimal performance, ruminating on their performance gaps, and unable to focus on debriefing. The other learner attempted to provide reassurance.

The learner roles were played by experienced simulation educators with a healthcare background (ie, physicians and a respiratory therapist), who were trained to portray the scenario characteristics listed previously and to respond to the debriefer within their role. One learner role was played by a single educator (R.D.W.), and the other learner role was alternately played by 2 educators on different dates (A.C., A.L.R.). Rehearsal involved 3 hours of practicing the debriefing scenarios, including discussion of ways to demonstrate frustration and distress, and how to respond to participants' approaches to debriefing. Lines were not specifically scripted because it was impossible to predict how participants would lead the debriefing.

Participants

Nurses, respiratory therapists, and physicians who had attended or facilitated the KidSIM ASSET: Foundations debriefing course²¹ within the preceding year (n = 64) were invited to participate in the study. The KidSIM ASSET: Foundations course teaches participants the Promoting Excellence and Reflective Learning in Simulation (PEARLS) blended framework for debriefing, which involves 4 phases (reactions, description, analysis, and summary) and promotes a blended approach to debriefing.¹¹ All participants provided informed consent.

Data Collection

Participant interviews and observations of simulated debriefing were used to collect data in 3 phases between August 2019 and January 2020: presimulation interviews, simulated debriefing, and postsimulation debriefing interviews (Fig. 1). All interviews and simulated debriefings were audio recorded. We collected data from both presimulation and postsimulation interviews and from simulated debriefings to allow us to explore

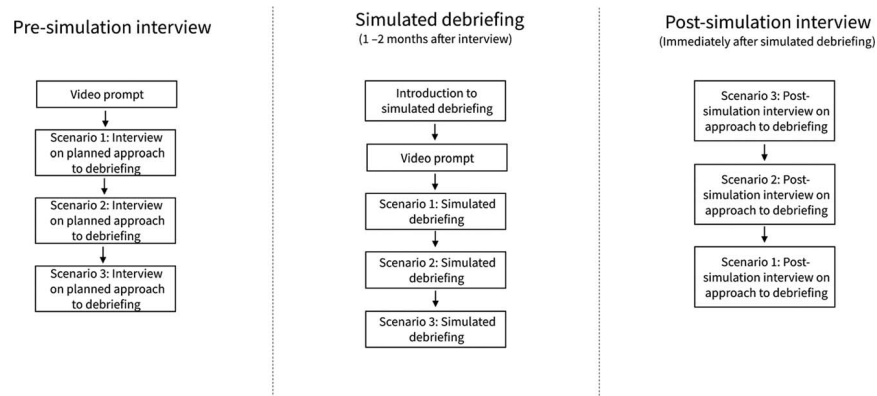


FIGURE 1. Study flow diagram. Data collection involved presimulation interviews, simulated debriefings 1 to 2 months later, and postsimulation interviews immediately after the simulated debriefings.

participants' reasoning for their adoption of specific strategies within a given situation. In this way, we sought more in-depth understanding of the debriefing process than could be achieved through only analyzing what debriefers were doing in practice. Furthermore, data from multiple sources supported triangulation in data analysis.¹⁸

Presimulation Interviews

Each participant was scheduled for an individual interview on a date and time of their convenience. Participants were shown the video prompt of the simulated scenario and asked about their approach to debriefing the learners for the 3 debriefing scenarios described previously. Interviews of 45 to 60 minutes were conducted by A.L.R., who followed a semistructured interview guide (Appendix 1) and applied think-aloud interviewing techniques where participants were asked to actively verbalize their thoughts in responding to questions.²²

Simulated Debriefing

Two to 3 months after the presimulation interview, each participant returned to participate in a simulated debriefing, at a date and time of their convenience. The session began with a prebriefing to remind participants that the purpose of the study was to learn how different debriefers approach challenges as a way to inform future debriefer training and that their performance was not being scored or otherwise evaluated. Participants were informed that they would have 10 minutes to debrief scenario 1 and 20 minutes to debrief each of the other 2 scenarios. More time was provided for the latter 2 scenarios as they were designed to be more complex. Participants were asked to debrief as they normally would without regard to the imposed time limits and that they would be paused when the allotted time had passed, regardless of where they were in the debriefing. The simulation began with the same video prompt shown in the presimulation interviews and was followed by 3 simulated debriefings involving scenarios 1, 2, and 3. A.L.R. directly observed each of the simulated debriefings.

Postsimulated Debriefing Interviews and Feedback

Immediately after completing all 3 simulated debriefings, participants were interviewed to explore their approaches to the debriefings, beginning with the final scenario, to explore the debriefer's experience of debriefing, the reasoning behind their approach, and the decisions they made at critical points in the debriefing. The interviews were conducted by A.L.R., following a semistructured interview guide (Appendix 1) and were followed by a feedback conversation on the simulated debriefing. The interview and feedback were 25 to 35 minutes in duration. At the end of the simulation, participants were asked to complete a demographic information sheet.

Data Analysis

Audio recorded data were transcribed by a professional transcriptionist. Constructivist grounded theory methodology guided data analysis,^{19,23} where iterative analysis and conceptualization of data allowed us to develop an interpretive understanding and situated knowledge of debriefing practices. Atlas.ti software²⁴ was used for qualitative data management. A.L.R. conducted all semistructured interviews and observed all simulations, affording informal data analysis and constant comparison between earlier and later observations

and interviews, thereby allowing for the interview questions to be adapted to explore emerging themes and advance conceptual understanding. The transcripts were analyzed formally after all data had been collected. This formal data analysis began with a subgroup of the analysis team (A.L.R., S.C., S.R.) reading the transcripts from the observed debriefings and interviews in detail, followed by independent open and inductive coding using a constant comparison approach. The researchers met after coding every 3 transcripts to compare and discuss their coding approaches and achieve consensus on a coding scheme. Presimulation interviews were coded by A.L.R. and S.C., and the simulated debriefing and postsimulation interviews were coded by A.L.R. and S.R. After coding was completed, A.L.R. analyzed the codes to identify themes; the emerging themes were "roles," "goals," and "strategies," and these were brought to the larger analysis team (A.L.R., W.E., J.L., A.C.) for discussion. These discussions involved examining the themes and associated concepts in greater depth, including what the roles encompassed, the goals they were intending to achieve, the associated strategies that debriefers applied within each role, and the contextual nuances of their application. Finally, the analysis team explored relationships among concepts to develop a conceptual understanding of how the roles, goals, and strategies related to each other.

In addition to looking at individual roles, goals, and strategies, we also examined sequences of strategies and transitions within and between roles, goals, and strategies. To do this, we listed sequences of strategies that each debriefer used in responding to types of learner statements (eg, learners arguing, learner expressing frustration, learner emotionally distressed) and examined these sequences for common patterns.

Reflexivity

A.L.R., V.G., W.E., R.D.W., and A.C. are physicians who work in acute care settings and have expertise in simulation debriefing and research. A.L.R., W.E., and J.L. have expertise in qualitative research, with a focus on feedback and debriefing. The researchers acknowledge that their previous experience as physicians, educators, and researchers have influenced study design as well as data analysis and interpretation. At the same time, their collective experience provided a unique lens on the research that allowed identification of patterns that otherwise may not have been noted.

RESULTS

Eleven participants consented to the research (6 nurses and 5 physicians), with 1 nurse only participating in the presimulation interview and the other participants taking part in all aspects of the study (Table 1). Data analysis included the data available for all 11 participants. All participants had been trained in the PEARLS framework of simulation debriefing¹¹ as part of prior simulation educator faculty development training, and we observed that they applied this framework in the current study.

From the interviews and observations of debriefings, we identified 4 distinct roles that debriefers adopted in approaching challenges encountered in debriefing: guiding, (inter)mediating, facilitating integration, and teaching (GIFT). Each role included several goals, along with strategies that could be taken to achieve those goals, as described hereinafter, with illustrative quotes

TABLE 1. Participant Demographics

Characteristic	Frequency (N = 11), n (%)
Age, yr	
21–30	1 (9)
31–40	7 (64)
41–50	2 (18)
51–60	1 (9)
Sex	
Female	7 (63)
Male	3 (27)
Professional background	
Nursing	6 (55)
Medicine	5 (45)
Years of simulation debriefing experience	
<1	1 (9)
1–2	3 (27)
3–5	2 (18)
5–10	2 (18)
>10	1 (9)
No response	2 (18)
Hours of simulation debriefing in the past year	
1–5	1 (9)
10–15	2 (18)
>20	5 (45)
No response	3 (27)

provided in Appendix 1. Creating and maintaining psychological safety were a common goal across all 4 roles. We conceptualized our findings as the GIFT framework (Fig. 2). The debriefers in our study adopted each of these 4 debriefing roles to varying degrees and in various sequences during the 3 different scenarios. Furthermore, they often applied the roles and strategies in a recursive fashion as they responded to the conversation as it unfolded in the moment.

Debriefers Roles

The guiding role involved establishing and adhering to an organized structure or framework for debriefing (Table 2). We identified 2 goals associated with guiding: developing relationships and providing structure. Strategies that developed relationships included: beginning with introductions, setting ground rules, and calibrating expectations to the level of the learner and complexity of the issues that arose within the simulation. Debriefers structured the debriefing by using the PEARLS blended framework for debriefing, identifying and prioritizing topics for debriefing, previewing, sequencing, and maintaining flow, while retaining flexibility in responding and adapting to the learner's needs as their frame of mind became more apparent to the debriefer. Previewing involved the debriefer orienting learners to the content, structure, or sequence of what they planned to address as a way of providing structure to the conversation. Sequencing referred to addressing emotion before focusing on information gaps, recognizing that high levels of emotion can interfere with information processing. Maintaining flow entailed moving the conversation forward and transitioning between phases of debriefing.

The (inter)mediating role involved addressing differences in perspective (Table 3). We identified 4 goals associated with mediating: intervening, flattening hierarchy or reversing the power dynamic, reconciling differences, and circumventing. Intervening strategies included interrupting or interjecting, confronting or opposing learner behavior, serving as a filter, reframing in neutral language, maintaining an objective or neutral stance, escalating directiveness, and sharing their own perspective. As a filter, debriefers requested learners to direct comments to the debriefer to prevent cross-talk between learners. To flatten hierarchy or reverse the power dynamic, debriefers

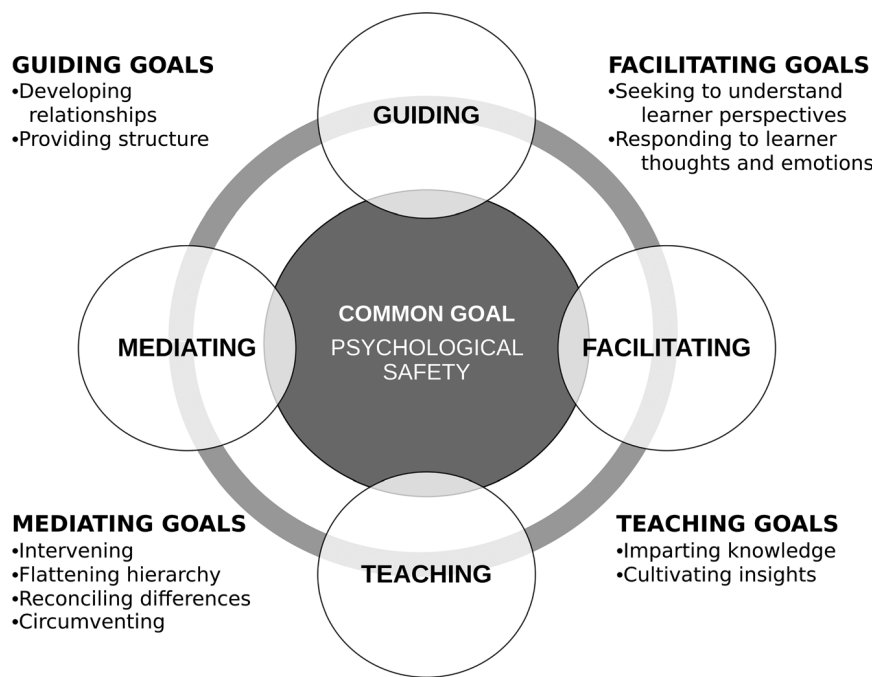


FIGURE 2. Four key roles in debriefing are described, along with specific goals including: (a) guiding—developing relationships and providing structure; (b) facilitating—seeking to understand learner perspectives, responding to learner, and helping learner integrate thoughts, emotions, and actions; (c) mediating—intervening, flattening hierarchy, reconciling differences, and circumventing; and (d) teaching—imparting knowledge and cultivating insights. Creating and maintaining psychological safety are a common foundational goal across the 4 roles.

TABLE 2. The Guiding Role

Definition: Establishing, Following, and Reinforcing Rules and Structure	
Goals	Strategies
Create and maintain a psychologically safe learning environment	<ul style="list-style-type: none"> Convey a growth mindset and curiosity Maintain situational awareness <ul style="list-style-type: none"> – Monitor the room – Apply active listening Respond to learner thoughts and emotions Share personal experiences, demonstrate vulnerability
Develop relationships	<ul style="list-style-type: none"> Initiate introductions Calibrate expectations to level of learner and complexity of issues Negotiate ground rules
Embed flexibility within structure	<ul style="list-style-type: none"> Apply a debriefing framework (eg, PEARLS) Identify debriefing topics Prioritize debriefing topics Previewing (eg, state intentions) Sequencing (eg, address emotion before information gaps) Maintain flow Adapt to learner/flexibility

made intentional use of first-person plural pronouns such as “we” and “us,” offered an apology, provided options, talked tentatively, and facilitated problem solving. Strategies to reconcile differences included naming the emotion or issue, facilitating perspective-taking, reorienting to ground rules, establishing common ground or shared purpose, and agreeing to disagree. Strategies that allowed for circumventing involved offering a deferred debriefing, focusing away from the learner who is upset or demonstrating disruptive behavior, directing to a neutral topic or shifting the conversation to the abstract, prematurely changing focus, or moving onto another topic.

The facilitating integration role involved enabling a critically reflective conversation that facilitated integration of thoughts, emotions, and actions (Table 4). We identified 2 goals associated with facilitating: seeking to understand learners' perspectives and responding to learners' thoughts and emotions. Debriefers applied a number of specific strategies to achieve

these goals. In seeking to understand learners' perspectives, debriefers elicited reactions, invited perspective sharing, clarified and explored the learner's frame of mind, directed questions to a specific learner, reviewed the events of the simulation and understanding of medical facts, and engaged all learners in the conversation. Several strategies facilitated responding to learner perspectives, experiences, or emotions including acknowledging, validating, normalizing, reflecting, repeating, paraphrasing, summarizing, inviting other perspectives, and moving into the teaching role (see below). “Acknowledging” involved the debriefer verbally recognizing or expressing appreciation for the learner's perspective. “Validating” statements supported the value of a learner's perspective, and “normalizing” statements suggested that an experience was common or shared. “Repeating” consisted of repeating a meaningful word the learner had spoken, whereas “reflecting” involved the debriefer restating both the learners' words and emotional tone. In “paraphrasing,”

TABLE 3. The Intermediating Role

Definition: Addressing Differences in Perspective	
Goals	Strategies
Create and maintain a psychologically safe learning environment	<ul style="list-style-type: none"> Convey a growth mindset and curiosity Maintain situational awareness <ul style="list-style-type: none"> – Monitor the room – Apply active listening Respond to learner thoughts and emotions Share personal experiences, demonstrate vulnerability
Intervene	<ul style="list-style-type: none"> Interrupt/interject Confront/oppose learner behavior Filter learner comments Reframe in neutral language Escalate degree of directiveness Share own perspective
Flatten hierarchy/reverse power dynamic	<ul style="list-style-type: none"> Use first-person plural pronouns (eg, we/us/together) Apologize Offer options Talk tentatively Facilitate problem solving
Reconcile differences	<ul style="list-style-type: none"> Name the dynamic/emotion/issue Maintain objectivity/neutral stance Facilitate perspective taking Reorient to ground rules Establish common ground/shared purpose Agree to disagree
Circumvent	<ul style="list-style-type: none"> Offer deferred/alternative debrief or time out Focus away from learner who is upset or exhibiting disruptive behavior Direct to neutral topic/generalize Change focus/redirect/move on (prematurely)

TABLE 4. The Facilitating Role

Definition: Enabling a Critically Reflective Conversation	
Goals	Strategies
Create and maintain a psychologically safe learning environment	<ul style="list-style-type: none"> Convey a growth mindset and curiosity Maintain situational awareness <ul style="list-style-type: none"> – Monitor the room – Apply active listening Respond to learner thoughts and emotions Share personal experiences, demonstrate vulnerability
Seek to understand learner perspective	<ul style="list-style-type: none"> Elicit reactions Invite perspective sharing (including checking in for agreement/disagreement) Clarify learner frame Explore learner frame/guide reflection Direct questions to a specific learner Reframe questions Review events of simulation/verify understanding of medical facts Engage all learners
Respond to learner thoughts and emotions	<ul style="list-style-type: none"> Respond to learner perspectives, experiences or emotions <ul style="list-style-type: none"> – Acknowledge (eg, express appreciation) – Validate (eg, comment on difficulty of scenario) – Normalize – Repeat terms used by learner – Paraphrase – Summarize – Offer complex reflection – Invite other perspectives Respond to learner emotion <ul style="list-style-type: none"> – Empathize (name, respect, and/or explore emotion) – Demonstrate sensitivity – Offer support <ul style="list-style-type: none"> ○ Provide emotional support ○ Enlist group support – Follow up after the debriefing

TABLE 5. The Teaching Role

Definition: Discussing and Addressing Gaps in Knowledge, Skill, and/or Awareness to Achieve Meaningful and Tangible Learning	
Goals	Strategies
Create and maintain a psychologically safe learning environment	<ul style="list-style-type: none"> Convey a growth mindset and curiosity Maintain situational awareness <ul style="list-style-type: none"> – Apply active listening – Monitor the room Respond to learner thoughts and emotions Share personal experiences, demonstrate vulnerability
Impart knowledge	<ul style="list-style-type: none"> Tell how—didactic <ul style="list-style-type: none"> – Share own perspective <ul style="list-style-type: none"> ○ Share observation <ul style="list-style-type: none"> ▪ Highlight/reinforce positive ▪ Point out discrepancies/contradictions ▪ Provide constructive feedback with compassionate candor ○ Confront/correct misconceptions ○ Reframe learner experience ○ Expand/elaborate on learner comments – Share knowledge <ul style="list-style-type: none"> ○ Explain rationale ○ Refer to literature (studies, protocols, algorithms) ○ Share personal strategies and experience ○ Link simulation to reality – Summarize (intended messages) Show how—demonstrate <ul style="list-style-type: none"> – Provide examples of phrasing
Cultivate insight	<ul style="list-style-type: none"> Individual—empower the learner <ul style="list-style-type: none"> – Selectively reinforce/anchor – Build confidence <ul style="list-style-type: none"> ○ Offer encouragement ○ Create opportunity for deliberate practice Group—engage the group <ul style="list-style-type: none"> – Facilitate problem solving <ul style="list-style-type: none"> ○ Ask questions with a practical focus ○ Draw on learner previous experience – Invite peer feedback – Leverage peer expertise – Ask learners to summarize (actual messages)

debriefers repeated in their own words their interpretation of what a learner had expressed, whereas “summarizing” provided a concise overview of key points from the conversation. Additional debriefer strategies in responding to learners' emotions included empathizing, demonstrating sensitivity, and offering support.

The teaching role involved discussing and addressing performance gaps to achieve meaningful and tangible learning (Table 5). We identified 2 goals within this role: imparting knowledge and cultivating insights. Imparting knowledge involved instructor-centered strategies, including didactic teaching or demonstration. Didactic teaching or telling learners how to think or act encompassed sharing perspectives, such as offering observations, correcting misconceptions, reframing a learner's experience, or expanding on a learner's comments. Didactic teaching also involved sharing knowledge, including explaining the rationale behind a perspective or fact, referring to the literature, sharing personal experience and strategies, and linking what happened in simulation to the real-world context. A didactic approach also involved summarizing the messages that the debriefer had intended to convey. Cultivating insight involved more learner-centered approaches at either the level of the individual or the group. At the individual level, strategies to empower the learner included selective reinforcing or anchoring and building confidence through encouragement and creating opportunities for deliberate practice. At the level of the group, strategies included facilitating problem solving by asking questions with a practical focus and drawing on learners' previous experiences, inviting peer feedback, leveraging peer expertise, and asking the learners to summarize key learning points, representing the actual messages that they derived from the debriefing.

Psychological Safety

Creating and maintaining psychological safety were identified as a common goal across all roles. Strategies that contributed to creating and maintaining a psychologically safe learning environment included conveying a growth mindset and curiosity, maintaining situational awareness by paying close attention to body language (eg, facial expressions, eye contact, posture), and actively listening to not only what was being said but also the meaning and emotional tone, responding to learners' thoughts and emotions, and sharing personal experiences that demonstrated vulnerability.

Patterns of Conversation

Examining the sequence of debriefing strategies across the different debriefers, there were no common patterns. Some debriefers adopted many different combinations of strategies to achieve a particular goal, whereas others made use of selected strategies and would either use them a single time or repeatedly. In examining transitions, debriefers shifted their strategies toward achieving a different goal when a goal had been partially or fully achieved, although at times the shift occurred when they were unable to make progress in achieving a particular goal. Several debriefers made few shifts between goals or roles; they expressed feeling “stuck” and when uncertain of how to proceed next transitioned into the summary phase of debriefing.

DISCUSSION

Through the qualitative analysis of debriefers' approaches to debriefing challenges, we have described 4 core debriefer roles. These roles include GIFT, along with a number of associated goals and ways of working toward achieving them. Although debriefers' roles of guide and facilitator have been described in detail within the simulation literature,^{7,25} their roles as (inter)mediator and teacher may have been underemphasized.

The common goal that connected all 4 roles was that of creating and maintaining psychological safety. This aligns well with evidence that psychological safety is foundational for learning.²⁶ A recent review on psychological safety in debriefing based on perspectives from various disciplines identified ways in which psychological safety can be established, maintained, and restored once breached.⁶ The strategies we describe in our study provide empirical evidence that debriefers apply similar techniques in healthcare simulation.

Debriefers' role guiding involved establishing a relationship with the learners and balancing structure with the flexibility needed to navigate the dynamic conversation that unfolds in simulation debriefing and individualize strategies to learners' needs. Ways of achieving this have been incorporated into debriefing frameworks, including PEARLS.¹¹ Debriefers in our study who experienced challenges in this role expressed feeling stuck and uncertain of how to respond to unexpected challenges and made few shifts between goals and roles.

Several concepts from role theory may explain the nature of these challenges, with implications for debriefer education. Challenges arise in a number of situations: (a) when roles are ambiguous; (b) when role overload occurs, that is, when an individual does not have the education, skill level, or time to meet the demands of a given role; or (c) when there is conflict or incongruity between multiple roles.²⁷ Role stress arises when role obligations are poorly defined, conflicting, or impossible to meet, and role strain describes feelings of tension, anxiety, and frustration.²⁷ Role overload can lead to role stress, which then results in role strain.²⁷ Our GIFT framework may help prepare debriefers to address role overload and thereby prevent or minimize role stress and role strain. In characterizing specific roles involved in debriefing, the GIFT framework may also reduce cognitive load for debriefers. Future simulation debriefing training programs might incorporate various role elements along with associated strategies and how to apply them as a way to reduce role ambiguity. Furthermore, distributing roles between debriefers in codebriefing²⁸ and skill development through methods such as rapid cycle deliberate practice²⁹ could allow participants to try out multiple strategies and receive feedback on ways to apply them within a given scenario to reduce role overload. A better understanding of the distinctive and interrelated aspects of the GIFT roles may assist debriefers in flexibly applying strategies and in transitioning between strategies to reduce role conflict.

The (inter)mediating role in simulation debriefing might be expected, given the stress, high emotion, multiple learners, and multiple perspectives that are brought together in simulation, with the potential for unavoidable and often unanticipated conflict. Acknowledged as a challenge by debriefers in our study and by others,²⁰ recommendations on managing conflict in simulation debriefing have been adopted from other

disciplines,²⁰ although not studied as to their effectiveness in the simulation context. We have described a number of specific strategies that debriefers in our study applied in mediating conflict; further study to better understand when and why they chose to apply these strategies could further inform debriefer training and mentorship.

Debriefers' role in facilitating integration within simulation debriefing has been well recognized in the literature.^{3,8} Facilitation is grounded in humanistic psychology, with a focus on empathy, positive regard, and empowerment.^{30,31} A concept analysis of facilitation has described facilitation as “a goal-orientated dynamic process, in which participants work together in an atmosphere of genuine mutual respect, to learn through critical reflection.”³² Our description of the facilitating role in debriefing as one of enabling critical reflection and the associated goals of understanding the learner's perspective and responding in a supportive way within a psychologically safe environment is very much aligned with this definition and adds to the literature by describing an empirically based set of strategies that can help achieve those goals.

The teaching role in simulation debriefing has often been discouraged, in favor of approaches that encourage learner reflection and problem solving.²⁵ In doing so, this important aspect of debriefers' practice has variably been unacknowledged, underemphasized, or ostracized,²⁵ despite observations that debriefers commonly incorporate teaching within their practice.³³ Certainly, debriefers have valuable experience and insights to share, and there are situations when a more directive approach may be warranted, for example, when there are misconceptions, biases, or major knowledge gaps that have the potential to result in harm. Our study draws attention to debriefers' role in teaching and describes practical strategies that can balance imparting knowledge with cultivating insight.

Our finding that there was no clear sequence of strategies that debriefers applied to achieve their goals emphasizes that there is not a single uniformly effective approach to debriefing. How a strategy is applied in a given context may be equally important as the strategy itself. While strategies, techniques, and frameworks can be taught, how an individual debriefer applies these within a dynamic conversation represents the art of debriefing. Artistry in debriefing has previously been described as involving flexibility in applying techniques, balancing, and prioritizing different agendas and creativity.⁴ Longitudinal faculty development programs might include codebriefing²⁸ and observation with feedback to coach debriefers in their lifelong endeavor of developing expertise and artistry in simulation debriefing.

Our findings are limited by a relatively small number of participants engaged in a small number of scenarios at a single center. To mitigate this limitation, we included multiple sources of data: interviews to explore debriefers' planned approaches to debriefing, simulations to observe their actual approach, and additional postsimulation debriefing interviews. This approach generated a large volume of data upon which our framework was derived, and data triangulation (ie, including observational as well as presimulation and postsimulation interview data) and investigator triangulation (ie, multiple members of the research team with different backgrounds participating in data analysis) added methodological rigor.¹⁸ All participants had been trained

in the PEARLS debriefing framework and applied it in their debriefing practice, and this may have restricted the range of strategies we observed. However, despite some degree of uniformity in part of their training, all participants had since had a number of different experiences that would have modulated how they applied the framework and the strategies taken within the framework. As detailed qualitative analysis was completed after data collection was complete, we did not have the opportunity to directly explore the reasons underlying observations across participants, which may have provided additional insights. Given the qualitative nature of our research, we do not suggest that the 4 roles we describe are an exhaustive set; certainly, future research may identify additional roles of relevance for simulation debriefers. Future research that examines debriefing with a larger group of learners, within interprofessional teams, and in scenarios where there are multiple challenges may be particularly helpful in elaborating upon the GIFT framework.

CONCLUSIONS

We identified 4 key roles that debriefers adopt in response to challenges encountered in debriefing, namely guiding, (inter)mediating, facilitating, and teaching. The associated goals and ways of achieving these goals may help debriefers navigate difficult conversations in a way that maintains psychological safety and facilitates favorable learning outcomes within both simulated and healthcare settings.

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Appendix 1—Interview Guides

Part I: Presimulation interview:

Have you debriefed a situation like this before?

If “No”: Please describe how you are planning to approach debriefing the learners in this scenario?

What aspects of debriefing training are you using to help you plan debriefing the learners in this scenario?

How do you think those aspects of the training will be useful for you in this scenario?

How are you planning to address the learners' performance?

What value do you perceive in this approach?

Do you foresee issues with your approach to debriefing in this scenario?

If “No”: What is it that makes you believe the debriefing will go as you plan?

If “Yes”: What issues do you foresee? How do you think you would handle those issues?

If “Yes”: Please describe how you are planning to approach debriefing the learners in this scenario?

What experiences are you drawing from to help you plan debriefing the learners in this scenario?

What experiences from prior training that you are drawing on? How do you think those aspects of training will be useful for you in this scenario?

What prior debriefing experiences are you drawing on? In what ways will those experiences be helpful to you in this scenario?

How are you planning to address the learners' performance?

What value do you perceive in this approach?

What challenges are you anticipating? How might you address these challenges?

Have you experienced these challenges before? How did you handle this before? How do you think your approach was received by the learners?

Do you foresee issues with your approach to debriefing in this scenario?

If “No”: What is it that makes you believe the debriefing will go as you plan?

If “Yes”: What issues do you foresee? How are you planning to handle those issues?

Part II: Postsimulated debriefing interview

How did this debriefing feel for you?

What was challenging?

Did you find that you had the necessary skills to appropriately debrief this scenario?

If “No”: How could debriefer training be improved to help you better debrief this scenario?

If “Yes”: What helped you develop these skills?

Reflecting back upon your debriefing plan for this scenario, were there things that happened that you had not anticipated?

If “No”: What helped you feel prepared for this debriefing scenario?

If “Yes”: What might have helped you feel better prepared for this debriefing scenario?

I noticed [*state particular observation*], could you tell me about why you decided to approach the situation in this way?

Reflecting on the scenario and your approach to debriefing, what things you would change about your approach if you encountered a similar situation in the future?

What things do you think you did well? What do you think could be improved? What do you think would be most helpful for you in improving your approach?

Cultural Considerations in Debriefing

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Summary Statement: Culture influences how we communicate, teach, and learn. Debriefings are laden with cultural influences. Without attention to cultural considerations, accepted debriefing techniques might not reach the desired outcome and, in certain cultures, may even harm teacher-learner relationships. We explore cultural considerations in healthcare simulation debriefing and offer guidance for debriefers to gain awareness of potential cultural biases.

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Key Words: culture, debriefing, healthcare simulation, cultural differences, cultural intelligence, CQ, debriefer, communication, health professions, cross-cultural engagement, equitable and antioppressive learning environments, culturally responsive education.

Although the topic of cultural considerations is not new,¹ events in 2020 ignited global efforts to promote diversity, inclusivity, equity, and justice^{2–4} and have further heightened the attention to global diversity in the health professions workforce and in universities worldwide.⁵ As we examine health professions education for vulnerabilities in equity and diversity, healthcare simulation practices also require examination for cultural bias in our practice. We focus this commentary on the practice of healthcare simulation debriefing (Figure)—the learning conversation that holds the largest opportunity for solidifying learning during a simulation activity, as well as the largest liability for antagonistic cultural and, hence, teaching and learning discord.

Culture can refer to global, organizational, generational, professional, socioeconomic, and religious communities and practices. In this commentary, we specifically address global culture (referred to henceforth as culture), also known as national or ethnic culture (Figure).⁶ Often cultural differences are obvious and easily recognized; however, there are subtle ways that culture influences debriefings that are not noticeable.⁷ In debriefing,^{8,9} cultural factors may be silent influencers that alter the intended learning (Figure). To competently facilitate and adapt to cultural considerations in debriefing, we need to better understand culture and its influence on the education that we provide.

Fields that rely on communication have magnified the importance of emotional intelligence (EQ; Figure).¹⁰ Simulation educators have increasingly given attention to components of EQ and their role in effective debriefings (eg, psychological safety, neuroscience of learning, managing the upset learner). However, cultural intelligence (CQ; Figure)—the ability to interact effectively with various cultures—has not been adequately

addressed. Cultural intelligence incorporates EQ and then applies EQ across different cultural settings, “picking up where emotional intelligence leaves off.”^{11(p140)} Cultural intelligence is essential in conversations through both dialog and nonverbal communication.^{6,12} Although other fields that rely on communication have recognized the need to study CQ,¹⁰ simulation has yet to bring attention to CQ in debriefing.

Our exploration of the debriefing literature affirms the Western-centric nature of debriefing. We discovered that 13 of 17 debriefing models were developed in North America (Table 1). These models of debriefing do not explicitly address cultural aspects of the participants. A recent review of debriefing techniques³⁰ also lacks mention of any cultural considerations. In our search for peer-reviewed articles in all languages with a focus on healthcare simulation debriefing and global cultural considerations during debriefing (not limited to particular study methods, profession, learner level, or date of publication), we found 3 articles (Table 2).^{31–33} The purpose of these 3 articles differed greatly with a wide variation between methods, findings, and information reported, making it difficult to discuss recommendations for debriefers solely based on that data.

One of the greatest challenges in understanding cultural influences on education is that global or national cultures have been defined based on rather antiquated assumptions. For instance, one of the theories that is most commonly alluded to—the Hofstede's cultural dimensions theory³⁴—has been used extensively to examine various national and organizational cultures despite its senescence. Almost 40 years have passed since Hofstede's original study was conducted. Global priorities and political environments have shifted greatly during that time, as have the structure and function of organizations, leading to criticism that the 6-dimension model no longer applies.³⁵ Hofstede's analysis is based on survey data collected from employees of one organization with sites located in numerous countries—a sample that is not representative of the people who form an entire national culture and a survey designed with noneducational purposes in mind.^{36,37} Recognizing the limitations of Hofstede's work, researchers (eg, the Global Leadership and Organizational Behavior Effectiveness Research Program³⁸) have moved to expand the dimensions and refine the theory.^{39,40}

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Culture: “The set of attitudes, values, beliefs, and behaviors shared by a group of people, but different for each individual, communicated from one generation to the next. Also known as national or ethnic culture.”^{6,p.7}

Debriefing: Learning conversations led by a facilitator (“debriefers”) with learners (“debriefees”) that most often occurs immediately following a simulation experience, reflecting on various aspects of the simulation with the goal of exploring and addressing learning needs.^{8,9}

Healthcare Simulation: “A technique that creates a situation or environment to allow persons to experience a representation of a real health care event for the purpose of practice, learning, evaluation, testing, or to gain understanding of systems or human actions.”^{58,p.21}

Emotional Intelligence: “The ability to accurately perceive your own and others’ emotions; to understand the signals that emotions send about relationships; and to manage your own and others’ emotions.”^{59,p.5}

Cultural Intelligence: “An outsider’s seemingly natural ability to interpret someone’s unfamiliar and ambiguous gestures the way that person’s compatriots would.”^{60,p.1}

Power Distance Index: “Acceptance of inequality in distribution of power in a certain society.”^{22,p.8}

FIGURE. Definitions used. This figure defines the terminology as used in this article.

Despite this critique, the 3 identified studies (Table 2) used Hofstede’s cultural dimensions theory³⁴ and reported findings that suggest some useful considerations in debriefing. Perry et al³¹ suggest that high power distance index (PDI)—the “acceptance of inequality in distribution of power in a certain society”^{39(p230)}—may result in more vocal physicians and less expressive nurses during debriefing.³¹ Ulmer et al³² found a correlation of high PDI cultures with the following findings:

- Debriefers talked more than participants
- Participants interacted with each other less
- Fewer open-ended questions were asked
- Focus was on technical knowledge and skills rather than nontechnical
- Participants were less likely to speak up
- There was less closed-loop communication
- There was a lack of focus on systematic processes and situational awareness

TABLE 1. Debriefing Methods

Models and Frameworks	Components	Origins
Three-phase models		
3D model ¹³	Defusing, discovering, deepening	United States
3R model ¹⁴	Review, response, remind	United States
Debriefing with good judgment ¹⁵	Reaction, analysis, summary	United States
Diamond model ¹⁶	Description, analysis, application	United Kingdom
GAS ¹⁷	Gather, analyze, summarize	United States
Lederman’s 3 phases ¹⁸	“Introduction to systematic reflection and analysis, intensification and personalization, generalization and application” (p152)	United States
Multiphase models		
6Es ¹⁹	Events, emotions, empathy, explanation, everyday, employment	United States
DEBRIEF ²⁰	Defining debriefing rules, explaining learning objectives, benchmarking performance, reviewing expected actions during sim, identifying what happened, examining why, formalize learning	United States
Debriefing for meaningful learning ²¹	Engage, explore, explain, elaborate, evaluate, extend	United States
LEARN ²²	Learning objectives, emotions, actions, reflection, next steps	Canada
Mitchell model ²³	Introduction, facts, thoughts, reactions, symptoms, teaching, re-entry	United States
PEARLS ²⁴	Reactions, description, analysis, summary	Canada, United States
RUST ²⁵	Reaction, understanding, summary, take-home message	United States
SENSE ²⁶	Share, explore, notice, support, extend	South Korea
SHARP ²⁷	Set learning objectives, how did it go, address concerns, review learning points, plan ahead	United Kingdom
TeamGAINS ²⁸	Reactions, clinical component, transfer to practice, behavioral skills, summary	Switzerland
Two- or 3-phase model		
Mediated debrief (plus-delta) ²⁹	Recollection of experience, what went well, what can improve	United States

TABLE 2. Peer-Reviewed Research Articles That Focus on Healthcare Simulation Debriefing and Global Cultural Considerations

Reference	Perry et al ³¹	Ulmer et al ³²	Robinson et al ³³
Purpose	“Evaluate how dimensions of culture may influence simulation-based training in low-resource settings” (p363)	“Explore the relation between PDI and self-reported behavior patterns during simulation debriefing in countries with different PDIs as perceived by the debriefers” (p240)	“Evaluate the effectiveness of a culturally contextualized simulation educator faculty development program for educators in Uganda by measuring debriefing skills pre- and post-foundational debriefing training” (p327)

Robinson et al³³ provided culturally aligned training making it possible for international faculty to achieve a high level of engagement among learners in a low PDI culture using the following strategies: focus on allowing learners to talk more, involve learners in more interactions, encourage learners to initiate more interactions, and prioritize the learner agenda.

Although the literature touches on cultural aspects of students, debriefing behaviors, and simulation design,^{31–33} debriefing literature remains lacking in research studies, evidence, and specific direction around cultural considerations in debriefings.^{40,41} This may lead to debriefing practices that are not culturally responsive or appropriate. Noninclusive educational practice unintentionally creates attrition in diverse thinking and participation,^{42,43} miscommunication,⁴⁴ a heavy focus on student deficits with low regard for improvement,^{42,45} and a hidden curriculum⁴⁶ reinforcing marginalized values (eg, educator- or western-centric values over others).^{42,43,45,47} In realizing this impact, there is an imperative to understand how this can occur in debriefing, particularly constituent factors like the following:

- Which cultural factors are the most important?
- When are these factors at play?
- When does it matter?
- Why is it important to adapt to culture?
- Who is at risk?
- How do you adapt?
- Can a culturally sensitive method translate across all cultures?

Although we do not yet have the answer to these questions, we do understand that there are risks that we take when we do not realize or when we overlook cultural factors in debriefing.

When cultural factors are ignored, there are risks for the learner and educator, as well as risks in the learner-educator relationship.

Potential Risks When Cultural Factors Are Not Considered

Learner Risks

Cultural factors influence one's emotions and thoughts during a debriefing, including when to speak, how to respond, and perspectives around each topic in a debriefing.⁴⁸ Without understanding these cultural factors, it might be difficult to find out what a learner knows. Specific cultural factors that vary across cultures are guilt and shame and how these emotions are expressed. Cultural differences create problems in perceptions, the actions that we take on our perceptions, and then how our actions are perceived.⁴⁹ If learners feel that they are not understood, they might feel threatened,⁵⁰ undermining the psychological safety that educators seek to establish.⁵¹ Ignorance of cultural factors reinforces teacher-centered approaches.

Educator Risks

The belief that debriefing methods can apply in any culture may be true and yet unsound. Cross-culturally, educators

seek to achieve similar concepts with their learners including the following: learner centeredness in their teaching approach, clearly stating observations from a simulation case, providing immediate and direct feedback during the debriefing, and effective use of conversational techniques in debriefing. Although these learning goals seem common regardless of culture, the ease in applying learned debriefing techniques and the process in reaching these goals substantially differ from culture to culture. Consequently, specific styles of debriefing, feedback, and conversation facilitation do *not* immediately apply in any culture. For example, most debriefing models (Table 1) have a reaction phase that refers specifically to emotions. East Asians tend to suppress showing their feelings, whereas European Americans express theirs more readily.^{7,52} Therefore, in some cultures, it may be conversationally ineffective to begin directly with emotions.

If we do not address cultural considerations, accepted debriefing techniques might not work and even harm teacher-learner relationships in certain cultures. This may also lead to sentiments of “wasted” time by faculty and learners alike. Although faculty might feel like that past debriefing education has been wasted, we argue that the education is not wasteful, but rather incomplete. In addition, without cultural considerations, debriefing training might contribute to an education-practice gap in debriefing where methods learned (although relevant to all cultures) are not easily applicable in certain cultures—factors that must first be addressed to achieve and implement what was learned.

Learner-Educator Interaction Risks

Culture clash may be heightened in debriefing as it is often a conversation about performance, which may target one's professional identity and is meant to encourage one's sharing of opinion, knowledge, and thoughts. Cultural differences may lead to miscommunication and have the potential to harm relationships and reinforce the differences and stereotypes held by both.

A detected accent in language can signal differences⁵³ through “linguistic profiling”⁵⁴ and “accent bias.”⁵⁵ Profiling may occur where a debriefer may unintentionally discriminate during a discussion.⁵⁶ On the other hand, “cultural forgiveness” may occur when a response is encountered that would not be acceptable if it was someone from the same culture and is forgiven when the debriefer dismisses it as a result of being “from a different culture.” Both phenomena create cultural inequities within the group, as well as the teaching and learning.

Suggested Approaches to Considering Cultural Factors in Debriefing

Our exploration of this area naturally leads to the question of what we can practically do to make sure that we are considering cultural issues in our debriefing practice. With a lack of evidence-based findings, we extended our research into the areas of cultural intelligence, action research, social psychology, teaching and education, business, law, and sociology to

offer the following 4 suggestions that debriefers today can use to effectively approach cultural factors in debriefing:

1. Increase your awareness of cultural considerations in debriefing
2. Continually develop your “global dexterity”
3. Challenge your cultural comforts while knowing your boundaries
4. Engage in future research

1. Increase your awareness of cultural considerations in debriefing

There are multiple levels of global cultural considerations that influence a debriefing, including the cultural composition of:

- a.) each individual learner,
- b.) the learner group,
- c.) the debriefer,
- d.) the organization as it relates to national culture, and
- e.) each social and feedback interaction.

All of these levels, individually and in symphony, affect the dynamics of the learning conversation.

It is too difficult and impractical to dissect even one of these levels during the limited time of one debriefing, potentially paralyzing the debriefer's effectiveness in facilitating the conversation. While considering each cultural variable and the exponential combinations of interactions is impossible for one to do during a debriefing, we believe that there is one realistic and most important real-time approach: *Awareness*—to be aware that cultural factors are influencing a debriefing.

Knowing the cultural origins of the debriefing methods and one's own notions of debriefing helps prepare for using that method. Of the levels mentioned previously, the only levels that we are actively able to control as debriefers are our individual thoughts and actions—essentially, what we contribute to the dynamics. Reflective practice that focuses on understanding our own cultural composition, expectations, and implicit biases is one way to become more aware of our contribution as we enter debriefings.^{57,58} More importantly, we engage in cycles of unaware contributions. During a debriefing, we interpret the dynamics and the actions of learners through our own cultural lenses. This is processed through our culturally made thoughts and assumptions, which inherently guide our next action during the debriefing, contributing to the cross-cultural dynamics within a debriefing and providing an unintended “hidden curriculum” or the unwritten, unofficial, unintended lessons, values, and perspectives that, in this case, are not inclusive of all cultures.^{19,20} A classic example of this is: A debriefer gives feedback to a debriefee and then grows frustrated that the debriefee does not respond. The debriefee (based on his cultural background) is uncomfortable with what he perceives as anger from the debriefer and becomes increasingly quiet. Awareness at this level is difficult as it requires a sense of self and the ability to be self-aware in the moment—the act of briefly and artfully zooming out of a conversation for a moment to recognize our own contributions to help guide how we next engage. This skill of awareness while effectively facilitating a debriefing, without losing track of the conversation, takes practice and experience.

2. Continually develop your “global dexterity.”

The capability to identify and be aware of cultural differences is an initial step in approaching cultural considerations.

Even with awareness, the struggle during interactions lies in changing one's culturally ingrained behavior to adapt to other cultural atmospheres. Molinsky⁵⁹ calls this ability to adapt in this way “global dexterity.” We summarize here the most common specific and applicable suggested approaches found in the CQ literature^{60–62}:

1. Be aware: know your learners and know yourself (*see hereinabove*)
2. Set the stage
3. Seek cultural education and practice

Set the Stage

Debriefers can revisit how they teach, specifically creating inclusive environments through language and facilitating a sense of connection.^{45,57,63} Expectations and norms can be stated explicitly at the beginning of the learning experience, including an openness to discussing cultural aspects during the course and an acknowledgement of different cultural identities.⁶⁴

Seek Cultural Education and Practice

Culture is learned.^{64–66} Debriefers can seek their own learning experience with other cultures through formal and informal relationships with individuals from other cultures, as well as courses and workshops.⁵⁹ In a study by Crowne,⁴⁸ individuals who have been abroad have higher levels of cultural intelligence. Cycles of practice enhance overall cultural intelligence.⁶² The use of the Kolb experiential learning cycle framework during cultural experiences may increase CQ through cycles of experience.¹ Livermore¹ also suggests seeking mentors of different cultures—friends or colleagues who can expose differences in perspectives or orient and share ways of thinking and living.

3. Challenge your cultural comforts while knowing your boundaries.

Many simulation facilitators are trained in debriefing; however, there may be little discussion or practice in its application to the diverse cultural makeup of a learner group. Debriefers may use a set of rules without understanding that they can, and should, be modified to meet the participants' needs.

It is important that we take a focused look at whether the debriefing techniques that we learned are applicable to the environment in which we facilitate learning.^{31–33} Debriefers should be encouraged to assess their learners beyond the usual age, sex, years of experience, and clinical profession by also considering their individual and group cultural compositions. Debriefers must also take care to avoid assumptions and generalizations that may not be true. An example of one skill that is highly promoted in debriefing and may be culturally inappropriate in some cultures or participants is ensuring that every learner participates and has a voice in the discussion. In addition to awareness and CQ, the debriefer needs to be able to “read the room,” challenge their own comforts, and adapt their debriefing strategy to the group's cultural makeup rather than hold fast to the tenets of their preferred debriefing strategy.

Conversely, performing actions that go against one's beliefs will likely lead to ineffective interactions. Knowing our own boundaries: What is your “core”—values and beliefs that,

if removed, would leave you unrecognizable? What is your “flex” zone—things that you can change without losing your core? And where are the lines between both? Knowing these boundaries provides a sense as to what extent we can adapt while remaining authentic in the conversation.⁶⁷

When cultural factors are not part of the learning objectives and organically arise in the discussion, knowing when it is appropriate to discuss cultural differences becomes important.^{59,68–70} In teaching, we usually take the majority view appropriate to our culture, yet when the learners' responses differ from these values, it becomes an opportunity to critically discuss cultural differences, and debriefers then need to know how to handle this⁴¹ and “embrace the tension,”^{1(p189)} in service of creating rich learning discussions. When there is an identified need to disrupt patterns that reinforce systemic inequities or inequitable and oppressive learning situations, debriefers must also take the opportunity to name the dynamic.⁷¹ Deciding whether to draw attention to or discuss cultural differences in the moment creates an internal self-negotiation that often becomes a barrier to speaking up. Knowing how to best handle these debriefings brings us to engaging in future research.

4. Engage in Future Research.

The attention and evidence base for cultural considerations in debriefing are lacking. Our exploration of this topic urges us to better understand almost every facet of debriefing: *Who? What? When? Where? Why? and How?* Who might be most at risk? Which cultures have the most differences during debriefing? What cultural factors are important? What reporting points allow for replication of culturally inclusive work? When does it matter enough to name the dynamic and discuss culture? When is it not appropriate? Is it different for every culture? Why and how should we adapt? Can or should we find approaches that can translate across cultures? Studies of cultural aspects in simulation using different cultural models (beyond Hofstede) are needed with an exploration of generational changes and effects of globalization. What about debriefing in the context of organizational, generational, professional, socioeconomic, and religious cultures? For each debriefing model, what cultural barriers exist when applying in different cultures? What can a conceptual model look like?

The current lack of research studies and evidence around what cultural factors exist within and impact a debriefing may perhaps be due to unwoke attention and also, as we are seeing here, the complexity in studying these questions. With the entanglement of variables and levels that require each factor to be studied piece by piece, understanding the cultural influences in debriefing will take time—a glaring need and a collective challenging research agenda that we need to actively tackle.

CONCLUSIONS

Current advances in healthcare simulation have focused on EQ (eg, psychological safety, emotions in debriefing).⁷² Although EQ is seen as critical in a learning conversation, it is flawed and incomplete.⁷³ The ponderous gap in current debriefing models is the lack of awareness of cultural intelligence— affective processes that underlie our EQ. If unaddressed,

cultural dynamics can render learning ineffective and puts learners, educators, and the learner-educator relationship at risk. Just as we feel it is necessary to make culturally sensitive changes to our simulation cases, it is also necessary to make culturally responsive and relevant changes in our debriefings.

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Twelve tips for facilitating and implementing clinical debriefing programmes

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ABSTRACT

Contemporary clinical practice places a high demand on healthcare workforces due to complexity and rapid evolution of guidelines. We need embedded workplace practices such as clinical debriefing (CD) to support everyday learning and patient care. Debriefing, defined as a 'guided reflective learning conversation', is most often undertaken in small groups following simulation-based experiences. However, emerging evidence suggests that debriefing may also enhance learning in clinical environments where facilitators need to simultaneously balance psychological safety, learning goals and emotional well-being. This twelve tips article summarises international experience collated at the recent Association for Medical Education in Europe (AMEE) debriefing symposium. These tips encompass the benefits of CD, as well as suggested approach to facilitation. Successful CD programmes are frequently team focussed, interdisciplinary, implemented in stages and use a clear structure.

KEYWORDS

Debriefing; continuing education; communication skills; work-based learning

Background

Teams caring for patients in contemporary healthcare settings face increasingly complex environments that complicate efforts to provide effective, safe care. The accelerated evolution of best practice guidelines challenges clinicians to stay abreast (Densen 2011). Debriefing can promote reflective practice and represents a powerful educational tool that can enhance both group learning and safe patient care (Schmutz and Eppich 2017). Debriefing can be viewed as a guided reflection in the experiential learning cycle. In other words, we view debriefing as a deliberate learning conversation (Fanning and Gaba 2007; Tavares et al. 2019). As educators, we typically use debriefing as a learning tool following simulated events, with common discussion points including decision making, communication and teamwork (Harden and Laidlaw 2012; Cheng et al. 2014). However, when applied at the patient's bedside, "clinical debriefing" (CD) has also been associated with positive outcomes including improved team performance (Kessler et al. 2015; Schmutz et al. 2018).

Life-long learning facilitated by CD and workplace well-being programmes are both recognised as useful activities (Morey et al. 2002; Shanafelt et al. 2019). The recent uptake of programmes addressing these priorities appears to be increasing (Nadir et al. 2017; Song and Baicker 2019). Early studies of workplace debriefing primarily focussed on debriefing trauma victims or mandatory debriefing of staff experiencing very traumatic occurrences. Unsurprisingly, these studies signalled possible harm from debriefing after

incredibly stressful experiences (Carlier et al. 1998; Rose et al. 2002; Kagee 2002; Vaithilingam et al. 2008). In contrast, recent studies (Rose and Cheng 2018; Farrington et al. 2019) suggest that if debriefing is targeted appropriately then potential risks (related to psychological trauma, social relations, and learning trajectories) may be outweighed by the benefits. To this end, CD enhances learning, team performance and patient outcomes (Couper and Perkins 2013; Wolfe et al. 2014).

International symposium

In this article, we present twelve tips that review the current role of CD and offer suggestions for balancing the potential risks and benefits of these programmes. We distil the rich discussion from a recent symposium on CD held during the most recent meeting of the Association for Medical Education in Europe (AMEE) in Vienna on the 26th of August 2019.

Most prior literature on debriefing has focussed on healthcare simulation (Dufrene and Young 2014) or 'how to' debrief (Sawyer et al. 2016). At this symposium, an international panel of multidisciplinary educators considered an array of questions (Table 1) including:

- 'When should CD occur?'
- 'Who should participate?'
- 'Why undertake a CD?'
- 'Where should CD occur?'

Table 1. Twelve tips for facilitating and implementing clinical debriefing programmes.

When to debrief?	Tip 1	Formulate criteria regarding when, and when not to initiate a clinical debriefing.
Why debrief?	Tip 2	Demonstrate and articulate the importance of debriefing to colleagues.
Where to debrief?	Tip 3	Ensure a range of suitable environments for debriefing.
How to debrief?	Tip 4	Focus on the learning environment and emphasise psychological safety.
	Tip 5	Engage local faculty who can facilitate but not dominate.
	Tip 6	Establish an implementation strategy aligned with local culture.
	Tip 7	Use an easily recognisable structure for both facilitators and learners.
	Tip 8	Limit discussion topics and translate any important findings into meaningful clinical changes.
	Tip 9	Provide debriefers opportunities to improve their facilitation skills.
What next?	Tip 10	Minimise the impact of hindsight bias and avoid individual assessments of performance.
	Tip 11	Share a clear plan for providing expert help to distressed participants.
	Tip 12	Account for any legal issues and provide a policy on written documentation.

- 'How to debrief?'
- 'What to debrief?'
- 'What are the consequences?'

The AMEE simulation sub-committee purposefully selected five conference speakers (WE, RAS, RJS, AC, CDN) to include a balance of professional backgrounds, genders, international locations and debriefing experience (Table 2). Extensive notes were recorded from the pre-planning minutes, symposium experience and immediate post-conference reflections. We have derived our tips (Table 1) from a distillation of the symposium discussion supported by a literature review conducted with assistance from a senior University of Sydney librarian.

Tip 1

Formulate criteria regarding when, and when not to initiate a clinical debriefing

A primary goal of CD, in contrast to critical incident stress debriefing (CISD) should be to learn from routine everyday clinical events (Table 3). Discussing ordinary activities in debriefings may aid the building of rapport with groups of learners. To this end, while regular CD may be desirable (Sandhu et al. 2014), routine CD is infrequent (Nadir et al. 2017). The wider impacts on team performance are likely to be from cumulative exposure which may support CD with a high frequency (Wolfe et al. 2014).

The various forms of clinical debriefing require differentiation (Sawyer et al. 2016). We recommend local policies that provide programmatic guidance on which scenarios to exclude from CD. These twelve tips view CD as learning focussed in contrast to highly distressing situations requiring CISD or specific cases requiring formal after-action review (AAR) (Hagley et al. 2019). While overlap exists between CD, AAR and CISD, and all could reasonably occur for a given case, CD most often has a multidisciplinary lens, with the focus shifted away from individual performance. CISD, discussed in Tips 2 and 11, provides support to providers exposed to, or suffering from, distress. (Tuckey and Scott 2014).

Concerns over negative impacts of debriefing have previously been highlighted (Kagee 2002; Carlier et al. 1998). Furthermore, one-off debriefing interventions for lay people exposed to severe injury and burns have been associated with increased risk of post-traumatic stress disorder (PTSD) symptoms (Bisson et al. 1997; Mayou et al. 2000). However, in these studies there was scarce availability of long-term outcomes, thereby limiting generalisation to CD of healthcare workers. Moreover, no currently reported evidence

suggests harm related to participation in appropriately implemented CD (Rose and Cheng 2018). Successful CD programmes (Table 2) deliberately account for each participant's autonomy, undertake planned implementation, and ensure a consistent standard of facilitation. By ensuring these key steps, healthcare teams are more likely to use CD in their everyday practice. (Kessler et al. 2015).

Tip 2

Demonstrate and articulate the importance of debriefing to colleagues

In the context of undergraduate medical education, we most often encounter debriefing after simulated events (Fanning and Gaba 2007). Debriefing is widely viewed as a key component of simulation-based medical education (SBME) for all levels of learner experience (Ryoo and Ha 2015), but also has utility for learning after real-life events (Sawyer et al. 2016). The literature supports the use of debriefing to promote the effective application of existing skills (Rudolph et al. 2008) and improve team performance (Wolfe et al. 2014). As part of implementing new CD programmes, we recommend articulating the positive evidence for debriefing to our colleagues, who may be unfamiliar with its benefit in clinical settings. For example, the American Heart Association advises that CD should occur after cardiac arrest cases (Cheng et al. 2018). In addition, the American Academy of Paediatrics recommends offering debriefing after neonatal resuscitation (Serwint et al. 2016). One must clearly differentiate between clinical debriefing and CISD. In order to distinguish, CDs are generally short in length, focus on less-controversial content and discuss team, rather than individual performance (Nocera and Merritt 2017). In contrast, CISDs often follow an institutional process, may involve external providers, are scheduled several days after the event, and are primarily to ensure individual well-being (Clark et al. 2019). In this regard, clear communication of the aim and scope of any CD programme is essential (Johansson et al. 2009).

Tip 3

Ensure a range of suitable environments for debriefing

Debriefings should occur in an appropriate environment (Kessler et al. 2015). Table 2 lists settings conducive for successful CD. Moving away from clinical spaces may increase privacy and limit distractions (Hall and Tori 2017). On the other hand, some participants may be unable to leave their

Table 2. International experiences of clinical debriefing presented at AMEE 2019.

Presenter initials and origin	When? – timing of debriefings	Who? – AMEE presenter speciality	Who? – participants	Where? – location of event	Where? – location of debriefing	Where? – environmental considerations	Take home messages from local context
CDN, Cardiff, UK	‘TALK’ debriefings shortly after event, making use of natural breaks. Prompted at end of case ‘checks’.	Anaesthesia	Multidisciplinary and interprofessional teams, predominantly clinicians already in practice + some clinical trainees; teams change daily	Operating Theatres, non-theatre areas of anaesthetic practice.	In the clinical environment (Approach described allows team self-debriefing)	Aim to debrief before the team disperses, with choice of location depending on working environment and circumstances	(i) Create local buy-in and a supportive workplace culture (ii) Use a specific structure (iii) Agree on changes/actions and make them happen.
RAS, Melbourne, Australia	At the end of an operating list (daily)	Obstetrics and Gynaecology	Multidisciplinary and interprofessional teams, predominantly clinicians already in practice + some clinical trainees: teams change daily	Operating Theatres	In the clinical environment (doctor or regular theatre staff led)	Location should be conducive to promoting psychological safety	(i) Promote sustainability (ii) Create a safe space (iii) Account for past debriefing culture when implementing new programs
A.C. Sydney, Australia	Within 60 minutes of Emergency Department clinical event	Emergency Medicine	Multidisciplinary and interprofessional teams, predominantly clinicians already in practice + some clinical trainees; teams change daily	Emergency Department	In the clinical environment (nurse led)	Debriefing in actual clinical space(s) may aid recall of equipment and environmental issues	(i) Tie in your discussion outcomes with quality improvement initiatives (ii) Use structure
RJS, Miami, USA	Various (immediate or delayed)	Internal Medicine	Predominantly clinical trainees (Clerkship students and residents); teams change biweekly or monthly	Medical Ward Setting	Separate room on the ward where teams conduct “sit-down rounds” (doctor led)	Proximity, near enough to “the action”, contributes to relevance of CD, but location should be separate/quiet enough to create safe environment conducive to reflection	(i) Especially with junior trainees, even non-critical events may present emotional challenges that CD may help to “unpack” (ii) Making CD part of routine practice in training may help inculcate self-reflection and lifelong learning to create a “debriefing culture”

Table 3. Characteristics of various forms of clinical debriefing.

Type of debriefing	When? – timing of debriefing	Who? – typical participants	Where? – typical location	What? – typical content	Commentary
Clinical Debriefing (CD) (Kessler et al. 2015)	Usually immediately after a clinical event but no specific time limits (Table 2)	<ul style="list-style-type: none"> Facilitated by a skilled and trained debriefer of any background, or self-debriefing by high-performing teams Multidisciplinary participants including medical, nursing, allied health and students 	Near to, or in the actual clinical environment	<p>Routine events involving teamwork and communication</p> <p>Resuscitation events</p>	<ul style="list-style-type: none"> Aims to debrief ordinary everyday events (Table 2) Debriefers should aim to 'facilitate and not dominate' Focus on non-controversial facts Focus on team rather than individual performance Uses a structured format and focuses on a limited range of discussion topics Aims to mitigate the impact of a traumatic incident; to facilitate normal psychological recovery in healthy people distressed by an event; identifies group members who would benefit from additional professional support Typically addresses both medical and psychological issues without judgement A clear pathway for psychological referral is established
Critical Incident Stress Debriefing (CISD) (Tuckey and Scott 2014); (Magyar and Theophilos 2010)	<p>Not typically the first intervention following an incident</p> <p>Typically occurs within 24–72 hours of the event</p>	<ul style="list-style-type: none"> Led by a specially trained team of 2–4 people depending on group size Mental health professionals present Peer support professional present i.e. someone from the same profession with a similar background to group members Typical formula is one team member for every 5–7 group participants Group participants are involved with the critical incident, directly or indirectly 	A quiet meeting location as convenient as possible for all invited participants	<p>Traumatic and distressing events causing strong emotional responses (e.g. violent incidents, paediatric cases with poor outcomes)</p>	
After-Action Review (AAR) (Hagley et al. 2019); (Orlander and Fincke 2003)	<p>Delayed and often recurring</p> <p>May be mandated to be scheduled on a regular (e.g. monthly) basis (MMC)</p>	<ul style="list-style-type: none"> Facilitated by a lead investigator (ideally within institution but not involved in the patient's care) Group (MMC) Interviewers and Interviewees (RCA) Note taking (MMC minutes) Report writing (RCA) RCA Investigators, who are typically senior staff from the local institution, suggest changes to implement from action plans arising from AAR 	<p>Departmental meeting rooms or secure online conference systems</p>	<p>Morbidity and mortality conferences (MMC)</p> <p>Root cause analyses (RCA)</p>	<ul style="list-style-type: none"> After-action reviews typically seek to address five common questions: What happened during the response (and what was supposed to have happened)? Why did it happen? What can be learned? What should change? Have these changes taken place? A major goal of RCA and MMC is to prevent recurrence of negative patient orientated outcomes A review of the systems and processes (RCA) MMC used to examine medical error, to demonstrate teaching points, and meet quality assurance requirements

essential clinical duties for extended periods. Of note, one of the CD symposium speakers successfully conducted debriefings outside of the hospital setting. These small debriefings with groups of students proved popular with the learners even though they occurred a few days after the experiences.

In clinical environments, potentially suitable spaces for debriefing are often already occupied (e.g. by patients), prohibitively noisy or pre-allocated for a specific function (e.g., staff tea rooms). Thus, many spaces are not designated or designed for debriefing, which in turn may lead to difficulty finding a suitable location without prior consideration. On the one hand, a CD location close to where the event(s) took place may ease the team's recall of the environmental challenges such as ambient noise, physical obstructions, overcrowding of space, or broken equipment (Small 2007; Mullan et al. 2013). On the other hand, moving to a remote area for debriefing may be more practicable in some instances. Leaving the clinical area may provide enough space and time to rationally analyse the event (Fanning and Gaba 2007). Indeed, a recent randomised study in France showed that pre-debriefing guided mindfulness 'meditations' following simulation were associated with a significant increase in retention of key learning objectives after three months (Lilot et al. 2018).

Tip 4

Focus on the learning environment and emphasise psychological safety

An ideal learning environment requires psychological safety (PS), both establishing it *before* and deliberately maintaining it *during* the activity (Rudolph et al. 2014). Given the stakes for providers, PS is perhaps more important in CD and possibly harder to achieve. Relevant ground rules should be clearly outlined in the debriefing preview phase (Eppich et al. 2016). For instance, one might state the following: 'The purpose of debriefing is to improve the quality of medical care by [sic] our team'; it is not a blaming session. Everyone's participation is encouraged. All information discussed during this debriefing is confidential' (American Heart Association 2018). A recent concept analysis (Turner and Harder 2018) defined the essential components of PS as (1) *making mistakes without consequences*; (2) *the qualities of the facilitator(s)* and (3) *foundational activities such as orientation*. This list summarises the concepts but ignores the caveat of stating that mistakes are inconsequential in CD. Of course, mistakes can be quite consequential when taking care of real patients. Therefore, for CD we should mindfully consider case selection, with an awareness that breaches in confidentiality or ground rules may generate mistrust in future debriefings, as well as risk the reputability of the programme.

In addition, PS is an individually perceived and fragile phenomenon (Rudolph et al. 2008). Learners construct their perception of PS not only from facilitators' words, but also prior relationships, past experiences, and observation of the debriefer's non-verbal communication (Turner and Harder 2018; Kolbe et al. 2020). The perception of PS can also be affected significantly by local culture, presence of supervisors and the facilitator's style and approach (Edmondson 1999; Fey et al. 2014; Kolbe et al. 2020). To

this end, deliberately promoting PS can also contribute to an increase in 'team inclusiveness' (Eppich and Schmutz 2019).

Tip 5

Engage local faculty who can facilitate but not dominate

To establish a successful CD programme, we recommend recruiting and developing a range of debriefing champions. These champions ideally will role model effective facilitation practices and promote a wider awareness of the programme. Sawyer and Halamek recommend that CD debriefers should 'facilitate not dominate' (Sawyer et al. 2016). Furthermore, we endorse role switching from a 'sage on the stage' to a 'guide on the side', although we acknowledge that this approach can seem unnatural for most clinician educators (King 1993). As a facilitator, with the best of intent, we often want to 'fix' errors, provide solutions, give positive feedback, and actively encourage our team (Dieckmann et al. 2009). While it is important to add our expertise at opportune moments, the most effective clinical debriefings focus on behavioural skills applied in a team context.

Higher level collective skills such as communication and team reflexivity may be easier to promote in an open environment with a flattened hierarchy (Schmutz et al. 2018). CDs should de-emphasise discussion of unresolvable system issues and individual performance, thereby reducing the likelihood of threats to PS and collective frustration. High levels of distress or emotion may be better unpacked with CISD, supportive follow-up or professional counselling as appropriate (Clark et al. 2019). Uncertainty remains about how best to train debriefing facilitators. We require more evidence about extrapolating our existing knowledge of SBME debriefing to clinical environments (Kessler et al. 2015; Taras and Everett 2017). Facilitator training is further discussed in Tip 9.

Tip 6

Establish an implementation strategy aligned with local culture

Provide advanced notice about the intention to commence CD in your institution. Specific information about the debriefing process can be provided in the same way as we would expect to be notified of a prospective conference timetable. A combination of factors appears to contribute to implementation success, including local context, historical culture, transparent processes and the overall quality of CD facilitation (Salas et al. 2008; Eppich et al. 2016).

Whilst universal participation is encouraged, debriefing should be non-mandatory in the first instance, because compulsory attendance may cause stress in some participants (Mancini and Bonanno 2006). Furthermore, a key component of programme sustainability appears to lie in a focus on team performance (Mullan et al. 2013; Kessler et al. 2015) rather than individual performance (Rose and Cheng 2018).

Tip 7

Use an easily recognisable structure for both facilitators and learners

CD implementation may be streamlined by promoting familiarity with the process and thereby normalising debriefing. The use of a structure suited to local requirements helps achieve this aim. A consistent approach promotes familiarity and reduces the cognitive load for all involved (Fraser et al. 2018). Multiple scripts and tools can assist with CD implementation (Kessler et al. 2015). Notably, most structures set a time limits, provide a clear beginning (check in), a clear end (check out) as well as an approach to analysing performance. Examples of relevant debriefing tools include:

1. **TALK**© (Diaz-Navarro et al. 2014) – The Target, Analyse, Learn and Key Actions (TALK) model guides self-debriefing. A team first agrees on what target issues will be discussed. Next, the team examines successes and identifies areas for improvement. Finally, the team summarises the main learning points (i.e. from each other, the experience, and/or the CD), and finally agree on key actions for the future.
2. **DISCERN**© (Mullan et al. 2013) – The Debriefing *In Situ* Conversation after Emergent Resuscitation Now (DISCERN) model provides a CD guide and audit tool.
3. **STOP-5**© (Walker 2018) – This tool was described by Edinburgh Royal Infirmary. It is a 5-minute focussed CD with the structure ‘STOP-5’ (i.e. *Summarise case, Things that went well, Opportunities to improve and Points of action*).
4. **INFO**© (Rose and Cheng 2018) – Nurses lead CD in 4 steps (i.e. *Immediate, Not for personal assessment, Fast facilitated feedback, and Opportunity for questions*).
5. **TEAMSTEPS**© (Clapper 2016) – In this model teams are asked to self-evaluate whether they had clear communication; understood team roles and responsibilities; maintained situational awareness; distributed workload; engaged in cross-monitoring; asked for and offered help when needed; and made, mitigated, or corrected errors.

Tip 8

Limit discussion topics and translate any important findings into meaningful clinical changes

CD simply cannot cover everything – facilitators must make choices. Indeed, relatively mundane occurrences can catalyse learning conversations in clinical environments, provided they focus on the collective experience rather than individual performance. The spectrum of successful approaches described at the Vienna AMEE symposium (Table 2) illustrate this point.

Several factors may dilute the quality of clinical care, including (a) poor dissemination of the latest guidelines, (b) lack of education, and (c) errors in application (Søreide et al. 2013). To this end, debriefing may have a key translational role in remedying these three barriers to ideal patient care. If clinical teams observe that debriefing led to visible improvements in the care of patients, our

programmes are more likely to be successful. Thereafter CD can evolve from ‘what we sometimes do’ to become embedded in the culture of ‘what we do’ (Farokhzadian et al. 2018). In this regard, engagement with stakeholders and managerial buy-in are important considerations, as is the case with any clinical intervention involving cultural or practice changes (Curtis et al. 2017).

Regardless of altruism, the long-term sustainability of CD poses challenges. Common barriers may include a lack of available faculty, time pressures, and consistency of engagement during out-of-hours settings. To this end, the literature suggests that CD can be a both time-efficient and effective learning tool despite the substantial pressures that characterise modern healthcare (Kessler et al. 2015), especially during the recent challenge posed by global pandemics. In Tip 9, we address overcoming the challenges of facilitator preparation and out-of-hours availability.

Tip 9

Provide debriefers opportunities to improve their facilitation skills

Many healthcare providers recognise debriefing as an important activity and desire a structured implementation (Kessler et al. 2015). Despite this recognition, a lack of trained facilitators impedes the upscaling of many programmes (Sandhu et al. 2014). Further, 90% of North American Paediatric Emergency Medicine (PEM) fellows felt under-prepared to facilitate CDs (Zinns et al. 2015). Facilitator development promotes successful debriefing programme implementation (Fey and Jenkins 2015). In addition, direct mentorship and training of new facilitators should include guidance on leading discussion in target areas such as communication (Kessler et al. 2015).

Debriefers can acquire the skills and flexibility to facilitate debriefings through formal courses, peer feedback based on direct observation, and follow-up mentoring (Eppich et al. 2016; Krogh et al. 2016). Given the overlap between facilitation of SBME debriefings and CD, simulation-based sessions may assist new debriefers in acquiring skills in a predictable, reproducible manner and translating those skills to clinical environments (Eppich et al. 2016).

Programme sustainability and reach require a broadening pool of trained facilitators. Indeed, many settings do not routinely have experienced facilitators available to debrief 24-hours a day. Nurses, social workers, trainee medical providers and psychologists may all debrief capably (Kessler et al. 2015; Rose and Cheng 2018). Allowing new faculty to co-debrief with experienced facilitators is a useful method to build skills and confidence (Cheng et al. 2015).

Tip 10

Minimise the impact of hindsight bias and avoid individual assessments of performance

Consider the question of who is best placed to debrief clinical scenarios. When directly immersed in patient care, we may not recognise our cognitive biases or emotional impacts resulting from the case (Croskerry 2005). Further, residual stress could limit our ability to debrief effectively (LeBlanc 2009). High levels of cognitive load during

debriefing represent a challenge in CD of complex cases (Pawar et al. 2018). As a result, clinicians directly involved in patient care should be aware that their judgement, memory and facilitation performance are likely to be affected. Moreover, 'hindsight bias' may hinder our analysis of self and others during debriefings (Motavalli and Nestel 2016). This effect may be amplified when we were directly involved in caring for the patient in question, or when the details of the final diagnosis are known. Therefore, in each case we should consider the appropriateness of combining our personal involvement in the case with facilitation of the subsequent debriefing (Pawar et al. 2018). Finding a path through these pitfalls can challenge our self-awareness. To navigate the challenge, we recommend starting all CDs with a brief revision of existing ground rules, followed by a review of the facts of what occurred without judgement of the quality of performance (Mullan et al. 2014). Only then should we discuss or judge performance. During this 'analysis phase' we advise to focus discussions on team-based factors and collective problem solving, rather than individual errors (Kessler et al. 2015; Eppich et al. 2016).

Tip 11

Share a clear plan for providing expert help to distressed participants

Many institutions will have a range of available resources to support students and providers who become distressed. Mapping the available resources and providing these to debriefers may be pertinent when CD focuses on highly emotive events such as cardiac arrest with a fatal outcome. As discussed in Tip 2, facilitators should distinguish between the need for debriefing to learn (CD) and debriefing for well-being (CISD). In other words, is the primary objective for debriefing an everyday, lower stakes learning conversation, or is the focus on preventing immediate and future emotional harm to the team (i.e., debriefing for well-being)?

Uncertainty remains as to how stress impacts healthcare professionals (LeBlanc 2009; Lauria et al. 2017). Most individuals who work in stressful environments and receive resilience training and support appear to manage the demands of their work (Lala et al. 2016; Tubbert 2016; Watson et al. 2019). Nonetheless, CD programmes should adopt local strategies to handle distress resulting from the clinical event and recognize that this may be amplified by CD.

Facilitators must maintain a degree of flexibility and reflexivity in terms of promoting learning and ensuring well-being lies (Salas et al. 2008; Krogh et al. 2016). We recommend designing safety-net processes for serious unexpected emotional reactions, which, while rare, are possible in any form of debriefing (Fraser et al. 2012, 2014; Grant et al. 2018). Our field requires further work to better understand how to balance learning needs and workplace well-being, as well as to investigate which strategies can effectively promote psychological safety in CD (Harder et al. 2020).

Tip 12

Account for any legal issues and provide a policy on written documentation

Depending on local requirements and the legal jurisdiction, facilitators should consider a policy for maintaining confidentiality and non-discoverability (Sawyer et al. 2016). Clear ground rules and statements about confidentiality enhance psychological safety and encourage a rational appraisal of the case.

On the one hand, most contemporary CD guidelines advise against creating formal documentation of the debriefing for inclusion in the patient record in view of the risk of future subpoena (Mullan et al. 2013). Seek local risk management expertise to ensure concerns surrounding confidentiality and non-discoverability are suitably addressed (Sawyer et al. 2016). On the other hand, CD may have a role in identifying latent threats to patient safety. To prevent the loss of this crucial information, consider reporting processes that balance the need for sharing important findings without breaching confidentiality.

In summary, recommendations arising from CD at the clinical coalface present us with opportunities to improve patient care. However, participants should clearly understand how data will be disseminated and how any errors identified in the debriefing will be managed.

Conclusions

Clinical debriefing creates new opportunities for collective learning and can be implemented successfully in a variety of settings. Facilitators need opportunities to train and practice their debriefing skills in immersive, experiential learning environments, which broadens the local pool of facilitators. Further work will explore how best to prepare for the challenges associated with CD. Questions remain regarding both 'how to debrief' as well as 'what to debrief' in CD. Successful programmes have multifaceted benefits, including enhanced teamwork, improved clinical culture and anticipation of latent patient safety threats. There is a strong case for CD as an effective tool to promote workplace learning and patient safety, but maintaining successful programmes requires dedicated facilitators.

Disclosure statement

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