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Symposium

Debriefing –What, why and how?

Vijayanand Jamalpuri*, Amy Kline, Mike Shepherd*****

*Vijayanand Jamalpuri, Consultant Neonatal Pediatrician, Rainbow Children's Hospital, Hyderabad, India
**Ms Amy Kline, Simulation Specialist, Minnesota, USA, ***Mike Shepherd, Pediatric Emergency Specialist
Starship Hospital, Auckland, New Zealand

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ABSTRACT

Debriefing is a critical part of a simulation exercise in order to foster reflection and enhance clinical reasoning. Without a proper understanding of how to debrief simulation based trainings or real life events can be ineffective and inconsistent. In this article we provide an overview to the necessary elements of debriefing. We describe a three-stage approach to debriefing; reactions, descriptive and summary and review different forms of questioning that can be used in the descriptive phase. It is important for educators in simulation to train and understand how to effectively lead learners through simulation and debriefing in order to be successful.

Keywords: Reflective learning, directive feedback, delta- plus, Advocacy-Inquiry.

Adults are experiential learners and they learn best when they are actively engaged in the process by real time experience. Simulation training or exercises can provide such experience to the learners. Therefore, simulation is a technique, not a technology, to augment or recreate real experiences. However such experiences turn into learning only when there is a mutually engaging dialogue based on reflection between the learner and the educator[1]. Debriefing helps in generating such dialogue and highlights the lessons for learners through guided reflection on their performance. This is true for learning from real life experiences, but is an even more essential part of simulation learning. Simulation learning without debriefing is ineffective, even unethical. A lack of understanding or skill in debriefing is likely to lead to significant variations in practice and missed learning opportunities following a simulation exercise. Therefore, it is a must for the trainers to understand nuts and bolts of the debriefing.

We have 2 disclaimers about this article, firstly that debriefing is an art not a science, it relies on a range of nontechnical skills (eg reflective listening, compassion, humour etc), which vary among our colleagues and in some cases require further training. Secondly, debriefing is a practical skill that requires training and practice; this article therefore serves only as a theoretical introduction to debriefing.

Correspondence
Dr Vijayanand Jamalpuri, Consultant Neonatal Pediatrician, Rainbow Children's Hospital, Road Number 10, Banjara Hills, Hyderabad, Telangana 500034
E-mail: vjamalpuri@gmail.com, Mobile: +919866157271

What is debriefing?

Debriefing, the process whereby the facilitators and the learners reexamine the clinical encounter, fosters the development of clinical reasoning and judgment skills through reflective learning processes. The clinical encounter could be a simulated one or even a real one[2].

The terms ''debriefing'' and ''feedback'' are often used synonymously. However, there are important distinctions between the two, feedback is defined as information about performance which is provided to the learners with the intent to modify thinking or behavior to facilitate learning and improve future performance. Thus, feedback is viewed as the one-way conveyance of information to the learner. In contrast, debriefing is an interactive, bidirectional, and reflective discussion[3].

Why to debrief?

The concept of reflection on an event and subsequent analysis is the cornerstone of the experiential learning.

Indeed this ability to reflect, appraise, and reappraise is considered essential for lifelong learning. In practice however, not everyone is naturally capable of analyzing, making sense, and assimilating learning experiences on their own, particularly those included in highly dynamic team-based activities[4]. The attempt to bridge this natural gap between experiencing an event and making sense of it led to the evolution of the concept of the "post experience analysis" which is called debriefing[4]. Debriefing provides opportunities to foster reflective learning.

Reflective practitioners who engage in introspection learn to self-correct and assimilate new experiences with prior ones and thus improve their professional competence[5]. The purpose of debriefing is not only assimilation of learning but also to transfer learning to future situations[2].

Creating a safe learning environment: The facilitator must create a supportive and safe environment for the learners, to ensure a successful learning experience, in which they feel valued, respected, and free to learn. Participants should be able to share their experiences in a frank, open and honest manner[4]. Allowing the participants to be familiar with the simulation environment including the mannequins and all the equipment allays anxiety and creates a better learning environment. A safe learning environment can be achieved with pre-course information about the facilitative learning, explaining the rules of the course with emphasis on the same during introductions and lectures. For example:

- The events of the course are confidential and individuals' performance will not discussed elsewhere.
- If things go wrong in the simulation exercises the emphasis is on why rather than whom.
- There will not be any tricks

How much time for debriefing?

One should allocate double the scenario running time for the debriefing; usually 10-15 minutes for case scenario and 20-30 minutes for the discussion.

Where to debrief?

Debriefing in a room separate from the one where simulation exercise took place will help the learners to disassociate themselves from their emotions following the stressful scenario. It may allow course organizers to prepare the simulation room for the next set of learners. If separate room is not available, one can debrief away from the scenario area if possible.

How to debrief?

Facilitator's role is to maximize the educational potential of the debriefing session whilst ensuring that it is positive and supportive experience for the participants. Therefore it is important to have a structure to the debriefing process. Several debriefing methods have been described[2,3,4,5,6,7,8] and we discuss one such method, which consists of three phases: reaction, descriptive, and summary. To what extent learners engage in the debriefing depends heavily on how psychologically safe they feel and on the instructors' facilitation skills[3].

First Phase – Reaction Phase: Learners may be full of adrenaline and may carry lots of emotions when they are immersed in a stressful scenario. Therefore, first phase of debriefing focuses on exploring the participants' reactions and the emotional impact of the simulation experience on them. In this phase, participants can ''blow off steam'' before completing the rest of the debriefing[9]. Allowing them to vent their feelings may help them to become receptive and engage fully in the reflective discussion. A common opening questions could be ''how did that feel?'' or "how did it feel to be in that case?" Facilitator should listen to the answers carefully to understand what the learners want to talk about and thereby their learning needs. Information provided from participants in this phase will be important to use later in the debrief.

Second Phase - Descriptive Phase: During the second phase, the focus is on what happened during the simulation and why participants performed the way they did[9].

Facts: Elicit the likely clinical diagnosis of the patient. Let the learners answer and fill the gaps if needed. Clarifying medical facts allows the learners to participate in the open discussion, otherwise they might keep thinking and guessing about what could have been potentially wrong with the patient and

what the treatment objectives and approach should have been.

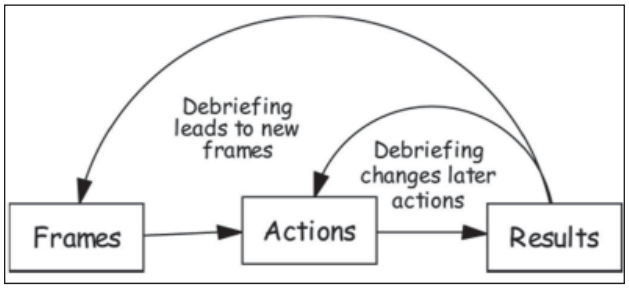
Analysis and Generalization: Analysis phase forms the crux of the debriefing. In this phase the learners and the facilitator together analyze both medical and non-medical factors (human factors), which were identified during the simulation exercise. Different strategies have been described for the analysis phase, which could be learner guided or trainer guided[10]. Eppich and Cheng[6] suggest using learner guided debriefing if there is enough time and learner has good insight, and using trainer guided debriefing if time is short and learner has poor insight. Three commonly described methods for analysis phase are 1. Directive Feed Back 2. Plus - Delta 3. Focused Facilitation using Advocacy-inquiry.

1. **Directive Feedback:** Directive feedback is a highly educator driven approach. Educator does majority of the talking and learners are provided with the solutions to the identified problems. This is often an approach used for more junior staff eg medical students. Providing information judiciously in the form of directive feedback may be preferred if time is very short and performance gaps are highly technical e.g. not able to use a T piece device in newborn resuscitation because the participant never used it before. Directive feedback can also be used if underlying reason for the deficient performance is clear e.g. due to knowledge gap when a learner says I could not remember the steps of the algorithm for neonatal resuscitation[6]. In these circumstances, educators can switch to teaching mode eg, show how to use T-piece device or revise the neonatal resuscitation algorithm.
2. **Plus - Delta:** Plus- Delta is a partly learner-guided approach where learners encouraged identifying their performance gaps by asking questions like: what went well/what would you do differently? What was easy/what was challenging?[6] This technique is well suited if time is limited or if the participants did not share their thoughts or emotions during the reactions phase. It provides insight as to what topics are important to participants. Once issues are identified, the educator either use advocacy-inquiry questions to promote more in-depth discussion or give directive feedback to the participants and fill the performance gap[6]. This might be an approach used for teaching junior doctors and nurses, often mostly focussed on medical understanding.
3. **Focused Facilitation using Advocacy with inquiry:** Rudolph et al[5] described advocacy-inquiry method to facilitate learners to disclose the reasons about the their actions. An advocacy is an assertion or observation, whereas an inquiry is a question. When pairing the two together, the instructor acts as a conversational scientist, stating in the advocacy his or her hypothesis, and then testing the hypothesis with an inquiry[7]. For example, an instructor might say, Dr Rakesh, I heard you raise your voice and shout at your nursing colleague when you were waiting for medications (observation), I am concerned this might have affected the team dynamic resulting in even more difficulty delivering treatment (advocacy) and I wonder if you could share your thoughts around why this occurred (inquiry)? So, the facilitator is using advocacy plus inquiry to elicit the internal frames, which guided the learner's actions. This is the generic approach that instructors can use in any scenario: notice a relevant result, observe what actions led to the result, and then use advocacy-inquiry to discover the frames that produced the results (See Figure 1)[7]. The frames are the answers to "Why?" questions and are likely to be much more broadly applicable to other situations.

   Some examples for advocacy with inquiry questions are:

   1. I observed that you did not turn on the warmer before baby was born; I am concerned, as you know, that baby can become hypothermic in this situation (Advocacy) and wonder why you think this occurred in this instance? (Inquiry).
   2. Dr Rajesh, I noticed that chest compressions were not started until 2 minutes after asystole was identified and I am concerned about this as delays in starting chest compressions can lead to worse outcomes in cardiac arrest (Advocacy), I am curious to understand why this occurred? (Inquiry)
   3. Dr Preethi, I noticed that you took four attempts to site a cannula in this infant with shock rather

than place an IO, and I am concerned that it caused a delay in fluid resuscitation in this shocked patient (Advocacy), can you please tell us your experience of this situation?? (Inquiry)



Frames are invisible; they are in the minds of learners. Actions (including speech) are observable. Most results (e.g., vital signs, order/ chaos) are also observable[7].

Once a particular frame is identified, the facilitator should ask whether the other learners havehad similar experiences in real life and what were the strategies they had used in the past. Therefore, analytical phase should include a discussion to generalize lessons learned to real-world context[9]. Several cycles of analysis are done to discuss the various learning objectives based on needs assessment of the learners. Facilitator might want to conclude the session once all the learning outcomes are achieved.

Third Phase – Summary Phase: The third phase is a concluding phase. It is focused on distilling lessons learned and consolidating the insights gained during the analysis phase. Facilitator might consider the following examples in the summary phase with the objective of eliciting learner led conclusions:

1. I would like to wrap up our discussion and discuss take home messages
2. What are the take-away messages?
3. Can you summarize the learning points for me?

Conclusion

Debriefing is a well structured and designed mutual dialogue between the learners and the facilitator to allow optimal adult learning. It is particularly relevant to simulation based training and is critical to the success of simulation based learning. It should be the most rewarding and enjoyable part of the simulation exercise by creating a safe learning environment and facilitating a reflective learner centric discussion. Debriefing is however a practical skill that will require the debriefer to develop experience and expertise, learning from other debreifer and their learners.

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One Page Debriefing Guide[6]

(Adapted from Eppich W, & Cheng A. Promoting Excellence And Reflective Learning in Simulation (PEARLS): development and rationale for a blended approach to healthcare simulation debriefing. Simulation in Healthcare: The Journal of the Society for Simulation in Healthcare: April 2015-Volume10-Issue 2-p 106–115)

Set the Scene: Begin by previewing what the learners should expect from the debriefing period. Review that the time will be spent first sharing how it felt to be in that situation, then reviewing what happened during the case and what participants might have managed differently and end with summarizing points from the case and how they can apply to the real-world.

Remind learners that you want to hear from them during this time and that you would like them to drive the discussion.

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Reactions Phase: "How did it feel to be in that situation?" or "What about that felt (good/bad/chaotic)?"

↓

Description Phase: Medical Facts - "Can someone summarize the case from a medical point of view?"

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DESCRIPTION PHASE - Analytical Phase - "Now that we are clear about what happened, let's talk more about the case."

More Time or Good learner Insight
Learner Guided Debriefing

Less time or Poor Learner Insight
Educator Guided Debriefing

More Time **Focused Facilitation**	**Less Time – Plus Delta (+/-)**	**Short Time - Direct Feedback**
Analyze performance related to objectives; exploring frames of reference "I would like to spend a few minutes talking about XXX" "I noticed {behavior} and I was concerned/unsure/happy because {provide rationale}. Can you tell me what you were thinking at this point?" Use open-ended questions	**Learner self-assessment and learner generated objectives** "What went well?" "What do you think could have gone better?" "What was easy/what was challenging?" Close performance gaps using direct feedback	**Provide relevant knowledge or tips to perform the action correctly** "I noticed you {behavior}. Next time you may want to try {suggested behavior} because {provide rationale}. How does that sound to you?

"Does anyone have anything else they would like to add that we haven't discussed yet?"

Yes?

No?

Are all Learning Objectives Covered?

No?

Yes

Summary: Learner Guided "I would like to wrap up our discussion and discuss take home messages" or "What are the take-away messages?" or "Can you summarize the learning points for me?"