



Journal Club : The First Year



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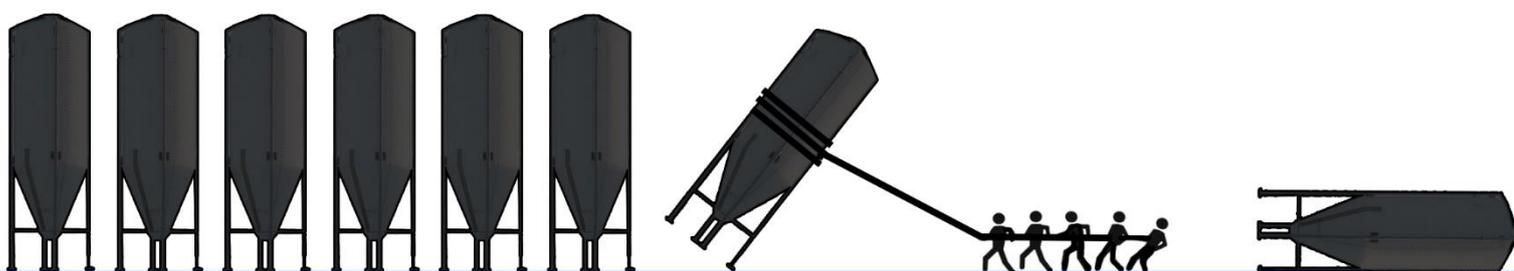
Dr Marjorie Lee White

Published by Simulcast,
Brisbane, Queensland, Australia
First Edition, September 2017



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ISBN 978-0-6481679-1-4



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Introduction

“There’s actually a great paper on that”

When I attended my first formal sim training in Boston, I remember asking Jenny Rudolph a question about utilising co-debriefers effectively. “There’s actually a great paper on that,” she began. Later on the course I asked another instructor, Mary Fey, a question about cultural differences in debriefing. “There’s a great paper on that,” she began. And that pattern continued throughout the course, until eventually I realised that I had a serious problem. I wasn’t reading.

As a new Sim educator, I had figured getting ‘on the job’ training in debriefing made me an expert and doing this course would be some fine tuning. I thought I was pretty down with this whole debriefing thing, but good lord, looking back! An expert I was not.

Thankfully after discussing this with Mary Fey, she sent me her top 10 list of papers for new educators. In doing so, she started me on one of the most exciting personal journeys of my life. I was grateful for the list you see, but I knew my own laziness (there was a 2 year old, a job to find and a Netflix queue back home that really needed to be dealt with after all). So I figured maybe by starting an email journal club with some friends I’d made on the course, I might hold myself accountable for reading an achievable number of papers a year.

But it turned out I wasn’t the only one who wanted to do more reading, and our little email list grew and grew until we had sim educators from Africa, China, South America, North America and Australasia all participating in some exciting discussions.

Somehow Vic Brazil got wind of that journal club, and eventually she and Jesse Spurr invited me to host a journal club on their new [Simulcast website](#). They had some great ideas for improving the format, inspired by the [AliEM Medic](#) series, and suggested opening the conversation up to the world via a blog. I was very excited, but I had no idea how transformative that experience would be.

We’ve been lucky enough to have incredible learning conversations with some of the world’s great simulation experts, bond with local sim champions around the globe and hopefully inspire more educators to learn about educational research and truly become experts in their field. We’ve learned about Rapid Cycle Deliberate Practice, Learner Centred Debriefing, Faculty Development programs, Cognitive Aid Design and much, much more.

So thank you to those experts who generously donated their time for our cases this year, and thank you to all the bloggers who commented on the articles and shared their experiences and challenges in sim, thanks to AliEM Medic for the inspiration and thank you to Vic and to Jesse for giving me the chance to learn from you all.

In the rest of this Ebook you’ll find a collection of the 10 cases we’ve discussed in the first 12 months of our journal club. I hope you find it a useful resource to share with other sim allies or new sim fellows who need an introduction to educational research.

And if you like it, and you enjoy it, I’d love for you to join us next case on the [journal club](#).

Cheers,

Ben Symon

Acknowledgements

Creating the Simulcast Journal Club has been a collaborative venture graced by the generosity of many people. In particular we would like to thank :

The creators of the AliEM Medic Series for their inspiration and guidance with our online format.

The network of simulation experts who have provided their expert commentaries and support.

Our online champions, particularly Ian Summers, Rowan Duys and Adam Cheng for their online promotion and interactions.

And most of all, all the simulation educators who have overcome their nerves to post on our blog and contribute to our monthly discussion.

Without any of you there would be no journal club.



About Simulcast Journal Club

The Simulcast Journal Club aims to assist with knowledge translation between coal face educators and academic professionals who are publishing educational research.



CASE STUDY

Every month at simulationpodcast.com we discuss an article with an associated case study to highlight relevant issues. Over the course of the month, bloggers from around the world comment on the article and the case.



PROMOTION

You can follow our twitter announcements on discussions at [@symon_ben](https://twitter.com/symon_ben) and [@sim_podcast](https://twitter.com/sim_podcast)



EXPERT
OPINION

An expert in the field provides their opinion on the issues raised and the article itself.



SUMMARY
& PODCAST

At the end of the month, we publish a summary of the article and the discussions in both podcast and written form.

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August 2016

“Debriefer Knows Best”



Expert Opinion : Mary Fey, PhD, RN

“Learner centered isn’t something you do, it’s something you are.”

The Article : “Learner-Centered Debriefing for Health Care Simulation Education : Lessons for Faculty Development”

[Cheng, A., Morse, K. J., Rudolph, J., Arab, A. A., Runnacles, J., & Eppich, W. \(2016\). Learner-Centered Debriefing for Health Care Simulation Education: Lessons for Faculty Development. *Simulation In Healthcare: Journal Of The Society For Simulation In Healthcare*, 11\(1\), 32-40. doi:10.1097/SIH.000000000000136](#)

Case Author :

- Dr Ben Symon

Expert Commenter :

- Mary Fey, PhD, RN

Editors :

- Dr Victoria Brazil
- Jesse Spurr

First Published :

- 29/08/2016

Simulcast Journal Club is a monthly series heavily inspired by the [ALIEM MEDIC](#) Series.

It aims to encourage simulation educators to explore and learn from publications on Healthcare Simulation Education.

Each month we publish a case and link a paper with associated questions for discussion.

We moderate and summarise the discussion at the end of the month, including exploring the opinions of experts from the field.

The Case :

Cath was sitting enthralled in the SIM control room watching a heated argument occurring through the glass in front of her.

All told it had been a fairly tumultuous sim with the team making a number of surprising decisions:

- Despite the critical hypotension and positive fast scan, the group had elected to take the patient to CT to find the source of his intra-abdominal bleeding.
- The airway doctor Dale had also come to blows with the drugs nurse Madge. (She was a battle hardened, well respected nurse and Dale’s requests for repeatedly incorrect drug doses had eventually lead to her drawing up completely different drugs).

As the case was going to wrap up soon, Cath began to map out her main discussion points for the debrief. It was a shame she only had 20 minutes, there was so much to talk about.

- “I need to address the decision to go to the CT. That patient could have died.” thought Cath.
- “Then I’ll acknowledge that blow up with Madge and Dale. If they can’t communicate honestly with each other, there could be huge repercussions for the patient.”

With her priorities arranged Cath rushed to the debriefing room to catch the participants as they walked out.

- “I can’t believe I didn’t call a trauma respond!” whispered Dale to his fellow resident. “I don’t even know how to activate it here. What if I get a trauma on nights?”
- Cath’s heart sank a little, there was no way she was going to have time to address the trauma respond issue, she’d already identified more critical issues that the learners really needed to hear about. Besides, she thought a little guiltily, Dale failing to call the trauma respond was the least of his problems.

With a deep breath Cath turned to the group :

- “So,” she said, “How did that feel?”.

Discussion :

- As passionate instructors we often have strong opinions on what our learners ‘Need to Know’. Simulation participants, on the other hand, may have an entirely different set of learning objectives that they have identified while being in the scenario.
- In this month’s article from *Simulation in Healthcare*, Cheng et al explore the continuum of teaching styles between ‘Learner Centred Debriefing’ and ‘Instructor Centred Debriefing’.
- In doing so, they advocate for a more Learner Centred approach to debriefing, while still acknowledging that there are some benefits to an Instructor Centred approach in some circumstances.

Article Summary :

In the article "Learner-Centered Debriefing for Health Care Simulation Education : Lessons for Faculty Development", Cheng et al state that they will :

- Compare and contrast learner vs instructor centered approaches to teaching
- Provide a rationale and conceptual framework for a more learner centered approach
- Describe key variables to consider when managing the balance between learner and instructor centered debriefing.
- Describe practical learner centered strategies for various debriefing phases.

In contrasting learner and instructor centered debriefing, the authors reference Maryellen Weimer's text "Learner Centered Teaching" in describing a spectrum of teaching strategies that vary between two extremes.

Using the analogy of 'The Guide on the Side' vs 'The Sage on the Stage', the authors argue that Learner Centered Debriefing :

- Shifts the balance of power and responsibility to the students, leading to them becoming "typically more motivated to learn" and "active meaning makers".
- Increases "student engagement with content, student learning and long-term retention of knowledge"

In defining Instructor-Centered Teaching, they state that it :

- "Emphasises teaching activities and deemphasises learning processes."
- Is "based on the premise that transmitting information is most efficient and effective"
- Places responsibility for learning primarily on instructors
- May unintentionally "promote dependent, instructor-centered learners"

With the assistance of multiple tables the authors then provide a Conceptual Framework for Learner- Versus Instructor-Centered Debriefing, Key Variables to Consider When Managing the Balance Between Learner and Instructor-Centered Debriefing and finally a series of pointers on how to approach a more learner centered debrief with specific advice regarding each phase of debriefing.

Blog Contributors :

- Nick Argall, Vic Brazil, Cliff Reid, Shannon Scott-Vernaglia, Jesse Spurr, Ian Summers
- Ben Symon, Callum Thirkell, Brent Thoma, M C Yuen

Summary of this Month’s Journal Club Discussion :

While the discussions this month were varied, they could primarily be condensed into three separate themes :

- ‘All Things in Moderation’
- ‘Debriefing format should change depending on targeted learning outcomes’
- ‘Transition of responsibility for learning is a journey within itself’

‘All Things in Moderation’

- *“Ideally we would have a mastery of a variety of techniques and be able to use the one most appropriate at the time, flexing across the continuum of ICT vs LCT to suit.” – Ian Summers*
- While all blog contributors were in agreement about the significant merits of a LCT approach, many voiced concern about the potential risks of approaching either extreme of the ICT/LCT spectrum.
- It was argued that being fully Learner Centered may not lead to achievement of targeted learning objectives, particularly as learners and instructors are susceptible to being influenced by what learners like, and learners may need more clear guidance to “know what they don’t know” or uncover blindspots.
- The evidence base for the superiority of LCT was challenged in the context of [minimal evidence of improved learning outcomes](#) in medical curricula moving from an ICT focus to Problem Based Learning curricula.
- It was voiced that there is an inherent ‘hidden curriculum’ dichotomy in designing a simulation with key learning objectives and then asking learners to come up with their own.
- LCT focused debriefing is more difficult to achieve and may be inappropriate for the novice debriefer to venture so far down that path that they get significantly derailed to the detriment of the learner’s experience.
- Potential solutions for these identified problems included :
 - Allowing for a learner centered debrief but following up with instructor centered educational resources may safeguard against failing to meet targeted learning objectives
 - Moving fluidly between the ICT and LCT spectrum according to the acute temporal needs of the debrief.

‘Debriefing format should be different depending on targeted learning outcomes’

- In exploring the potential flaws of extreme approaches, a discussion around the type of simulation format most appropriate for different learning objectives emerged.
- Summarised as the difference between “simulation as a tool for training’ versus ‘simulation as a tool for exploration”, the suitability of an LCT focused, long form debrief for skill acquisition was challenged. It was advocated that “Learners should not ‘make their own meaning’ if they are being instructed’. Rapid Cycle Debriefing was flagged as being more appropriate for this purpose for skills acquisition, given its suitability for a more ICT focused, skill improvement objective.

‘Transition of responsibility for learning is a journey within itself’

- Being an active participant in debriefs is a skill that must also be learned, and as such more reserved learners will often evolve from being passive observers to being active participants if given the time and simulation experience.
- Debriefs may benefit in mirroring that journey in evolving the debrief from ICT to LCT as courses progress and this was echoed by multiple contributors sharing their personal experiences teaching on short courses versus taking a regular group of learners on a longer term journey through simulation, and noting a natural transition towards learners taking ownership of the debrief as time progresses.
- Cultural contrasts in debriefing were highlighted by MC Yuen, who highlighted that participants in Chinese culture may be unable to advocate for their own learning needs and will take more effort from the debriefer to encourage learners to express their opinions and concerns.

Expert Opinion : Mary Fey, PhD, RN, Associate Director, Institute for Medical Simulation at the Center for Medical Simulation



Mary Fey has been working in the field of clinical simulation since 2007 and has been responsible for developing clinical simulation programs and integrating simulation into nursing curricula. She is Assistant Professor at the University of Maryland, School of Nursing and the Associate Director of the Center for Medical Simulation in Boston, Massachusetts. Dr Fey is a co-author of ‘the Standard of Best Practice for Simulation : Standard VI, The Debriefing Process’. She serves on the research committee of the International Nursing Association for Clinical Simulation in Nursing, as well as on the Certification Committee of the Society for Simulation in Healthcare. She holds a PhD and a Post-Master’s Certificate in Teaching from the University of Maryland.

This Simulcast Journal Club has helped us all think about the teacher-learner relationship. Through all of the discussion and the paper, the meta-message is: “learner centered” is deeper than the actions we take; it’s the belief system of the teacher. Being learner centered begins with holding the basic assumption that the learners are intelligent, capable, doing their best and want to improve. Holding this belief system compels us to partner with the learner to co-create meaning. Not an easy task! Many of the complexities of learner-centered debriefing have been well stated in others’ posts.

As pointed out by Vic and Cliff, context is everything. Decisions about how to facilitate a debriefing are influenced by multiple factors, including: available resources (e.g. time), faculty expertise, level of learners, etc. One size does not fit all. Ben (and others) have made the point that there are times when techniques on the “instructor centered” end of the continuum may be best for learners. E.g. Cath can satisfy one of Dale’s important learning needs by giving him the information about initiating a trauma response. This allows her to concentrate on learning needs related to clinical decision making and interprofessional communication.

Shannon reminds us that there are multiple ways to extend the learning beyond the debriefing room. Learners can continue to be supported when they are no longer with the instructor. This may be done through the provision of resources tailored to their learning needs, or by extending the conversation using techniques like wikis, discussion boards, and post simulation review of video.

All of these points illustrate the foundation of learner-centeredness. It is not so much about the instructor actions, as it is about how the instructor views the teacher-learner relationship. As stated by the authors of the paper, it is a focus on learning rather than teaching. It is a core belief that the best way to chart the course to improved practice is to partner with the learner.

The paradox is this: ultimate teacher control over learning outcomes is gained by sharing control with the learner(s). Diagnosis and treatment of their learning needs is best accomplished in partnership with them by (1) finding out which learning objectives are most important to them, (2) exploring the cognitive frames driving their actions and (3) tailoring debriefing to move them along the trajectory to improved practice.

Holding the learner in high regard while holding them to high standards encourages what Carol Dweck calls a “growth mindset” – a belief that learners can achieve the ultimate outcome through sincere effort. The converse is also true, as Ian points out so well: There is no point saying that you are sharing control if the first time someone disagrees with you your body language shows annoyance.

Learner centered isn’t something you do – it’s something you are.



Journal Club Summary August 2016 “Debriefing Knows Best”

Acknowledgements :

Simulcast would like to thank the creators of the AliEM MEDiC series for the inspiration for the journal club’s blog format and their ongoing support and contributions to the project.

Thankyou to Dr Mary K Fey, Associate Director of the Center for Medical Simulation for her expert commentary this month.

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1. Cheng, A., Morse, K., Rudolph, J., Arab, A., Runnacles, J. and Eppich, W. (2016). [Learner-Centered Debriefing for Health Care Simulation Education](#). *Simulation in Healthcare: The Journal of the Society for Simulation in Healthcare*, 11(1), pp.32-40.
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September 2016

“The Theory of Evolution”



Expert Opinion : Prof Debra Nestel

*“I suspect I might have asked different questions
if I’d known more about my own worldviews.”*

The Article : "Reporting Guidelines for Health Care Simulation Research: Extensions to the CONSORT and STROBE Statements"

[Cheng A, Kessler D, Mackinnon R, Chang TP, Nadkarni VM, Hunt EA, Duval-Arnould J, Lin Y, Cook DA, Pusic M, Hui J, Moher D, Egger M, Auerbach M; International Network for Simulation-based Pediatric Innovation, Research, and Education \(INSPIRE\) Reporting Guidelines Investigators.](#)

Case Author :

- Dr Ben Symon

Expert Commenter :

- Prof Debra Nestel

Editors :

- Dr Victoria Brazil
- Jesse Spurr

First Published :

- 22/09/2016

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The Case :

Brad was furious.

That meeting should have been a triumph. All year he had worked hard at establishing a simulation program for the Intensive Care Unit. He had trained simulation faculty, found sponsorship to fund the purchase of two mannequins, converted the spare bed space to a sim lab and developed a curriculum for the junior doctors rotating through ICU. And today's presentation to the other consultants was supposed to be a celebration of how far the program had come.

But yet again, his snarky colleagues couldn't resist the temptation to cut him down.

"What's the evidence any of this works?" Dr Snythe had snidely asked. "As far as I can see, the educational research that's out there is a bunch of opinion pieces and inconsistently reported RCTs. With the money you got for those damn mannequins, we could have hired 2 more nurses to provide actual patient care!"

"What's the evidence you do anything besides drink coffee on your non clinical shifts?" Brad had wanted to retort, but fortunately his frontal lobe had engaged at that point.

Well he'd show them.

Brad had been collecting data for 12 months prior to rolling out the sim program. He was armed with a swathe of Likert scales and survey responses and results from the junior doctors Advanced Life Support assessments. With the help of a keen epidemiology student at the local university, Brad was going to reassess the junior doctors this year in the same format. While they continued to attend their regular education program, Brad was certain that his survey outcomes would be better this year, and he had the staff numbers to hit a pretty decent p value.

Given his experience in clinical RCTs, Brad was confident his reporting standards would be exemplary, and publication would be likely.

"Can't wait to see Synthe's face when I finally prove this." thought Brad.

Sometimes, success was the best revenge.

Discussion :

As simulation educators who see the fruits of our educational labours on a frequent basis, it can seem a foregone conclusion that simulation is an incredibly valuable teaching tool. But creating a strong evidence base to prove that has been a bigger challenge. For clinicians used to evaluating pharmaceutical RCTs, contributing to and evaluating simulation research requires a surprisingly different skillset. In August this year, Cheng et al published a series of standards and guidelines for reporting on simulation in research. The publication has been hailed as "[A Joint Leap into a Future of High-Quality Simulation Research](#)"² and as such is an important read for simulation educators, both for those planning to contribute to simulation research and those wishing to be able to critique and assess the published literature.

Here are some questions to get you started :

- What advice would you have for Brad about engaging in his first foray into simulation research? What do you wish you knew before you started on a similar pathway?
- What issues have you had interpreting simulation literature?
- Do you have a structured approach to educational literature? How has this paper effected your approach to critical analysis of simulation literature?

Article Summary :

"*Reporting Guidelines for Health Care Simulation Research: Extensions to the CONSORT and STROBE Statements*" is essentially a two-in-one paper that incorporates a new set of standards for reporting of Simulation Based Research (SBR), and also the process through which those standards were devised.

After establishing that "the quality of reporting in health professions education research is inconsistent and sometimes poor", the authors note the progress other health care research domains have made through two previous guidelines : the 'CONSORT' and 'STROBE' statements. ([The 'CONSORT' statement](#) is a minimum set of recommendations for reporting randomised trials, with [The 'STROBE' statement](#) being a similar checklist of items that should be included in reports of observational studies.)

The article then describes the process by which the extensions for SBR were created, which can be summarised as :

- Developing a steering committee of 12 experts
- Defining the scope of the reporting guidelines
- Identifying a consensus panel of 60 pre-eminent experts in SBR including the editors of multiple simulation journals
- Generating a list of items for discussion and pre-surveying the experts
- Conducting a 5 hour consensus meeting at the annual INSPIRE meeting in January 2015 involving 35 of those experts and 30 INSPIRE network members
- Drafting reporting guidelines, an explanation and elaboration document, then pilot testing the document and further revising it

In describing in great detail the process through which the extensions were created, the authors establish the authority from which they can argue these guidelines should be the new industry expectation.

They then present the guidelines themselves, in the form of 3 tables (which for the physician with a shorter attention span could be considered 'the meat' of the article and are important reading) :

- (1) Simulation Based Research Extensions for the CONSORT statement
 - For use in reporting of simulation based randomised trials
- (2) Simulation Based Research Extensions for the STROBE statement
 - For use in reporting of simulation based observational studies
- (3) Key Elements for Simulation Based Research
 - A particularly useful table for new simulation researchers, which gives more broad guidelines on targeted goals for SBR.

The article then closes after a critique of the methods used, an acknowledgement that the guidelines will not be pre-destined to fit every type of research that comes out, that future revisions will be required and that feedback is welcomed.

Expert Opinion: Professor Debra Nestel



Debra Nestel is Professor of Surgical Education, Department of Surgery, University of Melbourne and Professor of Simulation Education in Healthcare, Monash University, Australia. Debra is Editor-in-Chief, Advances in Simulation (www.advancesinsimulation.com), the journal of the Society in Europe for Simulation Applied to Medicine (SESAM). She is Programme Director for the Master of Surgical Education (Department of Surgery, University of Melbourne and Royal Australasian College of Surgeons), a programme designed for surgeons interested in advancing their educational practice. Debra co-leads the Master of Surgical Science, University of Melbourne – a programme designed for junior doctors interested in pursuing a career in surgery. She is an honorary professorial fellow at Imperial College, London and Graduate Faculty Scholar in the College of Graduate Studies at the University of Central Florida. Debra leads a national programme for simulation educators – NHET-Sim (www.nhet-sim.edu.au) and a state-based network in simulated patient methodology (www.vspn.edu.au). Debra has published

over 140 peer-reviewed papers in health professions education, published a book on simulated patient methodology (2015), on healthcare simulation (2017), has submitted a manuscript for an editing book on surgical education for release in 2018 and is working with colleagues to edit a book on healthcare simulation research for publication in 2018/19. https://www.researchgate.net/profile/Debra_Nestel

What advice would you have for clinicians about to start simulation research for the first time? What do you wish you knew before you started on a similar pathway?

For the first question, summary advice to clinicians about to start simulation research... learn about your worldview and theories, read a lot and around, build your research network and participate in discussions like this. Drawing on my work on the Graduate Programmes in Surgical Education, I usually direct students to the fabulous article by Roger Kneebone (2002) – *Total Internal Reflection: An essay on paradigms*. <http://www.ncbi.nlm.nih.gov/pubmed/12047663>. Roger describes the dominant positivist paradigm in which medical education is located and uses his own experience of becoming a surgeon and then an educator to argue for balance between paradigms. Although the article is about medical education rather than simulation, the messages are highly relevant. The notion that RCTs are the gold standard reflects a particular view of the world (a positivist/post-positivist one). Although RCTs answer important questions (i.e. *what* questions), personally, I find interpretivism and critical theory paradigms more appropriate to the questions that I like to ask in my own research (i.e. *why* and *how* questions). Exploring these paradigms and thinking really hard about where you sit relative to the questions you want to ask, is super important before getting started in research.

I edited a series of articles in *Clinical Simulation in Nursing* on theories that inform simulation practice and in introducing the series, wrote an overview of theories and worldviews to orientate readers (with Margaret Bearman who has contributed to this journal club). [http://www.nursingsimulation.org/article/S1876-1399\(15\)00053-5/abstract](http://www.nursingsimulation.org/article/S1876-1399(15)00053-5/abstract). I can send the article on ResearchGate on personal request through [this link](#).

Theories and worldviews also inform research practice. A forthcoming book chapter by Rola Ajjawi and Craig McIlhenny, *Researching in surgical education: An orientation*, in Nestel et al (Eds.) *Advancing Surgical Education: Theory, Evidence and Practice*, is fantastic. Another chapter by Rhea Liang offers her experiences as a surgeon undertaking educational research. So again, not necessarily simulation but the journey is similar. I wish I had read these materials years ago. Sorry the last two will not be available until 2017!

In response to the second question, I wish I had gained a deeper understanding of these paradigms before embarking on research. My doctorate crossed post-positivism/interpretivism and I used mixed methods to explore the impact and experiences of a simulation-based training programme on participants' knowledge, attitudes and skills – that was in the olden days!!!!

I suspect I might have asked different questions if I'd known more about my own worldviews.

As the Editor in Chief of *Advances in Simulation*, can you share an outline of your approach to assessing submitted simulation literature?

Advances in Simulation is a new and open access journal with a really large scope, which we may refine after our second year. We're just letting it find its own identity for now. As Editor in Chief, I am seeking to publish high quality articles on healthcare simulation. The question really taps into, what comprises *quality*? A big question and one that is, of course contested. The *Cheng et al* guidelines go some way to helping to improve quality for randomised trials and observational studies but as we have seen in the blog, it's still no guarantee. Besides, these are only two approaches to undertaking healthcare simulation research.

Probably the biggest consideration for quality is seeking “true” peer review. This itself is tricky since “true” peers can be hard to find given that manuscripts may have several different areas of expertise bundled into one – clinical discipline, simulation modality, technical content, methodological framework, methods, contextual relevance etc. Finding a perfect match in one person is tricky. So, Associate Editors usually seek at least 2 reviewers (in addition to their own expertise) with the breadth of expertise to make judgments about articles. It is not uncommon to have oppositional reviewers' comments. This is when an adjudicator may get involved, could be me, could be a member of the International Advisory Group or an expert in the “contentious” area.

There are many standards for reporting research! The Equator Network has useful guidelines <http://www.equator-network.org/reporting-guidelines/>. As reviewers we make selections obviously based on the manuscript and our own preferences. Like others, I'll also put in a plug for Table 3 from *Cheng et al* on what to report about the simulation activity that is the focus of study.

In my launch editorial, I share some thoughts about the journal and *quality*.
<http://advancesinsimulation.biomedcentral.com/articles/10.1186/s41077-015-0002-x>

What impact do you see this article having on the future of simulation research?

In addition to the ideas shared in the editorial by the Editors in Chief of the four healthcare simulation journals (<http://advancesinsimulation.biomedcentral.com/articles/10.1186/s41077-016-0026-x>), my biggest hope is that the guidelines will prompt researchers to think really carefully about the design of their research before getting started. Having Tables 1, 2 & 3 as reference points as you conceive of your research might lead to improved documentation of research processes. If your research does not reflect a randomised trial or observational studies, then review the reporting guidelines for the methodology and methods relevant to your approach.

Finally, the *reporting guidelines* are simply that – guidelines! So although they are important, and will likely have impact before, during and after the research has been done [and reported], I'd encourage researchers to be creative too. Research methods are not static. They have evolved and continue to evolve. New types of data are likely to emerge, new ways to capture/collect data, store and retrieve it, and of course analyse it, will likely lead to new approaches to reporting research too.

Debra Nestel

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Blog Contributors :

- Nick Argall, Jessica Stokes-Parish, Margaret Bearman, Adam Cheng, Chris Cropsey, Ben Symon, Vic Brazil, Gabriel Reedy

Summary of this Month's Journal Club Discussion :

Take home messages for this month's journal club could be :

- Adherence to guidelines will not guarantee quality research.
- Entering the world of Simulation Based Research can be bewildering and new researchers would benefit from :
 - o Reading widely (including Table 3 of the article)
 - o Participating in 'the learning conversations' that exist in Simulation Academia
 - o Setting realistic expectations of one's own early research contributions.
- The dominant paradigm that 'Quantitative Research is superior to Qualitative Research' is not necessarily the case in education based research, and shifting paradigms can be challenging for medical clinicians coached to 'produce numbers'.

Discussion of the Paper :

There was widespread agreement on the importance of the paper and an appreciation of its presentation for discussion. For educators newer to SBR such as Ben Symon and Chris Cropsey there was enthusiasm on the extensions' use as a checklist or framework to improve the quality of their own quantitative research, with Table 3 in particular being acknowledged as a very important, practical resource that could be used "as a blueprint of sorts".

Commenters who came from an academic SBR background also acknowledged the importance of the guidelines but used their experience to highlight the important truth that adherence to guidelines does not guarantee brilliant research. As Margaret Bearman put it, "*just because something is reported, does not mean it is of quality – it simply allows us to make judgements about quality through transparency of reportage.*".

Adam Cheng finally commented himself on his reflections on the paper and invited ongoing feedback on the extensions at <http://inspiresim.com/reportingnowavail/>, advising a revision is likely in 5 – 7 years.

Discussion of the Case :

Interestingly the case of 'Brad the resentful simulation educator' resonated strongly with many commenters, who agreed that while the negative emotions expressed in Brad's case were potentially destructive, Brad's passion and zeal for the benefits of simulation education was perhaps too identifiable for comfort. Despite their compassion, commenters reinforced that Simulation Education is an expensive, resource intensive exercise and that Brad and Simulation Culture in general have a responsibility to provide evidence of their validity. Brad was encouraged to make a more constructive approach to achieving acceptance of his program, including finding champions and allies within the hospital, and providing positive simulation experiences that will create good word of mouth.

Advice for newcomers to Simulation Based Research :

For clinicians embarking on first time simulation based research, the comments provided a rich series of resources to investigate and learn from. Multiple experienced researchers commented on 'what they wish they knew', with significant clinical pearls suggested.

Nick Argall advised "*If you're trying something that really is new, have an open mind about what outcomes it will produce. It may completely fail to deliver the expected benefit. It may be spectacularly successful at doing something unintended but desirable. It may also have undesirable side-effects.*".

Jessica Stokes-Parish suggested four key points : "*Ask yourself some questions, Check what's already out there, Get a mentor, No Data is No Data*". Her theme of knowing your own worldview and what you want to explore was echoed by Margaret Bearman and Debra Nestel in her expert commentary.

Multiple commenters such as Gabriel Reedy reported cultural struggles with moving medical professionals beyond "Qualitative Research is King", with Gabriel highlighting that "*it's dangerous for the field as a whole to slide into a very narrow view of what counts as research.*" He highlighted that this can even up limiting "*the kinds of questions we can even ask.*"

Multiple resources were suggested for extended reading, which have been included in our references section.

Acknowledgements :

Simulcast would like to thank the creators of the AliEM MEDiC series for the inspiration for the journal club's blog format and their ongoing support and contributions to the project.

Thankyou to Professor Debra Nestel, Editor in Chief, *Advances in Simulation*, for her expert commentary this month.

Thankyou to all commenters this month for sharing your thoughts and allowing us to learn from you.

References and Commenter Suggested Reading :

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October 2016

“An Act of Betrayal”



Expert Opinion : Assoc Prof Dan Raemer

“I have wrestled with the reasoning that learning is about being challenged, intellectually and emotionally versus the cherished value that I don't want to hurt people“

The Article : "Deception and Simulation Education : Issues, Concepts, and Commentary"

[Calhoun, Aaron W.; Pian-Smith, May C. M.; Truog, Robert D.; More](#)
[Simulation in Healthcare : The Journal of the Society for Simulation in Healthcare. 10\(3\):163-169, June 2015.](#)

Case Author :

- Dr Ben Symon

Expert Commenter :

- Associate Professor Dan Raemer

Editors :

- Dr Victoria Brazil
- Jesse Spurr

First Published :

- 26/10/2016

Simulcast Journal Club is a monthly/ series heavily inspired by the [ALIEM MEDIC Series](#).

It aims to encourage simulation educators to explore and learn from publications on Healthcare Simulation Education.

Each month we publish a case and link a paper with associated questions for discussion.

We moderate and summarise the discussion at the end of the month, including exploring the opinions of experts from the field.

The Case :

"Oh crap" gulped Danielle as she watched Dave rush out the sim lab and well past the debriefing room doorway. It didn't take an anthropologist to recognise that he was on the verge of tears.

It hadn't even seemed like a particularly difficult scenario, but it had clearly affected Dave more than she'd expected. His management of the PEA had been going fine, but he'd been thrown off balance when the confederate consultant arrived and told him the patient needed defibrillation. Usually the learners were clued in enough to speak up and stop the shock going ahead (which was kind of the whole point of the scenario, half the bloody pre reading was on speaking up for safety), but Dave had been swept up in proceedings and 600 joules later had finally realised what was going on.

"Get started on the debrief", Danielle asked the rest of the team as she pulled off her confederate wig and hurriedly followed Dave down the doorway. "I'll deal with this."

So much for her safe container.

Discussion :

As simulation educators, psychological safety is often considered a core component of our teaching paradigms. Yet at the same time, in the interests of both realism and specific learning objectives, we often incorporate an element of deception into our scenarios.

This month's article was originally stimulated by a debate around the use of deception at the International Meeting for Simulation in Healthcare in 2014, and set off a series of responses in *Simulation in Healthcare* regarding the pros and cons of deception.

Please enjoy the original article, and let us know your thoughts in the comments in below.

In particular :

- What's your position on the use of deception in simulated teaching?
- Has reading this article changed your approach to scenario design? If so, how?
- How do you maintain psychological safety while incorporating deception?

Article Summary :

Published in June 2015, the article "Deception and Simulation Education" introduces the 'emerging ethical controversy' of using deception in simulation education. The article's creation was stimulated by a debate at the International Meeting for Simulation in Healthcare (IMSH) in 2014 and the authors provide a summary of that debate and propose a framework for considering deception's effect on psychological safety for educators and future researchers.

The article starts with a case to consider (which was also presented at IMSH) involving a cardiac arrest simulation with a secretly placed confederate senior medical officer who attempts to take inappropriate control of a scenario and orders lethal medication that could lead to patient death.

Key arguments from those 'pro deception' side of the debate include :

- Deception is sometimes required to create psychological and emotional fidelity.
- Modest use of deception is less psychologically damaging than real life cases involving misinformation and miscommunication, and we have a responsibility to prepare learners for the ambiguities of real world practise.
- Damage to psychological safety could be mitigated by effective pre-briefing and debriefing, including well established ground rules and expectations.

Those who argued against the use of deception suggest :

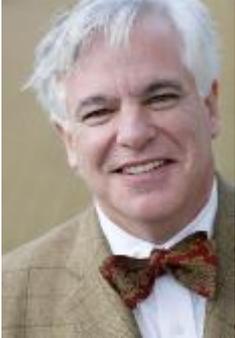
- "Deception constitutes a major relational transgression that can result in a sense of mistrust and betrayal between partners."
- Manipulation of an "already existing power differential between learner and teacher" could impact the level of psychological safety and therefore impair learning outcomes.
- Mistrust may spill over into the clinical environment.
- Learners' failure to challenge authority figures may lead to negative introspection about their 'character'

The article then discusses previous psychological research in deception, particularly the "Milgram Obedience Experiment" and the conflicting short term and longitudinal follow up of the psychological impact of that experiment on its participants.

After reflecting on previous evidence, the authors provide a series of tables and diagrams that outline a conceptual framework for deception, as well as a series of typically deceptive scenarios and potential ways to mitigate psychological harm. In particular, the importance of a well negotiated fiction contract that incorporates the possibility of deception is highlighted.

The article closes by asking if deception is ever truly needed, maintaining a neutral position and presenting both 'pro' and 'con' arguments, and then closing with anticipation regarding potential future research in the area.

Expert Opinion: Associate Professor Dan Raemer, Chief Curiosity Officer, Center for Medical Simulation



Dan Raemer has developed a special expertise in teamwork and crisis management over the past twenty years at the Center for Medical Simulation. He is particularly interested in the art of debriefing and is frequently called upon to facilitate multi-disciplinary teamwork sessions in a variety of specialty areas such as operating rooms, intensive care, emergency, endoscopy, and labor and delivery suites. In 2003 Dan received a unique award from the Harvard Department of Anaesthesia for "excellence in teaching". Using simulation as a research tool to investigate healthcare worker's behaviors and thought processes has been his most enduring passion. Dan has published work in these areas and has given numerous keynote addresses for specialty societies and other healthcare organizations on simulation as it has blossomed in the last several years. He has worked globally to establish the International Meeting on Medical Simulation, is the founding trustee and a Past-President of the Society for Simulation in Healthcare (SSH). In 2008, Dan received a "Lifetime Achievement Award" from SSH for his contributions to the field. He is also a Past-

President of the Society for Technology in Anesthesia. Dan's graduate degrees are in Bioengineering and he worked as a researcher for many years at Brigham and Women's Hospital and Massachusetts General Hospital in the Anesthesia and Critical Care Departments.

Dan's response to the case of the month :

When I was thirteen years old, the year I learned everything, I voluntarily attended a summer school enrichment class for budding writers (a fantasy I abandoned just a few years later!). The several teachers in this class were supposedly the best of the best and I recall being deeply engaged one morning in a classroom discussion about modern American authors. In the middle of the lesson we were interrupted by an announcement over the loud speaker. It was the school principal, the head of the program. She told us that an interesting observation had been reported by the Massachusetts Institute of Technology, MIT, about a large meteor that had been spotted out in space that was headed in the general direction of earth, but was not expected to enter our atmosphere. She would keep us posted of this exciting scientific discovery. The teachers seemed unamused by the intrusion into their curricular flow and we resumed our discussion. This was literature class, not science. Fifteen minutes later, the voice of the principal reported that the meteor had changed course and was actually expected to burn up in our atmosphere. Five minutes passed and she showed up in our classroom to interrupt and announce that the meteor had been seen in high-powered telescopes and was actually some sort of engineered metallic object with a sharp point... she would be calling our parents to come pick us up. I wanted to my mother worse than anything. I certainly wanted to cry (I have suppressed the memory whether I did or not). I was barely listening and was desperately trying to process the broad smiles of the teachers as we were told that the whole thing was a deception and that we would be studying the H. G. Wells classic novel, *War of the Worlds*. This was a simulation of the manner in which this book was introduced to the public as a radio show, narrated by Orson Welles, in 1938 and supposedly caused widespread panic (this has been later questioned). I have always considered this episode the pinnacle of my educational experience as a student. I clearly remember the episode, the story, factoids, and even the faces of the other youngsters in that classroom fifty-some years later. Perhaps it even influenced my career choice as an educator and a simulationista! Hmmm, I never thought about that before.

I have been the "confederate" (I don't like that term) in the case up for discussion. Also, I have played a role or been instrumental in some similar ones where deception was taken to an extreme. I have done them opaquely and with more transparency (I like the latter as a "best practice") On some days, I've left those cases with feelings of glee at the clearly excited learners who have reacted much like we do when a magician surprises us. On other days I have left those cases with a strong feeling of guilt and shame; feelings that have stuck with me through some fitful sleep at night and beyond. I have wrestled with the reasoning that learning is about being challenged, intellectually and emotionally versus the cherished value that I don't want to hurt people and push them to feel bad about themselves. Truth be told, I have discussed these issues with several of the authors of this article from time to time. Once I suggested a simulation deception to one of them, the ethicist, to which he replied that the idea sickened him! My feelings were hurt evermore.

I love stories because of the anticipation of when what seems to be will not be so, but I don't like the horror genre because they actually scare me. I love humor because it is about discovering the unexpected, yet I know that I have hurt feelings with a joke gone bad or "taken the wrong way". I relish simulations with a twist that challenges the learner that brings a smile in the debriefing, but I hate that same case when the learner becomes defensive and accuses me of tricking them. This is no easy dilemma, my friends.

Blog Contributors :

- Nick Argall, Ian Summers, Ben Symon, Clare Richmond

Summary of this Month's Journal Club Discussion :

There was a surprisingly consistent level of apprehension regarding deception in this month's journal club responses with all responders voiced moderate concern regarding deception's potential impact on psychological safety, multiple contributors sharing personal experiences and reflections on their emotional response to deception in sim, and most recommending at best very limited use of deception with an extensively fortified fiction contract that prepares learners for potential deception.

Nick Argall stated that *"the real-world challenges involved in practicing healthcare routinely involve misinformation, misdirection and miscommunication. If simulation is going to help people practice healthcare, then it must expose them to misinformation, misdirection and miscommunication."* Using the analogy of a stage magician, he argued that *"the damage of the betrayal does not come from lying, it comes from lying when your social contract does not explicitly permit you to lie. The first step towards psychological safety for the would-be deceiver is, therefore, to be absolutely explicit about the intention to deceive."*

Ian Summers cut to the chase with his response's opening position : *"Don't do it. Low gain, high risk and reasonable alternatives exist. Destroy trust and we lose the long game."* He then provided some specific examples of mitigation strategies, such as :

- An explicit 'deception contract' : *"Be prepared that members of your team may not act in ways that you agree with or that you might expect from what you know about them. We have been talking about (...insert challenging behaviour), so don't be too surprised if you deal with some in this next scenario. Is that OK by you?"*
- Removing roles in the debrief : *"We have been talking in the session about professionalism (conflict resolution/advocacy/graded assertiveness etc). You may have noticed that David was not the usual consultant you know and respect. He was playing a role. David can you explain to the group the role I asked you to play...."*

Clare Richmond advised that *"Creating a safe environment in simulation requires actions from the faculty before, during and after the simulation scenario."* She highlighted her experience from a SMACCForce Tactical Response Simulation that involved extensive written and verbal pre-briefs and psychological support for participants should a reaction occur during or after an intense simulation. She also discussed the importance of creating clear alternate identities for confederates to ensure clear barriers between real world roles and the simulation environments, noting *"I think its very important that to try and avoid caricature type confederates in simulations – archetypes being more authentic and realistic, than the stereotypical "cartoon-like" characters that I often see portrayed in scenarios. But by ensuring our confederates are not themselves – using different names, and yes often the fun costume, it helps keep the differentiation between themselves and others"*.

This lead to further discussion regarding the appropriate level of heightened or 'cartoon like' behaviour from confederates sometimes used in SIM, and a reflection on the impact of portraying character archetypes such as the 'arrogant surgeon' in maintaining "silos between our professional groups".



Journal Club Summary October 2016 "An Act of Betrayal"

Acknowledgements :

Simulcast would like to thank the creators of the AliEM MEDiC series for the inspiration for the journal club's blog format and their ongoing support and contributions to the project.

Thankyou to Dr Dan Raemer, Chief Curiosity Officer at Center for Medical Simulation for his expert commentary this month.

Thankyou to all commenters this month for sharing your thoughts and allowing us to learn from you.

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November 2016

“Dancing the Quickstep”



Expert Opinion : Dr Jane Torrie

“The fluidity and thinking on your feet is part of the joy”

The Article : "Thinking on Your Feet – A Qualitative Study of Debriefing Practice"

[Krogh, K.; Bearman, M.; Nestel, D.](#)

[Advances in Simulation \(2016\) 1:12DOI 10.1186/s41077-016-0011-4](#)

Case Author :

- Dr Ben Symon

Expert Commenter :

- Dr Jane Torrie

Editors :

- Dr Victoria Brazil
- Jesse Spurr

First Published :

- 01/12/2016

Simulcast Journal Club is a monthly/ series heavily inspired by the [ALiEM MedIC](#) Series.

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Each month we publish a case and link a paper with associated questions for discussion.

We moderate and summarise the discussion at the end of the month, including exploring the opinions of experts from the field.

The Case :

Nimali leaned back on the couch and gratefully took the glass of red from her husband's hand. "Thanks hun" she sighed, "It is definitely Wine O'Clock".

Joe paused the TV and turned to his wife, "So how was your big course roll out?".

"You know," she said, "It went pretty well overall. The feedback sheets were strongly positive, everyone seemed pretty chuffed when they walked out. But I guess it's my own performance I'm not happy with. I'm such a perfectionist and I just wish I had more experience. I mean, I did that simulation training a few years ago and I've gotten a lot of hands on practice, but it's just me doing it! I don't have any mentors or feedback on how I'm going, and I just wish I could see how others were doing it."

"Is this your way of saying we're going to IMSH next year?" asked Joe.

Nimali frowned. "I've already had the leave request denied unfortunately. I'll have to find some other way of hearing from the experts."

In the meantime however, there was some camembert and Netflix that needed her full attention.

Discussion :

A lot of clinical simulation educators work in isolated silos without extensive feedback or growth opportunity. While there is now wide availability of structured courses to provide a baseline level of skill for these educators, it is not unusual to be learning mostly 'on the job' through one's own reflection without a lot of access to experts in the field.

This month's paper from *Advances in Simulation* provides a structured and thorough review of reflections from a wide variety of simulation experts on their practice, and as such is a great paper to provide a framework to approaching reflection on one's own professional development. It is also a masterwork of qualitative educational research.

Please enjoy this open access paper, and leave your thoughts below.

To get you started with some questions :

- What reflections has this paper prompted about your own simulation practice?
- What strategies would you suggest for isolated educators to connect to experts in the field and other fellow 'coal face' educators?

Article Summary :

Aiming to explore potential dissonance between theoretical debriefing models and actual clinical practice, 'Thinking on Your Feet' provides an elegant summary of 24 interviews of peer nominated expert debriefers throughout Australia. The authors structure their analysis of those interviews through four primary categories (Values, Artistry, Technique and Development) and submit a "practice development triangle" as a framework for reflection on professional development.

The authors initially describe their motivation for the study, the main thrust being that *"the literature provides extensive and valuable guidance on how to approach debriefing as well as an understanding of the associated role of briefing. What is less well known is how educators debrief in actual teaching environments, with significant and occasional challenges such as limited time, disinterested learners and failing technology."*

Study participants were selected from 66 peer nominated experts with selection criteria focused on multiple nominations, diversity of affiliation, diversity of clinical/educational background and geographic location with an emphasis on country wide representation. This eventually led to 24 experts consenting to participation in the study, with one interviewer conducting 24 phone interviews which were subsequently transcribed and categorised / analysed.

In providing a detailed description of their process of analysis, Krogh et al provide clinical educators with a window into the structure of high quality qualitative research. They describe all 3 researchers independently coding a subset of transcripts and then jointly developing a framework of higher order themes through which all 24 transcripts could be coded by a single researcher. They then considered the higher order themes in more depth by re-analysing 8 interviews through 'a more interpretive lens'. After that they created a summary of each code with descriptive quotes, which were then grouped into four major categories. The authors then performed a critical review of their data against those categories, themes and subthemes in order to ensure their findings were truly representative of their actual data.

The heart of the article then explores the themes identified, such as "blended debriefing", "thinking on your feet", "creating a safe environment". The exploration of those themes is noted for its balance of depth and brevity, and defies further summary here. It is well worth an extended read.

In providing a conclusion, the authors propose a "practice development triangle" that incorporates four components : Techniques, Artistry, Values and Development, proposing that reflection on those 4 components would be of value in faculty and practice development.

Expert Opinion: Dr Jane Torrie, Director of the Simulation Centre for Patient Safety at the University of Auckland



Dr Jane Torrie has been Director of the Simulation Centre for Patient Safety (SCPS), University of Auckland, for 10 years and continues to work part time as a specialist anaesthetist at Auckland City Hospital. Assisting faculty develop debriefing skills formally and informally is a key part of her work at SCPS and elsewhere, for example the NZ Simulation Instructor Course delivered regularly in Wellington, and debriefing workshops over some years at SimHealth. She is a former Chair of the New Zealand Association for Simulation in Healthcare. Her interests are human factors science in healthcare, and she is a part of a research team particularly interested in communication within teams.

Jane’s response to this month’s article:

My initial reaction on reading this article was feeling reassured, in that what I strive for and teach to others seems so similar to this distillation. I would hope that a lot of us debriefers are like Nimali in *The Case*, looking for reassurance that our practice is both up to date and likely to be effective. Like Nimali, we know that end-of-session participant reactions are almost always positive – after all, they have had some small-group, personal interactions supporting their development. Actual learning with change in behaviour and subsequent improved outcomes are what we aim for but can much less frequently assess.

Furthermore, immersive manikin-based simulation with debriefing is a very resource intensive educational technique – we want our debriefs to be more than ok, we want participants to extract the maximum possible benefit.

The commonalities in approaches reported by Krogh’s expert debriefers may be parallel evolution and/or may reflect the sampling method – nominees were presumably all debriefers already engaged with the simulation community, with a shared “community of practice”. (I would have liked to see “saturation” reported on in a qualitative paper – were new themes and subthemes still appearing in the last interviews, or was saturation reached much earlier?)

As the interviewees represent esteemed practitioners to whose standards we aspire, it is reassuring to see the themes and subthemes align with recent literature on best practice. These guidelines are primarily drawn from general educational literature, as what constitutes effective debriefing remains wide open for research. For example, I looked for any more publications since a 2015 systematic review¹ was published but did not find any more “*empirical studies where some aspect of debriefing after simulation using a high fidelity manikin was varied in a controlled manner and where at least one non-technical performance outcome was reported*”. In the review (which did exclude papers reporting only technical performance outcomes), only 7 papers met analysis criteria and of these just 1 was considered to be of high quality: Cheng’s paper on use of a script vs no script by novice debriefers².

Assuming we are actually esteeming appropriate practice, what’s the best way to develop this? Cheng et al³ identify this as another important unanswered question. Themes of peer mentoring and continuing transformation in Krogh’s paper and *The Case* particularly resonated with me. I can’t agree more that having another person listen to your debrief and subsequently discuss with you is of great value. For those who struggle to get peer review, routine agreement by participants to e-sharing of simple audio files with other debriefers is a good QI strategy. Whether expert or novice, structured observations using a tool eg OSAD⁴, DASH⁵ and then focussed discussion with the debriefer is always illuminating.

Artistry? Yes, it resonates, the fluidity and thinking on your feet is part of the joy after an intensive few years debriefing. What interests me as a practical person is how to support the novice and the numerous occasional debriefers. I get a little anxious that “artistry” might be interpreted as free form, whereas there are signals that more structure is associated with better (participant) performance^{2, 6}. Novices often start with “we are just going to have a little chat about the scenario” but after some practice and peer feedback realise debriefs are not an informal chat but rather a special planned conversation with explicit rationale behind the structure and exact wording.

Krogh’s article presents supports a pleasing model for approaches to debriefer development, and I will be sharing it along with the strong recommendation to belong to the sim community: we all need to “get out more” at every opportunity.



Journal Club Summary November 2016 "Dancing the Quickstep"

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Blog Contributors :

- Vic Brazil, Ben Symon, Chris Cropsey, Rowan Duys, Ian Summers
- Margaret Bearman

Summary of this Month’s Journal Club Discussion :

There was universal praise for the article this month as both an insightful commentary on the current state of simulation education delivery and discussion. The discussion somewhat mirrored that of the paper with focus around the four key categories of “Values”, “Techniques”, “Artistry” and “Development”.

“Values”

Vic Brazil opened the discussion by arguing that the article’s most resonant message for her was “*that debriefing is about principles and values, not formats.*”. Ben Symon acknowledged that as a newer educator the paper had stimulated internal reflection regarding his educational philosophies and clinical practice, and a realisation that this was previously an easy blind spot to overlook.

“Artistry” and “Techniques”

Multiple responders, particularly Chris Cropsey found the framing of debriefing as ‘artistry’ rather than a procedural science to be a liberating concept. He argued that in acknowledging the ineffable nature of true artistry he was more able to allow himself the freedom to work more fluidly between debriefing formats and rise above a more conscribed ‘recipe’ like structure to debriefing.

“Development”

Several commenters such as Rowan Duys echoed the experience of ‘the isolated educator’ described in the case study. He described his experiences setting up a new simulation program in South Africa, and the challenges of faculty development that he has experienced in doing the same. The paper was considered a strong baseline to frame one’s own professional development around.

Ian Summers joined the discussion expressing interest in a similar paper looking more specifically challenging interview questions, such as “*What are the weird things you do in debriefing*” or “*Things you do that maybe you shouldn’t*” as a way of potentially unmasking some self reporting bias. There was also acknowledgement from multiple responders regarding the challenges of critiquing a qualitative paper when coming from a medical background biased towards RCTs.

Finally one of the authors, Margaret Bearman voiced appreciation that blog participants found the article accessible, and ending with more questions : “*How do we teach people to recognise and promote values which underpin learning? How do we holistically assess something like artistry?*”.



Journal Club Summary November 2016 “Dancing the Quickstep”

Acknowledgements :

Simulcast would like to thank the creators of the AliEM MEDiC series for the inspiration for the journal club’s blog format and their ongoing support and contributions to the project.

Thankyou to Dr Jane Torrie for her expert commentary this month.

Thankyou to all commenters this month for sharing your thoughts and allowing us to learn from you.

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February 2017

“Would you like fries with that?”



*“Communication is a symptom/outcome
of complex human relationships” - Vic Brazil*

The Article : "Communication in interdisciplinary teams : exploring closed-loop communication during in situ trauma team training"

Härgestam M, Lindkvist M, Brulin C, et al

BMJ Open 2013;3:e003525. doi: 10.1136/bmjopen-2013-003525

<http://bmjopen.bmj.com/content/3/10/e003525>

Case Author :

- Dr Ben Symon

Editors :

- Dr Victoria Brazil
- Jesse Spurr

First Published :

- 26/03/2017

[Podcast Link](#)

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The Case :

David ate guiltily in the dark of the McDonald's car park. The smell of salt, sugar and carbs wafted through his car, and the tension in his shoulders began to release as the raging hunger of a long evening shift without a meal break drifted away. No matter how much he swore to eat healthy, by midnight his frontal lobe was too drained to avoid that drive thru.

"Besides" he thought, he had just realised something interesting.

McDonalds drive thru attendants are much better at Closed Loop Communication than health care professionals.

He replayed the conversation in his head again, he had ordered the meal, she had checked what he'd ordered, there was a visual display of his order on the drive thru screen, he'd confirmed his order and she'd told him it would be available soon. It was textbook perfect. Call out. Check back. Confirmation. Completion.

"How do they do it so well?" he thought.

Maybe people get angrier when pickles turn up on their double cheeseburger than when we give their grandma the wrong drug? The world is a strange place when we can't do something so simple when it's critical, but we do it so well when the outcomes are meaningless.

"This demands more research." he thought as he turned his car keys and backed out the car park.

"I'd better come back tomorrow."

Discussion :

The principles of Closed Loop Communication are frequently taught on Simulation based educational courses.

Despite it being a frequently echoed important CRM principal, take up in true crisis situations appears anecdotally variable.

This open access BMJ article from 2013 provides a fascinating look at the uptake of Closed Loop Communication in the Simulation environment, and whether previous involvement in CRM/Trauma courses increases the "Relative Risk" of using Closed Loops.

What are your thoughts on the article and its look at how sim teams communicate?

How do we truly get our health care teams closing the loop?

What strategies have you found useful in your practice?

Article Summary :

After establishing the importance of closed loop communication and providing a model for its optimal form, the paper provides an analysis of verbal communication between multidisciplinary team members in a series of recorded, insitu, trauma simulations in a hospital in Northern Sweden. In total 16 teams were successfully recorded involving 96 participants in total from surgical, anaesthetic and medical backgrounds.

Participants were shown a video prior to the scenario that emphasised the importance of communication in critical care teams and use of closed loop communication.

Communication was transcribed and categorised as either 'Call Out' (CO) or 'Closed Loop Communication' (CLC) and analysed to assess trends for multiple demographics :

- Profession
- Gender
- Age
- Years in Profession
- Being Scandinavian or Non Scandinavian
- Previous attendance at a structured trauma course or simulation training
- Previous Trauma Experience

In addition, group leadership styles were analysed by assessing communication strategies used (coercive, discussing, educating and negotiating) and categorised into 'authoritarian leadership style' or 'egalitarian leadership style'.

While there is a lot of detail to the data provided, particularly pertinent findings were :

- On average there were 20 'call outs' compared to 2.8 'closed loop communications' per team
- Those with Scandinavian background had a significant increase in frequency of CLC (RR = 4.46)
- Egalitarian leadership style was associated with an increase of frequency of the team members use of CLC (RR = 1.14)
- Authoritarian leadership style was associated with a decrease of CLC frequency (RR = 0.85)
- Trauma teams with previous experience of participating in trauma team training with patient simulators did not use CLC more frequently than team members with no such experience
- Participation in more than 2 structured trauma *courses* significantly increased the use of CLC (RR=3.17) compared with those with no experience

As the author's write : "*Apparently there seems to be a gap between evidence-based knowledge in using communication to obtain safety and practical implementation of the communication model in team training.*" .

Summary of this Month's Journal Club Discussion :

Blog Contributors :

- Jessica Stokes-Parish, Ian Summers, Rowan Duys, Ben Symon
- Vic Brazil, Nick Argall, Simon Wilson, Suneth Jayasekara

Discussions by our Journal Club responders tended to explore a couple of primary topics :

1. **Cultural backgrounds influence team dynamics**
2. **Non verbal communication is important but difficult to measure and under-reported in this article**
3. **Teaching Crisis Resource Management does not necessarily translate into real world outcomes**

Overall the group very much echoed the article's finding that cultural background played a part in team coherence. A number of responders such as Ian Summers and Rowan Duys explored their own cross cultural challenges during a resus, and this was also contextualised in regard to some recent controversy involving college assessment of communication ability in Australian Emergency Medicine candidates. Rowan candidly shared his own experience in a multi-lingual environment, acknowledging that sometimes *"It makes teamwork very difficult in a crisis"*.

Multiple journal clubbers wanted more detail regarding the article's analysis, with particular concerns that there was a lack of data regarding non verbal communication. Ian Summers was keen for information on whether non verbal communication was transcribed, while Simon Wilson was curious as to what sort of team identification was used, highlighting the benefits of first name use in a crisis. Vic Brazil and Suneth Jayesakara challenged the notion that 'more closed loops always = better communication', with Vic arguing that balance between signal and noise is critical too, and also questioning how to quantify a *"clinically significant difference in number of CLCs"*. There was however widespread appreciation for the findings that egalitarian leadership style was associated with increased CLCs.

The fact that the paper appeared to confirm that teaching CRM doesn't necessarily translate to clinically significant CRM use was acknowledged with vexation but not much surprise. Multiple solutions were postulated, including the need to clinically practice CRM on a day to day basis to achieve expertise and using simulation as a tool to create cultural change within a hospital. Vic Brazil proposed that *"Communication is a symptom/ outcome of complex human relationships. The 'skill' element is only as good as the ability to overcome challenges inherent in the socio-cultural context."*, proposing that in order to improve this, teaching needs to *"stop trying to hammer in 'recipes' and explore barriers as much as we give tools"*.



Journal Club Summary February 2017 "Would You Like Fries With That?"

Acknowledgements :

Simulcast would like to thank the creators of the AliEM MEDiC series for the inspiration for the journal club's blog format and their ongoing support and contributions to the project.

Thankyou to all commenters this month for sharing your thoughts and allowing us to learn from you.

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1. Härgestam, M., Lindkvist, M., Brulin, C., Jacobsson, M. and Hultin, M. (2013). [Communication in interdisciplinary teams: exploring closed-loop communication during in situ trauma team training.](#) BMJ Open, 3(10), p.e003525.
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March 2017

“Coffee, Checklists and Self Flagellation”



Expert Opinion : Assoc Prof Stuart Marshall

*“Training with cognitive aids is crucial.
Nobody will remember to use them if they
haven’t already trained with them”*

The Article : "Helping experts and expert teams perform under duress: an agenda for cognitive aid research."

Marshall, S. D. (2017)

[Anaesthesia, 72: 289–295. doi:10.1111/anae.13707](https://doi.org/10.1111/anae.13707)

Case Author :

- Dr Ben Symon

Expert Commenter :

- Dr Stuart Marshall

Editors :

- Dr Victoria Brazil
- Jesse Spurr

First Published :

- 29/03/2017

[Podcast Link](#)

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The Case :

Nimali and Cath sat on the hospital balcony and clutched their coffee flasks in the cold morning air, as they had done together for the last 3 years. Handover was in 15 minutes, but Nimali knew that with her upcoming conference presentation a week away this was likely the last chance she'd have to catch up with her friend before then. And she had sensed that something was wrong.

"The truth is," Cath sighed, "I'm ashamed."

"We had this kid last week come in in asystole. I wasn't team leading, but as the new consultant on the block I wanted to help out. I got asked to do CPR, so I did CPR... I did continuous chest compressions for 2 minutes, with great swaps with Brad, and together we kept good quality going CPR going for about 15 minutes.

But when ICU came down, they asked me whether the patient had a pulse. And I realised for the last 15 minutes we'd been giving CPR without even a pulse or rhythm check."

She stared out at the traffic below for a while before continuing.

"I'm the consultant. I teach Advanced Paediatric Life Support. I teach on Paeds BASIC. I've been doing this for 10 years. The next kid who comes in with asystole might have me in charge, team leading. But when this really sick kid actually came in, everything I'd learned, everything I'd taught, it all went out the window. It's made me think that deep down, maybe I'm just not that good at this."

Nimali put her hand on Cath's shoulder and gave a wry smile. It was company and a safe reflective space that her friend needed now, but the educator in her just couldn't stay quiet.

"Have you read the Checklist Manifesto?" she asked.

Discussion :

Cognitive Aids are often recommended by Simulation Educators as important tools in a resus, but uptake at many hospitals is scattered at best.

In his editorial in 'Anaesthesia' in November 2016, Dr Stuart Marshall provides an overview of current evidence around Cognitive Aids, identifies current knowledge gaps in the research and proposes a series of principles that should underline future research.

In doing so he provides not only important information for future researchers, but also a thorough overview of the principles behind Cognitive Aids in healthcare for clinical practitioners.

For our Journal Clubbers this month :

- If you are involved in clinical research, what points have you found pertinent in reflecting on your own study designs?
- If you are primarily a clinician, how have you found the implementation of cognitive aids in the workplace? What's worked for you? Has this article changed your thoughts or approach to them?

Article Summary :

In “*Helping experts and expert teams perform under duress: an agenda for cognitive aid research.*”, Dr Marshall provides a compelling overview on cognitive aids (CAs) and the research behind them.

The article begins by establishing current evidence for CAs in emergency situations, primarily arguing that “evidence from studies from anaesthesia, and emergency medicine have shown that displaying cognitive aids during emergencies reduces omissions, time to perform tasks and improves team skills, communication and performance in most instances.”. While the existence of some studies showing no improvements in crises with CAs is acknowledged, Dr Marshall argues that this is related to education on the tool or poor design of the tool itself.

He then examines current knowledge gaps and issues in cognitive aid research including :

- That clinical uptake of CAs is far less than we would anticipate, making investigation into the barriers against uptake important.
- The importance of orientation to the tool itself and the importance of “simplicity of design” for a tool to be used during stress.
- The difference between complex ‘foundational tools’ that teach management in depth vs ‘implementation tools’ that provide a concise structure to resuscitation.

The article then provides a variety of strategies to ensure appropriate streamlining of CA design, particularly around which items to include. Using examples from the development of the COVER ABCD acronym and the ANZAAG Anaphylaxis cognitive aid, he describes the identification and reworking of barriers to uptake.

Following this, Dr Marshall provides a series of discussion points regarding the implementation of CAs in context including :

- Keeping them closely related to nearby required equipment
- Pros and cons of smartphones CA storage
- Improved use with linear rather than branching algorithms
- The existence of a validated Cognitive Aid in Medicine Assessment Tool
- Integration into existing technology

Finally the article ends with a set of “principles for future cognitive aid research” in Table 3, which is a particularly useful read for both preparing future research and assessing current papers.

Expert Opinion: Dr Stuart Marshall



Stuart is a practicing anaesthetist, simulation educator and researcher with interests in Patient Safety and Human Factors / Ergonomics. He has served on the Australian Society for Simulation in Healthcare (ASSH) executive committee and the Victorian Simulation Alliance (VSA) board and is an active reviewer for Anaesthetic, Human Factors and Simulation journals and conferences. He is the convenor of the 7th International Clinical Skills Conference in Prato, Italy in 2017 and Associate Editor for the Advances in Simulation journal.

His research includes investigation of the effects of cognitive aids on team functioning during emergencies and on simulation as an educational technique to teach patient safety and improve patient and health worker outcomes. He has developed several innovative patient safety courses for both undergraduate and postgraduate students, and units for Masters courses in Perioperative Medicine, Health Professional Education, and Health Service Management.

Stuart’s response to this month’s article:

Thank you for the invite to comment and indeed thank you for choosing my paper for the journal club!

The case describes a situation that is perhaps more common than we think- an emergency where not everything that should have been done, was actually done. Why? Well unfortunately we all have limited brain-processing capacity that becomes further limited in stressful situations (1). Not only that, but (obviously) with situations we don’t see very often, we haven’t had chance to practice and remember all of the steps in order – even when we have access to regular simulation training! Cath did her best in the situation she found herself in, but not surprisingly she forgot one part of an extremely complex and stressful procedure.

Of course, there is another complicating factor here; that we are almost always part of a larger team in these circumstances. So added to the complexity of having to remember the actions to undertake, she had to process how to assign them to team members, monitor how the team was coping and adapt the team roles and goals to any changes in circumstances (2).

So how can we cement a team in an emergency whose members often don’t know each other, and remember all of the tasks of a complex emergency? The answer of course is having a cognitive aid (3). Interestingly, the book that has kick started the interest in cognitive aids, “The Checklist Manifesto” has very little on emergency cognitive aids (except arguably one case where the checklist failed- the landing on the Hudson River by Sullenberger and Skiles) and concentrates almost solely on routine events (4). Theoretically cognitive aids should be particularly useful in emergency situations where cognitive demands for both teams and individuals most markedly outstrip the resources that are limited in exactly the situation. There is a developing literature showing that cognitive aids are beneficial for individuals to remember items to complete (5) to improve their team behaviours (6), and to improve teamwork in general (7). Of course, there’s a problem though – it needs to be simple enough to use with those limited cognitive resources.

In order for it to be used the cognitive aid must be situated where it can be seen and accessed, it must be simple enough in its design to be able to be used when the user is stressed and the team members must be familiar with it (8, 9). Unfortunately, the latter two are often not well thought out. The design is often undertaken by committee with everyone wanting their input and particular soap box issue accounted for leading to overly complex material and (inevitably) a shrinking font size or growing paper size. Occasionally designs are undertaken by an enthusiastic clinician with a laminator. Some of these are good if basic design principles are applied and too much colour is avoided, but might lack the key information for the crisis. As noted in the article a specific human factors design process is ideal. Identifying the commonly missed steps or important information such as doses and integrating it with other design elements in the environment, such as kit dumps, or colour coded Broselow tape and draws.

Training with cognitive aids is crucial. Nobody will remember to use them if they haven’t already trained with them. All too often I’ve seen team leaders in simulation pick up cognitive aids and immediately put them down in disgust because they feel it’s only adding to their cognitive workload. Simulation training with the cognitive aid and good design (based on simulation testing) should act as reminders to help task completion and team allocations. One of the team members should be tasked with reading the card out, as evidence now suggests improved team function improves with this structure. In Cathy’s case this might reasonably have been the scribe during the resuscitation, standing next to and prompting her.

Summary of this Month’s Journal Club Discussion :

Blog Contributors :

- Suneth Jayasekara, Ben Symon, Andy Tagg
- Ian Summers, Simon Wilson, Stu Marshall
- Vic Brazil, Rowan Duys

Discussions by our Journal Club varied between responses to the article itself and general reflections and experience sharing regarding cognitive aid design and implementation.

There was strong consensus that cognitive aid design is particularly vulnerable to ‘death by committee’ or [‘The Homer Simpson Car Conundrum’](#) . Commenters frequently identified design flaws in the CAs in their workplace, but this was also contrasted with reflection from Simon Wilson, Ian Summers and Stu Marshall regarding streamlined and efficient CAs such as ‘the vortex’. In exploring the reason for CA bloating, it was acknowledged that different clinicians also appear to have different needs from cognitive aids, with Ben Symon and Rowan Duys discussing the challenges of Cognitive Aid design for “once in a career” events that require rapid intervention but a significant amount of information.

There was appreciation of the article’s advice regarding cognitive aid design and implementation. Particularly its emphasis on the need to create streamlined, efficiently designed CAs and for in situ testing and data capture regarding their use. Vic Brazil and Ben Symon liked the fact that the article had forced them to challenge their preconceptions regarding cognitive aid function and use, with Vic mentioning she was *“forced to realise that I use checklists a lot of preparation in avoiding crises eg RSI checklist, procedural sedation, but less often when really stretched with a crisis.”*

There was debate regarding cognitive aid use in critical emergencies vs routine situations, with Suneth Jayasakera arguing that *“In emergency medicine where I work, I think it is most useful not necessarily for the crisis situation, but for critical procedures involving multiple steps, where missing any of the important steps could lead to a bad outcome”*. Stuart Marshall disagreed, arguing that in *“‘High Acuity Low Occurrence’ (HALO) situations like clinical emergencies we have limited capacity to think of the multitude of important items that we shouldn’t miss.”* Most commenters identified an RSI algorithm in their workplace, but other checklists and cognitive aids appeared more rarely in discussion.

Acknowledgements :

Simulcast would like to thank the creators of the AliEM MEDiC series for the inspiration for the journal club's blog format and their ongoing support and contributions to the project.

Thankyou to Dr Stuart Marshall for his expert commentary this month. This month's article was also inspired by an original twitter conversation started by Rowan Duys regarding CA research to which multiple journal club participants replied.

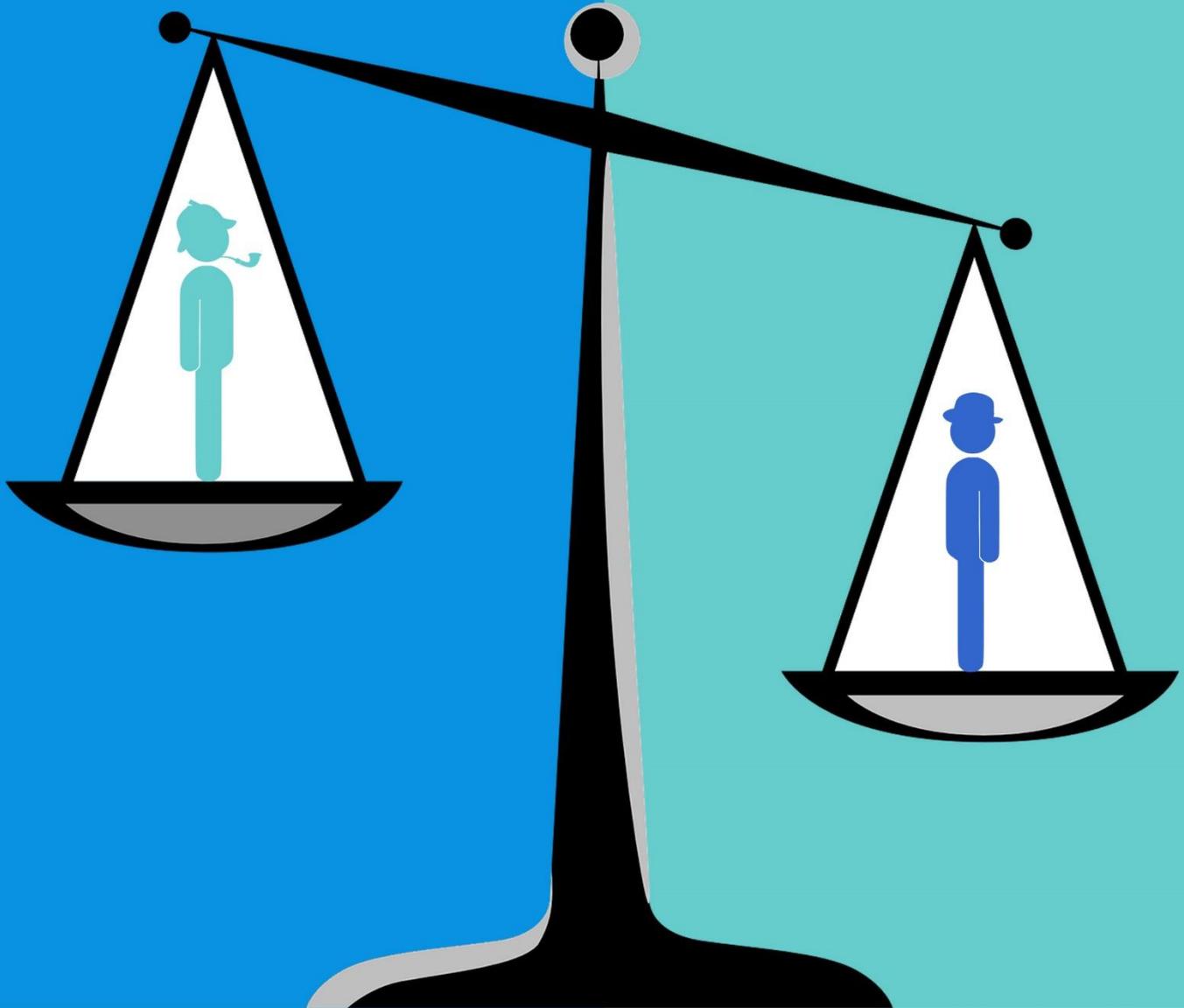
Thankyou to all commenters this month for sharing your thoughts and allowing us to learn from you.

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April 2017

“Hello, Old Friend”



Expert Opinion : Dr Adam Cheng

*“Uncovering frames is one thing.
Identifying, understanding and addressing them
is a whole different thing”*

The Article : "There's No Such Thing as Nonjudgmental Debriefing: A Theory and Method for Debriefing with Good Judgment"

Rudolph, J; Simon, R; Dufresne, R; Raemer, D (2006)

[Simulation in Healthcare: The Journal of the Society for Simulation in Healthcare., 1\(1\):49-55, Spring 2006](#)

Case Author :

- Dr Ben Symon

Expert Commenter :

- Dr Adam Cheng

Editors :

- Dr Victoria Brazil
- Jesse Spurr

First Published :

- 29/04/2017

[Podcast Link](#)

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The Case :

Nitin closed the door of the debriefing room as his fellow trainees filed out. It had been the third debrief of his Simulation Fellowship and with his consultant Brad's mentoring he was getting the hang of the basics, but today's scenario had left him feeling frustrated.

"I'm annoyed at them." He said, "They handled that case badly but they kept saying things went well! I don't understand how they couldn't see what a disastrous resus that was!"

Brad leaned back in his chair and looked at Nitin thoughtfully, "Who do you think let them off the hook?" he asked.

Nitin paused. "Luke was team leader. He should have had a better handle on things, but he kept defending the rest of them. Luke should know better, he's got the same experience as me."

"Who else let them off the hook?" Brad asked again, an enigmatic smile forming on one half of his lips.

Nitin frowned. "Sabrina made several errors but she just blamed the simulation environment."

"Nobody else?" Brad asked, and after a minute's reflection Nitin's heart sank as comprehension dawned.

"Oh crap." He said. "It was me. I let them off the hook. They're my colleagues, I didn't want them to think I felt 'above them'. So I didn't acknowledge what I saw. I was too focused on being nice but in doing so failed to meet their learning objectives". He sighed. There was still so much to learn.

Brad got up and walked over to the bookshelf in the corner of the room. He pulled out a dusty journal that must have been at least 10 years old. "There's something you need to read." he said. Nitin was surprised by Brad's expression. was looking at the article like it was an old and dear friend.

Discussion :

This month we are looking at a seminal article in simulation education and an article that is likely at the top of many reading lists for new simulation educators. First published in 2006 in Simulation in Healthcare's Spring Issue, Rudolph et al's article has had a profound effect on simulation education throughout the world. For those of you who've never read it before, particularly new Simulation Fellows or Junior Educators, please let us know your thoughts!

For the senior educators in our field, it has been 11 years since this ground breaking article was published. What are your thoughts now on the article itself and where simulation education has evolved from 2006? Is advocacy and inquiry still the primary tool in your debriefing set?

Article Summary :

In "There's No Such Thing as Nonjudgmental Debriefing: A Theory and Method for Debriefing with Good Judgment", Jenny Rudolph, Robert Simon, Ronald Dufresne and Daniel Raemer report on their "experience with an approach to debriefing that emphasizes disclosing instructors' judgments and eliciting trainees' assumptions about the situation and their reasons for acting as they did." In doing so, they published a game changing paper that brought the concepts of 'Advocacy and Inquiry' and 'Debriefing with good judgment' to the world of medical simulation education.

The article begins by arguing that a person's underlying assumptions and beliefs or 'frames' will influence their actions in a crisis, which in turn will lead to finite results. The authors advocate that mistakes are often the result of seemingly rational actions and can be better understood by exploring a candidate's underlying assumptions around their decision.

The article then highlights two common styles of medical teaching / debriefing, described as :

- **Judgmental Debriefing** : Direct feedback from the instructor about what the candidate's mistakes were, potentially involving harsh criticism and learner shame but with clarity about the instructor's concerns and advice.
- **Non Judgmental Debriefing** : Attempting to avoid harsh criticism and preserve learner esteem by employing a 'compliment – criticism – compliment' sandwich, or by employing a socratic approach by asking 'guess what I'm thinking' questions without acknowledging mistakes, potentially implying that mistakes should not be acknowledged or are shameful.

The article then offers a solution to the failures of the previous two debriefing styles by offering a new approach, '**debriefing with good judgment**'. In essence the approach frees an instructor to express their concerns about learner actions by using an observation with 'advocacy and inquiry' in order to :

- Raise their concerns for honest discussion, thus role modelling that it can be socially acceptable to discuss error
- Provide their expert opinion in a clear and unambiguous manner but from a stance of genuine curiosity about the learners mindset and approach to the problem
- Explore the learner's underlying frames and decision making pathways that lead to the actions and results of the scenario
- Actively problem solve with the group an alternate frames and actions that might lead to improved patient outcomes

The article then concludes with acknowledging two scenarios where 'debriefing with good judgment' may be an unsuccessful technique (when working with a trainee who has genuine ill will or malicious intentions, and in some cultures where deference to senior educators makes exposing frames very difficult). They also provide some additional reflections on their experiences when debriefing, including :

- "it is vital that instructors ask questions that, like an anthropologist, help bring to the surface and clarify the invisible sense-making process, the cognitive frames and the emotions that governed the trainee's actions"
- "instead of treating their own judgments or concerns as the single "truth," they [instructors] test their views against the trainees' view of the same issue."

Expert Opinion: Dr Adam Cheng



Adam Cheng is Director of Research and Development, KidSIM Simulation Program at Alberta Children's Hospital and Associate Professor, Department of Paediatrics at the University of Calgary in Calgary, Canada. Dr Cheng oversees simulation educator faculty development at the national level for the Royal College of Physicians and Surgeons of Canada. He is chair and co-founder of the INSPIRE network, an international research simulation collaborative with over 120 institutions, focused on improving outcomes of critically ill children. He has served on the Board of Directors of both the Society for Simulation in Healthcare and the International Pediatric Simulation Society. He has provided leadership for various international simulation conferences and delivered lectures and workshops at

conferences around the world. Dr Cheng is established researcher with interests in cardiac arrest, cardiopulmonary resuscitation and debriefing, and has conducted numerous multicenter simulation-based research trials. He has edited three textbooks, authored the 2010 Pediatric Advanced Life Support Instructor training manual, and co-authored the Education chapter of the 2015 American Heart Association Cardiopulmonary Resuscitation guidelines.

Adam's response to this month's article:

I love the choice of this classic debriefing paper for journal club! This paper has informed the adoption of Debriefing with Good Judgment by an **entire generation** of simulation educators and the messages conveyed by Jenny Rudolph and her colleagues in the article still ring true over a decade after publication.

Debriefing with Good Judgment is a very powerful approach to facilitating debriefings, whether after simulation events or clinical events. Rooted in reflective practice, the facilitator aims to understand learner frames, or the underlying rationale behind learner actions, to gain a better understanding of the reasoning driving learner behaviors. Using the advocacy-inquiry (A/I) conversational technique, paired with a stance of genuine curiosity, the facilitator is able to uncover learner frames that can then be addressed to impart learning while maintaining a trusting relationship with learners. Having learned this debriefing approach from Jenny, Robert and Dan, studied the impact of the approach in the context of a research project, and taught it to hundreds of simulation educators, I have come to appreciate a few key things about Debriefing with Good Judgment:

- **Debriefing with Good Judgment is a highly effective approach to debriefing** : I remember watching Jenny conduct a debriefing using Debriefing with Good Judgment for the first time. It was like watching a seasoned conductor – able to make beautiful music by guiding her learners through a conversation where learners were able to openly share their thoughts in a productive, collegial, and respectful environment.
- **Doing it well takes practice** : Like any skill, doing Debriefing with Good Judgment well takes practice (and is ideally coupled with feedback!). Asking questions using the A/I technique may seem unnatural at first. Some learners state it feels like learning a new language; that they become paralyzed for fear of asking the question the "wrong way". How can we help learners get over this hump?
- **Debriefing scripts can help** : We've come to learn that utilizing a debriefing script or tool that provides scripted language for A/I can help with faculty development efforts and also improve the quality of debriefing. Scripts may offer varying different options for asking questions – which help to ensure questions don't always sound the same. Varying lead-in phrases when using A/I helps to preserve *authenticity of speech*, which is something that most learners expect of you as an instructor! If you don't sound like usual yourself when you facilitate a debriefing, how can you expect your learners to feel safe enough to share their true feelings and thoughts?
- **Being genuinely curious matters** : One aspect about being curious is that you are holding your own assumptions loosely. As an instructor you may have a pre-conceived notion of what the learner frame is for a specific observation or behavior. Instructors who are genuinely curious are accepting of the fact that the learner frame may be completely different from their frame.



- ***Uncovering frames is one thing. Identifying, understanding and addressing them is a whole different thing*** : the A/I technique offered in the paper is incredibly effective at uncovering the learner frame. Often times, the facilitator may choose to ask the inquiry question several different ways, thus allowing frames to be uncovered from multiple different learners. Novice instructors may struggle to identify, understand and address these various frames once they are shared. To assist instructors with this task, we typically teach instructors to : (a) Categorize learner comments into different thematic areas – was the comment about teamwork? Leadership? Situational awareness? Decision making? Medical knowledge?; (b) Seek clarification / confirmation of the frame from learners – “so what I’m hearing is that the medication error was due to two things – lack of a shared mental model and poor communication. Do you agree?”; (c) Work with the learners to address these issues once they have been confirmed (ie. employing a learner-centered strategy to close performance gaps).
- ***Debriefing with Good Judgment takes time.*** Doing a debriefing properly using the Debriefing with Good Judgment approach typically involves some investment in time. The more observations you wish to explore with A/I, the more time it will take. The more learner frames you wish to uncover, the more time it will take. This may be ok if you have pre-allocated sufficient time for the debriefing. Sometimes debriefing conducted in the clinical or in-situ environments are forced to be very short (eg. 5 minutes) – in these cases, other conversational techniques may be used (eg. directive feedback) to save time, with selective use of A/I when appropriate (ie. to explore an observation where the frame is not obviously evident, and when there was a serious adverse event that negatively impacted the patient).
- ***Debriefing with Good Judgment can change institutional culture.*** While this paper was written for a healthcare simulation audience, the concepts shared in this paper have the power to change institutional culture in a positive way. Our simulation program has been teaching Debriefing with Good Judgment for over a decade. In that time, we’ve trained over 120 simulation educators from all areas of the hospital. Those educators have taken A/I and used this conversational technique during clinical debriefings, during their day-to-day clinical interactions, during committee meetings, and in board meetings. While initially taught as a means to facilitate simulation debriefings, the ideas and principles shared in this paper have influenced positive cultural change throughout our institution!

I am curious to hear about your experiences with Debriefing with Good Judgment – how has this approach to debriefing impact your simulation program and institution?

Summary of this Month's Journal Club Discussion :

Blog Contributors :

- Andy Tagg, Adam Cheng, Ben Symon, Rowan Duys, Vic Brazil, Ian Summers
- Jessica Stokes-Parish, Chris Cropsey, Jason Acworth, Jesse Spurr

Twitter Comments :

- Center for Medical Simulation via @MedSimulation, David Grant via @davidgrantsim

The article prompted a particularly warm response on both twitter and the blog this month, with a significant increase in twitter comments by new journal club readers and a high volume of comments on the blog itself, perhaps a reflection on the popularity and support for the article in question.

The article was frequently described as a 'lightbulb moment' for educators. Many commenters described the article's concepts as a revelation, recalled the first time they read it and how they found it a liberating moment for themselves as an educator. Vic Brazil described "it can be a revelation as to the possibilities of 'direct AND nice' – high expectation and high support", or as Jenny Rudolph mentioned on twitter "Holding high standards AND high regard for learners underlies debriefing with good judgment."

There was extensive discussion regarding individual challenges readers had found when 'debriefing with good judgment'. Andy Tagg, Rowan Duys and Ben Symon discussed a variety of challenges including :

- Finding it hard to move away from "guess what I'm thinking" questions
- Overcoming internal conflict avoidance when delivering feedback
- Debriefeer 'paralysis' when trying to construct a perfect A/I question
- Differences in cultural conversational style leading to challenges delivering A/I in a natural phrasing pattern

As a group, commenters including this month's expert Adam Cheng workshopped solutions to a number of these issues including :

- Practice and familiarity with the technique
- Having a general debriefing structure
- Focusing less on 'crafting the perfect A/I' and instead being transparent about the true intent of the question at hand. As Chris Cropsey put it "I think the real power A-I is not the language but rather the curiosity of it. I find that the times when I can genuinely get curious about trainees' thinking, the words just sort of happen."
- Judicious use of 'previewing' to open group discussion on a particular learning objective without having to craft a question at all

There was a minimum amount of critique regarding the article itself. While there was acknowledgment that the article is a 'concepts and commentary' style paper without specific data regarding actual learner outcomes to support it, the experience and expertise of the authors, the group's anecdotal support of its findings and the seminal nature of the paper appeared to validate the article without challenge. The few critiques of the paper included David Grant's tweet : "great introduction to concept of curiosity, does not highlight importance of #listeningtounderstand & use of reply to facilitate learning". Vic Brazil also suggested an improvement if the article was published in 2017 might be video of a debrief involving "all the nuances of tone and facial expression". Jesse Spurr queried whether the paper had been so embraced by simulation culture it had become an expected standard, despite the fact that the original authors have continued to explore other debriefing techniques and strategies to improve learning outcomes.

Many thanks to all blog commenters this month, it was a truly wonderful discussion.



Journal Club Summary April 2017 "Hello, Old Friend"

Acknowledgements :

Simulcast would like to thank the creators of the AliEM MEDiC series for the inspiration for the journal club's blog format and their ongoing support and contributions to the project.

Thankyou to Dr Adam Cheng for his expert commentary this month.

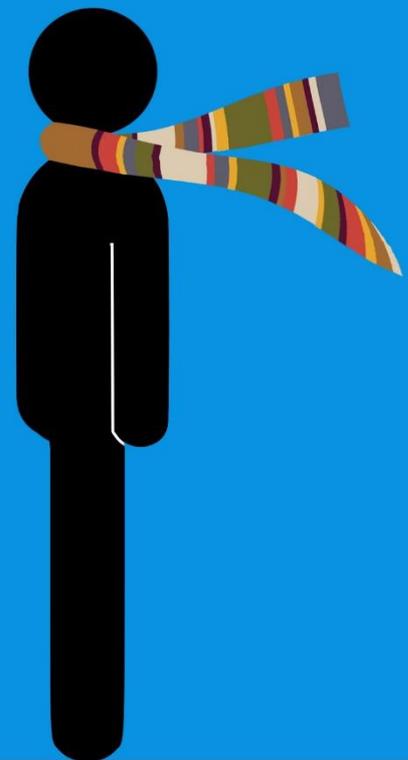
Thankyou to all commenters this month for sharing your thoughts and allowing us to learn from you.

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May 2017

“Hard Outcomes”



Expert Opinion : Dr Jared Kutzin

*“Practice can only be perfect
if educators help guide learners”*

The Articles :

"Pediatric resident resuscitation skills improve after "Rapid Cycle Deliberate Practice" training"

Hunt EA, Duval-Arnould JM, Nelson-McMillan KL, Bradshaw JH, Diener-West M, Perretta JS, Shilkofski NA.

[Resuscitation. 2014 Jul;85\(7\):945-51. doi: 10.1016/j.resuscitation.2014.02.025. Epub 2014 Mar 4.](#)

"Structuring feedback and debriefing to achieve mastery learning goals"

Eppich WJ, Hunt EA, Duval-Arnould JM, Siddall VJ, Cheng A.

[Acad Med. 2015;90:00-00. First published online doi: 10.1097/ACM.0000000000000934](#)

Case Author :

- Dr Ben Symon

Expert Commenter :

- Dr Jared Kutzin

Editors :

- Dr Victoria Brazil
- Jesse Spurr

First Published :

- 01/06/2017

[Podcast Link](#)

Simulcast Journal Club is a monthly/ series heavily inspired by the [ALIEM MEDIC](#) Series.

It aims to encourage simulation educators to explore and learn from publications on Healthcare Simulation Education.

Each month we publish a case and link a paper with associated questions for discussion.

We moderate and summarise the discussion at the end of the month, including exploring the opinions of experts from the field.

The Case :

When he started in ICU Brad had never intended to have an archnemesi, but Dr Snythe had somehow applied for the role.

"I overheard your sim fellow's debriefing the other day." said Snythe from across the tea room. "It's all very sweet, isn't it? This debriefing with good judgment thing. Lots of feelings and concerns and whatnot? I was quite touched. It's like the care bears are interviewing ICU trainees."

"I'm impressed." said Brad dryly. "I thought after two decades of bullying trainees you might not be able to recognise what feelings actually are."

Snythe's expression changed rapidly.

"Well you know what doesn't impress me Brad? Your data. No matter how much advocacy and inquiry you throw at these registrars, 6 months into your program their BLS metrics remain terrible. You can uncover frames all you want, but you're not making a spec of difference when it comes to our Quality & Safety outcomes."

Brad's ego was bruised and he came out swinging.

"Why are you even drinking coffee, Snythe? Out of nurse's tears?"

"Nurse's tears?" Snythe snarled. "Funny you should mention. We lost two nurses to fund your damn program in the first place. And when the director hears your results at the end of the year, I fully intend to get them back. Because believe it or not, Brad, I do care about stuff. Like actual patient care. And your program is getting in the way of it."

Brad's heart sank as Snythe stormed out. It hurt so much more because there was some truth in it. His trainee's metrics remained terrible. They loved the program, it was creating genuine cultural change and he knew they were learning! But skill acquisition just wasn't improving.

He needed a new strategy, and he needed it fast. The vultures were circling.

Discussion :

This month, we are looking at not one, but two articles! They are in many ways a pigeon pair and as such it's valuable to read them together. They describe a relatively new innovation in debriefing : Rapid Cycle Deliberate Practice. In many ways the opposite of traditional debriefing with good judgment, Eppich et al's paper provides an overview of strategies for structuring RCDP, while Hunt et al's paper provides hard data about the measurable improvements in paediatric resuscitation found through designing and implementing a paediatric RCDP program.

What are your thoughts on these papers and RCDP in general? Have you successfully implemented it into your simulation utility belt, or is it more a theoretical practice you've heard about but not seen much of?

Article Summary :

Article 1 : *"Pediatric resident resuscitation skills improve after "Rapid Cycle Deliberate Practice" training"*

After highlighting the failures of their traditional paediatric training, Hunt et al introduce a skills teaching curriculum style entitled "Rapid Cycle Deliberate Practice" (RCDP). Primarily involving cycling between deliberate practice and directed feedback, Hunt et al define three fundamental principles of RCDP :

1. Maximising the time learners spend in deliberate practice by offering multiple opportunities to "do it right".
2. Faculty provision of specific evidence or expert based solutions for common problems.
3. To explicitly foster "psychological safety" so learners embrace direct feedback.

Hunt et al designed a curriculum that emphasised the first five minutes of an in hospital cardiac arrest, which included :

- BLS training at intern orientation and PALS at the end of first year residency
- Monthly 'just in time' training sessions for residents that would be part of the hospital response teams that month. This included 2 hours of RCDP involving 5 scenarios that covered the primary causes of paediatric cardiac arrest.
- The RCDP structure started with an initial uninterrupted scenario as a 'needs assessment', followed by instructors taking a coaching role through progressively raising expected standards and sharing performance data, quantifying breached standards and providing solution oriented microdebriefing. When an error occurred, instructors would pause the scenario and ask them to "pause, rewind 10 s and try it again."
- An in-situ, unannounced mock code in the weeks after monthly training.

After designing the curriculum, Hunt et al tested its ability to :

- Improve performance on key resuscitation quality markers when compared to a baseline, pre-intervention cohort.
- Register a measurable improvement between first and third year paediatric residents.

Their simulated resuscitation metrics significantly improved, including less time to chest compressions, decreased time to defibrillation, less pre-shock pause times. There was also a 'dose response' noted, with 2nd and 3rd year residents showing improvement over interns.

Article 2 : *"Structuring Feedback and Debriefing to Achieve Mastery Learning Goals"*

If Hunt's paper provided motivation to implement RCDP within your practice, then Eppich et al's paper provides more detail and advice regarding "how to design and implement the feedback and debriefing components of deliberate practice-based educational interventions.

They further explore the principles outlined by Hunt et al, by describing strategies to :

- Establish a supportive yet challenging learning environment
- How to maximise opportunities for RCDP with feedback and reflection during debriefing
- Describing the role of within event "microdebriefing"

In order to 'establish a safe container' in the RCDP environment, the article recommends :

- Explicitly discussing the use of microdebriefing within training and validating the significance of specific, honest feedback by using the analogy of 'coaching world-class athletes'.
- Explaining that there is no expectation of initial perfection, but instead an expectation to learn from mistakes and improve.
- Encouraging peer feedback.

The article then outlines case studies regarding ACLS and PALS Resuscitation Training in order to flesh out examples of microdebriefing 'in the moment' rather than interrupting the flow of the scenario, and questions to pose to learners to help facilitate peer to peer feedback, such as "When the skill is performed correctly, what characterises effective performance?".

Expert Opinion: Jared M. Kutzin, DNP, MS, MPH, RN, CPPS



Dr. Kutzin is the Director of Education at NewYork-Presbyterian Hudson Valley Hospital. Previously, Dr. Kutzin was the Director of Simulation at Winthrop University Hospital and Saint Barnabas Medical Center (NJ) and the Director of Nursing & Clinical Simulation at the Institute for Medical Simulation and Advanced Learning (IMSAL), part of the New York City Health and Hospitals Corporation (NYCHHC). Jared received a Master of Public Health degree from Boston University, a Doctor of Nursing Practice from the University of Massachusetts at Amherst, and a Master of Science in Medical Education Leadership from the University of New England College of Medicine.

He started his simulation career with the STRATUS Center for Medical Simulation at Brigham and Women's Hospital in Boston, MA, and is a past chair of the Nursing Section of the Society for Simulation in Healthcare (SSH). He currently serves on the SSH membership and certification Committees and chair's the CHSE recertification process.

Jared's research interests include investigating the human factors that affect the quality and safety of healthcare, the quality and safety of prehospital care, and the use of simulation as an educational method.

Jared's response to this month's article:

The quote "practice makes perfect" has been attributed to John Adams, the 2nd President of the United States, when early in his career as a lawyer he made mistakes in his paperwork and lost seemingly easy to win cases. After struggling to find clients he began to find success as a lawyer and in 1760 he wrote in his diary, "I was too incautious and unartful in my proceedings, but practice makes perfect" (John Adams Historical Society).

Vince Lombardi, the Green Bay Packers coach from 1959-1966 is quoted as saying, "Practice does not make perfect. Only perfect practice makes perfect".

As simulation educators, we espouse the importance of debriefing. Regardless of an educator's preferred debriefing methodology, until recently, each of the common debriefing methods included phases of debriefing with at least some focus on identifying not only what the learners did, but uncovering why they took the actions they did. Built upon the framework of Chris Argyris and single and double loop learning, Rudolph et al, constructed a debriefing methodology which espouses that results are caused by actions and if debriefers only focus on the actions, the learner may change in the short-term, but may revert back to their previous actions later. Real change takes place and is maintained when debriefers are able to change the "frame" of the learner, thereby leading the learner to undertake a new action based upon their belief/understanding which in turn leads to a different result.

It is commonly stated that, "simulation is just the excuse to debrief". And while simulation educators are still mastering their debriefing skills, not all simulation objectives require time intensive debriefings. As a simulation educator, Advanced Cardiac Life Support (ACLS) instructor, and a TeamSTEPPS™ Master Trainer I often found myself at odds when educating learners. On one hand, I need to ensure that the learners who are taking an ACLS class are prepared with the knowledge and skills to quickly and accurately implement lifesaving resuscitation techniques. On the other hand I want to dig below the surface of my learners to understand why they undertook the actions they did so I could explain why they needed to adjust their thought processes and take a different action in the future. I need to spend some time debriefing my learners, either in their actions or on their actions. Even the ACLS class espouses clinical debriefing. How could I not take the time to model a good debriefing for them? Yet, the pressures of hospital administration continue to weigh. There is only a limited time to educate all of the learners who need to "competently" pass the required ACLS class.

The challenge of ensuring that clinical skills are obtained and retained has been the challenge set forth before clinical educators for the past century. Clinical skills may include the concepts taught in the Basic Life Support (BLS), Advanced Cardiac Life Support (ACLS), and Pediatric Advanced Life Support (PALS) classes but are not limited to these classes.

About 10 years ago, the American Heart Association (AHA) changed the method of education in their BLS, ACLS, and PALS classes. The video components of the class were enhanced and the role of the instructor was changed from that of a "sage on the stage" to more of a facilitator. A facilitator being an individual who ensures the learners are following along with the video as they "practice while watching". This "practice while watching" reduced the variability in instruction and allowed for "scaffolding" learning by taking pieces of a complex task (facilitated by a video), learning each part (with the help of a facilitator), and then putting them together independently.

Today, the American Heart Association is continuing to evolve their classes with online learning simulations being used in place of classroom didactic sessions and in-person skills validation taking a more constructive tone. Future innovation includes the development of the Resuscitation Quality Improvement (RQI) program which requires ongoing education (3-month renewal) via a manikin designed to assess psychomotor skills, without the need of an instructor. These advances are all based on the idea of Rapid Cycle Deliberate Practice (RCDP).

While simulation educators may all know that it is commonly cited that 10,000 hours of practice is required to become expert (Gladwell, 2011), it is the quality of that practice that is more important than the sheer number of hours. Rapid Cycle Deliberate Practice is not just a debriefing methodology, but rather it is a conscious curriculum choice that an educator makes. When designing an educational program, the educator must decide whether they want to focus on understanding why learners took certain actions in hopes of correcting the underlying deficits or whether the skills are so vitally important that instead the actions must be performed correctly; regardless of whether the learner understands why they are taking those actions. While not mutually exclusive, and the discovery of frames can still be completed in the Rapid Cycle Deliberate Practice format, the focus is more acutely on the actions of the learner and correcting those actions so they can be performed correctly in the future. Besides BLS, ACLS, and PALS, other topics suitable for the RCDP approach may be trauma assessments, performing a "Time Out" in an operating room, or de-escalating a combative patient.

As we so often do in healthcare, we can draw an analogy from another industry, this time sport. In basketball, about 20 percent of a teams total points for a game can be achieved from the free-throw line. The best teams make about 80 percent of their free-throws while the worst teams make about 66 percent. Individual players range from over 90 percent for the best free-throw shooters to less than 50 percent for the worst. After careful analysis there were three factors involved with making a free-throw (Rosenzweig, 2014).

1. The trajectory, it had to be straight.
2. The best shots aimed for 11 inches from the front of the rim, about two inches beyond the midpoint.
3. The arc. The ball had to leave the players hand at an angle of 45 degrees.

With this knowledge, researchers built a machine to immediately analyze the trajectory of a free-throw and verbally announce the angle to the player. The player could then make an immediate correction for the next attempt (Rosenzweig, 2014). Assuming it would take about 5 seconds per free throw, a player could attempt 12 free-throws in a minute. Each time receiving immediate feedback about the arc of their throw. It didn't take long for the player to recognize what a 45 degree arc felt like. The rapid attempts with deliberate, immediate feedback is the hallmark for this educational methodology. Coaches and players didn't need to understand why their shots weren't being released at the right arc or what the player was thinking about when they were standing at the free-throw line. Instead, the player had to figure out their own mechanics in order to release the ball at the optimal point to achieve the correct arc.

Practice can only be perfect if educators help guide learners. Educators must have the knowledge, skills, and attitudes in their tool box to decide if a lengthy, thought provoking, guided debriefing is in order or whether immediate feedback will be better suited to achieve their objectives.

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Summary of this Month's Journal Club Discussion :

Blog Contributors :

- Ben Symon, Vic Brazil, Ben Lawton, Suneth Jayasekara, Tanya Bohlmann, Walter Eppich, Ian Summers

Many thanks to all blog commenters this month for a wonderful discussion.

Responses to the two articles this month were positive towards the articles themselves but the content of the responses was quite varied depending on the responders clinical experience with RCDP within their own practice.

The themes of the conversation could be summarised as :

- The concept and execution of RCDP is not as well dispersed in the simulation community as Advocacy and Inquiry
- RCDP is best suited to situations where industry standards are clearly defined
- RCDP highlights the importance of avoiding a 'one size fits all' approach to debriefing

The concept and execution of RCDP is not as well dispersed in the simulation community as Advocacy and Inquiry

Some educators, such as Ben Symon, Suneth Jayasekara and Tanya Bohlmann described some inexperience using the technique and limited exposure to role modelling of how to 'do it right'. Ben Symon professed complete inexperience with the technique, whereas Suneth and Tanya provided anecdotes and lessons learned from their experience creating a very large 'SIM Wars' competition for their new hospital that incorporated a number of elements from RCDP, particularly around the importance of pre-briefing to meet learners expectations. Ian Summers reframed his response to microdebriefing, by stating *"it's what we actually do when we are supervising senior trainees as team leaders running real complex cases, without taking over but gently directing and assisting and then stepping back out of the way. So in many ways this is much more natural than it would seem."*

RCDP is best suited to situations where industry standards are clearly defined

Vic Brazil and Ben Lawton highlighted the importance of picking the right situation for RCDP. As Vic stated, *"like all mastery learning approaches – this really suits those skills and performance where the desired performance can be well described and there is minimal subjectivity in deciding whether learners have achieved or not. Hence BLS/ resuscitation a perfect subject."*

Ben Lawton contextualised RCDP to current BLS mandatory competency testing, arguing that *"A mastery learning approach whereby everybody "passes" they just vary in the time they take to get there seems conceptually much more appropriate in terms of what we offer our learners and their patients."*

He also highlighted one concern regarding the gamification of BLS training : *"There is a risk that participants learn to respond to a simulation based trigger that will not necessarily be present in real life and we need to be really careful to focus on aspects that actually improve survival (e.g minimising interruptions in CPR) and avoid asserting "correct" behaviour in areas where practise is more controversial as this may just alienate learners who no longer get the opportunity to discuss the pros and cons."*

RCDP highlights the importance of avoiding a 'one size fits all' approach to debriefing

Paper author Walter Eppich joined the discussion this month, and provided his own reflections regarding the importance of a diverse toolbelt of debriefing techniques. He states : *"Our field desperately needs a more nuanced understanding of how to align intended learning outcomes with simulation/debriefing strategy; in my mind, we are only beginning to understand how to dose each of the educational strategies Adam and I outline in our PEARLS framework."*

With specific regards to Resuscitation Education, he argues that *"the two papers in this month's journal club highlight and justify that the traditional approach to simulation, with a 10-15 min scenario followed by a 20-30 minute debriefing, are no longer defensible for resuscitation education. One could argue the same for other domains for which clear performance guidelines exist. Advocacy-inquiry alone will not promote learning when what learners really need is deliberate practice—actually doing the key skill over and over again until they get it right. Feedback and debriefing should be tailored to the performance domain and should be integrated within a thoughtfully designed curriculum."*



Journal Club Summary May 2017 "Hard Outcomes"

Acknowledgements :

Simulcast would like to thank the creators of the AliEM MEDiC series for the inspiration for the journal club's blog format and their ongoing support and contributions to the project.

Thankyou to Jared M. Kutzin for his expert commentary this month.

Thankyou to all commenters this month for sharing your thoughts and allowing us to learn from you.

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June 2017

“Beer Pressure”



Expert Opinion : Dr Walter Eppich

“Vulnerability is one element; Fallibility is the other.”

The Article :

"Coaching the Debriefers : Peer Coaching to Improve Debriefing Quality in Simulation Programs"

Cheng, Adam MD, FRCPC, FAAP; Grant, Vincent MD, FRCPC; Huffman, James MD, FRCPC; Burgess, Gavin MD, FRCPC; Szyld, Demian MD; Robinson, Traci RN; Eppich, Walter MD, Med

[Simulation in Healthcare : The Journal of the Society for Simulation in Healthcare. Publish Ahead of Print, POST AUTHOR CORRECTIONS, 20 May 2017 , DOI: 10.1097/SIH.0000000000000232](#)

Case Author :

- Dr Ben Symon

Expert Commenter :

- Assoc Prof Walter Eppich

Editors :

- Dr Victoria Brazil
- Jesse Spurr

First Published :

- 05/06/2017

[Podcast Link](#)

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We moderate and summarise the discussion at the end of the month, including exploring the opinions of experts from the field.

The Case :

Nitin squeezed into the booth next to Brad and the rest of the crew then raised his beer in a friendly salute. It was great to have the whole faculty out for a drink for once.

"Cheers to a course well run." smiled Brad, and they both quenched the thirst of a long day's debriefing.

"Thanks Sensei." Grinned Nitin, "I really enjoyed today. I think I'm getting the hang of this."

Brad nodded earnestly. "The student has become the master, I reckon. I was really having trouble in that second debrief, after Alex mismanaged that sepsis case so badly, I was worried we wouldn't be able to address all the issues that came up. I hope she wasn't too upset, I really felt she needed to know about her inotrope mixup and the whole albumin thing."

Nitin paused. He was concerned about that debrief too, and Brad had been so concerned about Alex's performance he'd completely forgotten the nurses present in the scenario. If truth were told, he tended to pay less attention to the nurses when he was debriefing, maybe because it was harder to relate to their concerns? But Brad had taught him so much in the last few months. It seemed arrogant and disrespectful to start doling out advice this early in his career.

Brad leaned back and sipped. "It's hard to get honest feedback sometimes.". He looked at Nitin perceptively, perhaps having registered his mentee's hesitance. Brad had flaws but a lack of emotional intelligence was not one of them.

Nitin punched him gently on the shoulder. "You did great Mr Miyagi. Next round's on me."

Discussion :

While we may espouse the importance of a healthcare workplace free of intimidating power differentials and flourishing with open highways of transparent communication, the realities of achieving that lofty goal can perhaps be recognised by reflecting on the simple challenge of giving peer to peer feedback between simulation educators.

This month's article is a call to arms from a group of simulation gurus regarding the power of peer coaching, and provides strategies to overcome the complex social pitfalls involved in providing honest feedback to your colleagues and friends.

What's your experience been with peer feedback in your simulation program? What are your reflections after reading this article? Has it changed your approach?

Article Summary :

In "Coaching the Debriefing : Peer Coaching to Improve Debriefing Quality in Simulation Programs" Cheng et al provide *"a practical guide for the who, what, when, where, why, and how of peer coaching for debriefing in simulation-based education."*

After first acknowledging the importance of ongoing faculty development for sim educators and the financial expense of formal training programs, the authors propose a pragmatic coal face alternative : *"peer coaching integrated into the flow of teaching that offers opportunities for educators to maintain and expand their skills with minimal impact on existing work commitments."*

The article emphasises the power of structurally integrating peer feedback into sim based education delivery, discussing how it can assist in founding a culture of transparency, accountability and patient safety that mirrors the journey we hope our learners take on their way to improving health care delivery.

The meat of the article, however, involves extensive detail and problem solving regarding challenges to peer coaching effectively. Identified barriers include :

- Unacknowledged power and experience differentials between senior and junior educators
- Fear of retribution from junior coaches who have valid feedback for their seniors
- A lack of standardised feedback tool to provide validity for feedback
- A lack of standardised feedback structure
- A lack of commonality of debriefing experience and educational philosophy
- Time constraints leading to inadequate allocation for feedback periods

The authors propose a number of options to address these barriers, including :

- A structured 'prebrief' at the start of an education day to establish goals, agree upon ground rules and establish a second 'safe container' for educators to provide and receive peer feedback
- Utilising a debriefing feedback tool such as the supplied 'Debriefing Feedback Form', or the 'DASH' or 'OSAD' to structure and validate feedback
- Establishing collaborative 'learning partnerships' with colleagues
- Utilising 'targeted peer coaching' for rapid, on the spot observations and feedback
- Utilising 'debriefing the debriefer' for more extended learning conversations and reflections at the end of the day

The article concludes with a step-wise model for implementing a peer coaching process within your workspace.

Expert Opinion: Assoc Prof Walter Eppich



Walter Eppich, MD, MEd is a pediatric emergency medicine physician at the Ann & Robert H. Lurie Children's Hospital of Chicago and the Northwestern University Feinberg School of Medicine, where he is faculty development lead for the Department of Medical Education. Nationally and internationally, he has taught extensively on basic and advanced simulation educator courses and serves as principal faculty at the Center for Medical Simulation in Boston/USA. He is an author of this month's paper, and a multitude of pivotal educational papers, including "Structuring feedback and debriefing to achieve mastery learning goals", "Learner-centered debriefing for health care simulation education: Lessons for faculty development", and "Promoting excellence and reflective learning in simulation (PEARLS): Development and rationale for a blended approach to health care simulation debriefing".

approach to health care simulation debriefing”.

Walter's response to this month's blog:

Thank you again for the opportunity to comment on this month's journal article. I very much enjoyed reading everyone's postings – lots of points I find quite helpful to my own thinking. I would like to amplify certain points and to provide some additional thoughts.

AMPLIFICATION

1) Workplace learning

Our main aim with the paper was to highlight how faculty development could be embedded within normal workplace practices, which stands in contrast to distinct faculty development events such as courses or workshops. Workplace learning refers to the learning that happens while being engaged in authentic work activities. For educational settings, this means encounters with actual learners on courses or simulations. This notion of workplace learning resonated with many of you since learning from patient care during clinical practice represents the ultimate workplace learning in healthcare. As Adam has pointed out, lots of parallels exist between our paper and coaching in clinical environments. For those that are interested in clinical coaching, two additional resources:

Coaching in emergency medicine: <https://www.ncbi.nlm.nih.gov/pubmed/21073779>

This paper builds on our work by Rudolph and others to structure clinical coaching conversations

“Let's Talk About It”: Translating lessons from healthcare simulation applied to clinical event debriefings and coaching conversations

https://www.researchgate.net/publication/305628527_Let%27s_talk_about_it_translating_lessons_from_h_ealthcare_simulation_to_clinical_event_debriefings_and_clinical_coaching_conversations

Our paper contextualizes the PEARLS framework for clinical debriefings and coaching. There is much overlap to peer coaching.

2) Demonstrating vulnerability...but also fallibility

Adam aptly raises the notion of demonstrating vulnerability. Let's define the term.

Vulnerability: “the quality or state of being exposed to the possibility of being attacked or harmed, either physically or emotionally.”

Adam notes: “I've found that showing vulnerability can sometimes be an effective strategy to overcome these challenges. To show vulnerability, I will offer up myself to be the first recipient of feedback and share my own

personal goal(s) for improvement on that day, while ensuring it is something they feel comfortable providing feedback about..... while this may not always work, it does often open the door for more effective feedback conversations down the line when the roles are reversed.”

I could not agree more.

So how might this look in practice?

I might ask “*Do you have any feedback for me?*” “*Anything you think I should have done differently?*”

This is an important first step—I agree with Adam. You could also be more specific about the feedback request. And as has been pointed out a number of times, sharing goals BEFOREHAND makes the conversation AFTERWARDS much easier. One thing to keep in mind: when I am having a peer coaching conversation with someone, I try my best to keep the discussion balanced—even if brief. This means including things to continue doing **and** things to change for next time. I don’t think anyone likes hearing **only** aspects that need improvement. The key here is to be **genuine** about things that the person should keep doing or things you liked. This is one of the problems with the SH*T sandwich; the desire to blunt the criticism leads to sugarcoating the critique with at times ingenuous praise. Most people see through this.

However, I would like to add another notion to the discussion, which is fallibility.

Fallibility: “the tendency to make mistakes or be wrong”.

We all take our turn at making mistakes and being wrong! Local experts and well-known experts alike, including Adam Cheng, Jenny Rudolph, Vic Brazil, me. EVERYONE. Demonstrating fallibility means being able to share your mistakes and shortcomings. I feel so strongly about this point, that I provide a disclaimer in EVERY debriefing or feedback workshop I do: “*I am not here because I am perfect at debriefing or giving feedback—I have good and bad days like everyone else. At times things come out of my mouth that make me think: why did you say that??? What allows me to stand here is that I spend a lot more time thinking about feedback and debriefing than most of you.*”

For those who are interested, Amy Edmondson writes about how effective leaders demonstrate fallibility in her book:

“Teaming”. <http://eu.wiley.com/WileyCDA/WileyTitle/productCd-078797093X.html>

This is an **excellent** read—much of Amy’s primary research originates in healthcare settings.

In my view, not only is ‘making yourself vulnerable’ important, but also being open about things you genuinely wish you had done differently in the debrief, i.e. being fallible.

How might this look in practice?

I might ask my co-debriefer: “*I don’t feel like that went as well as it could have. I tried so hard to engage the nurses in the discussion, although they seemed to be holding back. How did you experience that? Any suggestions?*”

Of course, a more ‘junior’ co-debriefer might seek to reassure rather than critique, which may require some persistence. “*I really want your honest perspective*”. We are often our own harshest critics and often their reassurance is warranted; but colleagues usually share valuable insights that help you take your debriefing to the next level.

In sum, vulnerability is one element; fallibility is the other.

ADDITIONAL THOUGHTS

What often gets in the way of sharing your point of view is that we conceive it as "criticizing" or "passing judgment" on someone's performance. What a paradox since "debriefing with good judgment" is supposed to be the way to go! It can still be hard to share that you think someone did not do something well in the debrief—even for me and other 'expert' faculty, no doubt.

One notion that helps me very much is ***not focusing on someone else's performance [i.e. what they did or did not do] as much as the impact of their performance on me or on learners [what it meant to me or to learners].***

How might this look in practice during peer coaching?

Rather than saying to my co-debriefer: *"I felt you were dominating the discussion and did not let me speak"*, I might say: *"I had some points I really wanted to make. I wished you had paused to ask if I had anything to add."*

Rather than saying: *"Some of your questions were confusing"* or *"Your question about XXX was confusing"*, I might say: *"My sense was that the learners were struggling with some questions. For example, there was a question about XX—I myself was not sure where you were going with that. What were you going for?"*

Rather than saying: *"In my mind you glossed over the reactions phase and did not explore some key initial comments"*, I might say: *"I got the sense that some participants did not get their initial reactions on the table, which I think got in the way of their analysis of the case from a cognitive perspective. How did you experience that?"*

One other strategy that helps me very much is ***simply to ask my peer: "Is there anything you would like feedback on?" so I can let them guide our discussion.***

Another is ***to ask: "I had some thoughts about your debriefing; Is this a good time for you?"***

Since the literature tells us that feedback receptivity is really important, I try to gauge the person's interest and ask permission before launching into what you have to say, even if it relates to a peer coaching or feedback conversation that MUST happen since the issue is that important.

Summary of this Month’s Journal Club Discussion :

Blog Contributors :

- Ben Symon, Rowan Duys, Bishan Rajapaske, Adam Cheng, Tanya Bohlmann, Vic Brazil
- Louise Dodson, Suneth Jayasekara

The article this month provoked uniformly positive responses. Blog comments were primarily focused on sharing experiences within local workplaces and trouble shooting specific challenges with peer coaching implementation.

Consistent overall themes included :

- **Acknowledgement that peer feedback is challenging and rife with social complexity**
 - As Tanya Bohlmann put it, *“I think mastering the skill of giving difficult or unwelcome feedback is something that will remain elusive without considerable (deliberate) practice and role-modelling but it’s good to know that most people still struggle or feel uncomfortable in this domain, and that there are numerous resources out there to help us continue to navigate this tricky territory.”*
 - Bishan expressed interest in extrapolating the principles from this article to clinical coaching.
- **There was a sense that the challenges raised in the paper were easily relatable, and that the paper unpacks and categorises the underlying issues well**
 - For example, Rowan Duys stated *“It is very helpful when someone else takes your lived experience, unpacks it, and describes it within a framework that is easy to understand and relates to the existing literature on the subject”*.
- **The group attempted to problem solve many of their shared barriers to peer coaching :**
 - Multiple posters reflected upon close allegiances with another “Sim Buddy” which allowed ongoing, specific growth together in the spirit of shared reflectiveness and learning.
 - Ben pitched that pre-identifying learning goals at the start of the day provides permission for specific and focused feedback in that area.
 - Author Adam Cheng suggested that senior educators can soften the power differentials in peer coaching by role modelling vulnerability and by asking for specific feedback that the junior educator would have expertise in.
 - Louise Dodson and Vic Brazil voiced that the OSAD and DASH tend to lack some detail on the grey areas that make a debrief successful, which Adam countered with a [debriefing checklist](#).

Acknowledgements :

Simulcast would like to thank the creators of the AliEM MEDiC series for the inspiration for the journal club's blog format and their ongoing support and contributions to the project.

Thankyou to Dr Walter Eppich for his expert commentary this month.

Thankyou to all commenters this month for sharing your thoughts and allowing us to learn from you.

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July 2017

“Who Watches the Watchmen?”



Expert Opinions :

Dawn Taylor Peterson, PhD

Penni Watts, PhD, RN, CHSE-A

Chad Epps, MD

Marjorie Lee White, MD, MPPM, MA

“We recognize that we are the ones watching the watchmen and this comes with a great deal of responsibility.”

The Article : "Simulation Faculty Development : A Tiered Approach"

Peterson, Dawn Taylor PhD; Watts, Penni I. PhD, RN, CHSE-A; Epps, Chad A. MD; White, Marjorie Lee MD, MPPM, MA, CHSE (2017)
[Simulation in Healthcare : The Journal of the Society for Simulation in Healthcare. Publish Ahead of Print, POST AUTHOR CORRECTIONS, 18 March 2017](#)

Case Author :

- Ben Symon

Expert Commenters :

- Dawn Taylor Peterson
- Penni Watts
- Chad Epps
- Marjorie Lee White

Editors :

- Victoria Brazil
- Jesse Spurr

First Published :

- 05/08/2017

[Podcast Link](#)

Simulcast Journal Club is a monthly/ series heavily inspired by the [ALIEM MEDIC Series](#).

It aims to encourage simulation educators to explore and learn from publications on Healthcare Simulation Education.

Each month we publish a case and link a paper with associated questions for discussion.

We moderate and summarise the discussion at the end of the month, including exploring the opinions of experts from the field.

The Case :

Nimali had been surprised with Nitin. For a new fellow, he had been surprisingly perceptive about what the running of the Simulation Centre involved.

"It's true," she said. "We could be a lot better, but it's hard!"

"We get great feedback from the learners, sure, but we're not going to improve if we just gauge ourselves based on the Likert scales of a bunch of interns who are so relieved to be taught in a non-threatening environment that their dopamine levels are through the roof."

Nitin shrugged philosophically, "It's nice to be liked at least."

Nimali agreed. "But I think we're addicted to it! We're so busy being non-threatening and nice and intellectually cuddly that we're not growing as a unit! We talk about debriefing with good judgement all the time, but I watched Catherine debrief the debrief yesterday, and it was basically 'You guys are tops! High five!'"

She gestured out the window towards the sim centre.

"We've been given this gift." she said to Nitin, and it was clear that she meant it.

"I want us to be world class. But we've been too busy educating others to improve ourselves. I've got to get my staff on board, but first I need a plan."

She gazed outside again and smiled.

"I want to make this place sing."

Discussion :

Running a simulation program can be work enough on its own, let alone worrying about your own faculty's development. But as Peterson et al suggest in this month's article, educating the educators can be a significant challenge and one which many institutions ignore. Peterson et al provide information on their certification process and explore lessons learned from its implementation.

To get the discussion started :

- What are your thoughts on the principles raised in this article?
- What's your experience of faculty development in your program?
- Is the proposed framework within this article feasible for your institution? And if not, what lessons and principles are still translatable to your service?

We are privileged to have the authors as our expert commenters this month, so we look forward to your thoughts!

Article Summary :

In 'Simulation Faculty Development : A Tiered Approach', Peterson et al describe the tiered faculty development program of the Office of Interprofessional Simulation for Innovative Clinical Practice (OIPS), which is a large simulation centre associated with the University of Alabama at Birmingham that sponsors > 24,000 learner hours a year.

The article starts by providing a series of arguments supporting the importance of faculty development in simulation education including drawing parallels with other industries as well as standards from the Society for Simulation in Healthcare and the International Nursing Association for Clinical Simulation and Learning. The authors note, however, that the majority of faculty development publications appear to specifically focus on debriefing at the exclusion of other elements of simulation teaching, and that a "one size fits all" approach is most common.

The article then describes the development of a tiered faculty development program, which is defined as "a progressive building of skills with increasing complexity at each level.". It contains five tiers (Sim Apprentice 1, 2 and Simulation Expert 1, 2, 3). Early tiers involve online modules, workshops and observation, whereas more senior tiers have higher expectations regarding specific advanced debriefing courses, assessments with the DASH debriefing tool and implementing courses. Interwoven throughout the tiers is an expectation of ongoing mentor meetings and workplace assessments to provide ongoing feedback and opportunities for growth.

The authors provide arguments to support their approach by outlining benefits which include :

- "Giving faculty the opportunity to gradually grow in simulation expertise"
- Providing staff with a "simulation identity"
- More consistent standardisation of the faculty's expectations of learners
- Allowing faculty to develop a personalised plan for development appropriate for their role within the service.

As the article closes, the authors reflect on the take up rate of the program within their service and discuss potential benefits that staff receive from signing up.

Summary of this Month’s Journal Club Discussion :

Blog Contributors :

- Vic Brazil, Nemat Alsaba, Ben Symon, Suneth Jayasekara, Shaghi Shaghagi, Bruce Lister, Ben Lawton, Sarah Janssens

The bloggers were appreciative of the article’s use as a stimulus to contemplate local faculty development programs, however there was an unexpected level of reticence regarding the hierarchical nature of the structure of the program, potentially reflecting different cultural perspectives from a north american vs australasian context. The primary themes touched on throughout the posts could be summarised as :

- Widespread appreciation of the use of tiers as an inherent motivator for self improvement
- Concern that implementing educational standards for faculty could create barriers to local clinical experts participating in education
- Acknowledgement that this particular approach would be more suited to a large simulation service such as the OIPS, rather than the smaller simulation faculty that many of the bloggers come from.

Widespread appreciation of the use of tiers as an inherent motivator for self improvement :

Multiple blog posts highlighted a thirst for self improvement and admiration for the extensive and thorough nature of the OIPS faculty development program. Multiple comments revolved around the nerdy nature of many of our sim educators and the self satisfaction they would enjoy from ‘levelling up’ and feeling an internal sense of progress. As Suneth described *“The nomenclature is almost like a video game – and I would be very muchpushing to achieve the “simulation expert 3” level!”*.

Concern that implementing educational standards for faculty could create barriers to local clinical experts participating in education :

Ben Symon and others voiced concern that in smaller centres while increasing expectations of educational faculty would hopefully lead to better learner outcomes there was a risk of isolating potential staff who might see those expectations as barriers to their participation. Ben Lawton also identified local challenges to implementing those expectations, including *“I do find setting standards for qualification to act as faculty on our courses difficult as there really isn’t a universal marker of competence in our context.”*

It was also acknowledged that the paper itself states a 19% uptake rate within their own faculty, a potential supporting argument regarding staff perceptions about the program.

Acknowledgement that this particular approach would be more suited to a large simulation service such as the OIPS, rather than the smaller simulation faculty that many of the bloggers come from.

There was widespread admiration (and in some cases open jealousy) regarding the infrastructure the OIPS team had created, but also an acknowledgement that for local hospitals with a small team of simulationistas a similar approach might not be entirely appropriate. Financial, staffing and geographical challenges were also acknowledged as potential barriers in setting standardised expectations for local simulation facilitators.

Experts’ Opinions :

Dawn Taylor Peterson, PhD

Penni Watts, PhD, RN, CHSE-A

Chad Epps, MD

Marjorie Lee White, MD, MPPM, MA



Dawn Taylor Peterson, PhD is the Director of Faculty Development & Training for the Office of Interprofessional Simulation for Innovative Clinical Practice (OIPS) at the University of Alabama at Birmingham (UAB). She is also an Assistant Professor in the School of Medicine, Department of Medical Education and the School of Health Professions, Department of Health Services Administration. She completed her initial simulation training and the Advanced Comprehensive Instructor Course at the Center for Medical Simulation in Cambridge, Massachusetts. Dr. Peterson is also a TeamSTEPS® Master Trainer. Her primary interests include debriefing, interprofessional simulation, and faculty development for simulation.



Penni Watts, PhD, RN, CHSE-A is currently an Assistant Professor and the Director of Clinical Simulation at the University of Alabama at Birmingham (UAB) School of Nursing. In this position, she oversees the daily operations of the simulation and skills lab that services nursing and health professions students. Her background includes over 25 years in critical care, emergency/trauma care, staff development, and most recently academics. Dr. Watts has received her advanced certification in simulation education, CHSE-A. Her service includes serving on several committees in the Society for Simulation in Healthcare and the International Nursing Association for Clinical Simulation in Learning.



*Chad Epps, MD trained in Anaesthesiology and completed a fellowship in Healthcare Simulation at the Mount Sinai Medical Center in New York City. He is currently the Executive Director of Healthcare Simulation and Professor in the Departments of Anaesthesiology and Interprofessional Education at the University of Tennessee Health Science Center. Dr. Epps is the Immediate-Past President of the Society for Simulation in Healthcare and past Chair of the Council on Accreditation of Healthcare Simulation Programs. He is published in the areas of simulation-based interprofessional education and co-edited the textbook *Defining Excellence in Simulation Programs* (Lippincott Williams & Wilkins, 2014).*



Marjorie Lee White MD, MPPM, MA serves as the Director of the Office of Interprofessional Simulation for Innovative Clinical Practice (OIPS) at the University of Alabama at Birmingham (UAB). She is Vice President for Clinical Simulation UAB Health System and Assistant Dean for Clinical Simulation for UAB Medicine. Dr. White is also an associate professor in the UAB School of Medicine, Department of Paediatrics, Division of Pediatric Emergency Medicine and practices in the emergency department at Children’s of Alabama, Birmingham, AL, USA.



Expert's response to this month's article:

Thank you to all who contributed to the blog allowing us to have such an interesting discussion. We would like to address each of the themes that emerged throughout the posts.

Widespread appreciation of the use of tiers as an inherent motivator for self improvement :

We agree with the consensus of the readers. Anecdotally, we have heard our simulationists talking about what level they have achieved and what they will need to do to get to the next level. Healthcare simulation can certainly benefit from the lessons learned in the gaming world where a "level up" or "next level" is desired by all. We also hope that the levels or tiers will eventually come to mean more than a game. We would hope that a facilitator development program such as this would be motivating for any faculty or staff member who is involved in simulation. Eventually, we would like to see a connection to Promotion and Tenure considerations for faculty who are involved in simulation and a comparable connection to a robust evaluation system for staff who are involved in simulation. We recognize that we are the ones watching the watchmen and this comes with a great deal of responsibility.

Concern that implementing educational standards for faculty could create barriers to local clinical experts participating in education :

We can understand the concern of isolating potential staff who might view these expectations as barriers to participation. However, in our opinions, the quality of the simulation experience and the psychological impact on the learner are most important. We need to ask ourselves, "Who do we want facilitating simulations?" Do we want clinical experts or simulation experts? We believe there is a role for both. In our opinion, simulation expertise is essential and those requirements are more robust than those of a clinical expert or content expert. The OIPS certification plan is intended for those who are the primary facilitators of simulations and debriefing. We consider the role of the content expert or clinical expert equally important, and their training looks different than that of a simulation facilitator and debriefer.

One reader mentioned that there isn't really a universal marker of competence in the field of simulation. The standards and literature we used to develop the plan are cited in the article. For example, we currently use the DASH© tool to give feedback to our facilitators. We recognize that additional tools to assist with providing feedback about the entirety of the simulation experience are needed, and we plan to adapt our plan as the evidence in the literature expands. We view the OIPS certification plan as an amalgamation of the currently available evidence in our field. We also view the 19% uptake rate as buy in for the program, not opposition. Our program is less than three years old, and we look forward to it continuing to evolve.

Acknowledgement that this particular approach would be more suited to a large simulation service such as the OIPS, rather than the smaller simulation faculty that many of the bloggers come from.

We believe it is imperative for faculty to receive simulation training to ensure quality and consistency across programs. We also know that a single initial training is not enough. Our own simulation journeys have continued with the support and feedback of our colleagues and mentors. In our opinion, the OIPS certification plan is a scalable model. Perhaps in smaller institutions there is not a need for five levels, possibly two or three. Our goal is to avoid the perception of an "all or none" model of training (i.e., sim expert or not sim expert). We also recognize that the acquisition of expertise requires deliberate practice and want to ensure that a structure is setup to support this. The most expensive part of simulations is, in our view, not the technology but the human capital. The faculty and staff who have the expertise need continuous improvement expectations as well. Simulation training does not occur solely in a classroom, and providing feedback on facilitation performance should be a standard no matter what type of institution or what the size. We believe it is possible for small centers to work toward a gradual change and adoption of simulation best practice. A change in practice is always hard, but setting standards gradually over time can be a way to slowly move faculty and staff to best practice. We also envision that smaller institutions might be able to partner across the time/space continuum with larger institutions to benefit from the support structure needed to put simulation quality



Journal Club Summary July 2017 “Who Watches the Watchmen?”

first and by making sure that the initial investment in training simulation facilitators is not lost. Please reach out to us if you would like to work together in this process!

Acknowledgements :

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Thankyou to Dawn Taylor Peterson, Penni Watts, Chad Epps and Marjorie Lee White for their expert commentary this month.

Thankyou to all commenters this month for sharing your thoughts and allowing us to learn from you.

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