



Journal Club Summary March 2018 : "PEARLS before Snythe"



Expert Opinions :
Dr Komal Bajaj
Dr Michael Meguerdichian

*"There is so much beautiful music
that is yet to be made"*

The Article :

"Promoting Excellence and Reflective Learning in Simulation (PEARLS)"

Eppich, W and Cheng, A.

[*Emergency Medicine Clinics of North America*, 36\(1\), pp.1-17](#)

Case & Summary Author :

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Expert Commenter :

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- Dr Victoria Brazil
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Simulcast Journal Club is a monthly/ series that 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 :

It had been easier, Brad thought, when Dr Snythe had been focused on destroying his simulation program. But with the publication of Brad's improved CPR stats post implementation of the PICU Simulation Program, he'd been both confused and delighted to find the rival intensivist suddenly supportive of his work. There had been, however, an unexpected catch.

Snythe was suddenly excited about the educational benefits of simulation. And he wanted *in*.

While Brad had tried to maintain the fundamental premise as Snythe tried to negotiate both learning to debrief and learning to use his frontal lobe, he was ashamed to admit that his archenemy's combination of enthusiasm mixed with concrete thinking was making him frustrated, and in some ways, downright snarky.

"You're getting there, Snythe." He said after their latest debrief. "But remember your debriefing molecule. I felt like today you lacked a decent 3 phase structure, and it lead to a very instructor centred debrief. It came across as a bit all over the place." He paused and muttered under his breath. "Kind of like your resuscitations."

"I heard that!" snapped Snythe, "And I wasn't going for your traditional model. I've been reading a lot about PEARLS and I wanted to give it a try today. I assume you haven't seen it but they've just released a debriefing tool."

He pulled out his tablet and showed Brad a crisp, blue and white cognitive aid. "Gotta get with the times, old friend." He grinned. "Wouldn't want to come across as outdated and irrelevant." He paused and grinned wickedly. "Again."

Brad scowled. The truth was he'd heard a lot about PEARLS in conversations with sim educators, but he'd never really 'got it'. Sounded like he'd better jump on the bandwagon though. It had been a while since he'd felt motivated to read much sim literature, but nothing got his inner bookworm going like a good case of career rivalry.

It was time to time to head to debrief2learn. For knowledge.... and more importantly, for revenge.

Discussion :

In 2015 Eppich and Cheng released a new structure for debriefing that is practical, pragmatic and more flexible than some more traditional approaches. Over the next few years they have released a number of papers to assist in translating their original landmark paper.

For our journal club discussants this month, what has PEARLS meant for you? How have you found using the new debriefing tool? Or if you haven't used it, check it out and let us know what you think? The team behind it are keen for your input!

Article Summary :

The PEARLS paper is an essential foundational paper for simulation educators and is frequently noted by new clinical educators as an extremely useful paper to use when first learning how to structure a debrief.

While many of us may have been taught a traditional 3 phase model in our early simulation training, the PEARLS paper acknowledges that there are times where the structure of a debrief will need to be altered depending on a number of factors such as the time available, learner insightfulness, technical vs human factors content.

The authors state they have four aims for the paper :

- (1) *"Provide a rationale for scripted debriefing;*
- (2) *Discuss a rationale for a blended approach to debriefing based on challenges to be addressed and debriefing method;*
- (3) *Present a PEARLS debriefing framework and guidance for its application;*
- (4) *Offer early experiences of implementing the framework in simulation educator courses"*

To provide **a rationale for scripted debriefing** the authors quote a number of articles that justify the stance that the use of scripts can improve learner's knowledge acquisition.

They then move on to discussing **a rationale for taking a blended approach**, and succinctly break down the three major debriefing variants used in clinical practice :

- (1) Learner self assessment (aka 'The Plus/Delta')
- (2) Focused Facilitation (often through the use of Advocacy and Inquiry to guide a deeper understanding)
- (3) Focused Teaching (to correct critical errors for which it would be unsafe to ignore, in a time efficient manner)

While taking the stance that all debriefs should be *"active, collaborative, and self-directed and learner-centered"*, they discuss some of the benefits of each technique in turn.

They then present the **PEARLS Debriefing Framework**, a tool which breaks down a debrief into 4 key phases : Reactions, Description, Analysis and Summary. The bulk of variability or technique blending involves the Analysis phase, whereby the authors argue one may need to switch between Learner Self Assessment, Focused Facilitation and Focused Teaching.

After providing a number of details tables and charts that provide more in depth information about varying educational strategies, the authors conclude the article by acknowledging the tension between providing a structured script for debriefing and potentially coming across as so rigid that the tool appears prescriptive. While emphasising their intent to provide some structure to debriefers, they also argue that :

*We agree that educators should avoid formulaic speech and tokenisms
as well as linguistic rituals by being curious and authentic;
Educators need to find and speak with **their** voice*

Importantly, in 2017 the authors released the PEARLS Debriefing Tool, a cognitive aid for debriefers to use. It is open access and available at <https://debrief2learn.org/pearls-debriefing-tool/>.

It has been formally published at : [Bajaj K, Meguerdichian M, Thoma B, Huang S, Eppich W, Cheng A. The PEARLS Healthcare Debriefing Tool. Acad Med. 2017. \[Post Author Corrections\]](#).

Expert Opinions : Komal Bajaj (MD, MS-HPed) & Michael Meguerdichian (MD, MHPED)



Komal Bajaj, MD, MS-HPed is Clinical Co-Director of The Simulation Center in New York. She is a Reproductive Geneticist and an Associate Professor at Albert Einstein College of Medicine. Komal’s research interests include in-situ programs, healthcare quality metrics, the use of clinical checklists, and challenging conversations. Komal attended Northwestern University’s Feinberg School of Medicine and completed her OB-GYN residency training at Northwestern University, followed by a fellowship in Medical Genetics at Albert Einstein College of Medicine. Komal received her Master’s in Health Professional Education from the Massachusetts General Hospital Institute for Health Professions. She is a board-certified OB-GYN and board-certified clinical geneticist.

Michael Meguerdichian is the Clinical Co-Director of the H+H:Simulation Center and Medical Director at The Harlem Hospital Simulation Center.. Michael is also an Emergency Medicine physician working at NYC Health + Hospitals Harlem. He started working at The Simulation Center in 2011 and in 2106, he received a Master’s in Health Professional Education. With the team, he has helped develop many of the curricula at the H+H: Simulation Center. Leading the fellowship, Dr. Meguerdichian is working towards molding medical education innovators to face the challenges of healthcare today. His research interests include studying the limitations of working memory, degradation of knowledge and skills as well as the benefits of deliberate practice



“At its finest, a debriefing after a simulated or clinical event can be a wonderful symphony of reflection, moving participants (and usually facilitators!) towards improved practice. We treasure such beautiful music, because we’ve both had moments where our facilitation results in a kazoo solo rather than a Schubert classic. As was pointed out in the discussion by Jesse and others, the cognitive load of facilitating a debriefing can be quite high. Novice debriefers are managing the load of *learning* debriefing while dealing with the load required to *execute* one. We find as more seasoned debriefers, that the stressors of debriefing in the clinical environment or managing expert learners may make a debriefing particularly challenging.

We developed the PEARLS Healthcare Debriefing Tool to lessen the load of debriefing while making the innovative debriefing approach developed by Walter and Adam more accessible. The PEARLS debriefing model integrates three common educational strategies to provide flexibility to the debriefer when addressing varied context and performance domains. Drawing on contemporary design principles, we built a cognitive aid that could be available on smartphone, highlight its flexible structure, and serve as a “cognitive scaffold” (thanks Warwick!) when needed.

Multiple respondents acknowledge the adaptations experienced debriefers make to the PEARLS approach. Vic so generously shared some of her expert adaptations in one of her posts. We make these adjustments depending on the participant mix and what sort of debriefing music we might be arranging that day. The front of the PEARLS Healthcare Debriefing Tool addresses each debriefing phase, identifying associated objectives, task(s), and providing sample phrases and questions. A facilitator may need to utilize prompts from one or more columns (or none!) during a particular phase depending upon his/her debriefing expertise and the context of the debriefing.

As Ann mentions, we hope to encourage a broader application of debriefing, whether it is conversations in clinical teaching, faculty development, as well as outside of healthcare. Kudos Nick for exploring its use with your police collaborators. We’ve had some fascinating debriefings using the PEARLS approach with colleagues in applied analytics, banking, and junior high students! We acknowledge the wonderful scores that have already been composed and look forward to continued innovation. Undoubtedly, there is so much beautiful music that is yet to be made!”

Summary of this Month's Journal Club Discussion :

Blog Contributors :

- Warwick Isaacson, Ben Symon, Ben Lawton, Melissa Morris, Nick Harvey Smith, Demian Szyld, Vic Brazil
- Jesse Spurr, Chris Speirs, Walter Eppich, Matt Nettle, Adam Cheng, Christina Choung, Ann Mullen

In some ways, "Everybody Loves PEARLS" could effectively summarise this month's journal club discussion. Critique was minor and specific and praise was everywhere! We were particularly touched to have the authors drop by and comment as well!

Overall themes from the discussion could be :

- It is very useful for new debriefers, but has hidden depths for advanced practitioners as well.
- PEARLS provides an elegant debriefing structure while avoiding constrictive prescription.
- There remains room for future innovation.

PEARLS is useful for new debriefers, but has hidden depths for advance practitioners as well :

Warwick Isaacson opened the discussion by reflecting on his journey in a new educational role. He discussed the early brain strain of structuring a debrief that can seem effortless in the hands of an expert and how useful the tool has been to provide a 'cognitive scaffold' for his early ventures into the learning conversation. Similarly Melissa Morris discussed how useful she finds it in "*quickly imparting some type of standard for facilitation*". Matt Nettle stated the benefits of the paper eloquently with his statement that

"the PEARLS paper really provided me with a solid foundation for what sometimes is a sea of varied debrief processes and educational theory, all of which can sometimes swirl in the moments of cognitive load while facilitating feedback"

PEARLS provides an elegant debriefing structure while avoiding constrictive prescription :

Ben Lawton provided his thoughts about the tension between experts and novices and that the "*best guidelines act as scaffolding rather than a cage*". He acknowledged that like much of debriefing literature it relies heavily on expert opinion rather than hard evidence, but praised the paper for its flexible thinking.

Demian Szyld also praised the article extensively, but acknowledged concerns regarding the 'Plus/Delta' model and potential traps when a learner has poor insight into their own errors.

There remains room for future innovation :

Matt Nettle described PEARLS as "*version 2.0 for models of feedback*", and a number of responses involved people sharing either how they have built upon the foundations of PEARLS, or how PEARLS could be adapted to unexpected situations. Vic Brazil shared some specific adaptations and variations within the PEARLS format that she has found useful, while Nick Harvey Smith, Jesse Spurr and Ann Mullen described using PEARLS in alternative formats, such as in debriefing with the police force and in critical event debriefings.

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References :

1. [Eppich, W. and Cheng, A. \(2015\). Promoting Excellence and Reflective Learning in Simulation \(PEARLS\). *Simulation in Healthcare: The Journal of the Society for Simulation in Healthcare*, 10\(2\), pp.106-115.](#)
2. [Bajaj K, Meguerdichian M, Thoma B, Huang S, Eppich W, Cheng A. The PEARLS Healthcare Debriefing Tool. *Acad Med*. 2017. \[Post Author Corrections\].](#)