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Journal Club Summary September 2019 : "Broken Trust"

Expert Opinion: Dr Bram Welch-Horan

"A relentless pursuit of flat hierarchy, open negotiation, and an actively curious stance toward newer ideas"

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The Articles :

"Managing psychological safety in debriefings: a dynamic balancing act."

Kolbe, M., Eppich, W., Rudolph, J., Meguerdichian, M., Catena, H., Cripps, A., Grant, V. and Cheng, A.

(2019). *BMJ Simulation and Technology Enhanced Learning*, pp.bmjstel-2019-000470

"There shouldn't be anything wrong with not knowing': epistemologies in simulation"

Ng, S., Kangasjarvi, E., Lorello, G., Nemoy, L. and Brydges, R.

(2019) *Medical Education*.

Case & Summary Author :

- Dr Ben Symon

Expert Commenter :

- Dr Bram Welch-Horan

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- Dr Victoria Brazil
- Jesse Spurr

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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 :

Nitin held Nimali's gaze, silently searching for a hint of what emotion lay beneath. Suspicion, certainly… but there was something else he couldn't quite grasp. In the dim light he slowly reached for her hand but withdrew at her involuntarily shudder. His heart broke quietly in that moment. "It's a uniquely awful experience." He ventured. "To lose the trust of the person who first taught you the Basic Assumption.".

Nimali's eyes flickered.

"I've lied to you." He acknowledged. "I've lied to everyone here since my arrival. I've had to spin half truths and falsehoods through every conversation we've had. But Nimali, I've never lied about loving you.".

Nimali winced as if she'd been struck. "I'm afraid, Nitin, that our fiction contract has expired."

"I've wanted to tell you." He said honestly. "I've wanted to for the longest time. But I can't. You've got to believe me Nimali, I'm trying to protect you. You and this centre. I need you to trust me, we're all in very real danger.".

"You want trust?" countered Nimali. "Trust is built longitudinally. On a foundation of shared vulnerability, of integrity, of mutual respect… and from role clarity.". She advanced on him, fearless and stern.

"What role are you playing, Nitin?".

Tachypnoea took hold as Nitin frantically weighed his options : lose his cover or lose the woman he loved. His voice shook as he went to speak, and in that moment he finally recognised what he'd seen in her eyes besides fear. Affection. A remnant maybe, threatened and weak, but present nonetheless, with just a hint of positive regard. A kernel of their past maintaining the tiniest of openings into her heart. It was going to take a leap of faith.

He took a deep breath.

"I'm a spy, Nimali. A foreign agent recruited by your Government, and if we don't stop this murderer soon, there's more than just our simulation centre at stake. I'm trying to save the world.".

Discussion :

This month we're looking at different papers that reflect upon psychological safety. The first, by Michaela Kolbe et al provides an update on thoughts regarding the Safe Container and in particular a focus on nuance and advanced moves at repairing a perceived psych safety breach.

In the second paper, Ng et al look at psychological safety with a different lens. Asking if perhaps medical culture remains so hierarchical that espousing the goals of psychological safety may not be enough to create a truly safe space for higher learning.

A questions for this month to start the conversation :

- How do you think these papers change your approach to maintaining or repairing a sense of psychological safety in your teams?

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Article Summary :

This month in journal club we compared and contrasted two papers on psychological safety. The first, "Managing psychological safety in debriefings: a dynamic balancing act." By Kolbe et al provides further depth and a potential course correction on psychological safety in simulation since the publication of "Establishing a Safe Container for Learning in Simulation" by Rudolph et al several years ago.

Kolbe et al extend previous foundational discussions on psych safety by pitching that achieving group psychological safety is a complex interplay of a huge number of social dynamics. Indeed, they state that *"Psychological safety is not stable, but rather a dynamic and fragile perception."* that is effected by a multitude of factors involving traits of the individuals involved, group behaviours and institutional culture.

The authors then outline a number of implicit and explicit strategies that can be utilised before, during and after debriefings to build, maintain and repair psychological safety with a group of learners so that they embrace that risk taking in the service of higher learning.

The article then moves on to becoming a bit of a field guide at recognising breaches of psychological safety through recognising verbal and non verbal cues from participants, and then outlines a number of conversational strategies to repair that breach. In particular they explore and give a number of examples of 'naming the dynamic', a technique we first covered in journal club in 'difficult debriefing conversations : a toolbox for simulation educators' by Grant et al, in which essentially you explicitly name the elephant in the room and describe the conversational dynamic that's happening, and in doing so you kind of help everyone take a step back and ideally offer a strategy for getting out.

The second article, *"There shouldn't be anything wrong with not knowing': epistemologies in simulation"* by Stella Ng et al, critiques both medical culture and simulation education, by arguing that while Simulation Based Education espouses the importance of psych safety the reality is that medical culture is a pretty judgmental place where making mistakes is not embraced and in fact confidence and being 'right' about concrete facts is much more highly valued in hospitals. As such, they suggest that the conflict between how we say we're teaching, and how learners perceive we think can create unintended consequences, which they're keen to explore.

They explore this theory through a qualitative analysis of med students' perceptions about learning in a series of sims on accurate heart auscultation. Through their analysis they find that participants weren't super focused on contextualisation of principles and knowledge building through shared exploration of concepts around auscultation : they primarily want to get things right and they see the faculty as the gurus with all the right answers. The authors put it beautifully in their abstract conclusion : *"Medicine's tendency to idealise the objective pursuit of singular truths may compromise the purported culture of SBE as a space for learning".*

The thematic analysis includes some lovely interview quotes regarding how these med students perceive obtaining knowledge, how they primarily see learning as 'getting the answers right', and how they both fear and revere the facilitators as the gatekeepers of both validation and knowledge. A challenging reflection for those of us in simulation based education.

Expert Opinion: Dr Bram Welch-Horan

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He completed his fellowship at Texas Children's, and his residency at NewYork-Presbyterian Hospital / Columbia University Medical Center in New York City. His interests include deliberate practice as a foundation for expertise, team-based simulation for teaching resuscitation, and clinical event debriefing. He and his wife, a pediatric ICU nurse, have 3 children.

In preparing this commentary, I was relieved to note that the last time a "Safe Container" article was covered for Simulcast Journal Club (November 2017), no less an expert than Chris Nickson confessed to feeling a bit "vomity" at the idea of critiquing the work of some of his most prized teachers (Nickson, 2017). I would echo that— it's a bit surreal being asked to provide even a semi-official commentary on papers involving such pivotal members of the academic simulation community. But for me, part of the joy of being in such a community has been an evolution in which some of these folks were first role models, then were teachers in courses and workshops I attended, and now are becoming my mentors and collaborators in some cases. Part of what allowed that evolution, though, is the core set of values that many thought leaders in sim have espoused—a relentless pursuit of flat hierarchy, open negotiation, and an actively curious stance toward newer ideas and newer voices. They have, in essence, made it safe for other people to talk— including newer people and those in earlier stages of learning and professional development.

In that spirit, the first of the two papers for Simulcast Journal Club this month, by Michaela Kolbe and colleagues, looks at the "dynamic balancing act" of maintaining psychological safety in debriefings so that participants will feel secure enough to speak up and to take risks in the service of individual and team learning. The author team on this paper is, to borrow from the lexicon of rock 'n roll, a "supergroup." And here I don't mean a supergroup in the sense of Velvet Revolver (for the uninitiated, that erstwhile band included personnel from Guns 'n Roses and Stone Temple Pilots). I'm thinking more of the Traveling Willburys (which included Roy Orbison, Bob Dylan, George Harrison, Tom Petty, and Jeff Lynne). Meaning, an international and bi-generational lineup of accomplished practitioners of a craft that I value immensely. Thus, the paper brings together authors from the Boston (Rudolph), Calgary (Cheng/Grant/Cripps/Catena), New York (Meguerdichian) and Zurich/Chicago (Kolbe/Eppich) schools of debriefing theory and praxis.

This piece is, like the much talked-about "Safe Container" paper on pre-simulation briefings (Rudolph, 2014), quietly life-changing, in that it makes explicit some key techniques that excellent debriefers have been doing for many years, but provides an elegant summary of such practices in a way that encourages usability via "actionable knowledge." They start by locating the issue of psychological safety for simulation debriefings within the broader context of workplace interactions and organizational culture. This is a good first move, especially given that we are talking about simulation and debriefing in a healthcare context. The article draws an early contrast between the natural (and perhaps necessary?) tendency of learners to make mistakes, "particularly when learning new habits and skills," and the tendency of organizational cultures to stigmatize and punish mistakes of any kind.

As healthcare providers, we know we are in a high-stakes industry, and we may perceive that patients and colleagues expect us to know all the answers needed to do our jobs, and to be successful in our professional tasks 100% of the time. However, this assumption, likely first engrained through the "hidden curriculum" in medical school, nursing school, and other health professions education environments, stands in contrast to the concept of "learning from failure," as described by Amy Edmondson, of Harvard Business School and *Teaming* fame (Edmondson, 2012). (If you haven't read that book yet, I would urge you to run, not walk toward a copy. I've been savoring the Audible.com audiobook version, slowly, on the way to work, for months. One of the best things that's happened to me in the past year or so was when Prof. Edmondson's new book, *The Fearless Organization*, suddenly followed ME on Twitter. Yes, the book has its own Twitter identity.) Edmondson argues, in essence, that failure is not always bad, that certain opportunities for learning only occur when circumstances have deviated from *a priori* expectations, and that highly effective teams or organizations embrace these unexpected opportunities for learning as a way to drive growth and change (Edmondson, 2011).

However, to run towards performance gaps when we do a debriefing, rather than further perpetuating the error-averseness of organizational culture in healthcare organizations, we need to have a set of tools for keeping conversations about errors and

uncertainties action-oriented, improvement-focused, and non-punitive. We have to, as Kolbe et al. point out in the article for this month, "walk our talk." And it is in this sense that the paper, despite its lovely, user-friendly figures and tables that I and others will likely use in our own pre-debriefing warm-ups, points to something deeply challenging. To make it safe for learners (whether they are trainees in the hierarchical sense, or colleagues in the more lateral sense) to operate at the "edge" of [their] expertise, we need to confront the ways in which we, as debriefers, allow disconnects between our intentions and actions to occur.

I therefore find myself thinking back to instances (many of them very early in my time as a debriefer, but some quite recent, I will admit) when I felt impatient that learners were not making their way quickly enough to the "answer" (whether in terms of medical management or team science principles in a sim scenario). This perception surely led to situations when I felt compelled to talk more than I listened (because I had so much to teach! So many thoughts to share about, e.g. high-quality CPR, or so many expert-derived solutions to common problems in resuscitation choreography!). My impatience probably led, as well, to body language that ran counter to my overall intention to be learner-centered and to show genuine curiosity about participants' ideas and perspectives. Kolbe and colleagues helpfully characterize this as a loss of "behavioral integrity"—that is, an overt loss of consistency between what we say and what we actually do.

Which brings me to the second article for this month, which is an exploration, by Ng et al., on the safety, or lack thereof, of "not knowing" within the culture of medical education. This paper is by a group (from Toronto) that counts Ryan Brydges as senior author. Despite having studied philosophy in college (and even knowing what "epistemology" meant prior to reading this paper!) I'm not sure I have the theoretical clout to appreciate all the nuances in this incisive piece of work. The "-ology" of which they speak, of course, refers to theories of knowledge, to how we know what we know, and to how we can presume that what we believe is actually valid. The central tension in the paper is the interplay between what the authors describe as the purported epistemological belief of simulation-based education (namely that participants learn from experience and error in an atmosphere of support that minimizes fear) and what they feel is the dominant culture of medical education (i.e., "conflation of expertise with experience and hierarchy," and a tendency to suppress "experiences of error").

In a sense, Ng et al. are asking whether we, as simulation educators, really are who we think we are, or at the very least, borrowing from Kolbe et al., whether we can walk the walk, and not just talk the talk. In an attempt to answer this question, the authors of this second paper turned to interviews of medical students participating in a study of simulation-based cardiac auscultation training, and analyzed the content of the interviews using qualitative methods. They found that the students, in general, felt they had acquired knowledge when they "were able to apply pertinent concepts," demonstrate clinically relevant skills, and transfer their learning and skills to other contexts. Furthermore, in exploring students' beliefs on how they know what they know, the authors found that the participants felt they had learned well when their knowledge was "affirmed by an external source" or tested against a reference standard, "preferably a faculty member."

To my eye, this is a challenging set of results. Many of us look at simulation as a locus of experiential learning in which participants and facilitators co-create moments of learning that arise because of specific experiences, and in which faculty members are challenged to explore their own perceptions, and sometimes mis-perceptions, of learners' frames. We may believe simulation is one of the ways in which we come to appreciate, and possibly accept, the central role of uncertainty in medical knowledge, and in the care of patients. However, the students interviewed for the study by Ng et al. believed, by and large, that faculty needed to be independent verifiers of their knowledge, and cited "social and personal pressures to constantly project an image of certainty" in their knowledge.

Looking back on my own experience as a medical student, I remember feeling overwhelmed by the volume of information contained, for example, in the copy of Harrison's Principles of Internal Medicine sitting in the bookcase of my dorm room. Yet there were times when I too felt that a professor could help me feel some certainty about my understanding, and therefore calm my anxiety about the ocean of knowledge my textbooks represented. I remember feeling a sense of relief that, for example, my small-group preceptor in our Physical Diagnosis course, an experienced internist from my father's generation, told us we could ask him any question about anything in medicine, and that he would try to answer as best he could. We did ask him a lot of questions, and in retrospect, I really don't think he knew the answer to all of them, but I don't recall thinking much about those unanswered questions at the time.

I was happy to see that participants in the Ng study, despite the aforementioned emphasis on certainty, also noted that faculty had the ability to offset what the authors describe as "medicine's pressures to perform with certainty and confidence at all times" through the process of "modelling an authentic appreciation of learning through experiences, errors and discovery." All I can say is "Amen" to that. I remember a time when I was a final-year resident in pediatrics, was on a shift in the children's emergency department of our hospital, and watched 2 attending physicians consult with each other after a call came in on the "Bat Phone," or direct line that ambulance personnel used to give pre-arrival notifications to our ED. The more junior of the two

faculty members announced that a child with out-of-hospital cardiac arrest would be arriving shortly, and that she would be leading the resuscitation. I watched her assign roles to other staff members, and verbally rehearse, in discussion with the more senior faculty physician, how the first few minutes of the code would be run.

At the time, I was amazed to see this happen, in that the junior faculty member was laying out a whole set of challenges and uncertainties for all to see: pediatric codes are rare, the stakes are high, the information in pre-arrival notifications for such patients is often vague, and there is considerable pressure on a resuscitation team leader to accomplish a host of tasks quickly and accurately in the first few minutes of the code. The transparency and gracefulness she showed regarding not knowing, as opposed to projecting the appearance of knowledge and control, has stuck with me, as has the open negotiation she displayed with her senior colleague, in full view of many other team members. Today, this is how I try to behave, how I often see my most valued colleagues behave, and how I teach trainees to act in emergencies. But when I first saw these behaviors on display, I could hardly believe what was happening. I didn't know the phrase "psychological safety" at that stage in my career, but it was there with us in the resuscitation room.

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Summary of this Month's Journal Club Discussion :

Blog Contributors :

- Eve Purdy, Susan Eller, Laura Rock, Belinda Judd, Sonia Twigg, Karen Wallace, Komal Bajaj
- Adam Cheng, Karen Wallace and the mater curry club, Sarah Janssens

The journal club discussion was rich in depth and shared vulnerability, with many participants sharing reflections on their own misadventures negotiating psych safety in education, clinical experience and even while reading the papers of the month.

A number of big topics came up recurrently :

- Exploration of the formation, maintenance and repair to Psychological Safety
- 'Naming the Dynamic' was repeatedly appreciated as a very useful 'power move'
- Significant barriers to engagement with Ng's paper despite appreciation for its message

Exploration of the formation, maintenance and repair to Psychological Safety

Eve Purdy began the month's discussion with an analogy that *"highlighted how rapidly and unexpectedly the psychological safety of a situation can change".* It was appreciated that psych safety is a conceptual space that is shared between learner and facilitator and that it is inherently highly vulnerable. As Kolbe's paper outlines, these individual, group and institutional factors interact with each other in complex, unpredictable reactions almost like a volatile set of chemicals thrown into a Bunsen burner. As Sonia Twigg put it "Kolbe's paper was an elegant discussion of debriefing that goes beyond the facile assumption that psychological safety can be commanded and into the mud of what actually happens".

Multiple strategies were shared and workshopped regarding detection of under-recognised breaches, and a number of participants emphasised the importance of 'walking the talk', while Komal Bajaj explored strategies for orientation to programs in the weeks/months before simulations occur.

'Naming the Dynamic' was repeatedly appreciated as a very useful 'power move'

Belinda Judd and Susan Eller explored the utility of 'naming the dynamic'. It was simultaneously admired as a very useful conversational defusing technique, although there was also acknowledgment that done poorly it could trigger an inflammatory response. They mentioned some reluctance utilising it earlier in their debriefing careers, but appreciated the paper's highlighting of the technique and some responders voiced plans to practice it again.

Significant barriers to engagement with Ng's paper despite appreciation for its message

While the message of Ng's paper was valued, (as Sonia Twigg put it : *"it's a relief to get brutally honest about the effect of hierarchy and dominant epistemologies in medicine"*), there was a strong and pretty close to universal push back regarding the approachability and readability of the paper. Some readers "admitted only reading the front and back page" and it was politely suggested that "there is a level of inaccessibility for clinician educators in the writing.". Particular critique was mentioned of the heavily repeated use of the word 'epistemology'.

Interestingly in some ways, our discussion reaffirmed the central thesis of the paper : 'there shouldn't be anything wrong with not knowing', but as healthcare professionals we didn't appreciate the repeated use of words that were unfamiliar to us. In some ways this highlights the importance of considering the target audience when writing papers, in that translation to the end educator seems important. But in other ways, were we not reinforcing the behaviours that Ng et al described? A focus on understanding and getting the right answer?

Interesting, challenging reading and discussion this month from a wonderful group of worldwide educators.

Thankyou so much for all your time.

Acknowledgements :

Thank you to Dr Bram Welch-Horan for his expert commentary this month.
Thank you to all commenters this month for sharing your thoughts and allowing us to learn from you.
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