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Journal Club Summary June 2020

"Lack of Diversity in Simulation Technology An Educational Limitation?"

Expert Opinion: Dr Karanjot Lall

"Educators often undervalue the immense power they hold in shaping the cultural competency of our medical community"

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Journal Club Summary June 2020 "Lack of Diversity in Simulation"

The Article :

"Lack of Diversity in Simulation Technology : An Educational Limitation"

Conigliaro, R., Peterson, K. and Stratton, T.

Simulation in Healthcare: The Journal of the Society for Simulation in Healthcare, 15(2), pp.112-114.

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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.

Article Summary :

In *"Lack of Diversity in Simulation Technology : An Educational Limitation",* Conigliaro et al present "a nonsystematic review of simulation technology available in 2018 with respect to skin tone, age and sex".

They begin the article by acknowledging that many educational institutions now have diversity policies for faculty but question whether this alone is sufficient. They argue that "achieving true appreciation and understanding of diversity may require that the educational environment is itself diverse", and use this perspective to examine the commercially available simulation products available in 2018.

Utilising catalogues of 8 companies found via an online search engine they categorised the items available into light and dark skinned, geriatric and obese subcategories. While the authors acknowledge this was not a systematic review, the results displayed are marked. From the catalogues reviewed products are vastly more likely to be advertised using photographs of light skinned mannequins, and with the exception of one company, most stock less than 25 products with dark skin tone offerings, compared to hundreds of products with light skin. Company A, for example, stocks 520 products with skin components, displays 486 products with light skinned photographs on their website, and has 12 photos of dark skinned products. Even the company with products essentially equally available in light and dark skin tone, 750 products were displayed with light skin and 2 were shown with dark skin. In essence even when a diverse products were available, they were visually concealed from the advertising. In addition to this, the products which did feature racially diverse options tended to be associated with trauma such as gun shot wounds or sexually related issues such as sexual health training, breast milk training and female genital mutilation.

When exploring simulated patients through online demonstration videos, a similar bias was found both in simulated and real patients towards utilising well muscled, white males. Only in the realm of virtual patients, where skin tone bears no production cost beyond adjusting a slider on the screen, was there significantly equal availability of skin tones and patient size.

After making these observations the authors note that the availability of diverse simulation technology is "hardly a panacea" & that their analysis has several limitations. They do however advocate that educators should be "cognizant of inconsistencies and challenge those aspects of the 'hidden curriculum' which serve as latent microaggressions toward multicultural patient care", and that only with "continued attention will learners receive a consistent message that diversity, even if not always obtainable, is important".

Expert Opinion: **Dr Karanjot Lall**

Dr Lall is a Paediatric Registrar from Rotorua, New Zealand. She currently works at Queensland Children's Hospital and is a Simulation Education Fellow at Bond University. She is also an academic lecturer at Griffith University and has been recognised for her contribution to student teaching through various awards. After completing her medical degree at The University of Auckland she has worked in areas with multicultural populations across New Zealand and Australia. She is passionate about ethnic equality in healthcare and shifting workforce culture to appreciate diversity and improve outcomes for minority groups.

Karanjot is currently completing the ANZCEN incubator program and hopes to attain a Masters in Clinical Education in the coming years. She aspires to dual train in Paediatrics and Emergency Medicine with an ongoing career in medical education and is excitedly awaiting the arrival of her first child.

My name is Karanjot Lall. When people read or hear this, they automatically make presumptions about me. Conversely, I can spend hours on a phone-call to a stranger who has never known my name and then watch their jaw drop when an Indian female walks into the room as opposed to the Caucasian they had pictured. I am hopeful this will not be the experience of my children if society continues to engage in open conversation about prejudice and racism.

When I was asked to give an 'expert commentary' on this week's journal club, my surprise was far from subtle. I don't see myself as an expert in any respect – but I recognise that I am able to share personal experiences and opinions through a lens which is possibly unique for many readers. For this I am very grateful. Despite being an outspoken extrovert, whenever I have shared personal experiences of racism with colleagues / friends / acquaintances I leave the interaction feeling as uneasy as I would following an unprofessional conflict in the work place. Usually not due to any negative responses I receive, but rather just from having discussed a 'taboo' subject and wondering what implications that could have for me. I always felt I was alone in this sentiment until Ben Symon referred to this month's journal club being a "somewhat nervous discussion," and I realised others also experience these challenges when discussing issues of racial stigma and cultural competence.

Conigliaro and her team present a very interesting discussion about the lack of heterogeneity in simulation technology. However, I disagree with the premise that this lack of diversity limits educators' abilities to represent a full array of patients and incorporate diversity. I have never been overly attached to the appearance of manikins in simulation and don't see it impacting on learners' behaviour as much as (for example) environmental cues or ethnically diverse simulated patients may. As far as I can see, when running a simulation my behaviour would be no different if the manikin had a 'fair' skin tone or was painted blue like an avatar. What would likely influence my behaviour would be the clinical situation which was created – for example, a patient with a hearing impairment or non-English-speaking.

What was far more in keeping with my perspective was that "achieving true appreciation and understanding of diversity may require that the educational environment is itself diverse." The impact of the appearance of a manikin seems irrelevant and, in my experience, imposing mandatory conditions in any setting (equipment in this scenario) rarely results in positive perceptions toward the enforced subject (in this case – 'diversity'). Increasing diversity in technology also poses the risk of generating hidden curriculums which may reinforce stereotypes, negating the good-willed intention of inclusion and cultural acceptance.

Rather than focusing on the homogeneity of technology, I believe addressing issues of cultural equality through simulation would be better aimed by focusing on the interactions of learners with people from different

backgrounds. Scenarios which utilise simulated patients of varying ethnicities with diverse accents / languages and cultural norms, are more likely to reflect the interactions of the dynamic healthcare setting. The difficulty with such scenarios would always be portraying the authenticity of the case and being culturally respectful without making generalisations toward any race. Given the culturally diverse population of many workplaces, such scenarios could always be based on personal experiences. I remember being a medical student in my Obstetrics rotation and meeting a Punjabi family with a limited understanding of English. The clinical team were hurriedly gaining consent for an emergency caesarean with the patient nodding, however not understanding a word that was being said. I was able to step in as a translator but was surprised that the team had not recognised her lack of comprehension given her fearful, confused and anxious demeanour. Being able to create such simulations would instil more awareness of language barriers and behavioural changes experienced by ethnic groups compared to any number of 'appropriately skin toned' manikins.

Educators often undervalue the immense power they hold in shaping the cultural competency of our medical community. The simple act of recognition and reflection on altered behaviours toward multicultural patients may be a small gesture, but may change a clinician's actions towards an entire community of people and touch the lives of many. "Clearly, to optimize care, providers must understand, empathize, and relate to patients regardless of variations in race, ethnicity, or physical appearance," and this begins with recognition of inherent assumptions and open discussion about issues which so often make us uncomfortable.

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Journal Club Summary June 2020 "Lack of Diversity in Simulation"

Summary of this Month's Journal Club Discussion by Jessica Stokes-Parish & Ben Symon :

Blog Contributors :

- Eve Purdy, Ben Symon, Jessica Stokes-Parish, Samantha Davis, Ian Summers, Susan Eller, Vic Brazil
- Sonia Twigg, Sarah Beebe, Amy Lannen, Komal Bajaj, Maybelle Kou, Marc Auerbach

This month was a challenging blog to summarise, being characterised by moments of self-reflection, discomfort and commitments to improve. Prominent themes of discussion included the fact that diversity of manikins was not a panacea for systemic racism, the importance of taking a systematic approach to the problem, and consideration of utilising context experts to facilitate conversations regarding our biases and unidentified prejudices.

Ian Summers and Ben Symon, highlighted the conversational discomfort with their comments - Ian in particular noted that he wrote and rewrote his sentences in an effort to not cause offence while Ben noted the private comments and emails he'd received expressing concern about people's own submissions and expressing hesitance to participate or fully disclose their thoughts.

Despite this hesitance, there remained a space for self reflection and shared experiences, as the group created a shared narrative around their own errors, the barriers to change, and sharing a personal commitment to improve. For example, Sonia Twigg said *"talk about diversity reminds me of my time spent in Central Australia...for a couple of months in a remote Aboriginal community and a few years in Alice Springs. I am forever grateful to my Pitjantjatjara teacher - a proud elder who tried to teach us the language, but more importantly shared her experience of being in the word and helped us to start to understand."*.

While acknowledging the enormity of the problem with the sheer volume of cultural dominance expressed through an industry heavily weighted towards white or light skinned manikins, it was highlighted early that achieving manikin diversity is simply not enough. In the words of Eve Purdy - *"diversity in manikins does not equal an anti-racist simulation program*". Our friend Komal Bajaj reinforced this and summarised much of the discussion with the recommendation that anti-racist simulation curriculums need a needs-assessment - from sim content to sim design to sim modalities (including moulage), to who the faculty are...with an actual equity framework for accountability.

Samantha Davis raised concerns about the potential harmful experiences that may be perpetuated through the use of stereotypes in an attempt to "diversify" and also that sim facilitators are not adequately prepared to address racism, transphobia or other forms of discrimination. I, myself, expressed similar concerns with the comment expanding that *"I think we have had a focus on task outcomes, as opposed to culture development, which may create a bias for these stereotypes".*

As Jessica Stokes-Parish tates, "whilst largely informed by our time and resourcing constraints, I think we truly do not understand the impact of inadvertently perpetuating microaggressions and stereotypes in our learning.".

Acknowledgements :

Thank you to Dr Lall for her 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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References :

1. Conigliaro, R., Peterson, K. and Stratton, T., 2020. Lack of Diversity in Simulation Technology. *Simulation in Healthcare: The Journal of the Society for Simulation in Healthcare*, 15(2), pp.112-114.