GLOBAL PERSPECTIVES

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Cultural considerations in simulation-based education

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I. INTRODUCTION

The ultimate goals of health professions education are to enhance practice readiness, improve delivery of safe patient care and ideally, improve patient outcomes. Simulation based education (SBE) is now well established as an educational approach, in undergraduate programs and for continuing professional education, that complements existing models in development of core clinical knowledge and skill acquisition for health professions students and clinicians. It is known that the various domains of learning, such as knowledge, the psychomotor, affective and behavioural elements of practice, can be incorporated into holistic patient care simulation scenarios (Kelly, Hopwood, Rooney & Boud, 2016). Ways of determining the impact of SBE are topics emerging in the literature. Increasingly, those who design and deliver SBE are becoming more attuned to the spectra of cultural considerations important for learning and practice (Bahreman & Swoboda, 2016).

Culture can be defined as 'the social domain of practices and material expressions' and 'a way of life, customs and beliefs' (Horvat, Horey, Romios, & Kis-Rigo, 2014). Further, culture is a consideration within the contexts of: organisational, ethnic, socio-economics, geographical, political, personal values and beliefs and societal standpoints (Horvat et al., 2014). For ease of discussion, we will focus on culture from the ethnic and geographical perspectives which influence approaches to learning and outcomes in educational settings. Specifically, we address the challenges – and opportunities – in addressing the cultural diversity in the student population. There is much in the literature about developing cultural competency in relation to patient care, but little acknowledging the diversity amongst health professions students and ways to maximise learning, specifically within SBE.

The cultural considerations of learners, as noted above, should be considered in all stages in SBE including the: formation of participant or observer groups; scenario topic and content presentation; preparation and participation of students and faculty; approaches to debriefing; post simulation reflection and benefits beyond the educational exercise. As SBE matures, educators are more cognisant of the importance of local contexts and nuanced practices as foundational features in designing and delivering simulations. Attention to students' expectations of learning, embedded within their cultural norms, is critical for meaningful development of professional practice, as portrayed through SBE. These are important factors given the diversity in student cohorts, patients and the health workforce.

II. LEARNING EXPECTATIONS OF DIVERSE STUDENT COHORTS

Globalisation of the health workforce has an impact on universities, particularly in the Asia-Pacific region, in that there are significant numbers of 'international' students within health professions programs. These large, diverse student cohorts are distinctly heterogeneous in their cultural origins, language, educational backgrounds and clinical practice cultures (San Miguel & Rogan, 2015). Their expectations about learning often contrast with contemporary Western

approaches. Rather than being the 'font of all knowledge' the contemporary role of teachers is to facilitate student learning. Group work, peer learning and Socratic dialogue are paradigms which significantly contrast with pre-university experiences, and often challenge the leaning expectations of students from Asian cultures (Kelly et al., 2016). For example, Asian students' experiences from traditional college education are of assessments that personify rote learning so when students are suddenly exposed to approaches such as *self-directed* or *problem based learning* to promote deeper analytical processes, significant adjustment is required (personal experiences of all 3 authors). Some may say this is the case for students in many other countries. In any case, academics need to acknowledge the differences in these expectations and support students in the transition to higher education.

Culturally sensitive beliefs influence not only student learning but also clinical practice, and the expectations of clinical facilitators of 'ideal' student behaviours. The nuances of effective communication is a prime example here and one which can be addressed in SBE prior to students' clinical placements. San Miguel and Rogan (2015) provide examples of facilitators' comments about nursing students' 'ineffective' communication abilities such as: avoiding eye contact, not engaging in 'small talk' and perceived lack of 'seeking clarification' in relation to clinical procedures. Many of these cultural considerations can be addressed using SBE to model 'ideal' professional behaviours to students as well as academics, and through peer teaching, offering those who facilitate SBE appreciation of student-centric approaches to learning.

III. KEEPING LEARNERS WITHIN THE SAME CULTURAL GROUPS?

We acknowledge there are benefits in combining learners from varied cultural backgrounds into 'mixed groups' for any educational approach, where diversity of contexts and values enrich awareness. However, when commencing a program of simulation, there may be benefit in configuring groups with similar cultural understandings, supported by a faculty member with an equivalent background. This approach may address the commonly reported levels of anxiety when participants are asked to 'perform' in simulation scenarios while others observe. Participants may then feel more able to interact using specific phrases, range of responses and practices inherent to their culture. Once the learners have reached a particular level of comfort with what is expected, a deliberate move to more heterogeneous groups may expand awareness of equally relevant responses from others' cultural viewpoints. There is also value in academics' modelling professional behaviours

for students or clinicians, with respect to the context of the practice environment. These approaches may ease the transition to more demanding simulations that require greater learner engagement, more peer feedback and active participation in debriefing.

IV. PREPARATION TO FACILITATE LEARNING

SBE is a learner-centred approach, where participants and observers should feel comfortable in responding authentically to a given patient 'situation' and draw on tacit knowledge to personify holistic practices. Within SBE, learning and insight is facilitated through fluid interplay between participants (the socio-cultural) and with artefacts in the environment (the socio-material) (Kelly et al., 2016). Facilitating SBE requires multiple skills which may conflict with established, or comfortable, educational practices. Being mindful of what learners bring to the situation such as previous work and life experiences will also help facilitators support participants' varied approaches to learning.

There is a dearth of literature on the influence culturally diverse faculty have on learners in SBE, another important point to discuss and explore. Planning how to facilitate simulations commences with agreement (if there are multiple faculty) on how to select active participants, the pace and complexity of the unfolding scenario, the level and type of support offered to participants, when to intervene if practice is unsafe, and when to stop the scenario.

Even the interactions between the simulation faculty and technical support team and how they choose to progress or deteriorate the 'patient' can vary based on the quality of interaction between them. These subtle differences can indeed influence the overall intended learning outcomes. Such factors can be minimised by having dry-runs of the scenario with all members of the simulation team, especially when they too are of diverse cultures. Pre-planning offers synchrony of intended simulation states with expected interventions and helps to shape the debriefing content.

V. ENGAGING OBSERVERS IN NOTICING

Attention is turning to those who observe simulations and ways to improve engagement in noticing what unfolds, to discuss during debriefing but to also trigger self-reflection of practice and beliefs. Several research groups are developing rubrics with varying levels of supportive prompts or sample answers to help students focus on the simulation action. Students can enter comments into the rubric about what they discern as professionally (and/or personally) important for a given patient care situation which provides opportunity to

contribute opinions into the debriefing session. This may lead to more thoughtful and constructive comments rather than punitive tendencies or focusing on 'what is right'. Students could also pair up to complete the rubrics which might highlight different opinions based on cultural values.

VI. DEBRIEFING DIVERSE STUDENT COHORTS

In the contexts of this paper, the cultural expectations of post-simulation debriefing are generally based on the principles of 'seeking the absolute truth' and 'not settling for second best'. This conflicts with Western based models of debriefing where the facilitator probes students' opinions in a 'reflective mode' approach. It is acknowledged that achieving stepwise deconstruction of the simulation exercise is important, namely - what went well, what does not fit in the expected plan, what went wrong, how could it be improved. A particular characteristic of culturally diverse learners is that they might choose not assert to embarrass their team mates when they knew of a superior alternative. However, it also important to note the students of Asian origin seem to be particularly keen to quickly reach the 'essence of the matter', being told what was not done to expected standards and which are the expected best practices that should be adopted. Hence the debriefing might have to dwell more on identifying the core misses and have a structured way of stating the expected.

Over time, techniques such as encouraging learners to lead discussions, learning how to phrase questions during debriefings, as well as allowing for periods of silence, might be viewed as a more useful and informative approach to reflection on and about practice. Simple trigger questions such as: *what did you notice when …? what do others think? tell me more*, and *have you seen this before?* might be useful in changing the format to debriefing conversations. Viewing other faculty as they model debriefing practices will help in implementing new approaches, as would peer-review of facilitation techniques.

VII. MAXIMISING STUDENT ENGAGEMENT AND REFLECTION

Simulation exercises are time, centre and faculty limited and have to progress within a frame of pre-planned events and activities. This is especially true when large student cohorts more than 200 have to rotate within a couple of days. Such schedules can limit the capacity to help learners who are shy performers when 'being watched', those with inability to be assertive in group sessions, and those who are 'frozen' when the session demands 'action' as a team. While culture can have influence on how students learn, inherently some students choose to lead the sessions, while some prefer

to take instruction while the rest ruminate or stand inactive. The role of faculty in these situations is to maximise participation of all learners and guide them to achieve learning by being in teams.

VIII. SUPPORTING ONGOING LEARNING TO ENHANCE PRACTICE

Learning from the simulations needs to start before the actual sessions. Appropriate pre-reading to bring knowledge to the fore, pre-assessments immediately before or during simulation sessions to gauge knowledge retention and reflection, flagging current guidelines and core clinical information during the debriefing help to layer the learning experience. Following learners up after the simulations helps to determine if the minimum expectations as set by curricular goals has been achieved. With diverse student cohorts, there must be provision for extra sessions / open lab time for those who need more 'deliberate practice' following the simulations. Ongoing support can be offered through blended learning platforms. Options might include discussion forums or academic blogs that allow more 'reserved' students to clarify core principles with faculty and peers at a pace that suits their processing capacity and reflects their cultural belief systems.

In summary, culturally and linguistically diverse large cohorts are a challenge for many health professions educators. Understanding the different perspectives and expectations of these learners will assist faculty in creating and delivering culturally appropriate SBE experiences. Benefits would likely extend to all learners and offer insights about ways to enhance communication, teamwork and considerations when working in diverse teams or caring for diverse patient populations.

Notes on contributors

Associate Professor Michelle Kelly *PhD MN BSc* brings varied clinical, educational and academic experience to her current role as Director: Community of Practice at Curtin University. Her practice and research in health professions education focuses on the varied ways simulation can be used to enhance and enable holistic clinical practice.

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Declaration of interest

There are no specific conflicts of interest from any of the authors with regards to this paper. Views put forward are based on personal experiences, their own and others' research.

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