Culturally Safe Practices in the Co-creation of Medical Education Curriculum with Indigenous Animators: Outcomes From an Indigenous Learning Circle

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ABSTRACT

OBJECTIVES: To explore the experiences of Indigenous patient actors who co-created and enacted Indigenous patient scenarios in collaboration with medical school faculty. We critically examine the structures and systems in a medical school that mediate cultural safety for Indigenous patient actors. The Truth and Reconciliation Commission of Canada has called on medical schools and healthcare institutions to help address the intergenerational harms inflicted on Indigenous people by the Indian residential school (IRS) system. Institutions are striving to incorporate cultural competency, conflict resolution, human rights, and anti-racism education into their curricula. However, the structural inequities within undergraduate, postgraduate, and continuing medical education practices must be identified and challenged to ensure that medical education is authentic and culturally safe for those involved in the development and delivery of the Indigenous health curriculum. To explore potential structural inequities in the co-creation process of simulated cultural communication scenarios (SCCS), the Indigenous animators at Debajehmujig Storytellers and collaborating faculty and professional staff at the Northern Ontario School of Medicine University (NOSM U) examined cultural safety in their curriculum design and delivery process.

METHODS: We utilized the qualitative Indigenous research methodology of the Learning Circle to deconstruct the co-creation process and to explore the experience of cultural safety from the Indigenous animators' perspective throughout the curriculum design and delivery process.

RESULTS: A framework for culturally safe co-creation practices with Indigenous people, rooted within Indigenous teachings of the Medicine Wheel, emerged from the qualitative data.

CONCLUSIONS: This framework has the potential to guide the practice of culturally safe co-creation of Indigenous patient simulations in medical education and healthcare workplace learning. While the Medicine Wheel teachings are held by specific Indigenous nations, we anticipate that the results and recommendations of this study will apply to Indigenous co-creators and academic medical educators internationally.

KEYWORDS: simulated cultural communication scenarios, cultural competency education, cultural safety, patient-led co-design, indigenous health, indigenous research methods, patient simulation, social responsibility

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Introduction

Background

In 2005, the Northern Ontario School of Medicine University (NOSM U) was founded with a social accountability mandate to be responsive to the population of Northern Ontario, where Indigenous peoples make up a significant portion of the population: 11% in the northeast,[1] and 21.5% in the northwest.[2] Three years after the School was founded, the Truth and Reconciliation Commission (TRC) was convened to document the history and lasting harms the Indian residential school (IRS) system inflicted on Indigenous peoples in Canada.[3] In 2015, the TRC issued 94 Calls to Action. Specifically, Action #23 calls for the provision of cultural competency training for all healthcare professionals and Action #24 challenges medical and nursing schools to offer curriculum focused on Indigenous health issues "including the history and legacy of residential schools, the United Nations Declaration on the Rights of Indigenous Peoples, Treaties and Aboriginal rights, and Indigenous teachings and practices."[4] The TRC also emphasized the need for "skills-based training in intercultural competency, conflict resolution, human rights, and anti-racism."[4]

Addressing the Calls to Action related to health care has been an increasing focus for medical schools since the release of the TRC Report. Medical educators from Australia, Canada, New Zealand, and the USA recently collaborated on a consensus statement describing educational institutions' roles in eliminating Indigenous health inequities. Their requirements include that "medical education programs must have an explicit, rigorously developed Indigenous health curriculum, with *rigor* defined in terms of both Western and Indigenous

standards and contextualized to local needs," and that "Medical education institutions must have a framework for understanding and addressing racism and privilege at institutional and curricular levels."[5]

Supported by a social accountability mandate, Indigenous peoples' health has a robust presence in the undergraduate medical education curriculum at NOSM U compared to other medical schools, with concepts reinforced in its spiralling curriculum.[6] The cornerstone of the NOSM U Indigenous health curriculum is an innovative mandatory 4-week cultural immersion placement in an Indigenous community, the only one of its kind in the world.[7] Over several months, leading up to the placement, students are taught about the history and cultural diversity of Indigenous peoples in Canada, Indigenous health services delivery systems, social determinants of health, racism, and cultural safety.[8]

Our 20 years of experience with this substantial Indigenous health curriculum has allowed us to critically deconstruct the pedagogical approaches that support successful outcomes.[9–12] We also understand the importance of continually identifying lingering colonial, institutional, and structural processes that obstruct learning goals and create a hidden curriculum. For that reason, Indigenous community members at each placement site are engaged and involved in creating the placement curriculum. This community involvement in the Indigenous health curriculum has translated into meaningful learning opportunities about traditional Indigenous medicine, empathy for Indigenous patients, and preparedness for culturally safe care. One Indigenous NOSM U graduate explained that the curriculum collaboration between the School and Indigenous people benefits learners as this curriculum is transformative for many who experience it.[7]

Another area of curriculum utilizes simulated scenarios to develop the clinical skills required for culturally safe care. However, assessments of simulations with Indigenous standardized patient (SP) scenarios at the School revealed that the SP model did not allow the Indigenous actors' to apply their lived experience to portray authentic Indigenous clinical scenarios and created culturally unsafe learning environments for Indigenous SPs.[9,13]

A program for simulated cultural communication scenarios (SCCS) was developed to mitigate the concerns created by the standardized cultural simulations. The SCCS also allowed us to introduce Indigenous patient actors who consider themselves animators since they do not only act out a character they co-created, but also impart life, interest, spirit, and vitality into patient cases.[9] SCCS features cases co-created and animated by Indigenous patient actors in collaboration with academic medical educators to enhance authenticity and avoid stereotypes.[9,14,15] Details on the development of these cases has been published.[9] During the SCCS co-creation and implementation process, our group became aware of the importance of supporting the Indigenous animators to voice and portray their lived experiences in the cultural patient simulations.

Existing research on the potential harm caused through simulation and the subsequent suggested policy changes have predominantly focused on workplace learning.[16,17] However, attention must also be paid to the experience of SPs as they enact their role in healthcare education. In particular, West[18] has challenged educators to explore the structural inequities that SPs face in medical education, including the marginalization of the SP role, the lack of value placed on the educational contributions of SPs, and the emotional and physical pain inflicted on SPs. "When this SP experience collides with institutional healthcare culture, structural inequities become apparent and point to how phenomena, such as marginalization and humiliation, can shape individuals operating within the culture of healthcare, ultimately affecting patients and their health."[18] Therefore, when educational experiences are developed to foster culturally safe patient care, the potential benefits and risks for Indigenous animators involved in the teaching may be significant. However, research to examine the impact of this work on Indigenous co-creators from their perspective had been lacking until now.

Methods

Using a qualitative Indigenous research method, we engaged in a dialogue about the experience and perspectives of the Indigenous animators on our team who co-created and enacted the patient scenarios in collaboration with medical school faculty. Beginning with a structured Learning Circle and following up with several member checking meetings over the period of 1 year, we explored how structures and systems in a medical school supported or hindered the experience of cultural safety for Indigenous animators.

Overview of the SCCS co-creation and delivery process

Our co-creation process for the SCCS was built on a long-standing collaborative relationship. Debajehmujig Storytellers, an Indigenous theatre troupe, and several academic educators have successfully collaborated on smaller scale projects for implementation with small groups of students at specific rural placement sites.[15,19] Our goal was to co-create SCCS for 64 first-year medical students before their month-long Indigenous community placement.[9,13] We realized that the development process should respect and bridge Indigenous and Western worldviews, supplanting the Western-centric SP model. In early discussions, it became clear that the co-creation and delivery process would require monitoring of the cultural safety experience by the Indigenous animators, and second, it would require compatibility within the medical school curriculum, including culturally competent faculty and clear learning expectations.

To accommodate the two main campuses of NOSM U, the animators delivered the scenarios in each site on consecutive days. The co-creation team and the supporting NOSM U Indigenous Affairs Unit traveled 1000 km between campuses to implement the curriculum in person at each site. Each animator presented their patient scenario to groups of four students, with one student taking their history and three students and one preceptor observing. Each animator provided their scenario twice in the morning and twice in the afternoon.

The animators ensured authenticity of the patient scenarios by combining their experience with theatre techniques such as improvisation, their work on community health projects,[9,20] and their lived experiences as Indigenous people living in First Nation communities to develop the patient stories. As part of their artistic process, they consulted with community members who hold the roles of the patients they portrayed (e.g., police officer, health director) to enrich those life stories further. The animators then integrated the clinical details regarding the medical conditions into the patient's story during practice sessions with medical educators. The animators further workshopped the roles together with faculty to "breathe life" into the patient roles and practiced providing feedback to the medical students after the scenarios. This co-creation process between the Debajehmujig Storytellers, the clinical lead (MR), supporting faculty (MM), and an instructional designer (NB), resulted in the development of nine new patient scenarios.

Nabigon's Indigenous Learning Circle methodology

From the onset, the animators who co-created and enacted the case scenarios requested a debriefing session with NOSM U academic staff and faculty who collaborated on the initiative. The purpose was to share experiences and evaluate whether authenticity and cultural safety had been maintained from the perspective of the Indigenous animators. All involved agreed to approach the debrief as a research project and the Indigenous research method of the Learning Circle was chosen as an appropriate approach.[21,22]

For the Anishinaabe (the Indigenous nation involved) a sharing circle is a healing ceremony where all participants are equally able to speak and listen. It is a wholistic experience where the "heart, mind, body, and spirit" are shared.[22] Stories, experiences, and feelings expressed in a sharing circle are meant to be kept confidential.[23] Nabigon et al. created the Learning Circle method modelled on a sharing circle but focused on knowledge sharing among the people in the circle and beyond.[21] The Learning Circle therefore differs from a sharing circle in that stories told in the circle can be reported on without breaking Sacred Trust. The Learning Circle method aims to involve all participants in a process to identify what forces might be creating imbalances or negative experiences and how these might be addressed to move closer toward balance. This knowledge seeking dialogue supports healing of relationships and thus moves to restore balance as part of the research process. Learning Circles are similar to sharing circles in that each participant is "free to speak without interference, interruption or questioning," and each person speaks only about their own experience and respects others perspectives without providing a rebuttal.[21]

Implementing the Learning Circle

The Learning Circle started with all participants meeting at the Debajehmujig Creation Centre, sitting comfortably in a circle in the Green Room, the performers' lounge. One of the animators opened the circle with a smudging ceremony. Then audio recorders were set up in the room, and the protocol unfolded in the way that Nabigon[21] described it:

> *Everyone waits for someone to finish speaking in turn, around the circle in the same direction as the dance, clockwise. The clock is not honoured. People are prepared to stay for as long as it takes. The communication is understood to be between the person and the Creator. Each speaker is allowed to complete their thoughts before the next person's turn. There is an air of light-heartedness or fun; it is not serious, yet deeply serious, and this is the presence of the Trickster.*
>
> *The participants work to get rid of blame, which is intuited as inferior or undesirable behaviour, and this shedding of blame becomes the key for change. In this view, getting rid of blame encourages participants to accept responsibility and to participate in 'power-with'.*
>
> *The format is not confessional. The concept of the grandfathers and grandmothers providing unconditional love sets the stage for forgiving oneself and others. There is an etiquette of honesty; the past is past, and one cannot do anything to change it; however, one can learn from it. There is a sense of reality orientation and grounding in the here and now.*

Two full rounds of the Learning Circle were completed, with all speakers sharing their thoughts. We then continued to go around until all participants had articulated all the information they wanted to share, no new ideas were being generated, and saturation was reached. The Learning Circle lasted approximately 3 hours, then one of the animators, who is also recognized as a knowledge keeper, conducted a closing ceremony.

Learning Circle questions

The questions that guided the circle were co-created in advance and were designed to privilege the perspective of the animators. Instructions were to respond to any of the questions during the Learning Circle in no particular order (see Table 1). The academic medical educators were asked to witness the animators' perspectives and reflect on these topics from their perspective as non-Indigenous supporters.

Learning Circle participants

Each of the 13 SCCS co-creation team members were invited to participate in the research and all of them accepted the

invitation. The participants included the Indigenous animators, the creative (BN) and the administrative (JB) directors of the theatre group, two faculty members (MR, MM), and the instructional designer (NB), as provided in Table 2.

Analysis of the data generated during the Learning Circle

The Learning Circle audio recording was transcribed verbatim. The thematic analysis of the transcripts aligned with our main research question: "What creates the experience of cultural safety for Indigenous Animators in the co-creation and delivery of authentic Simulated Cultural Communication Scenarios with medical school faculty?" The first set of codes was created using the qualitative research software program NVivo 12.[24] The codes were then analyzed and categorized into emerging themes. During the collaborative analysis, it became evident that the themes aligned strongly with the concept of the Medicine Wheel. The Medicine Wheel has many layers of meaning in Indigenous cosmology. For example, the four quadrants of the Medicine Wheel can represent the physical, mental, emotional, and spiritual aspects of life as illustrated in Figure 1.

Mashford-Pringle and Shawanda[25] have suggested that the Medicine Wheel can be used as an analytical tool for non-linear data analysis. This approach "can reveal interconnectedness and dependency between or on other variables that may not have been apparent in a more linear or western analysis."[25] They also suggest that reflection on the initial findings is critical as there may be teachings that require a secondary analysis.

Congruent with these suggestions, we presented the emergent themes back to all co-researchers and the animators in a member-checking process which included face-to-face meetings, phone conversations, and electronic mail over the period of approximately 12 months. The themes were revised until all co-researchers agreed that no new ideas were generated any longer and consensus had been reached.

Table 1. Guiding questions for the Learning Circle.

1. Did the case scenarios you developed reflect issues you observe in your Indigenous home community in the way you envisioned?
2. How safe did you feel during the development and delivery process?
3. What made you feel safe/unsafe during the development and delivery process?
4. What impact, if any, on yourself did the experience have?

Table 2. Participant demographics.

DEMOGRAPHIC GROUP	DEMOGRAPHIC CHARACTERISTICS	NUMBER OF PARTICIPANTS
Animators	Female	2
	Male	7
	Indigenous	9
Total		9
Academic team members and administrative director	Female	4
	Male	0
	Indigenous	0
Total		4

Ethics

This research project obtained ethics approval from the Laurentian University Research Ethics Board (REB # 6009722). Written informed consent was obtained from all participants prior to the study's initiation.

Results

The thematic analysis is presented with the overarching themes aligned with balancing the four quadrants of the Medicine Wheel in a culturally safe, co-creation process. The theme of physical safety was further analyzed to reveal the sub-themes of travel arrangements and racism; intellectual/artistic safety was connected to the co-creation process, the delivery process, the feedback sessions and the artistic growth. Emotional safety was strongly connected during the delivery process and mediated by unpredictable emotion triggers. Spiritual safety was talked about in terms of respect for Indigenous world views.

First quadrant: physical safety

Travel arrangements. The importance of physical safety considerations was primarily discussed in reference to the significant travel requirements between campuses, including access to

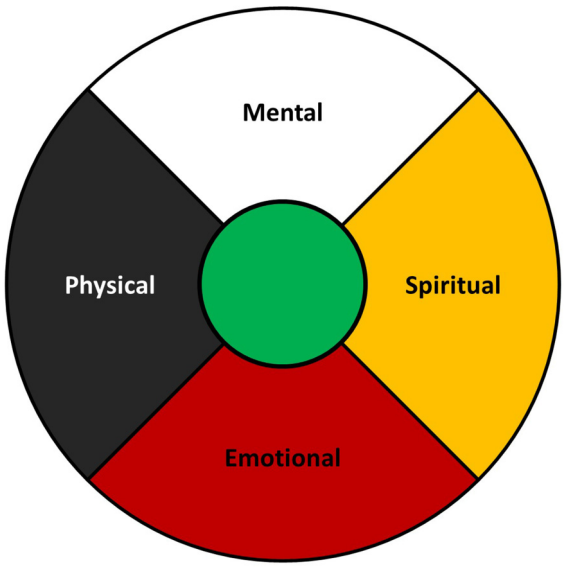

Figure 1. Balanced medicine wheel.

safe transportation and accommodations as well as culturally relevant food.

> *I really enjoyed the development and delivery process in both places. With so many people taken care of, I felt like it was really easy for our group because the transportation was taken care of, the food was taken care of, like all of the extra things where you can sometimes trip, it was to me just so beautifully organized. [Participant 7]*

Exposure to racism. However, one campus is in a city with many documented incidents of racial violence, including police brutality against Indigenous people,[26–30] and considerations for the physical safety of the Indigenous animators had to include carefully selected accommodations to reduce potential exposure to racism. Despite these precautions, some animators experienced microaggressions and felt that the location was unsafe.

> *Just going to Thunder Bay, knowing that there's a missing person there at the time that was Aboriginal… It kind of made me scared to even just go across the street seeing a police cruiser there. And I'm playing a police officer [in my patient scenario]!…' [laughs uneasily] But yeah, I thought, oh my God, I wonder if I could just be picked up off the street for being out after dark. [Participant 9]*

Second quadrant: intellectual/artistic safety

Intellectual/artistic safety in the co-creation process. Animators felt that their intellectual and artistic well-being was respected in the co-creation process when they had agency over the patient character and the case they created.

> *I think there is something there to have a voice in the character. To have an insight in regards to choosing that career or plan that they have in the community…I think it's important to have a choice in which character to use. [Participant 4]*

The animators' freedom to create rich details for each patient character in consultation with community members ensured an authentic representation of First Nation community life and activities and was a vital component of a safe artistic process.

> *Developing my background…, I was a little nervous cause I didn't want to send the wrong message, I guess. I didn't want to portray it wrong, you know? So I went to my aunt and I talked to her a bit about what it's like being on Band Council and she shared a lot with me and I felt like I had enough there [to create the character]. [Participant 2]*

Developing distinct cultural identities for each patient character was important to animators to reflect the diversity of Indigenous people, including their level of involvement in community traditions, worldviews, language, and their healthcare needs, as they navigate two distinct cultural realities every day.

> *For myself, it would be nice to make my own character and decide how in touch with my culture my character is, you know? Whether I identify with being Anishinaabe or not… [Participant 2]*

Supporting the animators' agency in the co-creation and delivery of the scenarios helped to minimize power imbalances and helped to create a sense of safety.

> *I felt like I had a lot of control over my character, I had the reigns, and I make myself really vulnerable when I do performances. So I felt safe when I went into the room knowing that I wasn't …forced to perpetuate any stereotypes but rather maybe break them down and inform and educate the students. [Participant 1]*

Intellectual/artistic safety in the delivery process. Animators identified some personal benefits, including feelings of empowerment, as they used their artistic abilities to educate and challenge stereotypes and portray different patient perspectives that students may encounter in communities.

> *And even if they weren't asking the right questions, I'd find some way to throw them a bone … My character was so standoffish …I said 'Well I don't believe in Western medicine. Don't you ever see those commercials? Side effects may include laziness, alcoholism, homelessness…Who wants to be fed that? That's just going to make you more sick'.*
>
> *So there were little ways of throwing out information and yeah I had a lot of fun with it. [Participant 1]*

Animators felt empowered to share some of the realities of their day-to-day experiences living in a First Nation community as they presented patients with different social and economic situations.

> *…the place we were from was fictional but it is based on our reserve… So I tried to make it as similar to my reserve as possible, down to experiences and stuff. Experiences that people have had on my reserve, I've taken and made them part of my character's story. So I like to think that there was equal amounts of bad and good in my character's past and story, what I had to tell. Because, you know, living on a reserve isn't all sunshine and rainbows but at the same time it's not a terrible place either. It's still a nice place. Yeah, it's home. [Participant 2]*
>
> *'Well I'm broke, just paying enough bills, trying to buy simple foods. I work at the recovery centre, I work at the youth centre'. [Participant 5]*

The animators felt safe to share some of their personal life experiences in their patient roles and during the student feedback portion of the session, and students shared that they valued the knowledge that was tied to their lived experience.

> *…my character was using a lot from my own personal experience… from learning the culture and traditions and I am doing that to the best of my ability today. I started this in 2008. And it is hard, and I explained that to the [student]… At the end of it she's like 'Well thank you for sharing your story to me. Thank you so much, I learned a lot'. And I was like 'Wow, okay cool!' [Participant 8]*

When students asked for advice for their upcoming cultural immersion placement, it resonated well with animators who then provided guidance.

There were some really great things that happened… they asked what kind of advice would you give me going into these communities, and in that I really felt like a resource. [Participant 1]

The animators also felt that their knowledge was valued in the tutor feedback portion of the session.

The preceptor actually jumped in and started asking me questions about how I felt during the interview at certain parts, like with some of the questions. And I was like 'Oh that's really cool, no one's actually done this before'… I thought that was really good because then after he asked the question, I answered. [Then] he would then talk to the student and be like 'See, so another way you could have done this is …' Rather than just explaining to the student right away, [to first] show the reasoning behind it. Yeah I thought that was great. [Participant 2]

However, the animators felt unsafe with students or tutors who did not appear to embrace the session's cultural safety communication objectives and instead focused on their own clinical objectives.

I wasn't sure if the objectives were clear… in one interview I went in and my character, all he wanted to do was get a note and leave. And that's what I got [from the student]. And so I wasn't sure that [students and tutors knew] it was about communication… So I felt a bit cheated and it was actually really awkward after that because we sat there for about 10 minutes…Yeah so I wasn't sure if I was doing something wrong… [Participant 1]

One tutor also seemed unprepared and directed students to focus on the clinical presentation.

So then [the tutor] started talking… 'And even before this happened, because she's talking about headaches, we want to know if you get headaches when you're laying down, do you get headaches when you're standing up, are you having a brain aneurysm?' She's like 'These questions should be pounded out right away. And if that's the case – the interview should be stopped right there.' And I was like [chuckles] 'okay!.' [Participant 9]

Some students were not prepared to explore the patient character's personal life, illness, and social determinants of health. A few of these students took a privileged and disrespectful position in the feedback portion of the session and even spoke about the animator in their presence.

… one of the students was like, 'I don't even see how this is important, like what does any of her personal life have to do with what we're treating here?'

In another instance, a student displayed micro-aggressive behaviors when they recognized the animator.

I recognized him and I asked him after… 'Do I know you from somewhere? Like do you know me?' [chuckles uneasily] Is that why you're so standoffish? And he's like 'I recognize you too'. And I thought if I hadn't gone in the [scenario] so business-like and being a police officer, and going in there like just an 'old alcoholic Joe' or something, I wonder if my treatment would have been totally different. [Participant 9]

In this instance, the animator found the student standoffish and wondered whether she would have been treated poorly had she portrayed a person living with addictions rather than a professional.

Some students questioned the patient character details, which resulted in the animators feeling judged and disrespected as professionals and as Indigenous people. One animator, who portrayed a health services manager, recounted:

…one of the students was saying, 'I didn't actually believe her, what she was saying. I didn't believe that she is working at the clinic'. … I was like 'oh okay she's judging me right off the bat! […] And then I was wondering, you know I was a character, right? And it almost seemed like they didn't know I was a character, they really thought I was [Ms.] Birchbark'. [Participant 8]

The lack of preparedness of students and tutors in following the learning objectives could lead to gaps in respect for the animators and even questioning the authenticity of the simulated patient cases. These experiences resulted in lack of cultural safety for the Indigenous animators.

Intellectual/artistic safety during the feedback session. The animators' feedback to students after the scenario often became a significant teaching moment in which the animator could draw on their knowledge to break down assumptions and stereotypes in a safe space.

I guess it felt culturally safe. No one really asked me anything too 'out there' I guess. The [students in my group] were a little scared. They felt like they were walking on thin ice. […] So like after our interview we did our little feedback session, a lot of people asked me 'Was it okay if I said that?' or 'Could I have said this?' I was like 'well it all depends on the person you ask'. To me, even myself and my character, like it's fine. I know most people don't know what goes on, on the rez and in Native communities. So I don't mind telling that 'cause you don't know. Good for you to learn, I guess. [Participant 6]

I think just delivering my character out there was really good because I didn't try to give the students a really hard time. A lot of our conversations were long talks and long good conversations, I guess. Some good rapport we built. [Participant 6]

Sufficient time for respectful conversation and opportunities to resolve uncertainty and social discomfort during the debrief once animators had come out of character enhanced the experience of safety for the animators. Students perceived the sharing of knowledge as valuable, which in turn allowed animators to feel safe to disclose their lived experiences.

[my character] started drinking at a young age and… in one of the post discussions, I was telling the students 'Yeah some of these communities you'll find a lot of the youth drinking at like 13, 14 years old, stuff like that… It's kind of common in some places, especially if you go up north, it's a lot more common.' And so yeah I threw that aspect in

there. 'I started drinking when I was 14.' So that was part of my character. [Participant 6]

… I believe that they learned something. They got something, whatever they wanted, I'm pretty sure. I heard something, an answer. And then I even told them at the end, each one of them, I said 'Don't be scared to laugh. Don't be scared to make a joke as long as it's not cheesy.' And they started laughing. I said 'We're very humble people, we're welcoming, don't be scared of us. We're just as scared as you, first time. And have fun and don't worry so much.' [Participant 8]

The animators' intention to create an authentic learning experience for students required them to be open and perhaps even vulnerable, which underscores their need for cultural safety.

Artistic growth and intellectual/artistic safety. The circumstances when animators felt intellectually and artistically enriched by the experience aligned with experiencing support for their artistic expression of Indigenous lived experience.

The impact, the experience of creating a patient, it was good. Actually, it was really good. I really thought – because I never had to think about that before, you know? It was just beyond me, oh yeah you know, 'Oh I wonder what that person's life is like, they have a really brutal job' and then that even gave me more awareness into the doctor's job. Like oh okay I know why some of them have to be really hard, especially surgeons, you know, they … like hell I would never be able to do that. [chuckles] [Participant 9]

It was amazing. It was a learning experience for myself as an artist, as an improviser to do that with the first year student and myself as a first time doing these little scenarios. So it was quite – it was a learning thing. [Participant 8]

Third quadrant: emotional safety

Emotional safety in session delivery. The animators expressed positive emotions about being greeted and supported by Indigenous and non-Indigenous staff who were experienced in collaborating and relationship-building with Indigenous people.

I felt we were beautifully greeted and respected in both locations and it certainly felt different in Sudbury and Thunder Bay, but in each of the places I thought it was really cool that we got to have Sam [experienced Indigenous staff member] with us in both places. And we met outstanding people in Thunder Bay, I was thinking particularly about this lady Christeen […] she showed up everywhere and she was so warm and so welcoming – it was like 'Can I do anything? Do you need anything …' just so helpful that it really made me feel really comfortable. I appreciated that. [Participant 7]

Friendly and empathetic interactions resulted in feeling cared for and safe.

Looking at the medical education team, that was excellent. [Interacting with] Sam and Christeen…and feeling like we were actually cared about. It's easier to open up to somebody when you're actually feeling cared about. [Participant 9]

However, the animators expressed feeling uncomfortable with some students' behaviours.

… [one student] seemed really standoffish and totally changed the group atmosphere immediately as soon as he started talking. [Participant 9]

Those students and tutors who struggled with understanding the new, culturally safe communication-focused objectives created emotional stress for some animators.

It was kind of stressful for me cause they didn't quite understand what I was trying to say sometimes. And they would ask me a question and then I'll answer and then they're kind of lost I guess … [chuckles]. [Participant 3]

Exposure to emotional triggers. Since the animators co-created the characters, in part, based on their lived experiences, there was the possibility of becoming triggered and reliving intense emotions related to personal experiences of colonialism and oppression.

Yeah that was pretty stressful for me. I mean I know I was a made-up character but at the time I was actually feeling those emotions and yeah sometimes I felt a little sad, under the weather, angry too. You know, some stuff was out of my control, it was stuff I can't control. I felt like my character really wanted control but couldn't really get it, you know? So that was very stressful. [Participant 2]

Animators also described that they connected personally to their character's feelings in response to perceived discrimination or racism in healthcare, which they had personally experienced.

Doing a patient interview, it was a little more intimate than being on stage. So it felt like there was more that had to go into it, more of your emotion, the character's emotion. So yeah after we were done, I kind of just took a little time to myself to get back into being me cause I don't want to carry those negative emotions that my character was feeling around with me. [Participant 2]

Fear and discomfort was also felt by one actor who portrayed a female sexual abuse survivor and was assigned to an all-male group during the interview.

… I had all male [students] come in. And as a female, when you're seeing a doctor, I was uncomfortable. I felt uncomfortable cause the first time it was a male coming in I was thinking oh I thought it was going to be a female! I was like geeeeze … Then the next student came in, it was a male. I was like another male!! I just finished liking this other male and here comes another one, a doctor male, okay cool. And then he was nice, he was good, he was professional. Then another student comes in. Another male! Are they just all males?

So my character felt uncomfortable because the character, she's a sexual abuse survivor. And I know that happens in real life. Any woman, any female probably feels that way when they're going to a doctor and a male walks in. They have that right to ask for a female to come in there. And when that was happening with the students … I was [wondering] can I ask for that? But this is just a scenario, we're

just playing. But still can we still ask that? Again, it's alright, ah it's okay, whatever, just keep going. [Participant 9]

Enacting patient cases that were based in part on real experiences that the animators observed in their community could emotionally trigger some actors in unanticipated ways, which underscores the need for careful planning and reflection to ensure emotional safety.

Fourth quadrant: spiritual safety

The animators described the importance of sharing traditional Indigenous knowledge to support student learning and the circumstances when they felt safe to do so.

I gave one part of the 'diamond teachings', you got your physical, emotional, and spiritual self, I gave a little lesson on that. And then I got asked about cedar tea because I said my character drinks cedar tea every now and again. So I had to talk about cedar tea […] And you know, it's simply you just grab cedar and boil it, but it seemed like they wanted a little bit more of an explanation on it, like what else it helps with. I'm just like 'Oh when you get sick it helps when you're sick and it's just a good thing to keep you healthy.' [Participant 6]

I talked about Western medicine versus Traditional medicine, how this character was going about how she was doing it. And they were really interested, oh yes, they were very interested in how she does that. [Participant 8]

The animators felt safe to share this Indigenous knowledge when the listeners were communicating respectfully around Indigenous worldviews:

After a while…I was starting to feel like one of those good Elders, you know, you have to listen to and talk and just let them speak and speak and speak, right? That's kind of how I felt on that…. It was pretty cool. [Participant 5]

And I got a compliment that I'm an Elder in training. To get a compliment like that is wow, holy. I'm not even close to being an Elder yet but to get a compliment like that really helped me a lot, spiritually, physically, emotionally. [Participant 8]

Discussion

Cultural safety from the perspective of the Indigenous animators in the co-creation of Indigenous health curriculum can be understood as a process of seeking balance within the framework of the physical, intellectual/artistic, emotional, and spiritual quadrants of the Medicine Wheel. One quadrant is not more important than another, and too much emphasis on one aspect can create unbalance. The Medicine Wheel is a complex concept within Anishinaabe cosmology: "Everything of Creation is represented in the Medicine Wheel. In all of Creation there is a cause and effect. The Medicine Wheel depicts how these things of Creation interact."[31] The four quadrants of the Medicine Wheel are not separate but rather relational and should be in balance. Mohawk physician, Dr. Louis Montour, explains that the health and wellness of individuals is conceptualized as composed of these four parts: "People who are at ease with themselves, content, happy, and maximally productive; who can share, care, and trust; and who are respectful have strength and balance in all quadrants of the Medicine Wheel and in all segments of life: the spiritual, the emotional, the physical, and the intellectual."[32]

The aspects of strength and balance in the co-creation process were elaborated in detail during the Learning Circle, but we also learned about disturbances to strength and balance in the four quadrants which led to disturbances in cultural safety.

Disturbances in cultural safety: unbalanced quadrants

The analysis of the Learning Circle data shows that cultural safety at a medical school, in the delivery of curriculum with Indigenous animators, requires attention to at least four areas of safety, represented in the four quadrants of the Medicine Wheel, namely, the physical, intellectual, emotional, and spiritual aspects of safety of the patient actors' experience. We provide a brief summary of the disturbances below.

Within the physical aspect, the team had communicated, prior to the sessions, that travelling to Northwestern Ontario would be stressful for the Indigenous team members due to the high rates of missing and murdered Indigenous women and girls (MMIWG), the unsolved deaths of Indigenous youth[33]; overt racism, and police violence that have been documented in that city.[34–36] From the administrative perspective, carefully organized transportation and accommodations in specifically selected hotels, as well as culturally appropriate food and hosting were planned for the animators. However, some animators were still concerned about their physical safety in a city where violence against Indigenous people is frequently reported in the news. These feelings were reinforced by exposure to microaggressions, specifically at the Northwestern campus.

Mental and intellectual disturbances were also shared. Despite the orientation and cultural teachings for students and tutors, it seemed that some were still unclear in their understanding of the purpose of the SCCS and they reverted to old and familiar approaches used in their sessions with standardized patients, which were inappropriate in the SCCS. Some were ill-prepared for culturally safe care and missed the opportunity to explore the social and cultural aspects of the patient. This led to animators feeling disrespected and culturally unsafe with some groups.

The animators spoke about the implicit bias they observed and the discrimination they felt while interacting with a few students, tutors, and staff. Their narratives described what Vora[37] called an "unnamed tension" when someone is experiencing racial injustice that is not articulated out loud. The academic team attempted to create an intellectually safe environment by providing preparatory sessions with students

and tutors; however, reflecting on the experience, we acknowledge that those sessions did not consistently prevent incidents of microaggressions and entitlement in areas that have been declared geographic racism hotspots[38–40] such as in our study area.

There were incidents in which the animators described students and tutors speaking about them in the third person, disregarding that they were in the room and making assumptions about and questioning the authenticity of what the animator incorporated into their character in the scenario. The animators expressed concern that some students and tutors did not appreciate that the cases were rooted in stories of Indigenous people and their lived experiences. Animators also spoke about feeling judged or disbelieved when students could not distinguish that the animators were playing a role and were not debriefing about their personal experiences.

With respect to emotional safety, animators found that some students were standoffish, uncomfortable, or dismissive, leading to a lack of emotional connection. There was sometimes a general lack of concern that the animator was an actual person in the room, who should be acknowledged, and that a connection with that person needs a deliberate effort on the part of the student.

The academic team members did not anticipate the degree to which animators would be emotionally impacted during some simulations. For example, one of the female animators felt extreme discomfort when being interviewed in a room with a group of male students as she portrayed a woman who had experienced sexual violence by male perpetrators.

The times when there was "unnamed tension in the air"[37] were difficult for the animators to articulate in the moment; however, as they reflected during the Learning Circle, some did not feel emotionally, physically, and mentally/artistically safe. The animators thoughtfully considering when their patient character would be feeling unsafe and when they as animators felt unsafe to address this in the feedback sessions. Creating a process to support animators to address these concerns in a meaningful and consistent manner during the feedback session would strengthen cultural safety.

The animators did not express feeling spiritually unsafe during the Learning Circle. However, during our reflective conversations after our Learning Circle, we uncovered disturbances that occurred in the cultural/spiritual realm that were difficult to express and therefore required more time to unpack. The disturbance involved a violation of the Anishinaabe traditional practice of providing a gift to an Elder as a symbol of Sacred Trust when asking for their assistance. However, in this case, the gift and honoraria were not presented by the institution in line with Anishinaabe cultural norms. We discovered later that the Elders/Traditional Knowledge Keeper who had been invited to observe and support the animators were not compensated for their travel expenses in a timely nor culturally appropriate manner due to bureaucratic delays and culturally unsafe financial policies. This lack of spiritual safety resulted in strained relationships that took many months to uncover and resolve.

Flourishing of cultural safety: balanced quadrants

Cultural safety in the co-creation process requires the balance of the four quadrants depicted in Figure 1. We summarize the facilitators of cultural safety in the following section.

The commitment to a collaborative "co-creation" process was supported by the institution's co-development team who valued the animators' character development process and was committed to ongoing reflective conversations. West[18] tells us that "Recognizing injustices is a first step, but facing the injustices and bridging the gaps in cultural respect and humility by initiating honest self-reflective conversations will be key to ongoing medical education and patient care." The use of a Learning Circle was one way to encourage "honest self-reflective conversations." It allowed us to foster a community of practice in which positive, sustainable relationships could be built and the tools developed to work through foreseen and unforeseen barriers to create culturally safe medical education. In this environment, strengths within the four quadrants of the Medicine Wheel could continue to surface and grow despite some deficiencies on our approach.

From the perspective of the physical quadrant, a welcoming atmosphere on both sites was created by ensuring the presence of Elders, NOSM U Indigenous Affairs staff members, supportive faculty and staff, and the NOSM U co-development team. These key people contributed to the animator's overall feelings of physical and emotional safety from when they arrived at the university to when they returned to their home communities. The travel details included culturally appropriate food, comfortable accommodations in a safe neighborhood, and pre-arranged travel with culturally reputable companies, which contributed to the animators feeling physically safe and maintaining a sense of emotional well-being.

From the artistic and intellectual perspective, the animators found that the co-creation process was enriching to them personally as they could gain insight into the lived experiences of the community members they interviewed to develop their character. Some animators reflected on how the experience enriched their practice as artists and in the animation of real-life scenarios. The animators also expressed their sense of responsibility in accurately portraying input from the community members they consulted with in developing their characters, highlighting their artistic integrity in ensuring that the characters were authentic. Having the power to participate this way led to the perception that they were challenging cultural stereotypes in their engagement with students and tutors instead of perpetuating them.

The animators also spoke about feeling respected, empowered, and enriched in the co-creation experience with the

School's academic team. Feeling respected was reflected in comments the animators made about being perceived as Elders or knowledge keepers when students asked them to explain why their character drank cedar tea, for example, and how they felt prepared to answer cultural questions at the student's level of understanding. Further, in some instances, the animators drew on their lived experiences and expanded on their character's stories during the interview debriefs. The animators noted that the students expressed appreciation for the additional insights. Similarly, the animators felt that many students were genuinely learning important information about Indigenous people's lives to prepare for their upcoming Indigenous community placement experiences and, ultimately, for culturally safe care for Indigenous patients.

Feelings of mental/artistic safety were expressed regarding the speaking order in the debriefs with students and tutors. At the end of each student interview, the animators' feedback was given before the student and tutor feedback to allow them to address how they felt during the encounter. This often led to intellectual conversations that would not have occurred if the animators did not feel culturally safe.

The animators felt most empowered when they could teach what they thought healthcare providers should know about Indigenous medicines and culture. Feeling empowered also came from the confidence to speak from a place of knowing as the characters' stories intersected with their own life story and were not perpetuating stereotypes. They could "give students a safe space to face their privilege and practice talking about hard things (racial inequality) in order to provide equitable care."[37]

Lastly, based on the animators' perceptions about their interactions with the students, we learned that experiencing cultural safety is also influenced by understanding that the sessions enriched the students' learning. The feeling of empowerment was gained by having the creative freedom to develop their character based on their lived experiences and those of community members. This in turn led to positive feedback from the students about the impact of the interviews on their learning about culturally safe care for Indigenous patients.

There were both strengths and limitations to this study. This is a qualitative analysis of a Learning Circle of one interprofessional team's experience with cultural safety in simulated clinical cultural scenarios and caution must be exercised in extending the results and recommendations to other environments and contexts. However, the in-depth dialogue and co-analysis over the course of many months allowed us to provide a rich and in-depth description of many of the issues that might impact on Indigenous animators in their collaboration with medical schools elsewhere.

Recommendations

While we believe that each medical education collaboration with Indigenous people is unique, we also believe that there are specific practices that will foster cultural safety in the development of Indigenous health curriculum.

1. Recommendations for co-creation strategies at the institutional level:
   - 1.1 Committing to the collaboration process by sharing the power of co-creation with animators throughout all stages of the curricular initiative.
   - 1.2 Acknowledging and respecting the Indigenous animators' cultural expertise and community knowledge to create authentic patient characters.
   - 1.3 Co-creating evaluation processes and quality improvement research with meaningful input from animators.
   - 1.4 Ensuring space, time, and respect for the potential emotional impact on the Indigenous animators; this may include space and time for cultural and spiritual practices as required.

2. Recommendations for co-creation strategies at the curricular level:
   - 2.1 Providing sufficient opportunities for comprehensive feedback to students by animators, faculty, and tutors.
   - 2.2 Incorporating a "pause" option for real time micro-debriefing during the simulation to create a safe space for potentially uncomfortable conversations, such as identifying implicit bias or racial inequity.[37]
   - 2.3 Ensuring that a range of individual cultural experiences are portrayed in the scenarios, such as those from geographically, socially, and culturally different Indigenous nations and communities; including scenarios with patients who converse in their ancestral languages and require translators.
   - 2.4 Ensuring that time for microaggression awareness and education are provided to students and tutors.
3. Recommendations for practices to enhance readiness for co-creation:
   - 3.1 Applying the Medicine Wheel framework (or other preferred Indigenous approaches) to identify best practices to developing learning opportunities and approaches at the institutional level.
   - 3.2 Elder Nabigon's concept of the Learning Circle[21] is focused on: to forgive others; to look to the past, not to change it, but to learn from it by seeking truth and knowledge; to identify what is creating imbalances or dark forces at play today; and to address the issues by moving towards balance and healing. Utilizing the Learning Circle can, at the administration and academic levels of medical schools and healthcare institutions, create opportunities for safe dialogue and change.
   - 3.3 Lastly, committing as an institution to identifying the practices and policies grounded in colonial beliefs and practices and changing them to support

equity and more inclusive cultural worldviews is fundamental to changing the medical education and healthcare institution culture.

Conclusions

The framework of the Medicine Wheel can provide the foundation for a rich and safe collaboration with Indigenous animators aimed at providing skills-based training to medical students on culturally safe patient care. We found that the experience of cultural safety for Indigenous animators was predicated on supporting a balance between the physical, intellectual, emotional, and spiritual well-being of the actors during all stages of the design and delivery process. However, in our study, we also found that supporting holistic wellness requires action and responsibility by the institution, staff, the faculty, preceptors, and students. Our research underscores the importance of continually interrogating the systemic, insidious nature of processes that privilege mainstream institutional and interpersonal practices in medical education while marginalizing Indigenous perspectives when co-creating curricula with Indigenous partners.

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Authors' contribution

NB led the analysis of the data in collaboration with MM. MM and NB co-lead the drafting of the manuscript. LM and MR drafted significant portions of the manuscript. All authors edited various draft versions of the manuscript, contributed to the analysis, and approved the final version.

Supplemental material

Supplemental material for this article is available online.

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