Healers of Tomorrow

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Rural communities historically have difficulties recruiting and retaining doctors; doctors fulfill a placement or short-term contract, but then often leave for urban opportunities [1]. As a result, many rural residents lack long-term continuity of care. When a rural community also happens to be aboriginal, the problem gains another layer: short-term doctors do not stay in the community long enough to learn the culture or the traditions, including traditional medicine and traditional attitudes towards healing [2].

One potential approach is to train medical professionals from within the communities [3]. The hope is that, once trained, these professionals can bring these skills back home, combine them with their own knowledge of local and traditional medicine, and practice in the communities they came from.

Part of the role of the Faculty of Medicine's Aboriginal Health Initiative is to recruit medical students from aboriginal communities. However, according to the Inititaive's Director, Dr. Carolyn Surges-Sparkes, "We weren't moving as deep into the communities as we needed to." The initiative wanted to "start planting the seeds" of possible health care careers when students were still young, before they were even considering university (personal communication October, 2015).

In an attempt to plant those seeds, Memorial University of Newfoundland's (MUN) Aboriginal Health Initiative ran a five-day camp for aboriginal high school students from across Newfoundland and Labrador in August, 2015. The camp, called the Healers of Tomorrow Gathering, exposed twelve high school students from across the province to health care careers via activities and discussions of areas like nursing, pharmacy and medicine. MUN'S Faculty of Medicine participated by offering two days of simulation workshops.

Activities were chosen by Dr. Sturges-Sparkes and by members of MUN's Clinical Learning and Simulation Centre based on two sets of criteria (personal communication, October, 2015): what teenage learners would enjoy, and what was logistically possible (specifically, what equipment was possible to transport from St. John's to Corner Brook and back). As a result, students participated in six simulation activities, varying from proper hand-

washing, to IV insertion on a simulated arm, to suturing, to checking vital signs on a baby mannequin.

The Gathering: Bridging Schools of Medicine

Dr. Sturges-Sparkes points out that Westernized and aboriginal concepts of medicine are fundamentally different. For example, "[many aboriginal cultures] don't call it health; they call it well-being. In the Miqmaw language, there is no word for health – only healing." The Miqmaw culture sees humans as perpetually in the process of healing (the mind, heart and spirit in addition to the body). This is broader than the Western view, which defines health as the absence of disease.

The Healers of Tomorrow Gathering aimed to promote knowledge exchange between these spheres. While the workshops and activities focused on teaching Westernized medicine, the discussions focused on finding and examining the parallels and differences between Westernized and traditional aboriginal medicine. Each day of the camp ended with a nightly talking circle in which aboriginal students and elders had an opportunity to talk about their own traditional medicine. Elders brought in samples of plants traditionally used as medicine in Labrador and in the Corner Brook area. A highlight of the camp for many members of the MUN team was the realization that purple, one of the colours serendipitously chosen as a theme colour for the camp, was the traditional colour of healing.

Students and elders alike expressed gratitude, both in nightly talking circles and in their post-program evaluations that the camp organizers made an effort to "acknowledge aboriginal culture and aboriginal knowledge." But Dr. Sturges-Sparkes wants to deepen that dynamic from acknowledgement to full-on collaboration, dissolving the separation between the "Westernized ways" and the aboriginal traditions: "My hope is that in future camps, we can work with aboriginal people to bring these ideas and their understanding right into the simulation activities." The next round of the camp, slated for the summer of 2017, will see elders brought in at the curriculum-planning stage to help create culturally relevant scenarios to support the simulations.

In the future, Dr. Sturges-Sparkes hopes the program might expand to include Grade 9 students, and will eventually look for other ways to reach even younger students, which will involve the Aboriginal Health Initiative going into the communities rather than bringing the students out. She says the program aims to tell young aboriginal learners, "These career possibilities are within your grasp." For many aboriginal students, medical careers are "not in their radar of possibility at all."

Dr. Adam Dubrowski, Academic Director of the Clinical Learning and Simulation Centre and a co-organizer of the event, adds, "We hoped to help these kids see that being a health care provider is a viable future option for them, that the learning process is not so different from the process that they are familiar with, and that the profession is very

rewarding. If this was an effective way of convincing them to come and get a healthcare degree, they would then go back to their community and provide these services there. This may introduce sustainability and stability of health care delivery in aboriginal communities" (personal communication October, 2015).

"Indigenous" Learning: Is there such a thing?

Dr. Dubrowski notes that in aboriginal culture, knowledge is often transmitted by elders showing the younger generations how to perform a task, and then allowing them the opportunity to perform that task. This process closely mirrors simulation-based medical education.

Simulation-augmented learning is supported by Kolb's Experiential Learning Cycle, which asserts that effective learning occurs when a learner progresses through a four-stage cycle [4]. In the First Stage, the learner participates in a concrete experience. In the Second Stage, the learner reflects upon that concrete experience, either on their own or under the guidance of an educator or facilitator. In the Third Stage, learners form abstract concepts and generalizations drawn from the first two stages; now the learner gains understanding of how the learned content can apply to other contexts. In the Fourth and Final Stage, the learner uses the abstract concepts and generalizations constructed in the Third Stage to test hypotheses in future situations, resulting in new experiences.

This four-stage cycle closely parallels what happens in traditional forms of aboriginal education. Dr. Dubrowski explains with an example: "An [aboriginal] youngster is taken hunting. He or she has a concrete experience: - say, during that hunting session, no game is caught. An elder will provide feedback, demonstration, perhaps an anecdote or a story from the past. The youngster connects the two experiences and forms a representation of what should have been done, and how this can be applied in various situations. He or she will utilize this new set of skills and test it next time they hunt."

Research shows that children within indigenous communities who have not had contact with non-indigenous communities generally have a much more hands-on way of learning [5, 6]: this research does indeed support the idea that aboriginal learners may benefit more from simulation activities than from lecture-based learning. However, Dr. Sturges-Sparkes is not convinced that hands-on learning is necessarily exclusively better suited to aboriginal learners. Nowadays, young learners are increasingly better suited for simulation than for lectures, no matter what their family or cultural background. "We need to factor in the fact that when kids arrive at university now, they may learn differently than previous generations because of technology,"

Therefore, Dr. Sturges-Sparkes concludes, the kinds of learning activities one needs to appeal to this generation are different from those of previous generations. If there once was a gap between indigenous and non-indigenous learners regarding lecture-based

learning, technology may very well be sealing that gap; simulation and other hands-on activities may now be more appealing—and more effective—for young learners in general.

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