ORIGINAL RESEARCH

"What are we doing here?": Reflections on developing a transcultural "Road Map" for global menstrual hygiene management

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ABSTRACT

Introduction: Globally, reproductive aged girls and women experience personal and social barriers to access the simplest of supplies or menstrual friendly hygiene facilities, exclusion from full participation, and even violation of their human rights, simply because they are experiencing the biological event of menstruation. In Malawi, Africa specifically, the management of menstruation is a challenge for girls and women. This paper examines the process of developing a menstrual hygiene friendly facilities tool for the Malawian context.
Methods: Autobiographical narrative inquiry was used for this research. Chronological annals, personal communications, draft tool development documents, journals, text messages, photos, and mementos were used to co-construct an experiential narrative.
Results: Four threads that shaped the process of this nursing research collaboration were identified through the creation of the narrative as follows: (1) feeling vulnerable, (2) our realization, (3) building collaborative relationships, and (4) revisiting the product of the research.
Conclusions: Three implications for global transcultural nursing practice emerged from this research: (1) collaborative partnerships, (2) cultural adaptions of interventions, and (3) continuous learning and reflection. These implications can be used to guide future international nursing research.

Key Words: Autobiographical narrative inquiry, Menstrual hygiene, Global health

1. INTRODUCTION

A significant challenge towards reproductive health and well-being for girls and women in low-middle income countries (LMICs), such as Malawi, is the inadequate and unreliable supply of menstrual products, education, and resources.[1] Menstruation is an involuntary and biological process that remains a taboo topic across many cultures and contexts. As a result, 1.8 billion adolescent girls and women globally are deficient in information, products, and privacy to meet their menstrual hygiene needs.[2] This is even more true in LMICs where 200 million menstruating girls and women struggle to meet their menstrual hygiene needs due to lack of adequate water, hygiene and sanitation capacities, secure toilet stalls, and discrete and hygienic means for waste disposal.[1,3] The deficit of understanding, resources, and simple infrastructure creates a context of perpetual lacking for girls and women.

According to the World Health Organization (WHO) and United Nations International Children's Education Fund (UNICEF) (2012), menstrual hygiene management (MHM) is realized when people who menstruate have access to clean

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menstrual materials of choice, that can be changed in privacy, as often as necessary.[3] To achieve this end, one must have access to and use of soap and water as well as availability of facilities to dispose of used menstrual materials. Beyond the infrastructure and supplies, menstruators should be able to understand the foundational principles to the menstrual process as well as how to manage these with dignity.[4]

Malawi, also known as The Warm Heart of Africa, is a small, landlocked country in the Southeast of the continent. Malawi's population, currently over 17 million, is growing rapidly because of a high birth rate, which has resulted in challenges in meeting health, education, and economic needs.[5] Globally, Malawi has one of the highest rates of poverty with an economy dependent on agriculture and a largely rural population.[5] The life expectancy in Malawi is lower than the global average, with a high infant mortality rate and 12% of the population reporting as HIV positive.[5] In Malawi, research on MHM is scarce but Kambala et al. (2020) contends that "anecdotal evidence and grey literature suggest that MHM is a challenge for women and especially for adolescent girls in schools, rural areas, and low socioeconomic households".[1] Girls and women in Malawi report many challenges with MHM, including leaking and poor school attendance.[1] Malawi has sought outside developmental support to "upgrade" girls and women to menstrual products that are locally manufactured and have improved soaking abilities to better assist in MHM.[1] Mchenga et al. (2020) argue that the current sanitation facilities in schools do not sufficiently meet the menstrual needs of adolescent girls.[6] A report from Enzler (2018) states that menstrual hygiene "knowledge in girls was associated with better MHM practices and with reduced absenteeism".[7]

Presently, evidence informing efforts towards realization of universal guidelines and standards to support women's access to MHM reflects a need for materials and supplies, improved facilities, health promotion education, and commitment to understand and change the dominant cultural norms and narratives that inhibit MHM.[8] Menstruating girls and women have varying levels of access to affordable and sustainable menstrual hygiene product choices. This barrier may lead to use of substandard products or a choice between purchasing necessities such as food and managing their menstrual hygiene.[9] Furthermore, misinformation has implications to the health and dignity of girls and women which furthers the gender inequity gap. Lack of full societal participation has effectively silenced women's voices in shifting the MHM agenda. MHM transcends social, cultural, and geographic boundaries, making it a multisectoral issue that involves many factors such as water and sanitation, education, reproductive health rights, and urban development.[10] To support girls and women in their advancement towards menstrual equity, appropriate guidelines must consider and involve diverse sectors, policy makers, educators, health care teams, as well as national and international organizations. The level of involvement of each of these stakeholders will vary depending on the context girls and women find themselves.

Addressing the many layers of MHM presents both opportunities and challenges for scholars and practitioners alike. While there are a multitude of tools, checklists, and guidelines that exist on the global scale to address aspects of MHM, these all depend on the user being able to draw on the contextual and culturally relevant nuances of the population in question. Given the level of partnership required to engage and execute program and policy development in the realm of MHM, there is no guarantee that all stakeholders will have the relevant contextual details. This was the situation the authors found themselves in when attempting to create a menstrual hygiene friendly facilities tool in an unfamiliar cultural and social environment. As a result, the authors propose that rather than a tool, a "roadmap" towards MHM initiatives and programs that could be applied by any local community, who has the cultural understanding, would be more inclusive.

Such a roadmap could include the reflexivity needed to undertake collaborative partnerships at the global level. As the authors pivoted from tool to "roadmap," so did their ability to reconcile the importance of cross-cultural nursing collaboration, particularly between researchers in the Global North and the Global South. In an increasingly globalized and interconnected world, researchers face an imperative to expand and transform transcultural knowledge. This article outlines the opportunity provided of two Canadian early career researchers to transcend cultures and travel to Malawi, Africa to contribute to an existing project overseen by an established global investigator who would provide guidance from back home in Canada.

2. Methods: Autobiographical narrative inquiry

The decision to utilize autobiographical narrative inquiry (ANI) for this project was borne from the dissonance the first two Canadian authors experienced during the attempt to develop a menstrual hygiene friendly facilities tool intended for a Malawian context. After a series of personal and professional insights, these two authors thought it was important to critically reflect and inquire as to the cross-cultural nature and collaboration that come with international nursing research partnerships and teams. According to Bruner (2004), "How people tell their stories and what their stories tell are shaped

by cultural conventions and language usage . . . [and] reflect the prevailing theories about 'possible lives' that are part of one's culture".[11] This way of using narrative inquiry (NI) encourages engagement in the research process towards a commitment to culturally responsive practices that challenge the dominant social, cultural, and political narratives.

Our journey to Malawi was primarily as two researchers with personal, professional, and academic experiences with menstruation. Our experiences produced a sense of confidence in the work we were about to conduct. We naively did not account for the lack of awareness in our perspectives as it applied to a global context. We were women who had menstruated and conducted research on menstrual hygiene. Surely, we were prepared and qualified to continue our work globally. What we did not account for was the impact that culture and context would have on our work. Though we were experienced professionals, our nursing practice and research were limited to the Global North. As a result, we would soon realize that creating a menstrual hygiene friendly facilities tool for MHM in Malawi would be naïve and would not consider the cultural nuances that were integral to the Malawian context.

As we journeyed through the process of realizing our own inadequacies in the global setting, we considered how to best collaborate with a local community to create research that would be meaningful and applicable to that setting. Reflection on our time in Malawi has caused us to wonder about the process we experienced as we realized our inadequacies as global nursing researchers and shifted our research goal from developing a tool to working with the community to produce a "roadmap" that could be employed by any knowledge user and applied by those with knowledge of the local context. Our ANI documents our journey towards realizing this goal as we worked to develop meaningful, culturally relevant MHM research.

2.1 Narrative inquiry

NI is a means for understanding experience.[12] ANI is a form of NI that is somewhat similar to autoethnography in which the researcher explores how they are situated in relation to the phenomenon under study.[13] Integral to all NI research is an exploration of the three-dimensional inquiry space. As we explore the narrative of our experience in Malawi, we will look backward and forward, inward and outward, and will pay attention to place.[13] This will situate our story within a framework of a three-dimensional space of temporality, sociality, and place.[13] Dewey's (1938, 1958) view of experience has been credited as the philosophical underpinning of NI research.[13–15] In exploring the three-dimensional inquiry space, we find that it is derived from Dewey's theory of experience, specifically his perception of continuity (temporality), interaction (sociality), and situation (place). These terms create the metaphorical three-dimensional inquiry space that provides the conceptual framework for NI research. Engaging in this ANI encouraged us to situate ourselves within the research and to follow our interests and passions with MHM by inquiring into our story of experience while also contributing to broader social and theoretical conversations from diverse perspectives.[16]

2.2 Data collection

When conducting ANI research, there are several means for collecting meaningful data, referred to as field texts, such as transcripts of conversations, field notes, family stories, memory box artifacts, photographs, and other texts, composed by narrative inquirers and participants to represent aspects of lived experience.[17,18] The use of these mediums allows the researcher to turn inward to establish further insight into the social, cultural, and contextual nature of the work in question.

One particularly useful field text in ANI research, suggested by Cooper and Lilyea (2022), is to identify self-observations by creating field notes and journaling reflections on the research experience and perceptions.[19] Using this suggestion, we both kept a journal, during our experience in Malawi, in which we reflected on our experiences, noting thoughts and feelings, and identifying questions about observations in the field. Journal entries were completed frequently and rigorously. We also reflected on personal communications, including text messages and emails, with each other and with Malawian collaborators. In addition, photos taken in the field were used to supplement the written data collection sources. We also engaged in discussions with immediate family members during the time spent in Malawi. These discussions contributed to the retelling process and reflections were included in the research journals.

2.3 Data analysis

As we began data analysis, many months were spent immersed in the data collection sources. Journals, text messages, and emails were read and reread, and photos were reviewed to allow for immersion in the data. In keeping with narrative inquiry analysis, sources of data collection were coded with dates, context, characters, and topics.[12] Narrative codes, such as "names of the characters that appear in field texts, places where actions and events occurred, story lines that interweave and interconnect, gaps or silences that become apparent, tensions that emerge, and continuities and discontinuities" were noted.[12] Following the coding, we worked together to co-compose the results as an ANI that

explores the interpersonal and cross-cultural experience of developing a menstrual hygiene friendly facilities tool for the Malawian context. As threads emerged in our sharing and story writing,[20] we continued to revisit and engage with existing literature to deepen our understanding, guide the ongoing inquiry, and identify areas where our research is most needed to further the MHM conversation.

3. Results: A Journey of contemplation and reflection

The following is the ANI we co-created that reflects our experience in developing a menstrual hygiene friendly facilities tool in Malawi. Our ANI explores four threads: feeling vulnerable, our realization, building collaborative relationships, and revisiting the product of the research. We invite you to join us on our journey as we explore our experience in Malawi, paying particular attention to the three-dimensional inquiry space of temporality, sociality, and place.

3.1 Feeling vulnerable

After more than two full days of travel, covering three continents, we arrive at our destination, Malawi, Africa. We are exhausted yet excited about the journey we are to embark on over the next two weeks. Part of the purpose of our trip is to develop a tool to support menstrual hygiene friendly facilities in the Malawian context. However, over the next several days, we will come to realize that the development of this tool is anything but easy as we struggle to find our way in a culture and context that is very different from our own. We both identify as White settlers who have lived our entire lives as Canadians in the Western World. Other than a handful of holidays spent traveling in North America, neither of us would consider ourselves world travelers. This is our first trip to Africa. Upon landing and navigating through the airport, we are struck by the amount of armed security we see. Our observations bump up against what we are accustomed to, and we feel immeasurable tension. With wide eyes and hesitancy, we collect our luggage and make our way out of the airport. Our concerns are somewhat eased when we meet one of the faculty from the university who we will be collaborating with during our stay. She has kindly agreed to meet us at the airport and ensure our safe travel to the hotel where we will be staying. We also meet our driver, who will transport us to all our destinations during the trip. It is these two people who will come to help us feel comfortable and connected in an otherwise very unknown place.

As we make the 30-minute commute from the airport to our hotel, we are struck by the stark contrast between our world and theirs. We immediately notice the poverty. The roadways are lined with people selling whatever they can to make to support their families. One of us lets out a nervous laugh when we see a young boy holding out a live chicken for us to purchase. “What, you’ve never seen a chicken?” asks our driver and we both realize just how unprepared we are to visit this place and be immersed into a social context that is so very different than our own. We continue our travel, taking note of the roadways in disrepair, the crumbling buildings, and the emaciated farm animals grazing the roadside fields we pass. We arrive at the hotel shocked, exhausted, and overheated from the African climate that is so different from the ice and snow we left behind in Canada.

We spend the next few hours, each settling into our hotel rooms. The rooms are old and rundown; we note leaking ceilings and question the safety of the second story wooden planks our beds are placed upon. The complex is surrounded by a seven-foot brick wall that is topped with a two-foot electric fence. An armed guard controls entry into the gated complex and another patrols the interior of the grounds. In response to how our observations bump against what we are used to and the shock of finding ourselves in this uncertain setting, one of us texts the other “what are we doing here?”

We have arrived in Malawi on a Friday, so we have the weekend to orient ourselves prior to beginning our work on Monday. Our anxieties increase over those few days as we navigate unreliable internet service and power, a trip to the grocery store where we are overwhelmed by people begging us for anything we might share with them, and challenges with not yet having the local currency. The city center is swarming with people, and we are not acquainted with or comfortable with being in these crowds. The streets are busy, and we are not accustomed to the uncontrolled intersections and the seeming lack of traffic rules. That night one of us reflects “Was it the right choice to come here? I hope I can overcome my uncertainties so we can complete some meaningful work.”

When Monday arrives, we are excited to get started with our work. We meet the same faculty at the university who had greeted us at the airport. It is good to see a familiar face. We are welcomed to the university and provided with a tour where everyone we meet is friendly and kind. Rather than getting started on our work right away, our faculty contact helps us to get reliable internet, local currency, and a few necessities needed for our stay. We talk about managing in the crowds of people and how the means for making a living in Africa is so very different than what we are accustomed to in Canada – we were so unprepared for the social and cultural context. As experienced nurses, with comfort and confidence in our practice and research back in Canada, feeling vulnerable and out of place were unsettling, to say the

least. We are starting to feel somewhat comfortable and more prepared to navigate our time and work in Africa. Later that evening, back at the hotel, one of us texts the other "I think we are going to be all right here."

3.2 Our realization

With increased comfort in our surroundings, we are gifted with the confidence to venture out and begin some groundwork for the development of the menstrual hygiene friendly facilities tool that we are tasked with creating. Part of our role includes fieldwork where we will assess public washroom facilities and the availability and affordability of menstrual hygiene products. We visit public places and make several observations, noting washroom facilities with varying degrees of sanitation supplies, such as water, soap, and toilet tissue, and very limited disposal receptacles. A variety of menstrual supplies are sold in stores at what seems to us like an affordable price.

After a few days of collecting data, we find ourselves back at the hotel. We are equipped with our laptops, and our new knowledge, ready to take on the task of developing the tool. During that first day, we work hard to develop a tool that would reflect menstrual hygiene capabilities and potential in Malawi. But no matter how hard we work, the tool we are trying to develop just does not seem right. We consider if the tool should focus on education, but we realize we don't even know how girls in Malawi learn about menstrual hygiene. Our lack of knowledge is evident in a text one of us sends to the other "I wonder where people would learn about menstrual health?" Later that evening we text back and forth with each other, trying to determine how we will make this tool work. One of us texts, "We aren't changing all of Malawi's bathrooms, so the tool has to do something else." In agreement, the other replies, "People know a bathroom with running water is best . . . and they know they need to wash their hands but that isn't always realistic and accessible." Here we were, outsiders to a foreign country, trying to create a tool that would fit a context that we were largely unfamiliar with. Before going to bed that night, the reflection in one of our journals is "We are in one of Africa's poorest countries, there are bigger problems here than menstrual hygiene." We realize we are naive and ill prepared for this project, and we need help.

We quickly realize that being in the country is not enough for us to have the confidence or knowledge to create a tool that would be relevant and appropriate for the people who would be using it. We had envisioned a checklist that could be applied to create menstrual hygiene friendly washroom facilities; however, no matter how much we created and recreated that checklist, we lacked an understanding of the culture and context to ensure the appropriateness of its application in Malawi. Furthermore, we discussed and reflected upon whether this was our job to even do. As researchers from the Global North, it felt naïve and high handed to arrive in Malawi for a few weeks and presume to prescribe any sort of recommendations for menstrual health. We realized we needed a new plan, and it was at this moment that we both recognized the cross-cultural complexity in international nursing research.

As we reflect back in time on this experience now, we realize it would have been helpful to rely on our foundational knowledge. The basics of community health nursing point to community engagement and interventions based on community identified need. Building collaborative relationships is a cornerstone of practice and we had overlooked this crucial aspect. We had failed to consult with the community and allowed our overconfidence, derived from our personal and professional experience and research in Canada, to drive interventions that were not applicable to this context. We were doing exactly what we had learned to never do – we were attempting to tell a community how they should live without asking them how they wanted to live.

3.3 Building collaborative relationships

It was time for a new plan. Without recognizing it, we had been using what we thought was our "expert knowledge" on menstrual hygiene to inform the tool when in fact, in this context, we were not experts at all. We reflected on our work up until this point and the lack of collaborative relationships we had developed. We realized that what we needed was knowledge from those who truly were the experts – those who lived, worked, and played in Malawi. We needed to build collaborative relationships with those with knowledge and an invested interest in contributing to the research. We brainstormed and considered who might be willing to collaborate with us. We were already developing a relationship with faculty at the university. These faculty were local to Malawi and could share in a more collaborative approach to the research. In addition, a local program that worked to make and distribute menstrual hygiene products could be an asset in contributing to the project. Lastly, we realized that, in an earlier phase of the research project, young women had been interviewed and participated in focus groups where they discussed their experiences with menstruation and menstrual hygiene products. Surely, within this data, there were findings that could be used to inform our efforts.

The faculty at the university were approached to provide feedback on initial ideas and questions we had about menstrual hygiene in Malawi. They were eager to contribute to the research and shared their experiences through verbal

and written feedback to us. They helped us reconsider the affordability of menstrual hygiene products. We learned that what we had previously considered affordable products in the grocery store, in fact, were far from affordable for most girls and women who lived in poverty in Malawi. Their feedback highlighted our naivety when they wrote: "The available products are not affordable for girls and women . . . the majority of women are not able to buy menstrual products because of financial constraints." They went on to say "hygiene is a challenge because the cloth requires washing with soap. Not everyone can afford to buy soap." Our privilege and the ethnocentric views we subconsciously brought with us had prevented us from realizing what should have been obvious from our earlier observations and knowledge of the poverty in Malawi.

From further discussions with the university faculty, a visit to a local organization who makes reusable menstrual hygiene products, and data from our earlier research, we found that most girls and women use reusable cloth, made locally in Malawi, to manage their menstruation. We learned that reusable products often cause skin irritation and hygienic concerns because not all women have access to soap and water for washing. MHM is a challenge for girls and women in Malawi.

3.4 Revisiting the product of the research

During the process of attempting to create a tool, our naïve and narrow views, embedded in a Western context, were highlighted time and time again. We found ourselves constantly checking-in to identify where we had once again made assumptions based on our Western views. Thanks to those who collaborated with us in Malawi, we were able to learn a great deal about menstruation and its management in this country. However, no matter how much we had learned and begun to shift our views, we were still not, and, never would be, the experts that were needed to develop a meaningful and applicable tool.

Together we discussed and reflected upon our feelings. It just did not feel right to be the ones to develop this tool, yet we wanted something to show for the work that had been done in Malawi and the collaborators who had contributed to the research. In the end we agreed that a "road map" (see Appendix I) that could facilitate the development of a menstrual hygiene friendly facility tool, specific to the location of its employment, would be most useful. We collaborated with our partners in Malawi to develop the "road map" that could be applied in any context to improve MHM in an effort to work towards menstrual equity. Our end product was not what we had originally envisioned, but we also had not originally accounted for how impractical and naïve it would be for us, as the outsiders, to enter a foreign country and identify their needs.

4. Discussion

Global transcultural practice in research involves recognizing and addressing cultural diversity in diverse settings, particularly in the context of research conducted across different cultures and countries. The authors have identified three salient implications for global transcultural nursing practice in research; (1) collaborative partnerships; (2) cultural adaptions of interventions; and (3) continuous learning and reflection.

4.1 Collaborative partnerships

Collaborative partnerships are essential components of global transcultural research.[21] These partnerships involve working closely with local care providers, researchers, community members, and organizations to ensure the success, cultural relevance, and ethical integrity of research endeavors. Local partners can provide invaluable cultural insights, assist in navigating the local context, and enhance the relevance and validity of the research.[22] Local collaborators possess intimate knowledge of the cultural norms, values, beliefs, and practices of the community being studied. As such, their insights can help researchers develop culturally appropriate research materials and ensure that the research being conducted is respectful and relevant. Collaborators, who are part of the local community, also provide contextual understanding of the socio-economic, political, and historical background in which the research is being conducted.[23] This understanding is fundamental for interpreting research findings accurately and identifying potential barriers or facilitators to future implementation.

When seeking to participate in community engagement activities, transcultural research partnerships can facilitate these efforts and contribute to the cultural acceptance and ethical approval of research within the community.[24] For example, engaging thoughtfully with on the ground collaborators can vouch for the credibility and intentions of the research team, which can lead to greater participation and cooperation. In addition, partnerships can provide further opportunities for mutual learning and capacity building among community members, and within the research team.[25] This is facilitated through a deeper understanding of local practices and healthcare challenges. As a result of collaborative partnerships, the research goals are aligned with the needs and priorities of the community. This approach enhances the potential for meaningful impact and positive change in practices and policies.

4.2 Cultural adaptation of interventions

Interventions developed in one cultural context might not be effective or appropriate in another. Collaborative researchers should consider cultural preferences, beliefs, and practices when adapting interventions to different cultures. Cultural adaptation of interventions could involve modifying practices, interventions, or programs to better align with the cultural beliefs, values, norms, and practices of a specific population.[26] This process recognizes that a one-size-fits-all approach to interventions may not be effective across diverse cultural contexts. Adapting interventions to match the cultural characteristics of the target population increases the likelihood of successful implementation and improved health outcomes.[26,27]

Some examples of adaptive interventions might include ensuring that all materials and communication are accurately translated. Translation must be included in written materials, verbal instructions, and educational resources. Secondly, it must be considered whether visual elements of the intervention, such as images or symbols, are culturally appropriate and resonate with the population. Symbols that are meaningful and recognizable within a specific cultural context can enhance engagement. Finally, researchers must work with the community to ensure that the adapted intervention can be sustained over time. This may involve building local capacity and ownership of the intervention.

4.3 Continuous learning and reflection

Continuous self-reflection and learning are essential practices for professionals engaged in global transcultural research. Effective communication is at the heart of quality care,[28] and as such, self-reflection encourages researchers to examine their communication styles and preferences,[29] ensuring that they are flexible and attuned to the cultural communication norms of their research participants. These practices enable researchers to enhance their cultural competence, address biases, and ensure that their research and interactions with diverse populations are respectful, effective, and ethical.

The healthcare landscape is ever evolving, and the populations care providers serve are constantly changing. Self-reflection and learning foster adaptability, enabling providers to respond effectively to new cultural challenges, emerging research findings, and shifting healthcare priorities.[30] Engaging in self-reflection and learning fosters personal growth and professional development. It encourages providers to challenge themselves, expand their horizons, and become more well-rounded and effective professionals. When providers engage in continuous self-reflection and learning, they are better equipped to provide culturally competent care and conduct research that addresses the unique needs of diverse populations.[31] The provision of culturally competent care, that specifically meets the needs of the population, can lead to improved health outcomes for a population.

5. Conclusion

Global transcultural research requires a deep understanding of cultural diversity and collaboration with local partners. It is an ongoing process that demands humility, adaptability, and a commitment to providing equitable and effective care across diverse cultural contexts. As White researchers working with non-White, non-Western women and partners, it quickly became apparent that our ethnocentric, naïve worldview was impeding our ability to effectively collaborate to meet the needs of the people of Malawi. Through our work on this project, the authors have experienced exponential personal and professional growth and have fully realized that collaborative partnerships are a cornerstone of successful global transcultural research. They facilitate community engagement and contribute to research outcomes that are meaningful and relevant to the communities being studied.

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Authors contributions

All authors were responsible for study design. Dr. Bigalky, Ms. Mackey, and Dr. Namathanga were responsible for data collection and analysis while Dr. Petrucka provided oversight and guidance. Dr. Bigalky and Ms. Mackey drafted the manuscript and it was revised by Dr. Namathanga and Dr. Petrucka. All authors read and approved the final manuscript.

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