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# EXPLORING PERINATAL GLOBAL HEALTH: A REFLECTIVE COMMENTARY OF A NURSING STUDENT'S EXPERIENCE ABROAD IN UGANDA

By:

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### Abstract

**Background:** The first author undertook the Perinatal Global Health Internship from May to July 2016 in Kampala, Uganda as part of the Canadian Queen Elizabeth II Diamond Jubilee Scholarship Program funded by the Community Foundations of Canada. The internship was carried out in partnership with the University of Calgary, Faculty of Nursing and University of Calgary International, and the Aga Khan University – School of Nursing and Midwifery with technical support from Universities Canada.

**Aim:** In this paper, we explain the role of nursing in global health, explore the first author's learning in the area of perinatal health, and invite other nursing students to engage in global health work.

**Discussion of Stories:** A reflective commentary is used to describe the first author's experience in a government hospital in Kampala as she learned to recognize the implications of perinatal distress, socio-ecological conditions, and resource-poor settings on the health of mothers and premature neonates. In the commentary, the first author also describes the development of an Early Childhood Development resource and the value of partnership in relation to this experience.

**Reflection:** The first author reflects on the benefit of the internship in developing key competencies and attributes for global health work, the need for cultural competency, and barriers to creating effective change to address complex issues.

**Conclusion:** The first author summarizes key learning from the practice, teaching, and research components of the internship. She describes growth, two-way learning, and recommendations for the internship.

Key Words: global health; internship; students, nursing; nursing, transcultural, perinatal nursing

# **Perinatal Global Health**

According to the World Health Organization (WHO), in 2015 the maternal mortality rate per 100,000 live births was estimated to be 7 in Canada versus 343 in Uganda. Additionally, the rate for preterm births in Canada is 7.6 versus 13.6 in Uganda (WHO, 2010). Total infant mortality in Uganda is estimated to be 57.6 deaths per 1,000 live births (Central Intelligence Agency, 2016). According to the Central Intelligence Agency [US] World Factbook (2016), 19.7% of the Ugandan population lived below the poverty line in 2013. With the high incidence of poverty, families may have fewer resources which poses a barrier for women to access care during or after birth, and causes additional stress and anxiety (Premji et al., 2015). Anxiety and stress in pregnancy have been linked to preterm birth as well as fetal developmental complications (Dunkel Schetter & Tanner, 2012). These points raise attention to inequities in perinatal health faced by low- and middle-income countries. It is imperative for us to consider the factors leading to negative perinatal outcomes (infant morbidity and mortality, maternal mental health, maternal mortality, etc.) in order to understand how to address these complex issues.

## **Global Health & Nursing**

Global health, which encompasses the right for health of all peoples and communities, should be a primary responsibility of all registered nurses (Canadian Nurses Association, 2009). The more than 13 million nurses working as front-line health providers thus have the moral imperative to address complex health challenges of people and communities, including the determinants of inequality in global health (Nurses convene in Malta, 2009; Premji & Hatfield, 2016). These nurses are ideally positioned, they are regarded as trusted health care professionals, and their scope of practice enables them to be change agents (Premji & Hatfield, 2016). Nurses from high-income and low- and middle-income countries, however, need to be more engaged in sharing and exchanging learning, as well as harnessing equitable partnerships to co-create innovative solutions to our common health issues (Premji & Hatfield, 2016). Nurses need to develop competencies in global health to address the complex health issues facing people and communities in our world today – local to global (Premji & Hatfield, 2016). As collaborative global partners, registered nurses need to understand the socio, cultural, economic, and political determinants of perinatal global health.

## **Perinatal Global Health Internship**

The Canadian Queen Elizabeth II Diamond Jubilee Scholarship Program (QEII) seeks to provide Canadian students: (a) an international exchange opportunity that takes an inquiry and discovery approach, formal teaching and learning (i.e., course for credit), and professional experience; (b) networking opportunities both within interns and between interns and commonwealth residents; and (c) an opportunity to contribute meaningfully locally and globally (Community Foundations of Canada, Association of Universities and Colleges of Canada, & Foundation Rideau Hall, 2014). The QEII program, funded by the Government of Canada, provincial governments, and the private sector, is carried out in partnership with the University of Calgary, Faculty of Nursing and University of Calgary International, and the Aga Khan University – School of Nursing and Midwifery (AKU – SONAM) with technical support from Universities Canada. Interning or learning about perinatal global health as a nursing student is an incredibly valuable opportunity

to learn about how health is experienced in other parts of the world, and identify our common struggles in ensuring health for all peoples and communities.

**Discussion of Stories: A Nursing Student's Experience with Perinatal Health in Uganda** My three-month internship in Kampala, Uganda, as a part of the QEII, began in May 2016. Concurrently with the internship, I took Nursing 503.52, a course focused on perinatal global perspectives. The intention of the course is to prompt students to consider the challenges faced by women and their families in developing countries, and their needs during the perinatal and postpartum period (Premji, 2016). This course invites students to consider the similarities and differences between the home country (Canada) and the host country (Uganda). The activities within the internship and Nursing 503.52 focused on practice, teaching, and research. I will discuss my experiences in these areas in the upcoming sections. In the practice environment, I will describe snapshots of my observations and experiences in a government hospital. My colleague and I were fortunate to have received support from our host institution supervisors and the academic head at the AKU – SONAM, who organized many of these learning opportunities for us.

Practice: I accompanied AKU - SONAM students and faculty to a publicly funded national government referral hospital in Kampala. There, I had the opportunity to observe nursing care, interview and speak with patients, and do assessments under the supervision of AKU - SONAM faculty members. At the hospital, every unit was overcapacity with patients crowding the ward floors and corridors. In the Neonatal Intensive Care Unit (NICU), three nurses cared for upwards of 60 babies. Incubators typically accommodate two babies, but at times there were not enough incubators to meet the demand. The first time I visited the NICU, I wondered why there was an overwhelming number of preterm babies admitted, and what could be contributing to this high number. The course prompted me to look at global trends to understand the global burden of preterm birth. I learned that annually, "an estimated 15 million babies are born preterm (before 37 weeks of gestation), and this number is rising," (WHO, 2015). I wondered what could be done to help families care for these premature babies. When searching for potential solutions, I found that the neonatal mortality rate could be substantially decreased if premature infants received additional support in terms of feeding, warmth, and growth monitoring (Namiiro, Mugalu, McAdams, & Ndeezi, 2012). With the insufficient resources at the government hospital, the demand for extra support could not be fulfilled. This has a negative impact on the quality of life and survival outcomes of these neonates (Namiiro, Mugalu, McAdams, & Ndeezi, 2012).

At the government hospital, mothers were responsible for breastfeeding their babies. Mothers usually receive only general teaching regarding breastfeeding due to the high patient-to-nurse ratio. This means one nurse would teach a group of mothers how to breastfeed and care for their babies, rather than teaching each mother individually. My colleague and I found some mothers had difficulties with breastfeeding and reported not understanding how to breastfeed properly. This sometimes resulted in babies not feeding for an adequate duration or feeding infrequently, and consequently losing weight. Integration of the mother as the primary care provider of the preterm infant was integral in the unit, but additional teaching was occasionally needed for some

mothers. Although family integrated care is not a new concept, its application lags behind in our Canadian NICUs. Warre, O'Brien, and Lee (2014) describe a Care-by-Parent Model in which the connections (psychological and biological) between infant and mother are fostered to promote bonding, increased breastfeeding as well as skin to skin contact, and increased confidence in parent's abilities to care for their baby after discharge. The Family Integrated Care (FICare) program trialed in Canadian NICUs incorporates many of the components of the Care-by-Parent Model. The pilot study noted improved weight gain among enrolled infants. If the trial is deemed to be successful upon evaluation, this model of care could be incorporated across level three NICUs in Canada (Warre, O'Brien, & Lee, 2014). Observing the role of mothers in the care of their babies at the government hospital provided an opportunity for me to learn how nurses integrate mothers as primary care providers.

When interviewing mothers in the NICU, the course readings helped me to understand the various factors that could have increased a mother's risk for delivering prematurely. Perinatal distress is defined as "stress, anxiety, or depression at any time in pregnancy and during the first year following the birth of the infant," (Premji, 2014, p. 1). From a course reading, I learned that mothers in low- and middle-income countries generally experience more perinatal distress, and this distress has the ability to have pathophysiological effects on the body (Premji, 2014). These effects can lead to the birth of a premature infant or changes in the way mothers interact with their babies (Premii, 2014). I utilized the social determinants of health to analyze the complex situations I witnessed in practice, and to develop a better understanding of what factors contributed to the mother's (or her child's) presenting condition. From talking to different mothers, I realized some did not have access to health education, and were unaware of the importance of antenatal classes and appointments. Others did not have supportive social and physical environments. For example, one mother did not have the support of her spouse, and the marital tension she experienced during the pregnancy could have contributed to her baby's prematurity. Experiencing this sort of distress could have an impact on the way this mother interacts with her baby and have long-term negative consequences on the growth and development of an already fragile infant. Hence, as a nurse it is important to consider the context of the mother both during and after pregnancy including when she is discharged home.

With the high patient load, not all babies are able to receive monitors. Nurses shared the monitors among the babies most in need. The nurses were able to prioritize and organize care, doing their absolute best with the resources they had. They genuinely cared for their patients by employing active listening skills and providing patient-centered care to the best of their abilities regardless of the pressure from the high patient loads. They would laugh, joke, and create positive working relationships with colleagues and caring relationships with patients/families. The mentorship I received from these nurses has improved my practice here in Canada, and I was inspired by their ability to provide compassionate care with the many obstacles they face on a daily basis. They approach challenges with positivity, and their resilience inspires me to be a better nurse and overcome any obstacles I may encounter in my future practice. Networking and connecting with nurses in low- and middle-income countries can inspire students to be better nurses, use resources more efficiently, and remain humble.

**Teaching:** During my time at the AKU – SONAM, I had the opportunity to participate in theory classes with students. Classes at the AKU – SONAM are smaller; the largest theory lecture I attended had 35 students in the class. At my home institution, theory lectures usually have over 100 students. There is a strong sense of community in the classrooms at the AKU – SONAM. Professors strive to accommodate students and facilitate student learning. The faculty emphasize the importance of on-going learning and gaining nursing knowledge. Faculty believe that their students will change the way care is provided by performing and advocating for best practices to improve care. I enjoyed participating in class discussions and learning more about the way culture influences health care in Uganda. I was able to participate in cross cultural exchanges with students when we compared our nursing experiences in our home countries.

The nursing programs are structured differently. Students who are admitted to the AKU -SONAM have completed a certificate in nursing and have already worked as nurses prior to entering the diploma or bachelor program. Students who have practiced with their certificate as an Enrolled Nurse are eligible to earn a diploma at the AKU – SONAM, and graduates of the diploma program can further their education by pursuing a bachelor of science in nursing. Since the AKU – SONAM offers a work-study program, students can continue to work and support their families while completing their diploma or bachelor's degree. Students attend classes one day a week and clinical on another. The remaining time is spent at their workplace where they negotiate their shifts to secure time for school; however, students explained that at times they have to work a night shift before coming to class at the AKU – SONAM at 8:00am. This was challenging for students, as they would not only have to be at school all day, but also keep awake and concentrate to learn the material. I am amazed by their dedication and motivation to learn as well as the support they received from AKU – SONAM faculty. The students in both programs were taught best practices and had a strong understanding of the theoretical knowledge that influenced what they saw in practice. This is largely due to the expertise of the faculty and rigor with which the students are evaluated.

When we arrived at the AKU – SONAM for the internship, the semester was ending and students were preparing for final exams. As an intern, I helped with exam invigilation, marking multiple choice tests, and performing Item Analysis on the class examinations. Item analysis involved completing a difficulty index and a discriminatory index (Oermann & Gaberson, 2013). Providing item analysis to the professors helped them understand which questions students struggled with, which questions may have been unfair, and which questions could be revised for the next cohort's exam. The professors greatly appreciated our work, and it was helpful for me to learn how to do item analysis by hand for my own understanding. I was grateful to our supervisor for teaching us this skill.

My colleague and I had the opportunity to edit transcripts from focus group interviews conducted at the AKU – SONAM. These focus groups were with alumni or other professionals that have worked with AKU – SONAM graduates and their purpose was to help evaluate the AKU – SONAM's programs (areas for improvement, successes, etc.). Alumni were immensely grateful

and pleased with the education they received at the AKU – SONAM. Many alumni stated that because they attended the AKU – SONAM, they were more confident public speakers. Alumni also mentioned that they were taught to practice patient-centered care at the AKU – SONAM, and they believed this contributed to patients reporting increased satisfaction with their care. From the transcripts, I was not able to identify supporting evidence for the claims made, but I did gather that there was an overwhelmingly positive response from the interviewees. Alumni felt confident in their abilities, and many assumed positions of leadership and discussed their roles in their places of work. They teach best practices (such as active listening) to other nurses and have made changes in practice (i.e. advocating for better documentation). All alumni reported a strong connection with the school and spoke highly of the faculty. Editing the transcripts helped me understand the profound impact the AKU – SONAM has had on the confidence of these nurses, their practice, and the way they care for patients and work in their health setting.

Students at the AKU – SONAM also participate in practical examinations called OSCEs (Objective, Subjective, Clinical Examinations). These are similar to practical tests I have taken at the University of Calgary. One difference is that the students at the AKU – SONAM have more than one practical test in a day. My colleague and I helped faculty prepare for the OSCEs and acted as simulated patients. Faculty marked the students as they performed the nursing tasks. In one scenario, a student taught me (the simulated mother) how to breastfeed my baby while, in another scenario, a student demonstrated baby resuscitation to my colleague. The students conducted comprehensive patient teaching, demonstrated strong skills, and displayed confidence in their practice. This was a testament to the support received from faculty to prepare students for the tests and the students' keen desire to learn and achieve competency.

**Research:** The Aga Khan Foundation (AKF) is supporting the creation of locally owned early childhood centers in Uganda via the Madrasa Early Childhood Program Uganda (MECPU) (Aga Khan Development Network, 2016a). The AKF is an agency under the Aga Khan Development Network (AKDN) that addresses targeted developmental issues by engaging in intellectual and financial partnerships with other organizations sharing the same goals (Aga Khan Development Network, 2016b). The MECPU staff have a wealth of knowledge in Early Childhood Development (ECD) and a strong understanding of the Ugandan context and needs. The MECPU staff are training health care workers, many of them volunteers, from the community to help parents plan play activities/experiences that will promote the socio-emotional development of their children. By interviewing faculty members working in the area of maternal-child health and speaking with staff at the MECPU, an ECD resource was identified but it had gaps and areas for improvement. There was an expressed need for more support materials, especially in the area of ECD in newborn to three-year-old children. Positively intervening during early childhood is the most practical and cost-efficient way to promote healthy development (Engle et al., 2011). The effects of educating parents and providing support are larger when working with impoverished groups, especially when active strategies to demonstrate and encourage caregiving behaviors are taught (Engle et al., 2011). As discussed previously, when mothers experience perinatal distress, negative consequences to their child's growth and development can ensue. Promoting ECD can facilitate bonding between parents and children, as well as provide a strong developmental

foundation for later life. Given the importance of ECD and the expressed need, my colleague and I decided to focus on this area for our intervention.

Considering the importance and value of networking with and learning from the community, we collaborated with staff at the MECPU, our host institution supervisor (faculty member from the AKU – SONAM), and our course professor, Dr. Premji, in the Faculty of Nursing at University of Calgary to provide an ECD resource for newborn to three-year-old children. We searched for relevant resources and stimulation activities focused on ECD to gain a better understanding of this area. We then, with permission, modified a copyright-free ECD resource from the Centre of Disease Control and Prevention (CDC) to cater to the needs of local health centers in Uganda. When modifying the content for the resource, we wanted to include activities that are familiar to Ugandans or explain Western activities further. We worked with our partners to ensure the terminology was friendly and appropriate. For example, one of our partners noticed use of the word "mad" would be inappropriate due to the cultural connotation of the word meaning "mental"; "angry" would be more suitable. My colleague and I also visited a local health center with our host institution supervisor and a staff member from the MECPU. When we asked (with translation to Luganda) to take photos at the health center, the mothers consented to participate. Many volunteered to have their pictures taken when conducting the stimulation activities with their children. As recommended by a team member, we used pictures of Ugandan families stimulating their children to make the resource more relevant. MECPU will pilot test this resource and make appropriate modifications based on feedback from healthcare professionals and parents. MECPU aims to translate the resource to Luganda to increase access.

Working on this project, I learned about the substantial impact that can occur by working with partner organizations on an identified need. I learned that local ownership of a project is important to ensure sustainability, parameters should be determined by local partners, and taking an evidence-informed approach is imperative. As we only spent three months in Uganda, our partners had more insight into the local needs and cultural context and were able to guide us in developing a meaningful resource. I also learned the importance of partnerships with organizations in the host country and individuals like our professor with ECD expertise. The feedback provided to us improved the resource tremendously and helped it to achieve its purpose. Fostering ECD at the health centers may have a lifelong impact for these children.

## **Reflecting & Learning**

Premji and Hatfield (2016) emphasize the need for professional nursing education programs to help nurses gain competencies and attributes necessary for nursing engagement in global health and health reform. The QEII provides students with opportunities to develop key competencies like leadership and teamwork by encouraging students to contribute in meaningful ways to host and home communities as well as engage in cross cultural exchanges. As a result of participating in such a program, students develop attributes such as professional credibility, understanding of key issues, and humility, not only from interning in the global health setting, but also from personal changes as a result of the exposure. Enhancing my own cultural competency was essential in this experience as I realized that people with whom I interacted did not always share

the same background or worldview as I did. The International Council of Nurses (ICN) believes nurses should be, "culturally and linguistically competent to understand and respond effectively to the cultural and linguistic needs of clients, families, and communities in a health care encounter," (2013, p. 1). For me, this involved being aware of my own culture and ensuring it did not negatively influence others I worked with. Becoming more culturally competent also involved learning about the Ugandan culture and developing an understanding for how to act appropriately. The ICN (2013) also identifies accepting differences in beliefs and values as well as respecting cultural differences as aspects of cultural competency. Approaching the experience with an open-mind, as well as respect for other cultures, can help students develop meaningful working relationships as well as aid in the achievement of goals with partners.

Upon reflecting on the internship experience and my time being submersed in a new culture and environment, I recognize that creating effective change is difficult as issues are often complex and multifaceted. My understanding of key issues (access to healthcare, poverty alleviation, access to quality education, etc.) grew as I realized that simple solutions do not exist. Students may approach development projects thinking they will be able to create quick, substantial changes that will solve dilemmas, but soon find that single interventions do not achieve the desired outcomes. Infrastructure, governmental resistance, funding, and many other barriers may deter change. This realization can be difficult for a student with good intentions and a strong will to help. Rather than being discouraged, students as well as local and foreign professionals should work together to create change and be patient, as any change will take time. Together we may be able to overcome barriers as well as work within a system to create positive change. By choosing to act, rather than experience defeat, we move one step forward towards achieving health equity and promoting social justice globally. When in the face of global issues, students must look, listen, and learn to break down complex issues and identify solutions within the context in which they work.

#### **Conclusion & Recommendations**

Throughout the internship, I encountered opportunities to learn and grow. I developed an understanding of perinatal health in Uganda and investigated some of the many complex problems underlying key maternal-child health issues. I gained first-hand exposure to maternal health concerns and observed the extent to which prematurity affected the neonates at the government hospital. I discovered the rigor of the theoretical and practical education at the AKU – SONAM, marveled at the dedication of faculty and students, and compared and contrasted nursing education at the AKU – SONAM and my home institution. I was given an opportunity to collaborate with partners to address ECD concerns expressed by AKU – SONAM faculty and staff at the MECPU. Not only did I learn a significant amount about ECD, but I was able to gain key competencies and attributes to work towards leading meaningful change.

The AKU – SONAM students and faculty, as well as the staff at the MECPU, provided me with valuable learning opportunities via conversations and project work. Dr. Premji, my colleague, and I were able to contribute our knowledge of resources and learning as well. This exchange of knowledge, two-way learning, and partnership contributed heavily to the success of the

internship. By sharing and collaborating together, interventions may be more sustainable and targeted to address true needs.

It can be challenging to complete an internship abroad, but approaching it with an open-mind and desire to learn made this a meaningful experience for me. I hope sharing my stories in this reflection will show the valuable learning provided by the internship, the need to address perinatal issues in developing countries, and reason for registered nurses to collaborate with global partners to address complex challenges.

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