



Danielle Cieri (left) and Ryan Stehlin (right) prepare to see patients at the Adeiso Clinic alongside Gold Coast Medical Foundation.

Lessons from Ghana: Students Expand Cultural Consciousness during Medical Mission

BY TERRA OSTERLING

Just as the fall 2022 semester was winding down, and as Buffalo, New York, was facing a cold and snowy start to winter, three University at Buffalo School of Nursing students stepped into equatorial heat and sunshine. Danielle Cieri, Michael Pereira and Ryan Stehlin, all registered nurses and students in UB's Doctor of Nursing Practice program, traveled to West Africa to provide health care and education to residents of Accra, Ghana, a region home to 4 million people and one of the fastest growing cities on the continent of Africa.

The trip was arranged through the UB School of Management in partnership with Gold Coast Medical Foundation, a Bronx-based organization with ties to both the Buffalo area and countries throughout Africa. The multidisciplinary collaboration included students from nursing, management, engineering and medicine. Preparations began in summer 2022 and kicked off with the course Social Innovations & Leadership in Africa, which featured speakers from Ghana, South Africa, and Rwanda, was facilitated by program advocate Dorothy Siaw-Asamoah, a clinical associate professor in the School of Management.

The program seeks participants with the type of varied experience this group of established nurses brought: Cieri, a pediatric nurse and family nurse practitioner (FNP) student; Pereira, a critical care nurse studying nursing anesthesia; and Stehlin, a registered nurse and clinical laboratory technologist in a hospital microbiology lab who is studying to become an FNP.

Their preparations included securing travel visas, physicals for medical clearance and vaccines.

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typhoid, yellow fever, Tdap, meningitis and flu vaccines, as well as take anti-malarial drugs before and after," Stehlin said, for whom this was his first trip flying outside of the United States.

In addition to carrying their own basic over-the-counter medications that may be hard to find in Accra, they also carried medical supplies they would be using to provide care. These supplies, which were both donated by Gold Coast Medical Foundation and purchased using

funding granted by the Elsie and Lucius B. McGowan Private Charitable Foundation, included blood pressure cuffs, eyeglasses, iron pills, over-the-counter medications, glucometers and lancets for finger sticks.

Overcoming barriers

"We all have our RN licenses, so we could get started on providing care as soon as we arrived in the clinics on day one," said Pereira.

The clinics they helped staff provide primary care for people in every stage of life and were located at a hospital in Accra, the nation's capital, and at a temporary facility in Adeiso, a rural village more than an hour's bus ride northwest of the city. The nurses' goals as care providers were to diagnose and treat conditions, and to have conversations about medications and preventative actions. The clinics also provided rapid testing and treatment for typhoid and malaria.

While Cieri, Pereira and Stehlin helped diagnose and provide patient care and education, they relied on their Ghanaian counterparts to not only translate patient conversations, but also to demonstrate their experience and expertise in providing care with resources different than they are accustomed to using.

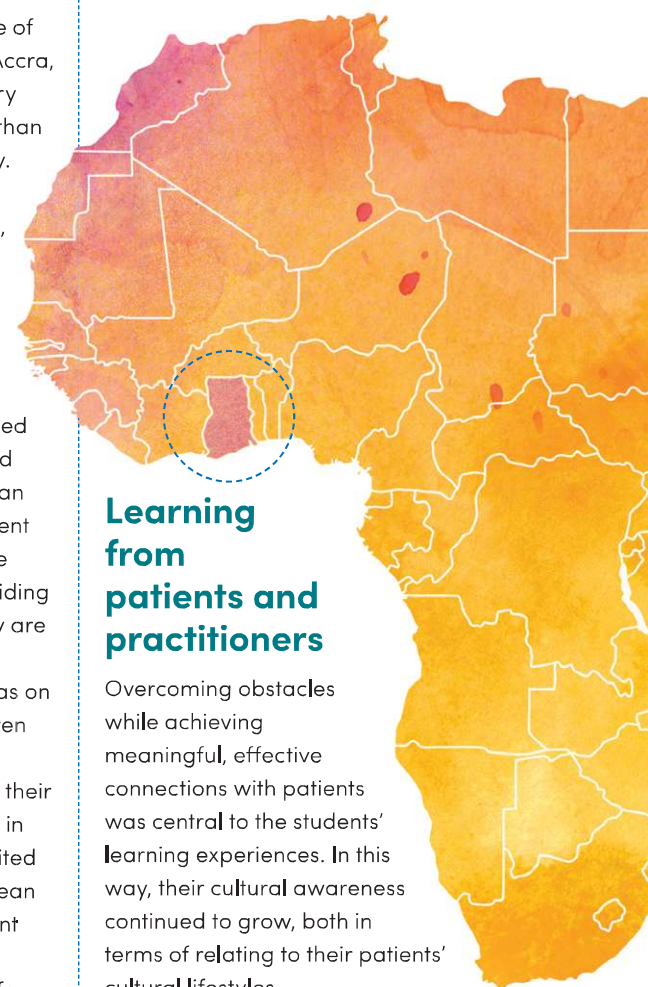
Cieri, whose care focus in Ghana was on women and children, saw many children with elevated blood pressure. Stehlin noted high rates of anemia, and while their supplies included iron pills to dispense in anticipation of this need, each nurse cited their patients' inadequate access to clean water and proper nutrition as persistent overarching obstacles.

"Our patients presented as anyone from a mother with uncontrolled hypertension to newly diagnosed diabetics," Pereira said. Along the way each nurse learned how needs, diagnoses and care may be different — yet similar — to their experiences in the US.

Access to continuity of care was an additional barrier, particularly for residents of Adeiso and for patients whose recommended follow-up testing or care may not be covered by insurance.

"In Adeiso, for example, there are no corner-store pharmacies for them to continue medications, and their sole source of reliable clean water was single-serving bottles brought in by truck," Cieri said.

Considering these barriers to better health, and as much of the medical equipment, medications and other supplies that are used in the US are either not available in Ghana or limited in quantity, the students were constantly reorienting and learning.



Learning from patients and practitioners

Overcoming obstacles while achieving meaningful, effective connections with patients was central to the students' learning experiences. In this way, their cultural awareness continued to grow, both in terms of relating to their patients' cultural lifestyles, needs and obstacles, and in learning their counterparts' methods for providing safe, patient-centered care.

Molli Oldenburg, the School of Nursing's global initiatives coordinator, collaborates with Siaw-Asamoah and Gold Coast Medical Foundation to facilitate the trips and guide preparations. Herself a veteran volunteer of 20 medical mission trips to Haiti, Senegal and Greece's refugee camps, Oldenburg knew how this

experience would impact these nurses and their practice, for the better.

"These experiences are life changing," Oldenburg said. "They helped me to be more culturally informed, and I want to be able to provide these opportunities to our nursing students so that they can also be more culturally informed when providing patient care, no matter where they are in the world."

In addition to providing clinical care, each of the students spent time learning within their specialties. While shadowing a hospital operating room anesthesiologist, Pereira observed both emergency and scheduled procedures, including Cesarean deliveries and surgical treatment of a car accident patient.

Stehlin's rotation through an HIV clinic underscored both how multiple barriers can compound. While the results of a viral load test may take a week to receive in the US, the typical wait time in Ghana is six months; test samples must be transported to a central lab location that may have limited supplies of reagents and machine analyzers, he said.

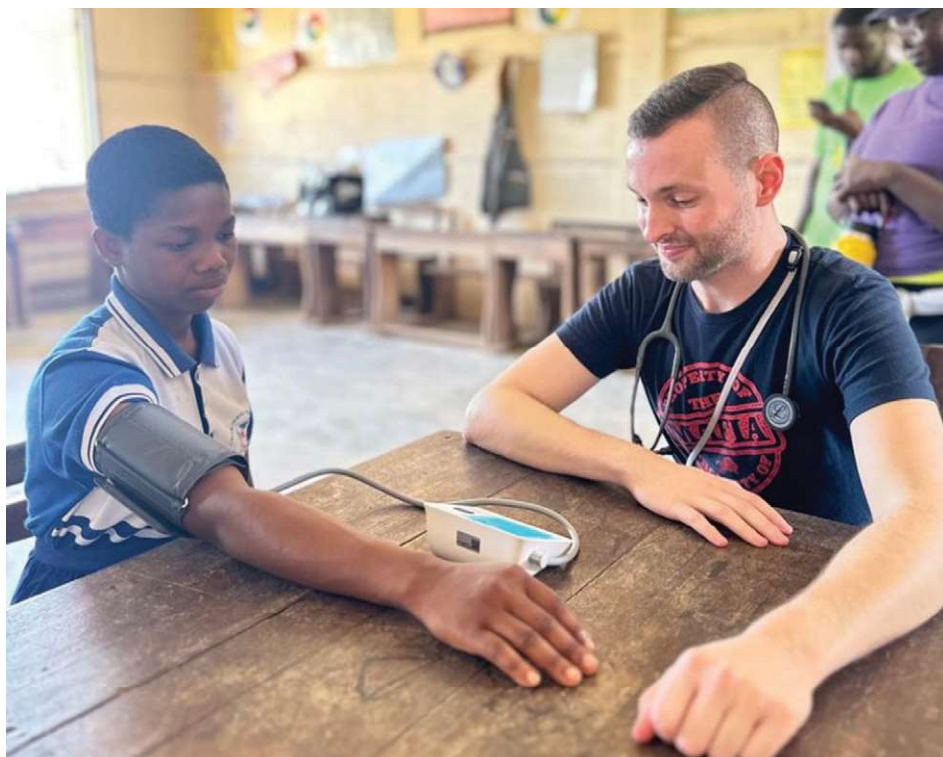
"So, they treat and prescribe empirically and educate about transmission risks and contraception [condom] use," he said.

Access to all kinds of resources – the

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nurses' access to supplies as well as patient access to resources for ongoing health – was just one aspect of shifting their cultural awareness. They learned that talking with people, which they already employ as a key piece to any care plan, became even more critical.

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The group provided blood pressure screenings and health education at a local children's school.

reminded us to be sensitive," Stehlin said. "First, we treat the human being, and that means respecting patient autonomy. They know their life," he added.

Pereira also got a crash course in using the more readily available and less expensive anesthesiology gases and medications available in Ghana. "For all our anesthesia patients, their pain was managed, and they were well-monitored and comfortable," he added.

In Cieri's rotation through the hospital maternity ward, she observed the nurses and midwives providing care similarly to how home-birth midwives do so in the US, including by counting fetal heart tones using a traditional fetoscope.

There were more similarities of needs and care – when the team visited adolescents in a school setting and asked the students what they were interested in learning from them, they asked the nurses to speak about mental health. For example, like their American counterparts, the students cope with bullying and feel pressure to perform well academically.

"They were really interested in the mind-body connection and learning how to cope

with stress and anxiety," Cieri said. "We let them know that it's okay for them to have feelings of anger or disappointment and focused on what they can modify for themselves."

They all learned that continuity of care is among the biggest challenges for people who lack reliable transportation to reach clinics, or who face other obstacles to refilling prescriptions, getting appointments and affording follow up care.

Their experiences beyond providing medical care immersed them in a vibrant culture of warm, welcoming people. "The people were so lovely to us," said Cieri, who was so taken by the colorful patterns of the handmade women's dresses and men's caftans that she commissioned their driver's wife, who owns a dress shop, to make a dress for her from fabric she chose in the market.

Oldenburg emphasized that the learning opportunities in a medical mission experience are people centered. "You see a different aspect of community and a different aspect of family," she said, "and how people love and help each other."