

The Expanding Botswana Global Health Program: Spotlight on a Global Health Fellow

Dr. Pooja Gala's six months in Botswana as part of the [BIDMC Global Health Fellowship](#) "started off busy and then got busier," she reflects. Between providing clinical care, teaching medical students and interns, contributing to quality improvement work, and running a district-wide research study, she had her hands full. She notes that none of this work would have been possible without the strong partnership BIDMC has established with Scottish Livingstone Hospital (SLH) and other local healthcare stakeholders. "All of our work was in conjunction with local researchers, doctors, and leaders. There was a lot of co-creating where people shared their views and aimed to build capacity in a culturally sensitive way that focused on local needs," she explains. Dr. Gala also appreciated the structure and continuity provided by the [Botswana Global Health Program](#). Launched in 2011 by the [Department of Medicine](#), today the program involves two additional BIDMC departments ([Obstetrics/Gynecology](#) and [Anesthesia](#)) and three BIDMC faculty based full-time in Botswana as well as four fellows and 30-40 residents each year.



During her fellowship, Dr. Gala focused on a condition not often associated with Botswana or sub-Saharan Africa: hypertension. By some estimates, 33% of adults in Botswana suffer from hypertension--making it even more prevalent than HIV, which is the medical condition people typically connect with the region. Dr. Gala set out to understand how hypertension is treated in the Kweneng East district, where SLH is located.



Working with visiting BIDMC residents, local partners, and Dr. Tomer Barak—BIDMC Department of Medicine's full-time faculty member at SLH, she discovered that most people with hypertension in this area are cared for primarily by nurses at local clinics or health posts. (For the 190,000 people in the district, there are only six doctors practicing outside of the hospital, covering 16 health posts and 10 clinics.) Many of the nurse providers reported feeling uncomfortable prescribing new medications or changing existing prescriptions; as a result, hypertension often goes undertreated or untreated. These findings along with other results of a medication reconciliation study—funded by BIDMC's Hospital Medicine Program--were recently presented at the World Congress of Internal Medicine conference in Cape Town, South Africa. As part of the medication reconciliation study, the BIDMC team interviewed patients with hypertension at six different locations. They compared the medications patients were prescribed with the ones they brought with them or reported taking in order to evaluate medication errors and the association of these medication errors with uncontrolled hypertension. The most frequent errors resulted

from patient misunderstandings about the medications and doses they were supposed to be taking, and medication errors were found to be significantly associated with poorly controlled hypertension.

Informed by these results, the BIDMC team in Botswana now plans to work with local partners on interventions to improve patient education and adherence support.

The BIDMC Global Health Fellowship, directed by Dr. Jonathan Crocker and built upon BIDMC's collaboration with the Botswana Harvard Partnership, was launched in 2015 and has since supported ten fellows in devoting six months each to clinical care, medical education, quality improvement, and research work in Botswana. With the program's recent growth, two fellows are now able to be in Botswana simultaneously, and the scope has broadened from a focus on inpatient care to include outpatient care. While co-fellow Dr. Paige Szymanowski focused on inpatient care at SLH, Dr. Gala was



able to lead outpatient expansion efforts. She designed and launched a new clinic at SLH to train local interns in outpatient care and liaised with providers in healthcare facilities across the district to establish regular outreach visits where she worked with rotating BIDMC residents to provide clinical mentorship and teaching on complex cases. According to Dr. Barak, "We have long realized that what we are seeing on a daily basis on the SLH wards is just the tip of the iceberg. Our program has contributed much to improving care in the hospital, but the outpatient arena across the district is critical if we are hoping to make a larger impact on healthcare and people's lives. In a very short time we have witnessed how the outreach activities enabled by our Global Health Fellowship and piloted by Dr. Gala are going beyond expanding opportunities for clinical mentorship and quality improvement, and are actually helping to create a real sense of community among caregivers throughout the district. The personal connections we are making with patients and providers across the local healthcare system are ultimately helping all of us as a community to provide better care to more patients."

Dr. Gala is now at the University of Chicago pursuing a research fellowship focused on strengthening health systems in low and middle income countries. She continues to work with BIDMC residents and fellows, who are now at SLH carrying on the work that she started. And this points to something she particularly appreciates about BIDMC's Botswana Global Health Program: "The program has been in Botswana for nearly a decade and Tomer's been there for several years, so we aren't doing six-month projects and then leaving, allowing our work to get lost; there's great program development and continuity with our lasting presence there," she explains. "Through its long term commitment, BIDMC's program has really become integrated into the system there."