Interview of Drs. Harrison and Patricia Bloom about a project targeting elders living in villages in rural southwest Uganda





**TGS:** Hello, Doctors Bloom, we understand that you are involved in a project with older adults living in rural villages in southern Uganda. Please give us an overview of what you are doing.

**HB/PB:** Yes, thank you, so nice to speak with you again. Our project, the Kisoro Elders Project, aims to train Village Health workers to screen for and treat visual impairment, hearing deficits, mobility and pain problems, depression and dementia in older adults in the remote rural villages of Kisoro District in southwest Uganda. Kisoro elders, like many older adults in developing countries, have little access to care; the only affordable mode of transportation is walking, and the average distance from village to the hospital and clinics at Kisoro District Hospital is 10 kilometers. We had the good fortune to be invited to add a geriatric skill set to the Village Health Workers previously trained in primary care skills by Doctors for Global Health Uganda, directed by Dr. Gerald Paccione, a colleague and friend who is a Professor at the Albert Einstein College of Medicine in New York.

TGS: How and why did you choose the interventions you listed?

**HB/PB:** These are prevalent chronic problems among older adults the world over which have significant negative effect on quality of life. When I (Harrison) made exploratory visits to Kisoro in April and October of 2017, I met with elders, the Village Chairperson, and Village Health Workers in a number of the villages. Although village elders cited poverty as their #1 problem, an issue beyond the scope of our ability to intervene, they also cited the problems we chose to focus on. Our goal was to choose

areas in which we could make interventions that would have an immediate impact on quality of life.

**TGS:** You are training and working with Village Health Workers; tell us about that program.

**HB/PB:** Doctors for Global Health has been operating in Kisoro, a district capital, population 13,000, for the past 12 years. It provides faculty physicians, residents, and medical students from Albert Einstein to help staff Kisoro District Hospital and Clinics, and in addition has trained Village Health Workers (VHWs) in 52 rural villages in the subcounties closest to Kisoro. Rigorous training over 1-2 year period equips VHWs to address routine acute care problems (fever, diarrhea, cough), hypertension and diabetes detection and control, prenatal care, common issues of maternal and child health, and follow-up after hospitalization. They are farmers with largely a primary school education.

We conducted our geriatric skills training for 6 VHWs in April 2018 and 6 more in September 2018, assisted by our project director, a Ugandan named Moses Iraguha, who has a Masters of Social Work degree, and a special interest in quality of life in older adults. During the initial two-day training module, VHWs learned about the focus areas of the project (Vision, Hearing, Mobility and Pain, Depression, and Dementia), and learned to screen for problems in these areas using E-charts for far vision, reading or figure clarity screening for near vision, the Whisper Test for hearing impairment, Timed Up and Go for mobility, a pain intensity rating scale, the Patient Health Questionnaire – 9 (PHQ-9) for depression, the Six Item Dementia Scale for Africa (SIDSA), and an adapted Activities of Daily Living and Contributive Functions scale. In addition, they learned simple interventions: identification of significant myopia for referral to the optometrist, dispensing of reading glasses, inspection of ear canals and removal of cerumen impaction, dispensing of low cost listenator devices, assessment of suitability of canes (to replace traditional walking sticks), measurement for cane height, referral of elders for follow-up mental health care in the villages for mildmoderate depression or the hospital for severe depression/suicidality, and education of family members and caregivers concerning dementia. We also hope to form support groups for elders with mild to moderate depression, and for caregivers of dementia patients, with the support of an excellent mental health nurse specialist.

After the two-day training module, we made follow-up visits to the villages, along with Moses. The VHWs invited elders who they suspected of having vision, hearing, and mobility and pain problems to a screening gathering. Many of the elders had to walk several kilometers over rocky terrain to the gatherings, which proved to be happy

reunions of friends for many who are socially isolated. The beneficial impact of reading glasses for many was evident: wide smiles when they realized they could once again read, or thread a needle for sewing, or help sort beans from stones during the harvest. Listenators for hearing impairment also had immediate and highly appreciated impact. Almost all the elders, having worked in the fields their whole lives, have musculoskeletal pain but have never taken analgesics due to cost barriers. Acetaminophen (paracetamol), which is quite inexpensive, was dispensed by the VHW with excellent results for many of the elders. Despite fears that canes may not be culturally acceptable compared with traditional walking sticks, frail elders with mobility problems felt much more stable using them. A local carpenter has been given a contract for their low cost production (with rubber cane tips obtained in the US).

The VHW, Moses, and we also conducted in-home visits for depression and dementia screening. Both the project director and the mental health nurse will continue to support VHWs' acquisition of skills in these more nuanced areas, and provide individual follow-up, as well as supervision and training in the establishment of support groups.

TGS: How has the project been received so far? Do you have any data yet?

**HB/PB:** So far the project has been extremely well received. "We thank you from the bottom of our hearts" is a sentiment we hear frequently expressed by elders in the project villages. Elders in other villages are asking when their villages can participate. Prior to the Kisoro Elders Project, older adults in the villages reportedly felt that their needs were not being addressed by the Village Health Workers. Dr. Paccione, the Director of Doctors for Global Health Uganda, has requested that we roll out the project to the remaining 40 villages that have VHWs, in the next year. So in order to achieve this rapid rollout, Moses is in the process, with our supervision, of training some of the initially trained VHWs to be trainers of other VHWs.

Between February and October 2018, 12 VHWs were been trained and 559 screenings were performed: 239 for vision impairment, 79 for hearing impairment, and 200 for mobility and pain problems. 143 pairs of reading glasses were dispensed, and on follow-up, 135 elders reported benefit from using the glasses for reading, sewing, peeling, and separating beans from chaff. 17 elders have received and reported benefits in conversation from use of listenators. 48 elders had mobility issues that would potentially be benefited from the use of a cane; a town carpenter is proceeding with producing the canes. 178 elders were given trial doses of paracetamol and to date 92 have received repeat supplies. Detailed flow sheets being used by the VHWs will capture all visits, test results, interventions made, and follow-ups (i.e. is the elder

using the reading glasses, what function are they helping?) Screening gatherings and individual home visits have become a part of VHWs' calendars. The extent to which they embrace the delivery of geriatric care will be reflected in their stipend sheets, as each task they perform is rewarded by a small stipend. VHW stipend income adds significantly to family agricultural revenues; a project goal is to increase VHW stipend income by 30%. The Activities of Daily Living and Contributive Functions Scale has been incorporated into the biannual census conducted by VHWs and hospital Supervisors.

TGS: Where does the funding come from and how much does the program cost?

**HB/PB:** We have received generous contributions from family, friends, and colleagues, as well as support from several NGOs, including the budget of Doctors for Global Health. The budget for the project, which covers the costs of the VHWs' equipment bags, intervention supplies (glasses, listenators, canes, paracetamol), training materials, the project director's salary and transportation, and VHWs' stipends, is quite modest, less than \$15,000 per year, projected to grow commensurately with the increase in numbers of VHWs.

**TGS:** What are your plans for the future? Is the project sustainable?

**HB/PB:** We plan to return to Kisoro twice a year for the next 2-3 years to oversee the training of the remaining VHWs, and to supervise aspects of the project such as the formation of peer counseling groups for depression and dementia caregiver support. After that we think that the project will be ready to be sustained under the leadership of Moses Iraguha and the health care professionals of Kisoro District Hospital and Doctors for Global Health. Our goal is to screen and provide interventions for all elders who need them in the 52 villages. They represent 5% of the village population, so we think this goal is attainable.

**TGS:** Do you think the project is applicable elsewhere?

**HB/PB:** We think this project is unique in Africa; we have not heard of or found evidence of other projects in which Village Health Workers deliver geriatric care to older adults in their villages. In the face of the phenomenon of global ageing, particularly in the developing world, we believe that this low cost, practical project, when appropriately modified for local culture, demographics, and existing health care infrastructure, could serve as a sustainable model, with an immediate impact on quality of life, for geriatric care in rural areas currently lacking access to health care.