

Partnerships for Health - Jeff Health and the Rwanda Village Concept Project - A model of interdisciplinary health professions student global education

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The Use of International Service Learning Initiatives for Global Health Education: Case Studies From Rwanda and Mexico

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BACKGROUND

The Rwanda Health and Healing Project (RHHP)

- Started in 2006: Barefoot Artists and TJU Department of Family and Community Medicine
 - Global health immersion experience
 - Interdisciplinary
 - Focus: team-based, sustainable public health programming, economic development, community empowerment
- Public-Health Programming: Akarambi, Rugerero
 - Hygiene and Sanitation
 - Childhood Nutrition
 - Helminth Prevention
 - HIV Education
 - Income Generation: chicken coop, rabbit rearing, mushroom farming, bee keeping, pig farming



The Rwanda Healing Project

Lily Yeh, director of Barefoot Artists, organizes Rwanda Healing Project with Jean Bosco Rukirande, regional coordinator of Rwandan Red Cross.

Built a genocide memorial in Rugerero, a genocide survivors' village, in 2004.

Asked Dr. James Plumb to perform a Village Health Assessment in 2006.

Jeff HEALTH: In the Beginning...

- Dr. Plumb, three medical students and one nursing student perform community health assessment in 2006.
- Follow-up work in 2007 by seven medical students.
 - Malnutrition project
 - Latrine building project in collaboration with Engineers without Borders



Jeff HEALTH: The Work Continues...

- New Projects Rugerero
 - Health education
 - Maternal and child health
 - HIV
 - Nutrition
 - Malnutrition project
 - Income generating
 - Chicken coop construction
- Began work in Akarambi, a rural village, in 2009.
- Medical, Nursing, OT, Pharmacy and Public Health students work together on...



- Projects in both villages
 - Malnutrition project
 - Survey
 - Worms project
 - Prenatal education
- Projects in Akarambi
 - Water filter project
 - HIV health education
- Projects in Rugerero
 - Mushroom growing project

Building Local Partnerships

- Non-governmental, non-political, voluntary organization run by students at University of Rwanda
- International student cooperation for community development
 - HIV AIDS awareness, reproductive health and family planning program
 - Malaria prevention program
 - Hygiene, Water, and Sanitation Program
 - Income Generation Program
 - Gender Empowerment Program (Pyramid Project)



RVCP-Jeff HEALTH Exchange Program

- 2006: Partnership between Rwanda Village Concept Project (RVCP)- University of Rwanda and TJUH
 - Formal MOU between Institutions (6 years to finalize)
- 21 Rwandan medical students participate in 2 month long rotations
 - Family and Community Medicine
 - Pediatrics
- Monitoring of Existing Programs in Rwanda
- Outcomes: current under investigation, program evaluation
 - Advanced Training: MPH, MSc
 - Johns Hopkins (2), Brandeis, Albert Einstein
 - Current Positions



FUTURE DIRECTIONS

Expansion and Evaluation

Clinical Elective

- GOAL: sustainable inter-disciplinary clinical experience for advanced health professionals focusing on reciprocal education and the integration of public health and medicine
 - Health System: 3 Levels
 - Local Community Health Centers, District Hospitals, Referral Hospitals
 - Kaitlan Elston, Cameron Bass (Spring 2011)
 - Family Medicine in Rwanda: University of Rwanda
 - Rubavo Clinic, Sante Murara District (includes village of Rugerero)
 - Continuity with Jeff HEALTH public health and education programs

Program Evaluation

- Impact of experience on participants
- Process Evaluation
- Survey of Projects

College Within the College (CWIC Program)

- Inter-professional Primary Care Dual Degree program (IPCDDP)
- 2 Tracks of CWiC: Population Health and Clinical Translational Research
- 4 Rwanda Squad 2011 Members Participated as part of CWiC Program
 - Scientific basis for Public Health rests on the study of risks to the health of populations and on the systems designed to deliver required services
 - Problem-solving paradigm in Public Health practice
 - Problem Definition
 - Problem Magnitude
 - A Conceptual Framework (e.g. - Ecological Framework) for Key Determinants of Health
 - Intervention Strategy
 - Policy Development
 - Implementation and Evaluation

Jefferson Medical College Clinical Skills Center

- Dr. Joseph Majdan

DEVELOPING CLINICAL PARTNERSHIPS

MS4 Independent Electives

- 2009: Elizabeth Krebs, Julia Switzer (EM, OB/GYN)
 - Establish relationship with Akarambi
- 2011: Kaitlan Elston, Cameron Bass (FM/IM)
 - Program Evaluation
 - Exploration of Family Medicine in Rwanda
- 2012: Philip Chan, Max Cooper (EM)
 - Hospital: Remera-Rukoma District Hospital
 - Contact: Hovaire Nsabamina (HO, Exchange 2010)
 - Hospital: Butaro Hospital
 - Contact: Damas Dukunde (H.O., Exchange 2010)
- 2013: Eva Cantor, Aaron Martin, Devesh Upadhy (OB/GYN, IM, Peds)
 - Hospital: Remera-Rukoma District Hospital
 - Contact: Kalinda (HO, Exchange 2010)
 - Hospital: Centre Hospitalier Universitaire de Kigali (CHUK)

Resident Electives

- 2012
 - Participants:
 - Residents: Ellen Plumb, Anna Filip
 - Faculty: Christina Hillson (MCH), James Plumb (Urban Health)
 - Goals:
 - Jeff HEALTH Project Supervision
 - Exploring Family Medicine in Rwanda
 - Identifying Strategies to Expand Public Health Programs
 - Start Building Clinical Partnerships
 - Activities
 - Site Visits: Ruhengeri, Kagayi, School of Public Health, University of Rwanda, We-Actx
- 2013
 - Participants: Komal Soin (PGY2), Ellen Plumb (PGY3), James Plumb
 - Goals: same as before
 - Activities
 - Site Visits: Remera-Rukoma Hospital

Remera Rukoma Hospital

- Presbyterian Church of Rwanda
- Kamonyi District
- Referral Hospital for 12 Health Centers
- Serves population of 342,792
- 168 beds: outpatient, surgery, emergency, physiotherapy, IM, pediatrics/neonatology, maternity, mental health, dentistry, nutrition, gender based violence, lab, pharmacy
- Preventive Services: Health Centers
 - Family Planning, Immunizations and Malaria, TB, Hygiene and Sanitation, Community Health, HIV/AIDS

Clinical Staff

- Viateur Kalinda, Director Remera Rukoma
- 9 physicians (GPs), 46 nurses (2 midwives, 1 pharmacist), 20 technicians

Linking Remera-Rukoma with Jefferson

- Remera Rukoma Vision
 - Reduce maternal mortality
 - Reduce infant mortality
 - **Form partnerships to fulfill its social responsibility
- Remera Rukoma Goals
 - Build clinical capacity among GPs staffing hospital
 - Skills needed: OB/GYN, surgical
- Dr. Kalinda comes to Jefferson
 - Meetings: pediatrics (x2), family medicine, EM
 - Memorandum of Understanding
 - Resource Sharing
 - Informal networking

Memorandum of Understanding

- TJU and Presbyterian Church of Rwanda
 - Defining Responsibilities: medical students, residents, faculty
 - Identifying Clinical Skill Needs
 - Developing methods of reciprocal education
 - ***Finding a role for family medicine

Building the Partnership

- Student and Residents in Rwanda: Defining the Partnership
 - Jacqueline Kohl (PGY3, Ob/Gyn)
 - Catherine Ford (PGY3, Ob/Gyn): Family Planning
 - MS4 Electives (x 7)
- Jefferson Institutional Support
 - Forming interdepartmental relationships



Principles of Partnership

- Reciprocal Education
- Health Capacity Building
- Linking public health with clinical medicine
- Professional development
 - Rwandan RVCP Exchange Participants
 - Jefferson students, residents, faculty
- Negotiate role of family medicine primary care in changing health system
- Involvement in students and residents in partnership building



RHHP Impact and Outcomes: under investigation

- 80 participating Jefferson students
- 11 students with joint PH/MD degrees
- Medical Specialties: FM, EM, IM, General Surgery, OB/GYN, Anesthesia, ENT, Urology, Dermatology
- Career Paths: founder of non-profit (PURE), PIH (Rwanda), Global Health Faculty Development Fellowships (EM, FM)
- Disciplines: Medicine, Nursing, Public Health, Physical Therapy, Occupation Therapy, Pharmacy
- Fundraising: \$60,000 in travel grants, \$30,000 in foundation grants
- Research Presentations and Dissemination: American Public Health Association (APHA), AAFP Global Health Workshop, CHOP Global Health Conference, Jefferson Center for Interprofessional Education Conference, Delaware Health Sciences Alliance (DHSA), STFM

RVCP Evaluation – Survey

- Health systems:
 - Public health, family medicine, underserved/community
- Medical Education System:
 - Medical education, career, professional development, research, mentorship, culture
- Partnership:
 - Culture, communication, collaborative, program

FUTURE STEPS

Dimensions of Global Health Elective

- Key Components of Global Health: Establishing Rotation Options
- Linking past RVCP participants with current Jefferson students and residents
 - Clinical Care
 - Health Policy
 - Public Health
 - Advocacy
 - Research



From Electives to Fellowship?

- Refugee and Global Health Fellowship
- Interdepartmental
 - Research-based advocacy and Public Health