Nicaragua Service Learning Project: A Reproducible Model for Interprofessional Student Engagement

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Objectives/Session Overview

• Illustrate an interprofessional educational initiative in Nicaragua
• Discuss a reproducible model to develop an international interprofessional education initiative
• Share student perspectives of the initiative over time.
• Provide insight into challenges and tips for success of program development
Interprofessional International Initiative in Nicaragua

- Imbed video here
Model of Community Based Rehabilitation (CBR)

Definition

• A strategy to improve access to rehabilitation services for people with disabilities in low-and middle-income countries, by making optimum use of local resources to ensure inclusion of people with disabilities in society and enhance their quality of life.

Components

• Health
• Education
• Livelihood
• Social
• Empowerment

Medical Model

THE IMPAIRMENT IS THE PROBLEM

DISABLED PEOPLE AS PASSIVE RECEIVERS OF SERVICES AIMED AT CURE OR MANAGEMENT
Social Model

THE STRUCTURES WITHIN SOCIETY ARE THE PROBLEM

- Lack of Useful Education
- Discrimination in Employment
- Inaccessible Environment
- Segregated Services
- Poverty
- De-valuing
- Prejudice
- Inaccessible Transport
- Inaccessible Information

Disabled people as active fighters for equality, working in partnership with allies.
Principles of Community Based Rehabilitation (CBR)

- Facilitate awareness and positive attitudes of disability
- Focus on prevention & health promotion
- Promote education and sustainable services
- Build social capital to enable communities to help themselves
Efficacy of CBR

• Comprehensive literature review shows CBR lacks a coherent core of research or evidence base using rigorous experimental design.
  Finkenflugel et al. 2005; Mannan et al, 2012

• Why? No single systematic method for the implementation or study of CBR exists.
  WHO 2003, 2006

• Methods are in the process of being developed.
  Kuipers et al. 2006; Lukersmith, 2013

• CBR may be “evidence poor” but it is “data rich” given a wealth of descriptive analysis.
  Lightfoot, 2004
Clinical Evidence for Health Interventions Exists

- **India**: CBR approach found to be more effective than traditional OP medical services in reducing disability associated with schizophrenia (Sudpito, 2003)
- **China**: improved functioning of those with disabilities in rural areas (Zhou, 1999)
Program Development

2007

- Partnership with the Jessie F. Richardson Foundation (JFRF)
- Interprofessional team: OT, PT & Dental
- 9 faculty & student participants
- 1 hogar

2012 - 2013

- Multiple partnerships
- Interprofessional Team: OT, PT, Dental, PA, Pharmacy, OPT, Audiology, Psychology
- 28 faculty & student participants
- 6 hogares
Program Overview

- Individual Profession Application and Interview Process
- Pre-trip preparation
  - 3 class meetings and blended online learning
    - Intro to the community based model
    - Intro to documentation
    - Team building
    - Nica Simulation
    - Online discussion board topics in global citizenship and global aging
    - Spanish language improvement plan
    - Nicaragua Knowledge Inventory
    - Preparation for travel
    - Fundraising to reduce student cost
    - Donation gathering for residents
- Trip 10-14 days in-country
- Post-Trip phase
  - Reflection on professional development and growth paper
  - Assist with marketing the program to new students and others
Program Overview cont.
In-Country Experience

• Fly to Managua
• 2 Interprofessional teams to serve 2 hogares (Esteli & Sebaco this year)
• Interprofessional team screenings for each resident
  • Identify needs for profession specific interventions
• Profession specific interventions
  • In interprofessional teams
• One Excursion day
• Fiesta
• Return to Managua for reunion dinner and flight home
A day at the hogar

- 6:30 granola bars on the walk to hogar
- 7:00-9:00 Early day to see the AM routine
  - OT/PT observe and help with AM routine Bathing/transferring/ADLs etc
  - PA/Pharm helping with wound care rounds
  - Dental filling in with both
- 9:00-12:00 Profession specific interventions
  - PA/Pharm full physical exams, bp checks, ear lavage
  - OT ADL assessments, leisure and productive activity
  - PT Movement therapy interventions, modifying equipment
- 12:00-1:00 Lunch (the elders are eating as well)
- 1:00-2:00 Spanish Language class
- 2:00-4:00 Professional specific interventions
- 4:00-5:00 Debrief, plan for tomorrow
- 5:00 – 8:00 Dinner and relaxation in interprofessional teams
  - Reflection Journal, decompression, study & review in silo as needed
Program Development Process

- Identify fit with university vision/mission
- Find a sponsor and/or In-country liaison
- Establish relationships
- Perform a needs assessment: Focus on host’s needs
- Develop network of professional supervisors
- Recruit, orient and prepare students
- Promote interprofessional collaboration
- Develop community support locally & in host country
- Evaluate and monitor progress
Assessment & Monitoring Tools

- Outcome measures tracking for our program:
  - Direct Service: screening, full assessment, interventions, daily education of residents/caregivers
  - Education and Training
  - Social Capacity Building
  - Community Meetings
  - Fund Raising
  - Donations
  - Scholarship: Publications, Presentations
  - Marketing

- Outcome measurements for our students:
  - Health Professions Schools in Service to the Nation Service Learning Student Survey
  - Readiness for Interprofessional Learning Scale (RIPLS)
## Program Outcomes

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<thead>
<tr>
<th>2007 – 2008 (1st 2 years)</th>
<th>Cumulative through Present</th>
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<tbody>
<tr>
<td>Hogares: 1 served</td>
<td>Hogares: 4 served; relationships with 14</td>
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<tr>
<td>Service: 45 older adults, 450 hrs/service</td>
<td>Service: 650 older adults; 1650 hrs / service</td>
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<tr>
<td>Education: 23 hrs for 20 participants</td>
<td>Education: 243 hrs for 211 participants. Generated 20 in-country initiatives</td>
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<tr>
<td>Community meetings: 2</td>
<td>Community meetings: 18</td>
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<td>Donations: 900 lbs</td>
<td>Donations: over 7600 lbs</td>
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<td></td>
<td>National Aging Council established. Increased local medical, nursing, PT and volunteer service provided to older adults</td>
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<td>Grants totaling greater than $19,000</td>
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Student Demographics
N = 70 student participants (2009-2012)

- **Pacific University Programs** (100%)
  - PA (15/21%); dental (16/23%); Pharm (12/17%); OT (16/23%); PT (11/16%)
- **Gender**: 90% female; 10% male
- **Age**: 20% 20-24yrs; 59% 25-29yrs; 14% 30-34yrs; 7% 35+yrs
- **Ethnic Identity**: 67% Caucasian/white; 14% Asian American; 13% Hispanic American; 2% African American; 4% other/unanswered
- **Prior volunteer experience**: 48%
- **Work in addition to school**: 27%
Students’ Experience of Service-Learning

Percent of students who agree or strongly agree:

• 98% Participation in service-learning helped me to better understand the material from lectures and readings.
• 98% Service-learning made me more aware of the roles of health professionals in other disciplines besides my own.
• 87% Service-learning helped me to become more aware of the needs in the community.
• 93% I feel that the work I did through service learning benefited the community.
• 94% Doing work in the community helped me to define my personal strengths and weaknesses.

Students’ Experience of Service-Learning con’t

• 91% During this experience, I became more comfortable with working with people different from myself.
• 70% Service-learning made me more aware of some of my own biases and prejudices.
• 91% Participating in the community helped me enhance my leadership skills.
• 91% The work I performed in the community enhanced my ability to communicate my ideas in a real world context.
• 100% I will integrate community service into my future career plans.
Plan for Success/Address Challenges

Plan for Sustainability
• Gain buy-in and financial support from your University and/or stakeholders
• Select a sponsor that has a sustainable approach
• Enculturate the program into the university system by adding a formal course and to hold students accountable
• Mentor and support core and adjunct faculty
  • outstanding students may become adjunct faculty upon graduation

Manage Processes
• Address cultural differences among professions
• Provide opportunity for Spanish language study (region specific language)
• Choose students who are appropriate for the type of experience you are providing
• Identify documentation systems and outcome monitoring measures early in the process
• Be proactive about yearly revision and process improvement soon after return from the in-country trip
• Market the program
What is the future bringing for us?

- We are serving a new hogare this year
- Interprofessional International Experience: Nicaragua I & II  
  CHP560/561 & CHP460/461  
  • Formalized 4 credit course
- Audiology and Professional Psychology are joining us this year for needs assessment
- We are exploring the idea of piloting mentorship trips for guest faculty


Mannan, H., Boostrom, C., MacLachlan M., McAuliffe, E., Khasnabis, C., Gupta, N. A systematic review of the effectiveness of alternative cadres in community based rehabilitation. *Human Resources for Health* 10(20) www.human-resources-health.com/content/10/1/20


