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MEDICAL CENTER

Staff Development



Faculty Development Showcase Week:
When the Rubble Settles: Rehabilitation in Post-Earthquake Haiti

Course Description:

Background: In 2010, the devastating earthquake which hit Haiti left an estimated 4,000 individuals with quake-related limb amputations, spinal cord injuries, bone fractures, paralysis, and mental trauma in a country where rehabilitation services had not yet been established. To address this need, an occupational and physical therapist created a 16-month program to train Haitians in occupational and physical therapy techniques. **Description:** This session will describe how an educational program was created and delivered to Haitians allowing them to provide occupational therapy services at a technician level to address the urgent need for post-earthquake rehabilitation. Additionally, the perspectives of 9 graduates regarding how well the information learned enabled them to serve their community, as well as their recommendations, will be discussed. **Results:** Three groups of students have graduated from the program at Universite de Adventiste in Haiti. The technical skills learned, together with adoption of Loma Linda University values of compassion and whole person care, enables graduates to meet the complex rehabilitation needs of their community. **Contribution to practice:** Through the experiences of the presenters, this presentation reviews concepts to guide practitioners toward thinking of volunteerism and service towards promoting and establishing the profession worldwide.

Course Objectives:

The participant will:

1. Explain occupational therapy disaster relief efforts in Haiti after the 2010 earthquake.
2. Identify the need for occupational therapy in Haiti and the challenges experienced in trying to establish occupational therapy as a profession in the country.
3. Describe the curriculum developed and utilized to train rehabilitation technicians, which has been completed with three cohorts of Haitian students, and a fourth currently enrolled.
4. Describe alumni experiences about how well the information learned aids them in meeting the rehabilitation needs of their community.

After the rubble settles: Occupational Therapy in post-earthquake Haiti

Heather Thomas, Ph.D., OTR/L
Karen Pendleton, M.A., OTR/L
Dragana Krpalek, Ph.D., OTR/L



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Presentation Objectives

- » Explain why a Rehabilitation Technician Training Program (RTTP) was implemented in Haiti
- » Describe the curriculum developed
- » Discuss lessons that have been learned along the way
- » Provide recommendations for future program development



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Presentation Overview

- » Part One: Background Information (Heather Thomas)
 - ~ Needs assessment
 - ~ Program planning
 - ~ Acceptance criteria
- » Part Two: Getting Started (Karen Pendleton)
 - ~ Curriculum overview
 - ~ Sample class activities
- » Part Three: Collaboration & Learning Curves (Dragana Krpalek)
 - ~ Importance of a collaborative effort
 - ~ Challenges encountered along the way
 - ~ Success stories
 - ~ Recommendations





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Part One
Background Information

Background Information

» In 2010, the devastating earthquake which hit Haiti left an estimated 4,000 individuals with quake-related limb amputations, unknown numbers of spinal cord injuries, bone fractures, paralysis, peripheral nerve damage, and mental trauma



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Thousands of people with homes destroyed- many displaced to "tent cities"

June, 2010- OT Volunteers



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June, 2010- OT Volunteers



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Translators were eager to learn...



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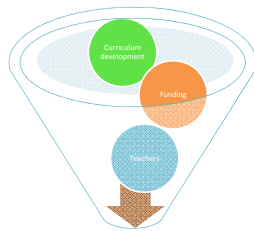
No OT or PT programs in Haiti

»So... what happens when the volunteers leave?



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It started as an idea



»What if we trained Haitians to provide rehabilitation?



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Loma Linda University (LLU)

- »Co-program creators:
 - ~Heather Thomas, Ph.D., OTR/L
 - ~Everett Lohman, DSc, PT
- »Curriculum created by: LLU OT & PT faculty
- »Funding for 3 years: Loma Linda University
- »Instructors: Flown for 1-2 weeks from Loma Linda University or other areas from U.S.
- »Title: Rehabilitation Technician Training Program (RTTP)



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LLU + HAH + UNAH

- »Where: Training will be provided at Hospital Adventiste d'Haiti (HAH) and at Universite Adventiste d' Haiti (UNAH), both in Dicquini (on the outskirts of Port-au-Prince).
- »These two sites are geographically parallel to each other and serve as the ideal place to train health care professionals.



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Entrance to Hôpital Adventiste d'Haiti Mar 20, 2012



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RTTP Classrooms – Upper Floor Post Remodeling



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Purpose



Train rehabilitation technicians, who will serve to rehabilitate persons with disabilities back into Haitian society.



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RTTP

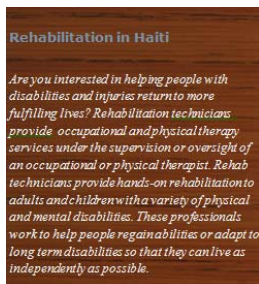
- » Started as a 9 month program
- » Moved to a 16 month program
- » Includes lecture and hands-on lab experiences
- » Experienced teachers
- » 16 students each year
- » Program started June 2012



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Publicity & Application Process

- » The minimum admissions requirement:
 - ~ High school diploma or the equivalency
 - ~ Three letters of recommendation
 - ~ One-page personal written statement
 - ~ Interviews
 - ~ Entrance exams: French & General Knowledge



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Future Plans

» Discuss initiatives made to 'hand-over' the RTTP



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Part Two *Getting Started*

Curriculum: Based on occupational and physical therapy

- » **First quarter courses include:**
- » Intro to Rehabilitation Services
- » Medical Terminology & Documentation
- » Human Anatomy & Physiology
- » Infectious Disease & the Health Care Provider
- » Orthopaedic Interventions I – PT Therapeutic Modalities
- » Acute Care & Early Rehabilitation
- » Cardiopulmonary Care
- » Intervention Techniques for Independence in Self Care
- » Adaptation & Implementation of Devices
- » Mobility, Transfers, and Accessibility
- » Wound Care
- » Neurological Interventions I – PT
- » Neurologic Interventions II - OT



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Curriculum

- » **Second quarter courses include:**
- » Pediatric Interventions I - PT
- » Pediatric Interventions II – OT
- » Hand/Upper Extremity Rehabilitation & Splinting
- » Orthopaedic Interventions II – OT
- » Community Based Rehab (CBR)
- » Introduction to Orthotics & Prosthetics Services
- » Psychosocial Aspect in Healthcare
- » Ethics & Whole Patient Care (RELE)
- » Current Issues in Health Care - Haiti



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Curriculum

- » The final quarter requires that all students complete 4 four week internships in the areas of pediatrics, inpatient, outpatient and community-based rehab.
- » The students return to do a final exam covering all material presented in the program.



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Course	Course description	Length
Introduction to Rehabilitation Services	This course will introduce students to the basic concepts behind rehabilitation services, specifically that which is provided by occupational and physical therapists. Students will gain an understanding of the scope of practice of each profession, as well as key medical professionals involved in health care. Students will be introduced to the different approaches to rehabilitation, including restoration, adaptation, maintaining, creating and preventing to promote health and wellness.	1 week
Adaptation and Implementation of Devices	This course will provide an introduction to adaptive equipment and devices which allow for greater independence and mobility in people with disabilities. Students will be able to recognize how to adjust prosthetic limbs and adaptive devices for growth and changes in the patient's limb and how to recognize physical/medical changes that may require re-assessment of the medical team.	1 week
Intervention Techniques for Independence in Self Care	This course emphasizes the physical and mental health implications of independence in completing self care tasks. Students will become proficient in adaptive dressing, grooming and bathing strategies as well as techniques for safe transfers, joint protection and energy conservation techniques to allow clients to become and stay independent in daily activities.	1 week

Hand & Upper Extremity Rehabilitation	Introduction to hand, elbow and shoulder rehabilitation. Approaches to common injuries and diseases will be presented as well as common orthotics and prosthetics used. Lecture and laboratory.	1 week
Orthopaedic Interventions II – Occupational Therapy	The course is part two of a two part course that will expand on diagnoses introduced in the first part. This course will include occupational therapy interventions for the orthopaedic population to promote engagement in daily activities, through promotion of skill or through adaptation of activities or the environment.	1 week
Neurological Interventions II – Occupational Therapy	This course is part two of a two part course that will expand on those common neurological disorders introduced in course 1, to include occupational therapy interventions for the neurological population, focused on interventions which either help restore or promote the development of skills needed for independence, or adapt methods of activity to allow for returning to a higher level of independence in the community.	1 week
Pediatric Interventions II – Occupational Therapy	This course is part two of a two part course that will expand on childhood diseases and developmental processes, to include occupational therapy interventions for the pediatric population. Students will be introduced to intervention techniques focused on facilitation of proper development, adaptation to allow for engagement in childhood activities, and the role of the parents and community in promoting development and independence of the child in society.	1 week

On June 16, 2012- 16 students started



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Assistive Devices



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One-Handed Dressing Technique



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Pediatrics



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Pediatrics



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Community Based Rehabilitation



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Hand Therapy



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De-sensitization Kit



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Splint design and fabrication



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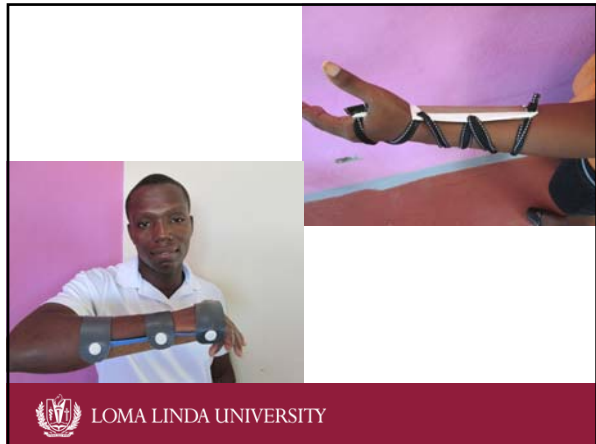
Making Exercise glove

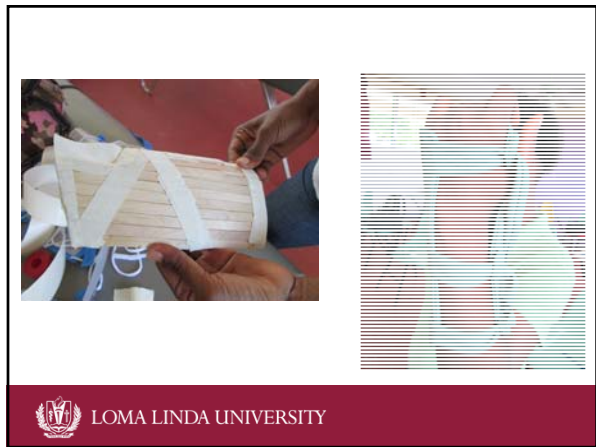


Examples of final exam splints



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Part Three
Collaboration & Learning Curves

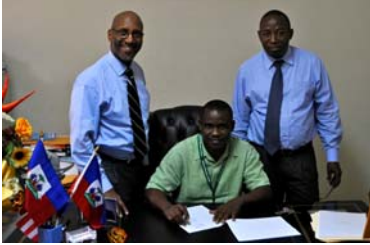
Collaboration
"Alone we can do so little; together we can do so much"
Helen Keller

International
National
Local
Organizational

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Strengthening Partnerships

» Memorandum of Understanding (MOU) between LLU, HAH and UNAH



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Local Collaborations

» Identifying rehabilitation technician program and rehabilitation centers



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National-Level Collaboration

» PTA
» Ministry of Health
» Ministry of Education



Competency Standards for Rehabilitation Technicians	
A Rehabilitation Technician is one who provides treatment and documentation of treatment under the supervision and direction of a physical or occupational therapist, or a physician in the absence of a therapist, to maximize the functional abilities of each individual client.	
Competency	Description of Skills
1. Request autonomy of client	<ol style="list-style-type: none"> 1.1 Respect each person's uniqueness of characteristics, such as gender, age, ethnic origin, etc. 1.2 Promote the client's rights and rights to privacy. 1.3 Encourage client's active involvement in treatment planning and participation in all professional responsibilities, accountability, commitment, respect and compassion.
2. Establish and attend practice	<ol style="list-style-type: none"> 2.1 Perform clinical skills, techniques, accountability, commitment, respect and compassion. 2.2 Follow established safety, personal responsibility and professional standards. 2.3 Use cost-effective and patient handling principles to protect both client and self/therapy. 2.4 Manage time effectively. 2.5 Demonstrate professional based practice.
3. Perform continuous learning	<ol style="list-style-type: none"> 3.1 Screen mechanical alignment. 3.2 Screen gait. 3.3 Screen posture. 3.4 Measure angle of flexion. 3.5 Screen muscle timing. 3.6 Screen muscle tone. 3.7 Recognize and describe motor inhibition. 3.8 Determine need of equipment or assistive devices. 3.9 Determine angle of manual handling. 3.10 Recognize symptoms of compensation to treatment. 3.11 Assess appropriate treatment goals.
4. Perform rehabilitation techniques/competencies	<ol style="list-style-type: none"> 4.1 Provide one-on-one, and transfer training. 4.2 Provide practice training. 4.3 Monitor self/therapist. 4.4 Provide safe manual lift. 4.5 Perform joint mobilization for client and/or caregiver with/without equipment. 4.6 Perform active/passive/active/assisted ROM. 4.7 Perform functional activities for upper and lower extremity (including gait). 4.8 Perform balance and stability exercises. 4.9 Provide stretching and strengthening exercises. 4.10 Assist in provision of assistive devices & equipment. 4.11 Training in components AHA & AHA strategies. 4.12 Implement safety management (e.g. safety gear, working site management). 4.13 Provide direct/indirect treatment.



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International-Level Collaboration

- » World Health Organization
- » Examples from other countries
- » International conferences
- » Publications

INSERT SCREEN SHOT OF
HEATHERS ARTICLE 'WHY
HAITI NEEDS OT'



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Potential Challenges with Collaboration

"I'd collaborate with my clones, because I'm a team player who wants all the credit."
— [Jarod Kintz](#)



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Logistics

- » Materials
- » Faculty
- » Future leadership



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Clinical Placements

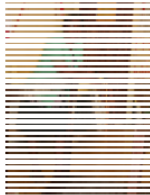
- » Limited Supervision
- » Limited Sites



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Job Opportunities

- » Limited job opportunities in the country
- » Focus on training up those already employed



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Some Success Stories

- » Edgard



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Some Success Stories

» Cedieu & Kernand



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Recommendations



- » Collaborate across all levels
- » Seek advice from outside sources
- » Be familiar with and respect services and organizations already in place
- » Be client-centered or 'country-centered'
- » Think about long-term hand over strategies
- » Work with governments to create national standards
- » Encourage students to be resourceful and creative
- » Encourage students advocate for the role of occupational therapy in their own country
- » View challenges as opportunities



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Thank you for your attention



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