

Health Status Impact Statements Following Mentorship Tutorials In Honduras



Angela Busch, Stacey Lovo Grona



Roxana Bados, Delia Martínez, Erica García



Adriana Angarita Fonseca, Isabel Cristina Gomez-Diaz, Martha Liliana
Hijuelos-Cárdenas, Eliany Pedrozo Araque, Laura Marcela Uribe Calderón

Sept. 21, 2019

PARTNERS



UNIVERSITY OF SASKATCHEWAN
Continuing Physical
Therapy Education
USASK.CA/CPTE



ETHICAL CONSIDERATIONS

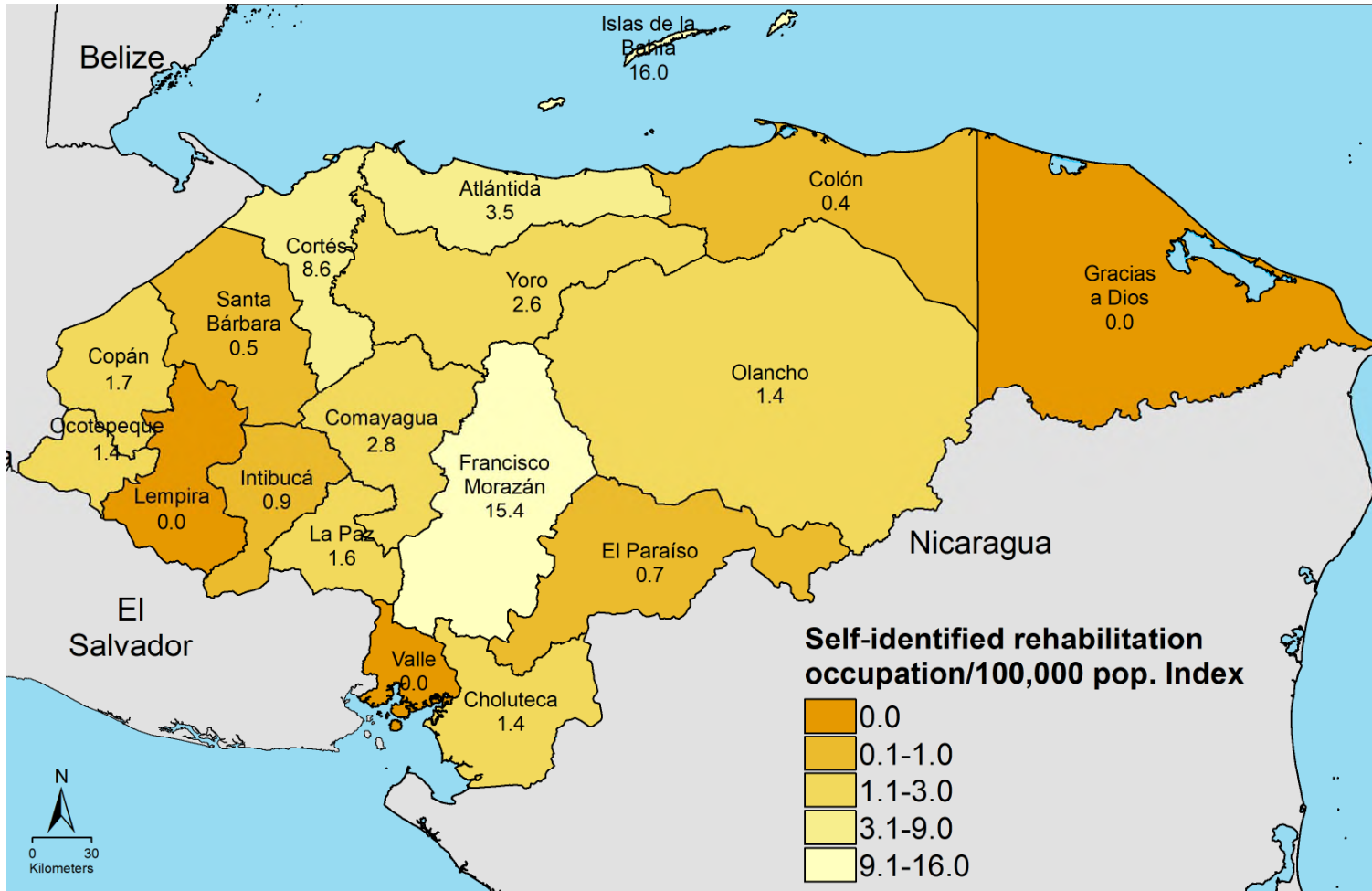
- Exemption from Human Ethics Committee, U of Sask.
- Consent to use photographs was obtained from parents
- Pseudonyms have been used to protect confidentiality



OUTLINE





- Background
 - Rehabilitation in Honduras
 - Little Hands, Big Hearts
 - Mentorship Tutorials
 - What is a Health Impact Statement?
- Methods
- Results
- Conclusions

Distribution of self-identified rehabilitation workers by province in Honduras - 2013



Source: Prepared by the A.Agarita based on the Instituto Nacional de Estadística Honduras (2013)

COMPARISON

Rehab Workers / 100, 000		
Colón (1) (2013)	0.4	
Francisco Morazán (1) (2013)	15.4	
Santander, Colombia (3) (Physical Therapists only 2000)	48	
Saskatchewan, Canada (2) (Physical Therapists only 2018)	69.3	

1. Instituto Nacional de Estadística Honduras (2013)
2. Sask. College of Physical Therapists Annual Report (2018)
3. Asociación Colombiana de Fisioterapia. Caracterización de la fisioterapia en Colombia. Bogotá, D.C. : s.n., 2008.

LITTLE HANDS, BIG HEARTS



Location



Trujillo, Colón, Honduras



Mission

LHBH seeks to inspire and empower the families of special-needs children through specific ministries that target individual needs



Personnel

- School Teachers (primary and special-education)
- Nurse
- Managers
- Support staff
- Volunteers

Photo Removed

Interprofessional mentorship tutorials with the visiting professors

Monday, Sept 3 and
Tuesday, Sept 4, 2018
15 hours



Isabel Cristina Gómez Díaz
Fisioterapeuta



Laura Marcela Uribe
Calderón, Fonoaudióloga



Eliany Pedrozo Araque
Terapista Ocupacional

THE VISITING PROFESSORS

Faculty of the Universidad de Santander
Bucaramanga, Colombia



**Universidad
de Santander**

Personería Jur. 810 de 12/03/96 Min.Educación

UDES

VIGILADA MINEDUCACIÓN

PARTICIPANTS

- Teachers (n = 4)
- Nurse (n = 1)
- Volunteers (n = 2)

Photo Removed

THE MENTORSHIP TUTORIALS

Day 1 – One-on-One therapy of a series of children with physical disabilities

1. Review of pertinent features
2. Handling and demonstration by the professors,
3. Professors provide and explain strategies
4. Question/answer/discussion

Photo Removed

Children seen on Day One		
1	♂, 2 years	Delayed development, unknown dx
2	♂, 1.5 years	Guillain-Barré Syndrome
3	♀, 14 mos.	Cerebral Palsy, delayed dev't
4	♀, 5 years	Fetal asfixia, defective palate, inflamed ear drum stands, crawls but does not walk,
5	♂, 9 mos.	Hydrocephalus, spinal bifida (surgery).

DAY 2 – CLASSROOM ACTIVITIES

- Professors observe teachers leading group activities
- Three Groups
- Question/answer/discussion

Group	Number of Children	Age range	Medical Conditions of the children
1	5	3 to 9	Autism, spina bifida, aphasia, epilepsy, blindness
2	5	3 to 9	Cardiac defect, hypothyroid, aphasia, Down's syndrome, autism
3	6	7 - 13	Learning disability, Down's Syndrome, attention deficit disorder, epilepsy, depression/sadness

Photo Removed

WHAT IS A HEALTH IMPACT STATEMENT?

- A brief summary in lay terms of the result of an intervention, program, or policy that contributed to a measurable change in health, behavioral, or environmental outcome in a defined population
- Key elements of health impact statements
 - description of the problem
 - description of the intervention
 - description of the health-related improvements

Photo Removed

METHODS

- 3 months after the tutorials, the LHBH teachers wrote health impact statements to provide concrete examples of how the application of the teaching had made a difference in the health and wellbeing of the children.
- They described:
 - the problem
 - the intervention (recommendation that was implemented)
 - the improvement in health



RESULTS

13

Three teachers wrote 4 impact statements out of the 21 patients seen on the mentorship tutorials.

Table: Summary of the health impact statements

	Case 1		Case 2		Case 3		Case 4	
	Deficit	Impact	Deficit	Impact	Deficit	Impact	Deficit	Impact
Communication / Learning	N/A	N/A	+	+	N/A	N/A	+	N/A
Social and emotional development	+	+	+	+	N/A	N/A	+	+
Gross motor skills	+	+	N/A	N/A	+	+	+	N/A
Fine motor skills	+	+	N/A	N/A	+	+	N/A	N/A

Mario Age: 5,
Dx: Down's and West syndromes

Problem

- Mario is irritable when touched or when it is his turn to do something,
- Feet and hands are constantly moving,
- repeatedly claps his hands or taps chin

Techniques/strategies learned in the tutorial:

- Therapy be less passive;
- Try to engage the child in the therapy activities
- When the child follows objects, let the child grasps it on his own. Don't over stimulate, stand back and let him interact independently with the object.
- During stories, encourage the child to grasp the objects of the images of the story

Photo Removed

Photo Removed

Mario

Age: 5, Dx: Down's and West syndromes

Impacts

- Mario cries less
- He now follows objects with his eyes and grabs them
- He holds his hands still more
- He babbles when a song is sung
- He crawls on his belly
- Mario now picks up objects that attract his attention when crawling on the floor

Photo Removed

CATA AGE: 8 Years
Dx: Language and learning difficulties
(Stutters when speaking)

Photo Removed

Problem

- Cata hardly speaks, she is shy,
- She has trouble making friends.
- When doing some activity in classroom like coloring, she always hesitates and then colors very vaguely.

Techniques/strategies learned in the tutorial:

- Talk to her so she feels comfortable and confident.
- Say words clapping in syllables, or tapping softly on the table.

CATA

Impact

- Cata pronounces words much better and has more confidence when speaking in the classroom
- She is playing with her classmates
- Her voice is more fluid and she dares to talk in class
- When we sing she sings that she knows, she sings very softly and well, a little more fluidly
- When she has problems speaking, she taps the table or claps, and then smiles when she succeeds
- Cata is happier, when she arrives at the classroom she greets her classmates with a hug!



Ken

Dx: Age: 2 years
Guillain Barré

Problem

- Ken was healthy at birth and had normal development until the last week of June 2018 when he got Guillain Barré syndrome, which left him flaccid.
- He cried during his exercises.



Techniques/strategies learned in the tutorial

- The professors recommended active exercise. When doing exercises on his legs, the child should help extend and flex his legs (not just passive movements)
- When doing exercises on his legs, the child should help extend and flex his legs (not just passive movements)
- When he is sitting, make sure his feet are flat on the floor. Use this position for daily activities.

KEN

Impacts

- Ken now understands that he has to help perform the exercises. When he sits in the chair to eat his snack or perform activities such as looking at a book, he corrects his legs when they fall sideways.
- He has learned to eat alone.
- He sits independently, is able to crawl, and this week he began to walk dragging a chair.

Photo Removed

KARINA Age: 5 years, DX: autism, cleft palate

Photo Removed

Problem

- Karina is always restless, she moves in one place, hits the floor with her hands, does not tolerate the noise of other children or many people in one place, tends to cry a lot.
- She sits independently but she doesn't walk
- She likes to listen to instrumental music.

KARINA



Techniques / strategies learned in the tutorial

The professors recommended

- Concentrate on calming her down – reduce noise, avoid over stimulation
- At this point she does not need physical therapy exercise
- It is important to decrease noise ... and provide more peaceful environment



Implementation and Impact

- She listens to Mozart and that calms her down. They are controlling stimuli so she only has one task at a time, and extraneous objects are removed.
- Karina has responded very well to the recommendations, she is calmer
- She is following directions better and is working with her mom well at home too.

CONCLUSIONS

- The health impact statements demonstrated how a collaboration between two universities (UDES, USASK) and a foundation (MCCCG) has had positive results for selected children with physical and learning, and has increased the rehabilitation capacity in a school for disadvantaged Honduran children.



Photo Removed



REFERENCES

- National Center for Chronic Disease Prevention and Health Promotion. September 13, 2017 Developing a strong health impact statement: a guide for 1305 and 1422 funded programs. Retrieved from:
https://www.cdc.gov/dhdsp/docs/Health_Impact_Statement_Guide_508.pdf

ABSTRACT

- **Title:** Health status impact statements following mentorship tutorials demonstrate enhanced rehabilitation capacity in a school for disadvantaged children in Honduras
- **Background** - In 2018, professors of physical therapy, occupational therapy and phono-audiology from the University of Santander (UDES) in Colombia visited Honduras to provide workshops and tutorials to strengthen rehabilitation capacity in Honduras. The visits and tutorials were facilitated by Continuing Physical Therapy Education (CPTe) and a professor at the University of Saskatchewan (USASK). As part of the visit, in September 2018, the professors provided 15 hours of onsite observation-based tutorials to the staff of a non-government- organization based school (Little Hands Big Hearts) in Trujillo Honduras.
- **Relevance to Rehabilitation** - The rehabilitation workers (teachers) considered the impacts of the rehabilitation knowledge and skills that they learned during the two-day interdisciplinary tutorial.
- **Description** - Three months after the tutorials, the rehabilitation workers wrote health impact statements to provide concrete examples of how the application of the teaching had made a difference in the health and wellbeing of the children. Techniques and strategies applied included: shifting from passive to active treatment approaches, modifying communication methods, greater attention to the posture of the child during activities, and reducing distracting stimuli as needed.
- **Observations or Critical Assessment** - Positive effects were described in communication and learning, and social, affective, gross motor and fine motor skills in four children with developmental delay, Guillain Barre, and autism.
- **Conclusions** - The health impact statements demonstrated how a collaboration between UDES and USASK has had positive results for selected children with physical and learning, and has increased the rehabilitation capacity in a school for disadvantaged Honduran children.

CITATION

Busch A, Bados R, Martínez D, García E, Angarita Fonseca A, Gomez-Diaz IC, Hijuelos-Cárdenas ML, Pedrozo Araque E, Uribe Calderón LM, Lovo Grona S. (Sept 21, 2019). Health status impact statements following mentorship tutorials demonstrate enhanced rehabilitation capacity in a school for disadvantaged children in Honduras. [Abstract]. School of Rehabilitation Science Research Conference, Saskatoon, Saskatchewan, Canada.