

2019 School of Rehabilitation Science Research Conference
Saskatoon, SK
September 21, 2019

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





Angela Busch Kalyani Premkumar Stacey Lovo Grona











Julia Bidonde Maria Basualdo





Outline

Introduction

Network of Rehabilitation Workers

Visiting Lecturer Series

Setting - Honduras

Professional Networking

Methods

Research Design

Participants

Instrumentation

Data Analysis

Results

Conclusions



Visiting Lecturer and Workshop Series

Teaching events



Workshops/Mentorship tutorial



Seminars



Public Lectures



Collaborative meetings

Media Events



Local Television



Local Radio

Research

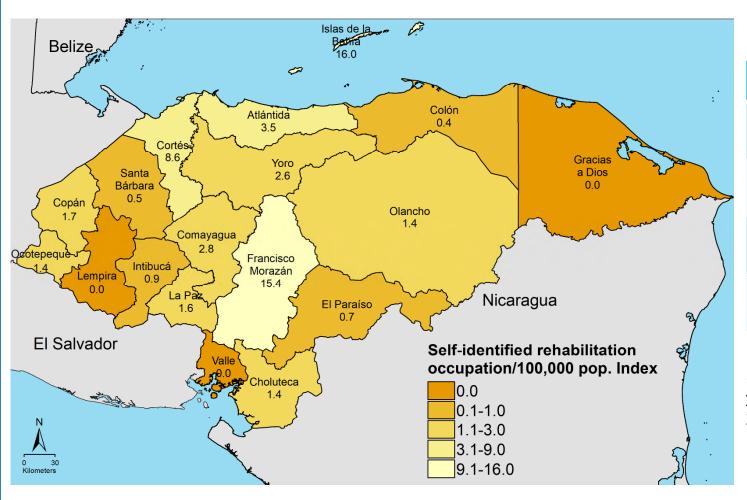


Workshop/Mentorship tutorial evaluation



Professional Networking

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



Comparison

Rehab Workers/100,00		
Colón (1) (2013)	0.4	1 - 1
Francisco Morazán (1) (2013)	15.4	: • :
Saskatchewan, Canada (2) (Physical Therapists only 2018)	69.3	*
Santander, Colombia (3) (Physical Therapists only 2000)	48.0	

- 1. Instituto Nacional de Estadistica Honduras, 2013
- 2. Sask. College of Physical Therapists Annual Report, 2018
- 3. Asociacion Colombiana de Fisioterapia. Caracterizacion de la fisioterapia en Colombia. Bogota, 2008.

Rehabilitation workforce in Honduras (2013)

Occupations*	n	Per 100,000
Physiotherapist (upper level)	118	1.54
Physiotherapy assistants and technicians	279	3.64
Speech therapist / audiologist	12	0.16
General Practitioner	3,376	44.09
Specialist physician	2,716	35.47
Total population	7,657,684	

^{*}Occupational therapy was not listed as an occupation

Source: Instituto Nacional de Estadistica Honduras, 2013



Rationale

In Honduras:

- Under-development of professional stature of rehab workforce
 - ► No professional associations
 - ▶ No university-based PT or OT programs
- Disconnect between rehabilitation centers and the national health care system
- Limited opportunities for professional networking

Professional Networking

Networking is a deliberate activity to build, reinforce and maintain relationships of trust with other people to further your goals.

Professional networking is simply networking focused on professional goals.

Purpose



To evaluate whether two continuing education workshops would strengthen professional networking among attendees

Methods

Design: Longitudinal study

Ethics: Exemption from USASK Behavioral Science Ethics Review Board

Data Analysis: simple and multiple mixed models

Instrumentation: Demographics questionnaire, professional networking questionnaire

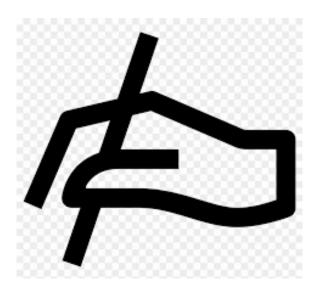
Professional Networking Questionnaire

Items (10)

- √ 6 Likert Items
 - five point scale, Never = 0, Always = 4
- 4 Yes No Items
 - No = 0, Yes = 4
- Items rated based on the past year
- Developed by the research team

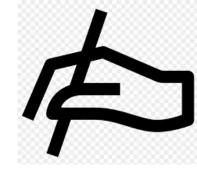
Subscales (2)

- Supportive Networking
- Exposure to Professional Networking Opportunities



Supportive Networking Subscale (eg, clinical cases, work challenges)

- I collaborated in solving clinical problems with other colleagues of my profession in my workplace
- I collaborated with other professionals of the health team
- I worked with other colleagues in my profession outside my workplace
- I was in close contact with other professionals outside my workplace who can help me with my work.
- If I need to contact professionals in my region, I have enough information at my fingertips to contact them easily.
- I collaborated in solving clinical problems with other colleagues of my profession in my workplace
- I collaborated with other professionals of the health team
- ► I have a clinical mentor with whom I can discuss my cases



Exposure to Professional Networking Opportunities Subscale

- I collaborated regularly with peers and professional colleagues at professional or educational meetings
- I participated in educational events related to my profession
- I belong to an association of my profession
- I belong to interest groups or discussion groups

Workshops

2017











Neurorehabilitation Workshop Acquired Brain Injury and Spinal Cord Injury Sept. 8 and 9, 2017, Tocoa, Honduras



Isabel Cristina Gómez Díaz

Physiotherapist. MSc in Neurorehabilitation, Professor of Physiotherapy, Univ. of Santander, Resourcher, Neuroriauma Center SAS, Bucaramanga, Colombia



Melvin Urbina Nuñez

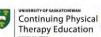
Specialist in Rehabilitation Medicine, manufacture de Rehabilitation de Rehabilitation de Rehabilitation de Rehabilitation integral del Librat Alfontico (Statica), La Cellaro Aindavios de Colon, CRICOL, Tocoo, al Alfontico (Statica), La Cellaro Aindavios



Ofelia Calderón Rodriguez

Centro de Rehabilitación Integral de Colon, CRICOL, Tocoa, Honduras

2017







School of Physical Therapy COLLEGE OF MEDICINE MEDICINE, USASK, CA/PT

Workshop: Rehabilitation of children with delayed neuromotor development



Isabel Cristina Gómez Díaz

Physiotherapist, MSc in Neurorehabilitation, Professor of Physiotherapy, University of Santander, Researcher, Neurofrauma Center SAS, Bucaramanga, Colombia

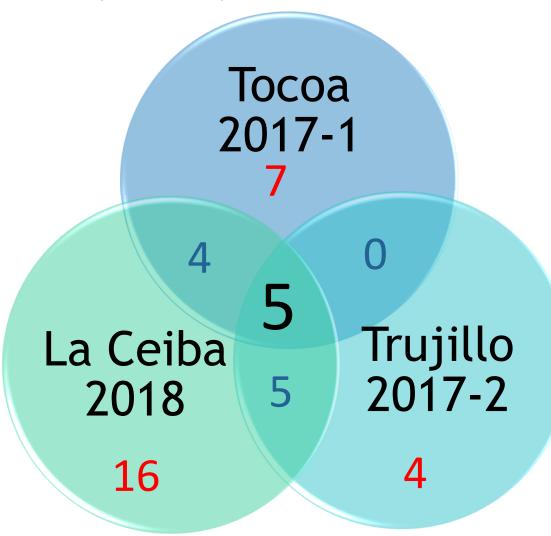
2018



Participants (n=41)

Attendance - a closer look

- 27 people attended only one workshop
- 9 people attended two workshops
- 5 attended all three
- 41 unique individuals



Evaluations at follow-up

Number of attendees per workshop













Physiotherapist, MSc in Neurorehabilitation, Professor of Physiotherapy, University of Santander, Researcher, Neurofrauma Center SAS, Bucaramanga, Colombia



2017-1 n=16

2017-2 n=14

2018 n=30

Evaluations n=60

Attendance at Workshops	Time 0 T ₀	Time 1 T ₁	Time 2 T ₂
Only 2017-1	7		
Only 2017-2	4		
Only 2018	16		
2017-2 & 2018	5	5	
2017-1 & 2018	4	4	
All three	5	5	5

$$T_0 = 41$$

$$T_1 = 14$$

$$T_2 = 5$$

Variables

Main Independent







Supportive Networking



Exposure to Professional Networking Opportunities

Covariates: gender, age, being a health care professional, position, state of residence, country of degree, workplace and experience working in health care.



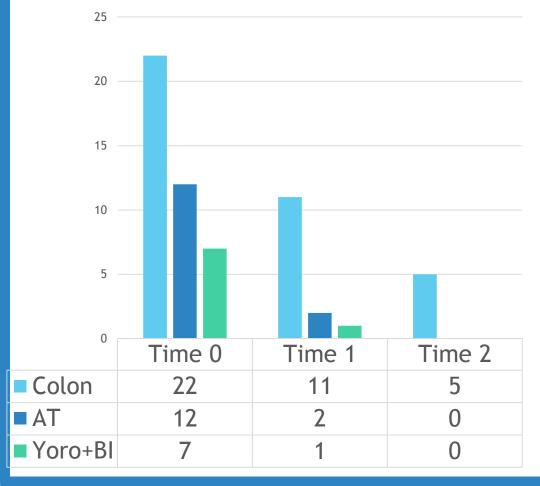
Results

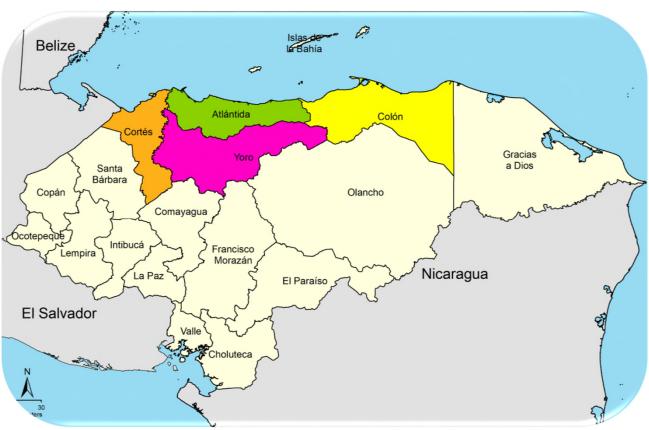
Demographics at baseline

Variable	Categories	
Age groups n (%)	> 30	21 (51.2)
Gender n (%)	Women	33 (80.5)
Health Care Prof. n (%)	Yes	20 (48.8)
Position n (%)	PT	12 (29.3)
	Rehab Assistant	7 (17.1)
	MD and RN	9 (22.0)
	Educ	6 (14.6)
	Psych	6 (14.6)
Workplace n (%)	Rehab Centre	21 (51.2)
	Hosp/Private Clinic	10 (24.4)
	Sp.Ed.Rehab//Sp.Ed./Uni	10 (24.4)
Experience HC	Median (IQR)	3 (1-8)

Demographics at baseline

State of Residence



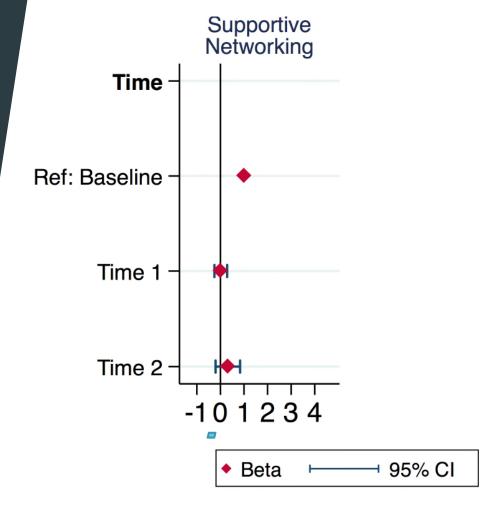


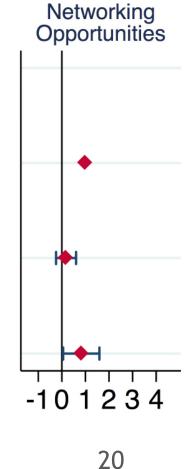
Forest Plots

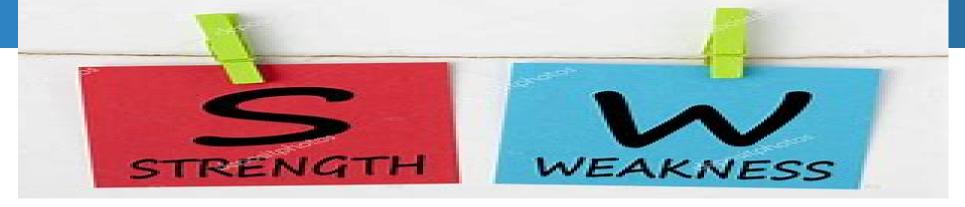
Covariates Considered:

- gender
- age
- being a health care professional
- position
- > state of residence
- country of degree
- workplace
- experience working in health care

Association: Workshop attendance (time) and Professional Networking Subscales







This study was largely exploratory

Strengths

- Development of a new questionnaire
- Focus on an important issue
- Provide baseline data for future studies

Weaknesses

- Sample size
- Convenience sample
- We suspect that some of the questions were not fully understood due to language and culture
- Lack of validity and reliability of the Professional Networking Questionnaire
- Longitudinal design did not control for other networking activities

Future Directions

Validation of the Professional Networking Scale (Spanish and English)

Further exploration of Construct Validity

Comparison of Rural and Urban Settings

Evaluate online opportunities available in Honduras

Ensure networking is maximized at future workshops

Assess the impact of future professional associations as they develop

Conclusion

Our results demonstrated how attending the workshops has increased the professional networking opportunities in rehabilitation workers in northern Honduras

References

- Williams, Martha A. "Rural professional isolation: an integrative review." Online Journal of Rural Nursing & Health Care, vol. 12, no. 2, 2012, p. 3+. Gale OneFile: Health and Medicine, Accessed 15 Sept. 2019.
- > St. George, I. (2006). Professional isolation and performance assessment in New Zealand. The Journal of Continuing Education in the Health Professions, 26(3), 216-221.
- O'Daniel M, Rosenstein AH. Professional Communication and Team Collaboration. In: Hughes RG, editor. Patient Safety and Quality: An Evidence-Based Handbook for Nurses. Rockville (MD): Agency for Healthcare Research and Quality (US); 2008 Apr. Chapter 33. Available from: https://www.ncbi.nlm.nih.gov/books/NBK2637/
- Schmitt MH (2001) Collaboration improves the quality of care: methodological challenges and evidence from US health care research, Journal of Interprofessional Care, 15:1, 47-66, DOI: 10.1080/13561820020022873
- Joyce C, Veitch C, Crossland L. Professional and social support networks of rural general practitioners. Australian Journal of Rural Health [Internet]. 2003 Jan [cited 2019 Sep 20];11(1):7-14. Available from:
 - http://search.ebscohost.com.cyber.usask.ca/login.aspx?direct=true&db=rzh&AN=10 6822683&site=ehost-live