

# Physiotherapy in Belize II. Observations from within the Belize Physiotherapy Profession

*Michelle Trejo<sup>1</sup>, Ronnie Ek<sup>2</sup>, Judith Dorado<sup>3</sup>, Sergi Matus<sup>4</sup>,  
Emerson Briceño<sup>5</sup>, Thayne Holder<sup>6</sup>, Jeff Hartman<sup>7,8</sup>*

## Abstract

The purpose of this study is to understand the challenges and barriers that exist for practicing physiotherapists in Belize and explore potential solutions from the unique perspective of physiotherapists currently practicing. A total of 18 in-depth interviews were completed representing the entire Belize workforce. When asked to reflect on the physiotherapy profession in Belize, three themes were most prevalent. Of highest prevalence was the perceived 'lack of awareness' of physiotherapy both within society and the government. The next most prevalent theme was the need for 'professional development' in the form of a formal physiotherapy association. Finally, 'barriers to access' was the third most prevalent theme and was explained by the high cost of physiotherapy services and the lack of formal in-country training contributing to a small workforce in country. The physiotherapy workforce in Belize faces many barriers that limit their ability to meet the needs of society. Investment in the rehabilitation professions, as called upon by the World Health Organization, will significantly improve the lives of many individuals and will lessen the burden on the health care system.

## Key Words

Physiotherapy, human resources, rehabilitation

*Citation:* Hartman J, Johnson LJ, Holder T. Physiotherapy in Belize II. Observations from within the Belize Physiotherapy Profession. BJM 2021, 10(2): 12-15

## ■ INTRODUCTION

With life expectancy on the rise throughout the Americas,(1,2) people are experiencing greater levels of acute and chronic illnesses and sustaining injuries more than at any time in history.(3) Many of these conditions may impact health and function, for which rehabilitation is the frontline health strategy. It is for these reasons that rehabilitation has been termed the health strategy of the 21st century.(3)

The World Health Organization (WHO) defines rehabilitation as “a set of interventions needed when a person is experiencing or is likely to experience limitations

in everyday functioning due to ageing or a health condition, including chronic diseases or disorders, injuries or traumas.” A global estimate of the need for rehabilitation demonstrated at least one in every three people in the world needs rehabilitation at some point in their course of illness or injury.(4) At present, the need for rehabilitation services around the world is largely unmet with less than 10 skilled rehabilitation practitioners per 1 million population.(5,7) It is for this reason that in 2017, the World Health Organization (WHO) convened a meeting of over 200 rehabilitation experts from 46 different countries to discuss the state of rehabilitation in the world. This meeting highlighted the global unmet need for rehabilitation and called for coordinated action and commitment amongst all stakeholders to raise the profile of rehabilitation as a health strategy by 2030.

Like many other countries around the world, the unmet need for rehabilitation within the Country of Belize is vast. The 2014–2024 National Health Sector Strategic Plan acknowledges a serious shortage of various rehabilitation professions and a recent study in 2020 (Hartman, et al, BJM 10(2): no. de págs. finales) revealed a total of 18 people in Belize having formal training in physiotherapy with only 16 considering physiotherapy as their primary

1. Physical therapist, Coral Grove Medical and Pediatric Center

2. Physical therapist, Archangel Medical Center

3. Physical therapist, Orange Walk

4. Physical therapist, Belize City

5. Physical Therapist

6. Physical Therapist, Doctor of Physical Therapy, Karl Huesner Memorial Hospital

7. Assistant professor, Doctor of Physical Therapy Program, Department of Family Medicine and Community Health, University of Wisconsin, Madison

8. Fulbright Scholar 2020, University of Belize. Belmopan, Belize

profession. With a population of 408,487, this equates to .4 physiotherapists for every 10,000 people. To make matters worse, the same study revealed other rehabilitation professions are even sparser when it comes to human resources and the geographic distribution is inequitable. Table 1).

Building up a workforce of physiotherapists is complex. Social, political and environmental issues pose barriers for

**Table 1. Distribution of physiotherapists according to district and population**

	Population	Physiotherapists
Country	408,487	18
Belize	124,096	9
Cayo	99,118	4
Orange Walk	52,550	2
Corozal	49,446	0
Stann Creek	44,720	2
Toledo	38,557	1

change. A working group of rehabilitation professionals in medical facilities around the world met to discuss the role of the clinician in raising awareness of the need for rehabilitation within and among medical faculties, policy makers, civil society, and the private sector.(9) They developed guiding principles that focus on provision concepts and data, information and public relations, and collaboration in projects and networking.(9) While these suggestions can be applied in Belize, there are barriers and issues unique to Belize that need to be considered and overcome so that the rehabilitation needs of the population can be met. No one knows these barriers better than physiotherapists who are currently working in Belize.

The purpose of this study is to understand the challenges and barriers that exist for practicing physiotherapists in Belize and explore potential solutions from the unique perspective of the cohort of physiotherapists currently practicing.

#### INSTITUTIONAL OVERSIGHT

This study was performed by authors as part of the United States Fulbright Scholar program (10) with support of the United States Embassy in Belize and at the invitation and approval of the University of Belize. The study was formally reviewed by the University of Wisconsin School of Medicine and the Health Sciences Institutional Review Board of Public Health on November 27, 2019 and deemed exempt (ID 2019-1412).

#### PARTICIPANTS

All persons licensed by the Belize Ministry of Health (MoH) to practice physiotherapy or who advertise as practicing physiotherapy in Belize were invited to participate in a

formal interview for data collection purposes.

Physiotherapists currently practicing in the Belize military and not with civilian patients were excluded because they work within a unique health system and do not represent the cohort of physiotherapists accessible to the community-at-large.

#### DESIGN AND INSTRUMENTATION

A mixed-method, phenomenological, in-depth interview methodology was used for this study. A topic guide was used to frame the interview. Thematic analysis of physiotherapist insight was performed by the primary investigator and used to facilitate further exploration by the authors.

#### PROCEDURES

The goal was to identify all people practicing physiotherapy in Belize. Participants were identified through a formally requested list granted by the MoH's Licensing and Accreditation Unit, word-of-mouth, and an extensive internet and social media search. Once identified, the potential participant was contacted by the most convenient means (email, phone/WhatsApp, Facebook, LinkedIn). Once contacted and screened to verify formal training in physiotherapy, an in-person meeting at the site of practice was requested at which time formal consent for participation was collected. If an in-person interview at the participant's place of employment was not feasible, the next most convenient means was accommodated. Conversations were not recorded but notes were taken, and data was immediately organized after the interview by the senior author (JH). Interviews typically lasted 1–2 hours and some required follow-up conversations for data confirmation and clarification.

#### RESULTS

In total, 23 persons were contacted and screened for participation. Four were military personnel and one did not have formal training; thus, they were excluded from participation. A total of 18 met inclusion criteria and agreed to participate.

When asked to reflect on the physiotherapy profession in Belize, several themes were prevalent. Of highest prevalence was the perceived 'lack of awareness' of physiotherapy both within society and the government. The next most prevalent theme was the need for 'professional development' in the form of a formal physiotherapy association. Finally, 'barriers to access' was the third most prevalent theme expressed by most participants and was explained by the high cost of physiotherapy services and the lack of formal in-country training contributing to a small workforce in country.

#### DISCUSSION

To practice physiotherapy in Belize, it is necessary to overcome many barriers to become trained and even more when returning home for employment. In-country training

is non-existent and established employment opportunities are few. Being a physiotherapist in Belize not only requires high levels of knowledge and skill but also grit, perseverance, passion, and a strong sense of entrepreneurship.

Physiotherapists have a keen understanding of their communities and the healthcare system in which they work. They work hard and struggle knowing there are many more people that could benefit from their expertise. While many challenges and barriers exist that are unique to each physiotherapist, there are several that are common to most. Here is a summary of the common themes that arose from this study and additional insight.

Of highest prevalence was the perceived lack of awareness of physiotherapy both within society and the government. Most participants believe people do not have an accurate understanding of what physiotherapy is, what it can offer, or where to access it.

- “Physios don’t get much respect. We work hard, help a lot of people, and no one knows much about us. We have to advocate for ourselves.”
- “I am very well educated and trained but we just aren’t used appropriately. People just don’t know about physiotherapy and if they do, they can’t afford it.”

Physiotherapists also perceive the government and the health care system in general as guilty of the same, pointing to the frequent absence of physiotherapy or rehabilitation in general in national health initiatives and social narratives, and rarely make political platforms. Physiotherapists believe if greater awareness is attained, physiotherapy can be better utilized not only in a restorative manner but also in prevention, wellness, and health maintenance initiatives resulting in a more healthy and productive society.

- “They didn’t recognize physiotherapy when I first started. I just did my own thing seeing a few patients a day. It’s been a very slow change in Belize, but it’s getting there. We are really being underutilized.”
- “If the government would only invest in training, physios could be placed in the regional hospitals and then manage field officers or technicians to reach the more rural areas. It would not cost much to do this and it could have a major impact.”
- “I worked for the Belize national team but they didn’t have any money to pay me. There is no money for sports physiotherapy and physiotherapy in general.”

To achieve greater awareness and utilization, most of the physiotherapists interviewed believe they need a “voice at the table” within the MoH and government. To help achieve

this, they reported a need to form a formal physiotherapy association, recognized by the government, to allow representation on a larger scale. A collective presence within governmental and non-governmental affairs throughout the country would bring more awareness to the profession and position the profession more strategically within the institutions of Belize. In addition, this could bring international awareness to the Belize health care system through institutions such as the Pan American Health Organization (PAHO) and World Physiotherapy (formally known as the World Confederation for Physical Therapy), thus, enlarging its presence and voice in the region.

- “We have to form a national association. We have no voice, and no one listens to us. This should be our first priority.”
- “A formal association will help legitimize us and bring awareness to our profession.”

Access was the second most prevalent theme expressed by most participants. More specifically, the cost of a physiotherapy visit was a significant factor in limited access for people. In private physiotherapy clinics, the cost per session ranges from \$40 Belize dollars (BZD)–\$100 BZD with an average of \$69 BZD (\$2 BZD = \$1USD). In private medical outpatient settings, a physiotherapy session costs as high as \$120 BZD–\$150 BZD. Even a visit at the public hospital in Belize City cost \$20 BZD–\$30 BZD, a price beyond what many can afford. (Hartman, et al, op cit)

Over half of the participants believed government investment in formal in-country training of physiotherapists would be very helpful in enlarging the workforce, setting professional and practice standards, and ultimately improving equitable access to high-quality physiotherapy across the country. This combined with the current private physiotherapy industry would bring greater societal awareness, easier access, and reduced costs making it more accessible for most Belizeans.

- “People have to leave the country to study, and if they do, most don’t return.”
- “My daughter has been accepted to two foreign physiotherapy schools; she is very bright. The problem is we can’t afford to send her, and we cannot get help from the government.”
- “Studying in Mexico was very hard on my family, and I almost didn’t do it.”
- “I thought about starting my own training program. It is badly needed. I could use more help and I know we need more therapists everywhere.”

Finally, participants believe a national rehabilitation center

of excellence would bring much needed attention and availability of rehabilitation services to Belize. This kind of center could be a source of pride for Belizeans and something that would demonstrate societal value for people living with disabilities and members of rehabilitation professions. There is precedence of this type of initiative at the Karl Heusner Memorial Hospital in Belize City, where local and international fundraising efforts resulted in the building of a structure which houses the country's only Neonatal and Paediatric Intensive Care Units (ICU). This initiative has brought significant awareness to an important issue and advanced neonatal and paediatric services in the country. A national rehabilitation center would not only be a leading provider of rehabilitation, but also could serve as a center for training and research, as well as a regional hub for international conferences.

• "A national rehabilitation center could do wonders for this country. It would send a message that people and kids with disabilities are important and would provide an important service."

#### ■ CONCLUSION

This study gives voice to the current physiotherapy workforce in Belize. While small in number, there is great passion and potential within the current cohort of physiotherapists in Belize. A formal physiotherapy association combined with a governmental-led strategic plan for raising the profile of physiotherapy and rehabilitation could "ensure healthy lives and promote well-being at all ages," a United Nations goal for sustainable development (goal #3).(11) This kind of change could be monumental and result in a healthier and wealthier Belize.

#### ■ ACKNOWLEDGEMENTS

The authors would like to thank the Belize Physiotherapy workforce for their generous gift of wisdom and time.

### ***Fisioterapia en Belice II. Observaciones dentro de la profesión de fisioterapia de Belice***

#### ***Resumen***

*El propósito de este estudio es comprender los desafíos y barreras que existen para los fisioterapeutas en Belice y explorar posibles soluciones desde la perspectiva singular de los fisioterapeutas que ejercen actualmente. Se completaron un total de 18 entrevistas en profundidad que representan a toda la fuerza laboral de fisioterapia en Belice. Cuando se les pidió que reflexionaran sobre la profesión de fisioterapia en Belice, tres temas fueron los más frecuentes. La percepción de mayor prevalencia fue la de "falta de reconocimiento" de la fisioterapia tanto dentro de la sociedad como en el gobierno. El siguiente tema más frecuente fue la necesidad de "desarrollo profesional" por medio de la formación de una asociación formal de fisioterapeutas. Por último, las "barreras de acceso" fue el tercer tema de mayor prevalencia y se atribuyó al alto costo de los servicios de fisioterapia y la falta de capacitación formal en el país que contribuyen a que haya una pequeña fuerza laboral en el*

*país. La fuerza laboral de fisioterapia en Belice enfrenta muchas barreras que limitan su capacidad para satisfacer las necesidades de la sociedad. La inversión en las profesiones de rehabilitación, como pide la Organización Mundial de la Salud, mejorará significativamente la vida de muchas personas y disminuirá la carga sobre el sistema de atención de la salud.*

#### **Palabras clave**

*Fisioterapia, recursos humanos, rehabilitación*

#### ■ REFERENCES

1. PAHO. Health in the Americas Web site. <https://www.paho.org/salud-en-las-americas-2017/?tag=life-expectancy-gains>. Accessed 10/19/20, 2020.
2. PAHO. Aging and demographic Changes. Health in the Americas. Web site. <https://www.paho.org/salud-en-las-americas-2017/mhp-aging.html>. Published 2021. Accessed 4/20/21, 2021.
3. Stucki G, Bickenbach J, Gutenbrunner C, Melvin J. Rehabilitation: The health strategy of the 21st century. *J Rehabil Med.* 2018;50(4):309-316.
4. Cieza A, Causey K, Kamenov K, Hanson SW, Chatterji S, Vos T. Global estimates of the need for rehabilitation based on the Global Burden of Disease study 2019: a systematic analysis for the Global Burden of Disease Study 2019. *Lancet.* 2021;396(10267):2006-2017.
5. WHO. Rehabilitation: Key Facts. <https://www.who.int/news-room/fact-sheets/detail/rehabilitation>. Published 2019. Updated 7/4/19. Accessed 6/1/20, 2020.
6. AlHeresh R, Cahn PS. Expanding Global Rehabilitation Services through International Academic-Community Partnerships. *Annals of Global Health.* 2020;86(1):71.
7. Khan F, Owolabi MO, Amatya B, et al. Challenges and barriers for implementation of the World Health Organization Global Disability Action Plan in low- and middle- income countries. *J Rehabil Med.* 2018;50(4):367-376.
8. SIB. Population and household. <http://sib.org.bz/statistics/population/>. Published 2020. Accessed 6/1/20, 2020.
9. WHO. Rehabilitation 2030- a call for action. 3/18/17 2017
10. Fulbright. U.S. Scholar Program. <https://www.cies.org/program/fulbright-us-scholar-program>. Published 2020. Accessed 6/1/20, 2020.
11. WHO. Rehabilitation 2030: a call for action. Published 2020. Accessed 6/1/20, 2020

Received: May 5, 2021  
Revised: July 26, 2021  
Accepted: July 28, 2021