



Background

- Long COVID is a condition first termed by people with lived experiences, that occurs when symptoms are experienced 3 months from the onset of COVID-19, and for at least 2 months that cannot be explained by an alternative diagnosis.¹
- Long COVID can present with a cluster of over 200 symptoms that can cause disability and impact quality of life.²⁻⁷
- Physiotherapists can have an important role in Long COVID rehabilitation, to facilitate symptom management, reduce disability, and return to function.⁸⁻¹²
- However, the experiences of physiotherapists in Canada in Long COVID rehabilitation (e.g., perceptions of the role, knowledge, clinical practice and recommendations) are unknown.

Objective

To explore the experiences of physiotherapists in Canada working with adults living with Long COVID.

Methods

Study Design: Cross-sectional qualitative descriptive study.

Participants: Physiotherapists registered to practice in Canada who worked clinically in the past year with ≥ 1 adults living with Long COVID. Sampling: Purposive and snowball sampling approach to capture diversity in level of clinical expertise, geographical physiotherapy practice location (urban vs. rural), and practice setting (private practice, outpatient/inpatient rehabilitation, community hospital). **Recruitment:** We recruited through professional networks via word of mouth and researching contacts of Long COVID rehabilitation clinics online. We then emailed potential participants. After interviews, we asked participants to forward the initial recruitment email to other potential participants.

Data Collection: Semi-structured interviews involving two (members of the research team)-to-one (participant) via Zoom. Using an interview guide, we asked participants about their experiences, specifically pertaining to the perceptions of the role, knowledge, clinical practice, and recommendations working with adults living with Long COVID. We administered a demographic questionnaire to collect data on participants' age, gender, practice setting, and clinical experience working in Long COVID. **Data Analysis:** Group-based descriptive thematic analysis.



Disruption to the profession & models of physiotherapy care delivery characterized by:

- Encountering a new patient population with complex clinical characteristics (multidimensional & episodic disability, loss & grief, stigma & gaslighting, and financial burden), and
- Pivoting to new models of physiotherapy care **delivery** (in-person to virtual models of care delivery and Long COVID clinics)



"...about 4 months after the pandemic started [...] we had a request from our hospital to start a Long COVID clinic [...] We didn't really know anything about it – they were very clear that this was going to be the first program that we start. We're gonna be learning as we go and we just rolled with the punches. So, I learned about Long COVID as a result of a need for the program to essentially start." (P3)

Table 1: Participant Characteristics (n=13)

Personal Characteristics of Participants	Number of Participants (%)	Clinical Characteristics of Participants	Number of Participants (%)	
Median Age (years) (IQR)	41 years (33, 49)	Number of Patients Treated in Past Year With Long COVID		
Gender		1 to 25	5 (38%)	
Man	5 (38%)	26 to 100	4 (31%)	
Woman	8 (62%)	More than 100	4 (31%)	
Ethnicity		Number of Years Working as a	12 years (7, 25)	
White	9 (69%)	physiotherapist (IQR)		
South Asian	1 (8%)	Geographical Practice Setting		
Asian	1 (8%)	Rural	2 (15%)	
Middle Eastern	1 (8%)	Urban	11 (85%)	
Black or African	1 (8%)	Type of Practice Setting Delivering		
Province		Long COVID Care		
Ontario	5 (38%)	Private Practice (Outpatient)	4 (31%)	
British Columbia	2 (15%)	Rehabilitation Hospital (Outpatient	5 (38%)	
Alberta	4 (31%)	or Inpatient)		
Quebec	1 (8%)	General/Community Hospital (with	4 (31%)	
Nova Scotia	1 (8%)	Outpatient Long COVID Clinic)		

Long COVID and Rehabilitation: Experiences of Physiotherapists Working with Adults Living with Long COVID in Canada Caleb Kim¹, Chantal Lin¹, Michelle Wong¹, Shahd Al Hamour Al Jarad¹, Amy Gao¹, Nicole Kaufman¹, Kiera McDuff¹, Darren A Brown^{2,3},

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Results

Figure 1: Experiences of Physiotherapists in Canada Working With Adults Living With Long COVID



offer, or like what you are doing." (P2)



Table 2: Participant Recommendations For Effective and Up-To-Date Long COVID Care

Category	Participant Recommendations	Category	Participant Recommendations
<section-header><section-header></section-header></section-header>	 Integrate Long COVID-specific education into physical therapy school curricula and continuing education. Curricula should address the importance of screening for Post-Exertional Stress Exacerbation or Post-Exertional Malaise (PESE/PEM), and potential harm of traditional exercise-based interventions. 	<section-header><section-header></section-header></section-header>	 Collaborate in an interdisciplinary team to address complex symptoms that exceed the scope of pract of individual disciplines. Provide mental health support as needed. Foster interdisciplinary learning and regular check-ins.
Engage as Active and Open-Minded Listeners	 Emphasize being an active listener to encourage open-mindedness and effective communication to avoid testimonial injustice (gaslighting) of patients with Long COVID. 		 Establish a national standard of care for Long COV to ensure consistent and equitable care across Canada. Create accessible systems for video consulting an sharing expertise between provinces. Increase funding to Long COVID programs to improve patient access.

Saul Cobbing^{1,4,6}, Alyssa Minor², Soo Chan Carusone⁵, & Kelly K. O'Brien^{1,2}

Keeping up with rapidly emerging evidence

As participants progressed through their learning trajectories, many embraced greater roles as: a) advocates, helping patients navigate services and mitigating stigma & discrimination, and as b) collaborators, fostering interprofessional partnerships in Long COVID care.



...a difference that I see really from my other physiotherapy roles [...] I'm there just to support them and [...] help them until they're able to go in the right direction and once in the right direction the body's gonna sort of heal. So I'm sort of [...] part psychologist because there's a lot of discussion, lot of education." (P13)



Discussion

• Experiences of physiotherapists working with adults living with

by a dynamic process of learning curves and evolving roles.

and interprofessional collaborator when working with patients

the context of Long COVID, these common roles emerged.

evidence-informed practices. Some participants neglected

potentially exacerbating disability and causing a "crash"

living with Long COVID enhanced the study's design and

robustness. Although the study benefited from a diverse

participant pool across various Canadian provinces, clinical

settings, and varying levels of experience, it primarily focused on

adult care in urban settings, limiting its generalizability. The study

reflected a small sample of physiotherapists and does not include

the lived experiences of people living with Long COVID, however

we acknowledge the importance of considering perspectives of

different healthcare systems to enrich the understanding of Long

Conclusions

education to ensure safe rehabilitation for people living with Long

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Working as a physiotherapist in Long COVID rehabilitation is a

dynamic and evolving process of experiencing a disruption,

• Given the variability in knowledge and experiences among

physiotherapists in this field, there is an urgent need for

patients for a comprehensive understanding of rehabilitation

needs. Future research could broaden the scope to include

diverse patient demographics, geographical settings, and

phenomenon in patients with Long COVID.^{14,15,16,17}

discrepancies in knowledge regarding guidelines and

living with Long COVID, which align with a subset of Canada's

Physiotherapy Core Competencies.¹³ Despite variability in how

Variability in Clinical Practice: Physiotherapists demonstrated

diverse approaches to Long COVID rehabilitation, showcasing

Strengths & Limitations: Collaborating with physiotherapists

underlying sources of fatigue, favoring graded exercise therapies,

physiotherapists drew upon these essential competencies within

physiotherapists' approach to models of care delivery, followed

• Application of Core Competencies: Physiotherapists described

taking on roles as a supporter, advocate, communicator, scholar,

Long COVID were characterized as a disruption shifting

Trial & error

failures in physiotherapy care delivery.

ensure safe rehabilitation (e.g. pacing).



DVID



feedback with a mock interview.

COVID.



COVID management.

learning curves, and evolving roles.



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