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Post COVID-19 Condition: **Understanding Implications** for OT Practice

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Learning Objectives

- Define and describe Post COVID-19 Condition (PCC)
- Apply recommended treatment interventions for individuals with PCC
- Understand models of care for individuals with PCC

Introduction

- The COVID-19 pandemic has had a significant impact on morbidity, mortality, and occupational performance for individuals worldwide¹
- However, much less is known about the sequela of the disease process, with 80% of those with confirmed COVID-19 diagnosis continuing to report at least one symptom beyond two weeks ²

Post COVID-19 Condition (PCC)

- Post COVID-19 Condition (PCC) also known as "Long COVID" is defined as the illness that occurs in people who have a history of probable or confirmed SARS-CoV-2 infection, usually within three months from the onset of COVID-19, with symptoms and effects that last for at least two months ³
- Clinical presentation of PCC can be characterized as three possible stages, including "multi-dimensional", "fluctuating", or "episodic" and generally has an impact on everyday functioning ⁴
- Upwards of 150+ symptoms have been identified in the literature for individuals suffering from PCC, although severity, number, and duration may vary or relapse over time ¹



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World Health Organization (WHO) Living Guidelines

- Chapter 24: Rehabilitation of adults with post COVID-19 condition ⁵ • Published Sept 2022; Targeted for Clinicians & Program Planners
- Up to date guidelines for the rehabilitation and clinical management of adults with PCC
- As PCC can have a multi-system impact, many topics may be interconnected and/or linked to support the rehabilitation process

Table 1: Recommendations for Re	
Concept	Recomme
Components & Functions of Rehabilitation Care	Multidisciplinary rehabilitation teams; contine centered care and shared decision making. (assessment, follow-up, and referral
Red Flags for Safe Rehabilitation	Conditional exertional desaturation should b consideration of physical exercise training
Referral Principles	Early referral of adults with post COVID-19 c services is suggested
Service Delivery	Hybrid approach of in-person and remote me
Workforce	Include but not limited to Physiotherapists, Psychologists, Speech and Language Therapi

Figure 1: Recommendations on Clinical Management

Post-Exertional Symptom **Exacerbation (PESE)** Education and skills training on energy conservation

Arthralgia Pain education, skills training on selfmanagement strategies, prescription of short term anti-inflammatory drugs, and in the absence of PESE physical exercise training

Cognitive Impairments

Combination of education, skills training on self-management strategies and cognitive exercises. The provision and training in the use of assistive products and environmental modifications may be useful

Combination of education, skills training on energy conservation techniques such as pacing and, in the absence of PESE a cautious return to symptom titrated physical exercise training

Mental Health

Psychological support, and in the absence of PESE, physical exercise training. Mindfulnessbased approaches and peer support groups may be useful

Swallowing Impairments

Education and skills training on positioning, maneuvers and dietary modifications, and swallowing exercises

Olfactory Impairment Education & Skills training

Voice Impairments Education and skills training about voice rest and vocal behaviors, respiratory exercise and vocal training

ehab Program Planning

endation

inuity and coordination of care; and people Operationally: standardized symptom

be ruled out and managed before

condition for appropriate rehabilitation

nodels integrated across all levels of care

Occupational Therapists, Nurses, pists, Physicians, and Social Workers

> **Breathing Impairments** Education and skills training on self-management strategies such as nasal breathing and pacing approaches, and in the absence of PESE physical exercise training

Fatigue

Orthostatic Intolerance

Combination of education & skills training, and in absence of PESE, physical exercise training. Environmental modifications may be useful

Return to ADL's & Work

Education and skills training about energy conservation techniques, provision and use of assistive products, return to work action plan, and environmental modifications



Clinical management of COVID-19

(d) 221.222



Models of Care

- Four Concepts of Safe Rehab: ⁶
 - Avoiding acute events & symptom flareups - waxing/waning of symptoms
 - Personalization symptom stabilization
 - Facilitating expectations return to health looks different for each person
 - Psychologically supportive recognizing stigma
- Adaptable for episodic disability and complex care needs ⁷
- Promote continuity of care ⁷
- Incorporate outcome measures for PCC: ⁸
- Nine core recommended outcome domains including fatigue, PESE, cardiovascular functioning, cognition, nervous system, mental health, pain, physical functioning, and work/occupational challenges

Implications & Conclusion

- To date, no validated intervention(s) exist for rehabilitation of PCC
- Guidelines for PCC continue to evolve based upon best available evidence to support persons with PCC
- Occupational Therapists play an important role in the rehabilitation of this novel complex patient population recognizing the physical, mental, and cognitive implications associated with PCC

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