

Post CoVid infection

Strategies and client considerations

This has a specific focus on educating pilates teachers

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Focus and purpose

Awareness of some of the symptoms of CoVid particularly lingering symptoms that can become what is known as Long CoVid.

1. Exploration of screening questions
2. Introduction of some of the assessment tools that are being used by health professionals to identify specific symptoms and deficits

Symptoms and strategies

Anxiety

Fatigue

Cognitive changes

Sleep

Other considerations

- Respiratory
- Cardiovascular

But Joseph Pilates and Spanish Flu arguments

The societal context is different ?

The POW s were all men who were living in quarantine during the war. As such were in better health than soldiers who had been on the battlefield. These individuals had been in quarantine and for sometime protected from the disease and the circumstances that led to the disease spread.

The so called young and healthy were most affected by Spanish flu. High mortality rate, some of which was associated with treatment. There were no vaccines, less medical interventions so survival rates were lower for Spanish Flu.

CoVid 19 contexts

CoVid has been affecting people of all health states and in population. Our client groups have good prior health and socio-economic status, but are still getting sick. Thanks to better public health and medical interventions we have higher survival rates from CoVid19.

Long Covid and fatigue issues are affecting both genders, but there is a higher prevalence in women.

Return to class screening

What type of COVID?

Eg Alpha and Delta tends to have greater impact on respiratory tissue and cardiovascular function

Age of client?

Eg Young men appear to have greater prevalence of myocardiac complications

Eg women are having higher prevalence of long covid and fatigue implications.

Symptoms and other considerations

Fatigue, Vertigo, Brain Fog, Cognitive function, Anxiety

Neurological symptoms - eg optic nerve (CNii) neuritis, headaches

Respiratory considerations - eg people experiencing an ongoing fibrosis of the lungs or development of asthma like conditions

Reviews and clearances (here is a link to the resources provided by the Australian College of General Practitioners

<https://www.racgp.org.au/FSDEDEV/media/documents/Clinical%20Resources/Guidelines/Managing-post-COVID-19.pdf>

Who are at risk?

Studies have identified that patients are at higher risk of post–COVID-19 conditions if they:

// have experienced severe illness during their acute COVID-19 illness, including requiring intensive care

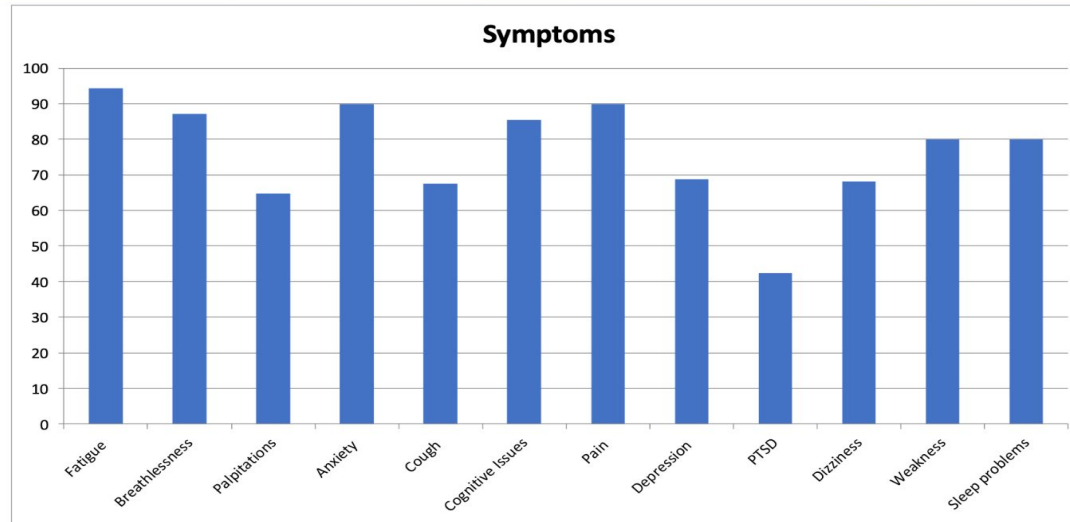
// have pre-existing comorbidities (eg respiratory disease, obesity, diabetes, hypertension, chronic cardiovascular disease, chronic kidney disease, post-organ transplantation, active cancer)

// are of older age

// are female.

A screening checklist - long covid symptoms

Main Symptoms



Key symptoms reported on initial triage

Acknowledgement: Dr Darren Greenwood

A screening form could include?

Questions about fatigue? Eg a fatigue scale (discussed later)

Changes in sleep patterns? Are they finding waking up hard, so maybe getting to their early morning class maybe more difficult

Changes in activity tolerance or behaviours? Are they finding they are unable to tolerate their normal level of exercise

Any changes in pain and restrictions in movement or weakness?

Any concentration or memory problems? Eg are they more forgetful. Remember for older clients this could be quite concerning because of concerns about dementia etc

Any changes in heart rhythms, are they noticing pains in the chest racing heart etc? Have they been assessed by a Dr about this, remember things like tachycardia can be a symptom

Changes in breathing patterns? Are they struggling with post exercise asthma like symptoms? Exhale or inhale struggles?

REMEMBER: we are not diagnosing but using this material to help adapt and modify our programs or to ensure we help make appropriate referrals. Explain the purpose of the screening to your clients so that they can feel comfortable as to your reasons for collecting this information.

Many of our clients see us more regularly than their doctor so they maybe more able to disclose this information to us.

Assessment Tools you may come across or use

// An example of some of the assessment tools that are being used are the Yorkshire Long Covid Assessment tool to **identify functional disability** and this could be helpful in identifying client goals and focus needs.

<https://www.bsrn.org.uk/downloads/covid-19-yorkshire-rehabilitation-scale-jan2021-apbrochure-elaros-c19-yrs-brochure.pdf>

// Determining of how a person's able to perform activity and what that means for conditioning work and play

[1 - 10 Borg Rating of Perceived Exertion Scale \(RPE\)](#)

// Fatigue Management scales can be simple 1 to 10 scales to help clients achieve self awareness. There are 252 ways to measure fatigue! (Hjollund et al., 2007)

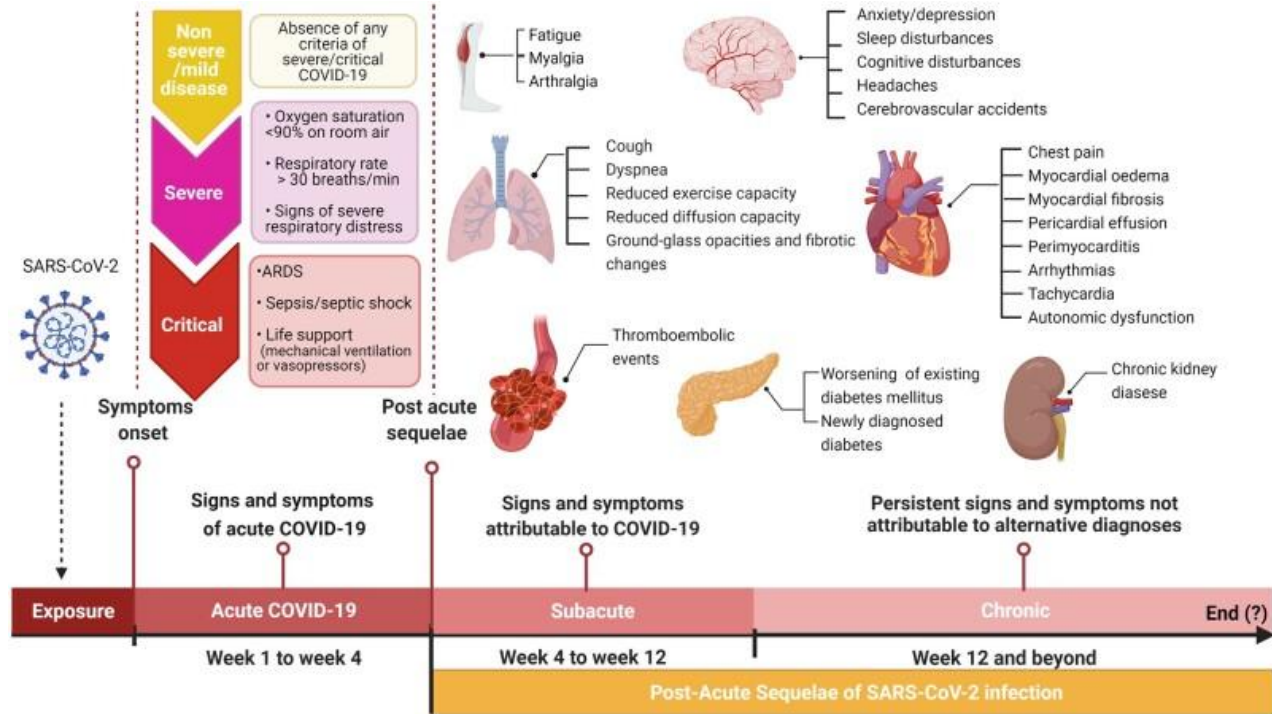
FAS is a simple scale for people to self complete and provides an insight into physical or mental aspects of Fatigue.

[https://www.med.upenn.edu/cbti/assets/user-content/documents/Fatigue%20Assessment%20Scale%20\(FAS\).pdf](https://www.med.upenn.edu/cbti/assets/user-content/documents/Fatigue%20Assessment%20Scale%20(FAS).pdf)

// Cognitive Assessment tools

[COPM](#), [MoCA](#), [MMSA](#)

Common Symptoms of SARS CoVID2



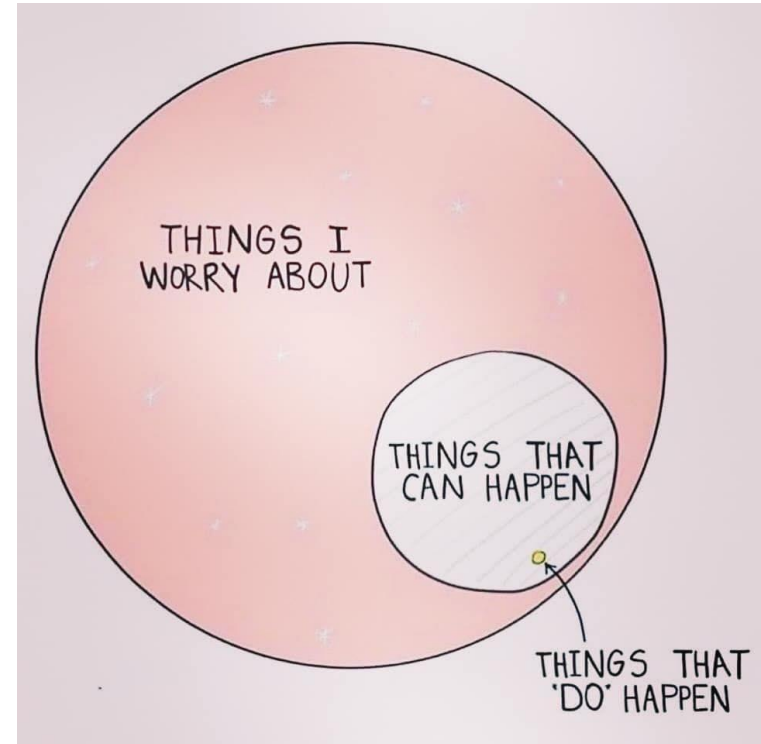
Anxiety

Yes, seeing a psychologist or mental health expert is appropriate. Unfortunately, in some places there are 18 month waiting periods for clients to see a professional. What we can do in our classes are:

// Breath patterning and anxiety management has a big overlap

// Help the clients to articulate their triggers eg too many exercises, being overwhelmed, specific people in the class. Is it listening to too much news that could be inviting overwhelm. Find ways to help them manage their exposure to those triggers. Eg don't talk about CoVid or Politics in class maybe encourage a book club discussion

// Make clients feel safe, and whatever that means for your client



Fatigue

Definition of fatigue:

a multifaceted condition characterized by diminished energy and an increased need to rest, disproportionate to any recent change in activity level”

(Mitchell & Berger, 2006, p. 374)

Chronic fatigue syndrome (CFS) and Long Covid

Is a condition in which symptoms of fatigue persist for **at least 6 months** and do not resolve with rest. The fatigue may be worsened with physical activity or mental stress. It is diagnosed based on the presence of a specific group of symptoms and after all other possible causes of fatigue are ruled out.

Long COVID is considered when symptoms persist for **more than 3 months**.

Describing Chronic Fatigue [which is not CFS]

Characteristics

- Intensity
- Frequency
- Chronicity
- Daily pattern

Dimensions (contribute to fatigue)

- Cognitive fatigue
- Emotional fatigue
- Physical fatigue
- Functional fatigue

Impact

- Distress/bother
- Interference with occupational and role performance
- Impact on functioning
- Mood
- Cognition

Fatigue

If a person has fatigue, the questions we have to ask is does it cause distress, is it affecting their function?

Management of Fatigue

Avoid the boom bust cycles

Explore energy conservation techniques with your clients

- eg driving to class so they have the energy for class
- Arrive to the class early so that they are not rushing, have a waiting room or space that they can sit (I appreciate that this is difficult)
- pace themselves so that they don't do all their activity in one day leaving them too tired for the rest of the week
- Identify activities that can be delegated so they have the energy for the activities they enjoy
- Timing of class
- Zoom classes rather than having to get ready to come into the studio

Fatigue management strategies

- Work with a **fatigue scale** for clients to measure their exertion and activity. Remember that the Borg Scale of Exertion does not necessarily correlate with fatigue levels
- Activity diaries

Length and pace of classes

- Introduce 30 minute class options
- Use the semi private arrangement to allow clients to have mini rests, a full one hour private session maybe too much

Fatigue considerations and its effect on a person's ability to participate in a pilates class

Physical

- **Muscle weakness** - closed chain resistance based work
- Endurance - pace the class to give rest and recovery breaks don't push to fatigue
- Overlap with pain - is pain affecting their sleep
- Deconditioned - build strength gradually
- High Intensity - Care whilst some argue for this I would want clearance for clients with respiratory and cardio complications

Mental Concentration

- minimise distractions
- Pause Prompt Praise strategies
- Memory
 - When people are stressed or anxious routines are comforting and can aid memory

Sleep

Stimulus control

Going to bed when sleepy

Going to bed at ~same time each night

Regular waking time each morning

Getting out of bed after 20 min if unable to fall asleep

Sleep restriction

Keep naps to < 1hr

Avoid late afternoon naps

Limit total time in bed

Sleep hygiene

Environment conducive to sleep (dark, quiet, comfortable)

Avoid caffeine after midday

Cognition

Remember Brain Fog can be linked to Fatigue

If a person is seeing an OT or Mental Health Practitioner they may have undergone some of the **cognitive screening tests** and you may seem them referred to in a report.

Eg the Canadian Occupational Performance Measure (COPM) Mini Mental State Exam (MMSA) and Montreal Cognitive Assessment (MoCA) .

These assessments generally look at how the person's cognitive skills are affecting the person's ability to participate in daily activities and what are the deficits. This input is helpful as it can give insights into what is affecting the person eg is **it attention, memory, decision making, thinking skills judgment and executive functioning**. Awareness of this can help with the strategies you may use in working with your client.

Cognition what does it include

Cognition refers to the abilities that enable us to think, including:

// **attention**

// memory & learning

// executive functions and;

- Planning and organizing to attend classes pay bills , do homework

// metacognitive functions (self reflection, insight)

- Motivation, somatic insights

Attention

Attention seems quite obvious, and we have all been in a class or a situation where you know your client is not attending to what they are doing. It could even be you scrolling through your phone whilst also listening to this session.

Attention:

// underlies all functional activity and cognitive functions

// allows information processing

// allows us to engage in novel non-routine activities

// is necessary for a person to be able to do higher order activities such as executive function.

Attention has two components:

// **capacity** - amount of information processing in a given time

// **control** - ability to direct attention

What does this mean in pilates?

Attention:

- Keep instructions simple
- Maybe have cue cards or visual prompts
- Minimise noise and other distractions to help aid attention

Memory

- Need to attend to store memories
- Write down appointments
- Create reminders or routines
- Strategies like a song to help the person organise strategies (I create little stories for a person to remember a sequence)
- Chunking of information

Executive Decision Making:

- Ability to commit to homework and appointments
- Reward positive thinking and motivation
- Appropriate praise and reinforcement of patterning
- Set goals and discuss rewards. Eg if your client loves a particular exercise eg banana stretch on the trapeze table. If they meet their goals in the class they get to finish with that exercise

Strategies for anxiety, fatigue and cognitive issues

Strategies to help clients in these situations include reducing noise and other sensory overload that could impede the capacity to process information and be overwhelmed.

Person specific considerations

// do they work better at a particular time of day?

// do they have fatigue or pacing issues?

// is relaxation and stress management their purpose for coming to class?

Environment considerations

// declutter space and ensure a quiet environment

// incorporate checklists, signs and reminders if helpful

// position client appropriately in the room (e.g. up the front of a group class)

Movement or task considerations

// make use of routine, timers or a beat to work to, if helpful

// educate on self monitoring of movement patterns and adequate rest breaks

// encourage note taking / recording / checklist, if helpful

Exercise - cognition , fatigue and healthy habits

Research has shown that regular exercise, good nutrition and sleep can help improve cognitive function. Does this mean our clients have to be doing 10 hours of exercise a week when fatigued probably not.

Helping clients restore healthy and sustainable habits is important. We could be asking them to think about

“ what is the smallest change that you can make that could make a difference?”

This comes back to those strategies we were talking about earlier to help ourselves or our clients regain control, when everything feels so overwhelming and difficult.

Movement ideas

When a muscle is contracted isometrically (which means contraction without any movement being allowed) for around 10 seconds, that muscle as well as the muscle(s) that performs the opposite action to it (called the antagonist) will be far more relaxed and can much more easily be stretched than before the contraction. This is known as **'muscle energy technique' (MET)**.

Breath focussed work, including diaphragmatic release

- Care re 100's and holding breath as it can relate to valsavic breath patterning and heart regulation strategies
- Inhale and its relationship to increasing heart rate.

Supported closed chain work

Trigger point work and

Balance work

Supine work facing a wall can reduce the role of gravity and distraction

Some ideas and movement series

These are being regularly posted in our instagram and youtube channels. If time permits we will take you through a class using:

- Arc / barrel / bolster whatever you have
- Towels
- makarlu

Considerations

Respiratory

Standing up or seated, but propped up on the mat can work as well. Remember that looking at rib mobility and diaphragmatic toning. Whilst this is all great exhale is easier on the body as it works with the elastic recoil of our chest cavity.

- Inhalation can raise blood pressure, care with holding breath
- Exhalation is difficult for people with asthma like conditions
-

Vestibular/ fatigue

- Supine face the wall
- Use a towel, partly to support against gravity but also at times as a weighted blanket
-

To learn more about the immune system etc

Pilates Anytime Course

[Claiming Immunity](#)

- use Promo code MULLINS For extended free trial and Discount

Anatomy Dimensions Courses

[Introduction to Neuro Anatomy](#)

[Anatomy Dimensions breath](#)



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