



Long Covid –What is it and impact on Workability?

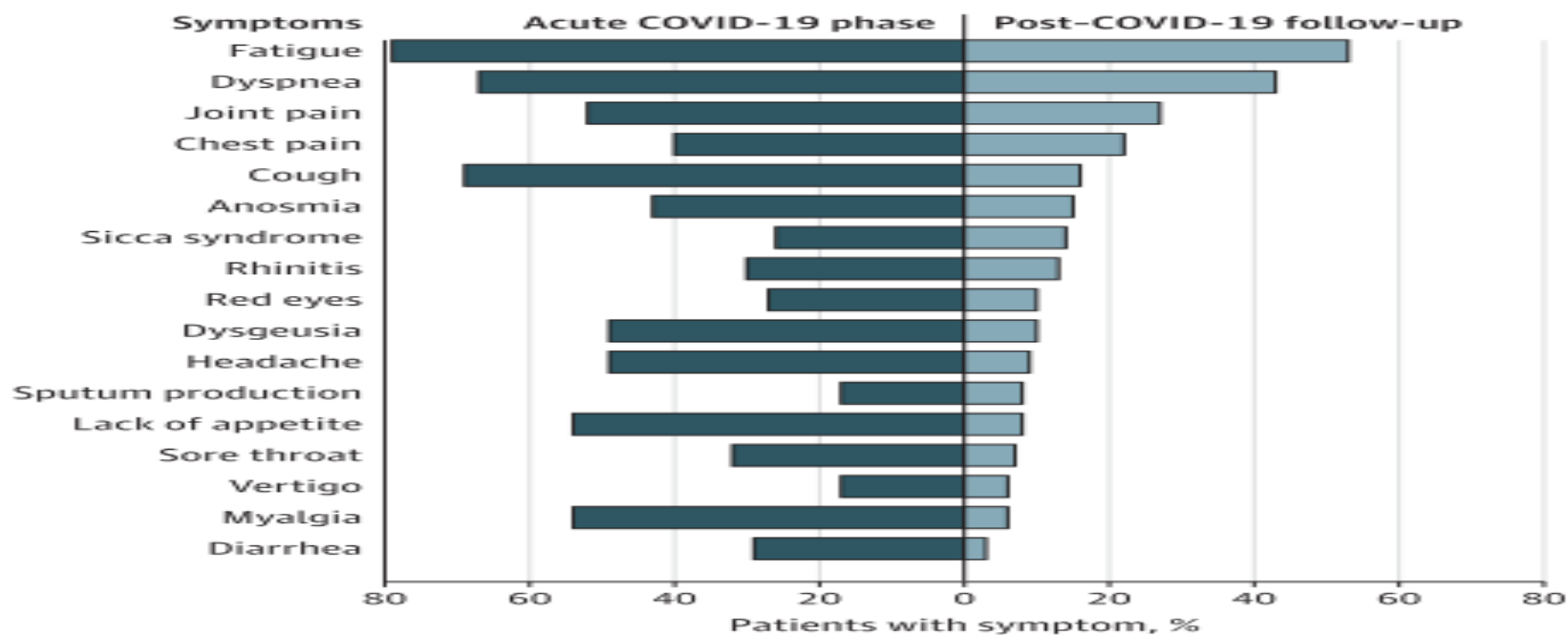
**Professor Ewan B Macdonald
University of Glasgow**

- UK Total population 66 Million
- Covid deaths -130,000 deaths
- Deaths are about ½- 1% of all cases of infection
- By March 2021 – Long Covid 1.1 million cases
- Study of 20,000 cases -13.7% symptoms for over 12 weeks
- 5 weeks Post Covid infection symptoms -23% female , 18.7% male
- Age 35-49 highest prevalence (25.6%)
- Positive covid test – more symptoms
- “prevalence of symptoms post covid infection is higher than the background prevalence”
- Symptoms-fatigue 8%; headache 7.2%; cough 7%; myalgia 5.6%



- Female age 58 – night support worker- very fit and active
- Covid 19 –March 2020- intensive care three weeks
- Extremely fatigued
- Vocal cord paralysis, breathless
- Lung scarring
- Can walk 200m with a stick in 15 min
- Physio, mental health , OT , speech therapist
- Adaptations to home
- Review January 21 , attending hospital, can walk 400m, unfit for work

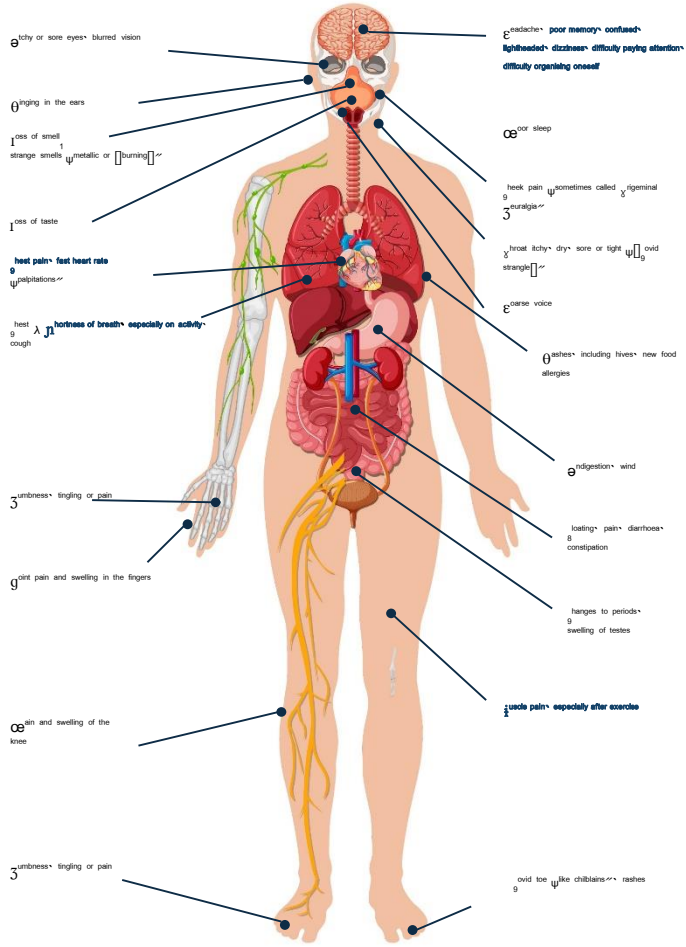
- Partner returned from holiday to Wuhan in November 2019
- Unwell , chest infection December advised to see GP- no-strongman
- January 2020 – residual breathlessness on exercise , chest discomfort
- Still working
- February – saw family doctor – referred for investigation
- Lung scarring and myocardial damage
- Reduced exercise tolerance
- Still working and reduced exercise tolerance (40%)2021



The figure shows percentages of patients presenting with specific coronavirus disease 2019 (COVID-19)-related symptoms during the acute phase of the disease (left) and at the time of the follow-up visit (right).

- CarfiA, BernabeiR, LandiF, 3-605. doi:10.1001/jama.2020Group GAC-P-ACS. Persistent Symptoms in Patients After Acute COVID-19. *JAMA*. Aug 2020;324(6):600.12603

Common symptoms of
Long Covid



What is
 M
 9
 ost
 9
 aʃəp
 9
 condition
 5

f *letharginess* • *dizziness* 0 ʃ very common
 7 **u** *abnormal* ʃ *function* ʃ *ψ* *œ* ʃ ʃ 1 1 non-λ drug and drug treatments

œ *persistent conjunctivitis* ʃ *visual acuity*
 ʃ *ψ* *œ* ʃ *œ* ʃ
 7 *nosmia* • *parosmia* • *ψ* *often metallic* 0
 like burning • *ψ* *dysgeusia*

ʃ *angiodema* ʃ *new food allergies* ʃ
 9 *consider* ʃ *past* ʃ *all* ʃ *etiology* ʃ *border*

ʃ *hypoxia on exertion* ʃ *associated with oxygen*
 desaturation: ʃ *œ* ʃ *lets out asthma* • *œ* ʃ ʃ *fibrosis* •
 cardiac causes

ʃ *myocardia on minimal exertion*
 ʃ *consider* ʃ *utonomic* • *myocardia* •
 7 *inappropriate sinus tachycardia* • *brady* ʃ •
 tachy ʃ *arrhythmias* • *pulmonary embolus* •

œ *inflammatory arthropathy*
 ʃ *autopathic phenomena* ʃ *œ* ʃ *other sensory*
 phenomena • *peripheral neuropathy*

ʃ *oxygen desaturation* ʃ *on exertion* ʃ *cause not yet*
 known • *research points to abnormal switch to*
 anaerobic metabolism with raised lactate

œ *inflammatory arthropathy*
 ʃ *autopathic phenomena* ʃ *œ* ʃ *other sensory*
 phenomena • *peripheral neuropathy*

ʃ *autocognitive* ʃ *œ* ʃ *radache* • *executive*
 dysfunction • *poor memory* • *confusion* • *nominal*
 dysphasia

ʃ *sleep disturbance* ʃ *ψ* *can be*
 autonomic •

ʃ *initus*
 ʃ *rigid neuralgia* • *new focal migraine*

ʃ *hypoxia* ʃ *ψ* *can be autonomic* ʃ *post* ʃ *intubation* •

œ *thy* • *dry* • *scor* ʃ *or light* ʃ *ψ* ʃ *avid*
 strangle ʃ • ʃ *atypical oedema* found even in
 non ʃ *intubated* • non ʃ *hospitalised patients*

ʃ *retinal chest pain* ʃ *œ* ʃ *then starts after*
 3 months ʃ *microvascular angina* •
 myocarditis • *ψ* *angina*

œ *aches* ʃ *œ* ʃ *effluat* • *vesicular*
 herpesiform • *multiforme* • *vescitic*

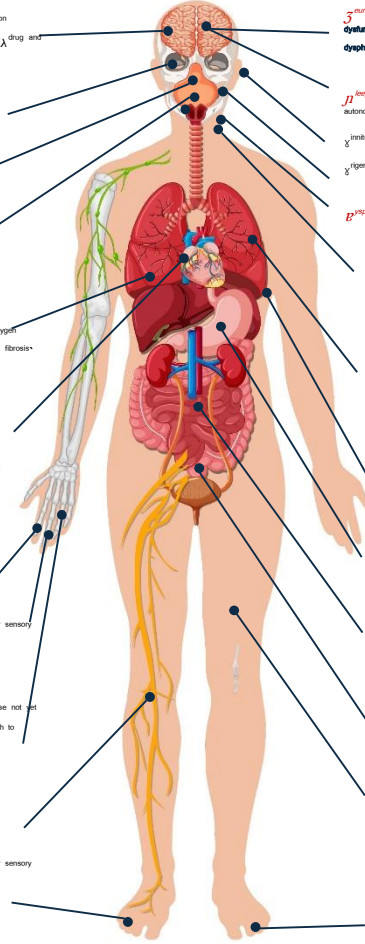
ʃ *δββε* ʃ *ψ* *smoothly* ʃ *ψ* *likely*
 autonomic dysfunction •

ʃ *smoothly* ʃ *ψ* *likely* *autonomic*
 dysfunction • ʃ *œ* ʃ *dist* ʃ *vital* ʃ *œ* ʃ ʃ
 coeliac disease • *colitis*

ʃ *menstrual irregularities* • *testicular inflammation*

ʃ *pruritis* ʃ *often post* ʃ *exertional* ʃ *an occur*
 hours to days after ʃ *ψ* *specific physiotherapy*
 required •

ʃ *tipus pernio* ʃ *ψ* *avid toe* • *vescitic*
 lesions





- Extreme tiredness
- Dyspnoea
- Chest pain or tightness
- Memory or concentration “ brain fog”
- Sleep problems
- Palpitations
- Dizziness
- Pins and needles
- Joint pain
- Depression and anxiety
- Tinnitus , earache
- Nausea , gastric symptoms
- Postural hypotension
- Loss of taste and smell
- Skin rashes

- Multi system disease
- Primarily a disease of blood vessels : endothelitis
- May lack a diagnosis of Covid 19
- New syndrome – was not recognised initially
- Often inadequate medical care
- Lack of good rehabilitation facilities
- End up being referred to occupational health or Disability specialists

- Memory loss 41% “Brain fog”
- Headache 13.1%
- Dizziness 16.8%
- Neuralgia 2.3%
- Musculoskeletal 10.7%

-Garrigues E, Janvier P, Kherabi Y, et al. Post-discharge persistent symptoms and health-related quality of life after hospitalization for COVID-19. *J Infect.* Aug 2020;doi:10.1016/j.jinf.2020.08.029

-L M, H J, M W, et al. Neurologic Manifestations of Hospitalized Patients With Coronavirus Disease 2019 in Wuhan, China. *JAMA neurology.* 06/01/2020

- Clinical care is specialised to eg cardiology, respiratory, neurology, gastroenterology etc (the bunkers of modern medicine)
- Much health care and Rehabilitation is the same
- Exceptions are gerontology, family medicine and occupational health
- LC is a new and multi system disease
- After clinical issues have been addressed-
- Need multidisciplinary Bio-psychosocial case managed rehabilitation and vocational rehabilitation
- Liaison with the workplace

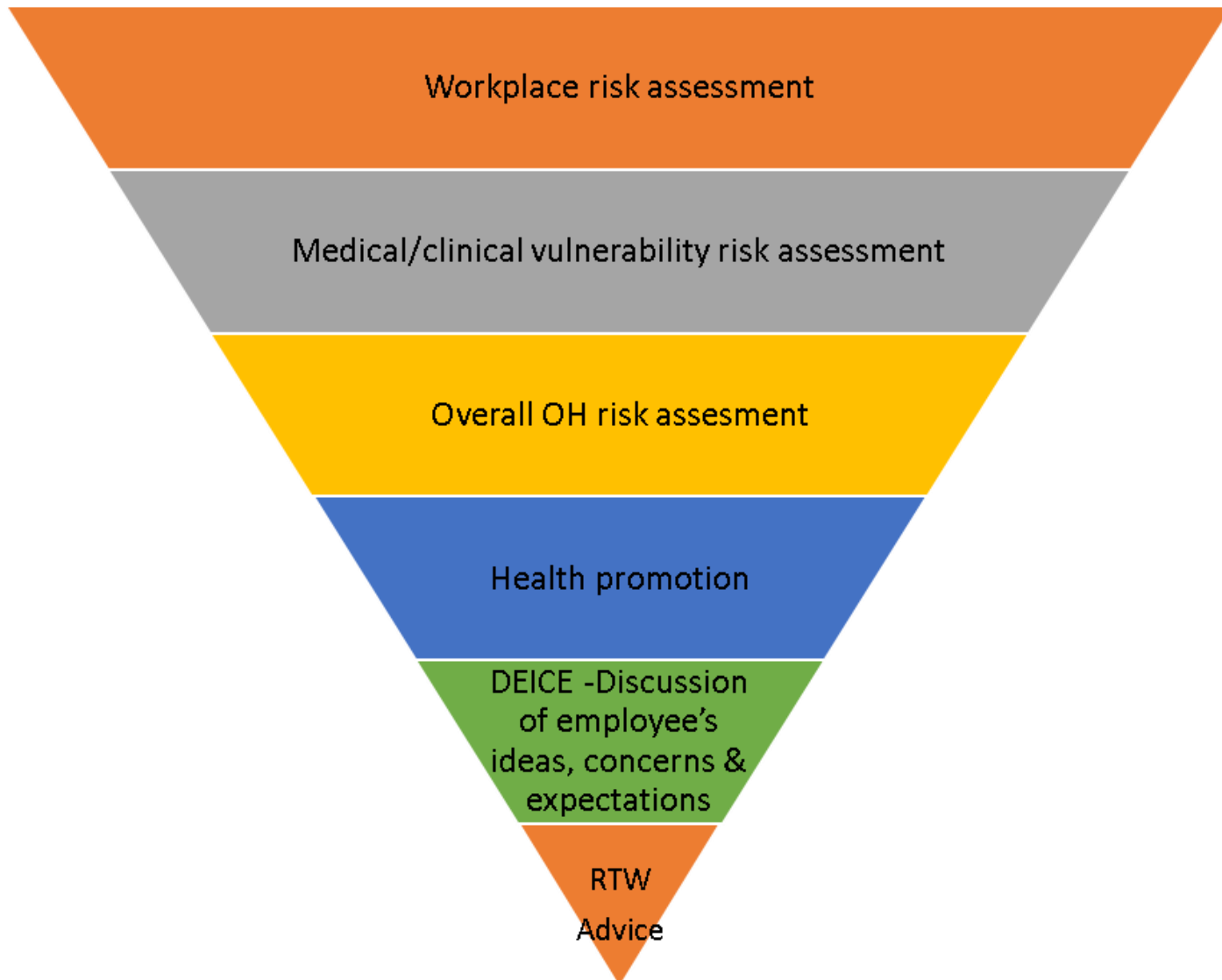


- Fatigue
- Respiratory
- Neurologic
- Cognitive impairment
- Sleep disturbance
- Mental health



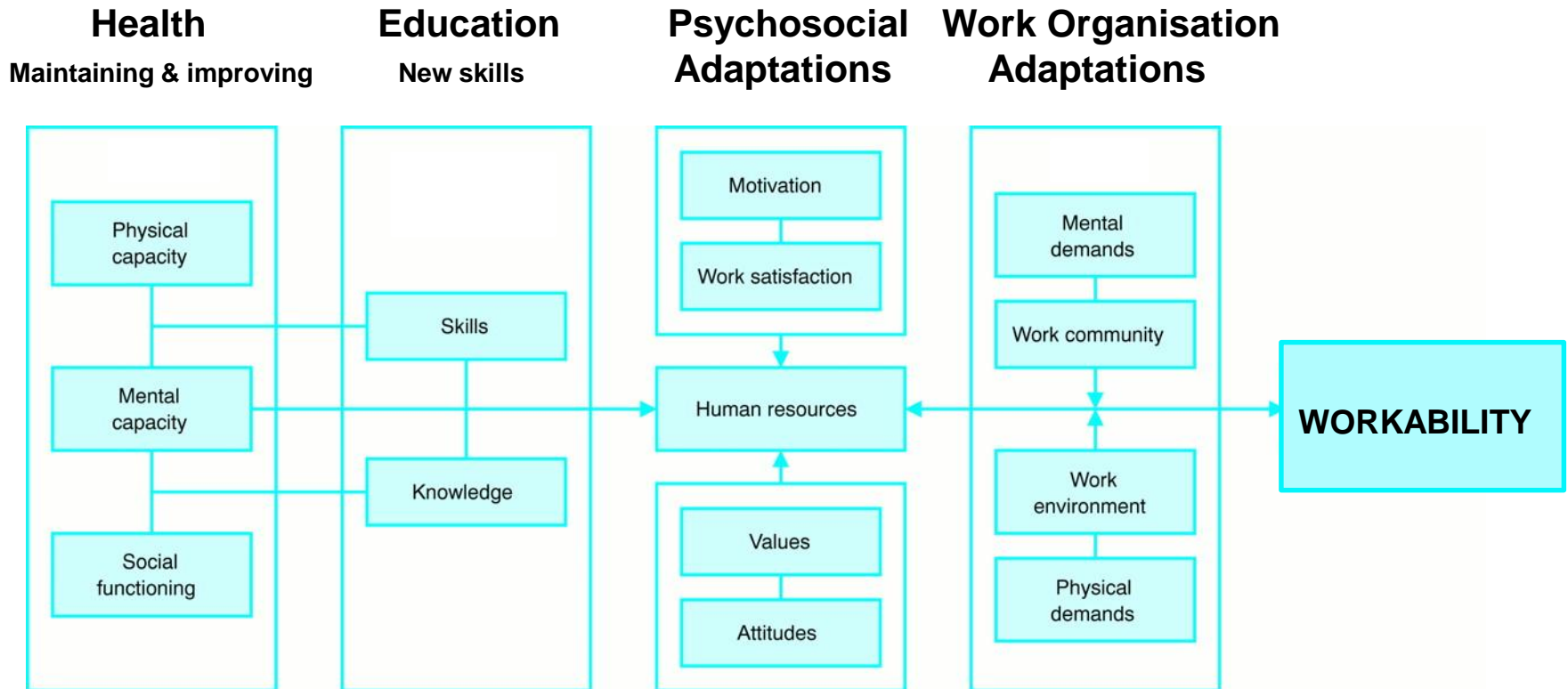
- Often young skilled workers , want to get back to work, are traumatised, usually inadequate rehabilitation
- Cognitive effect and fatigue
- Need careful assessment
- Are there any clinical issues needing medical treatment?- if so refer back to physician
- For most, need the rehabilitation of work
- Biopsychosocial case management
- Slow phased return or alternative work
- Prognosis is of improvement
- Graded exercise – 70% rule

- Significant problem and poorly understood
- Will have significant impact on the workforce and economy
- A challenge for disability managers , occupational health , health and safety and employers
- Will need innovative approaches to workplace rehabilitation
- Longer phased returns to work
- Employers may not understand it
- Consider safety critical issues



The process for maintaining the workability of the ageing worker with multiple diseases

(developed from Juhani E Ilmarinen Occup Environ Med 2001;58:546)





University
of Glasgow | Institute of Health
& Wellbeing

Return to Work BMJ editorial

<https://www.bmj.com/content/370/bmj.m3600>