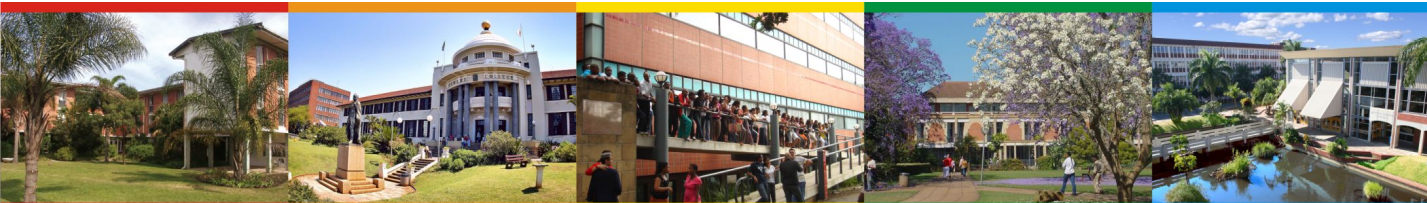




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The Rise in Covid-19 cases in South Africa: Public Health Perspective

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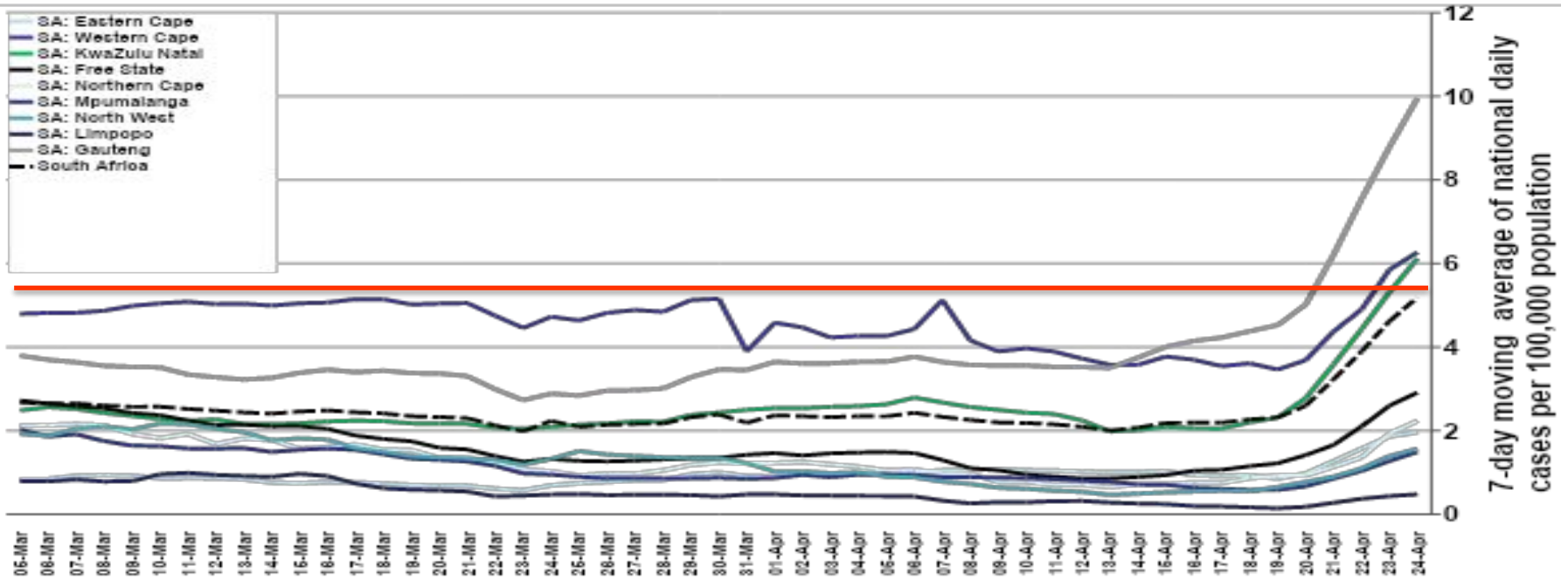
UKZN INSPIRING GREATNESS

Increased Burden of Covid-19

- Case Thresholds – significant increase
 - 5 cases per 100 000 – breached
 - 30 cases per 100 000 (weekly) – breached
 - 30% of previous peak – not breached
- Positivity Rate – significant increase
 - Did not decline below 6.1%, now 17.7%
- Hospitalizations – visible increase (65+)
- Hospital Deaths – very minimal increase
- Excess deaths – no clear increase

Covid-19 Cases by Province

7-day moving average cases per 100,000 population



Arrival of the 5th Covid-19 Wave

Sustained Trajectory

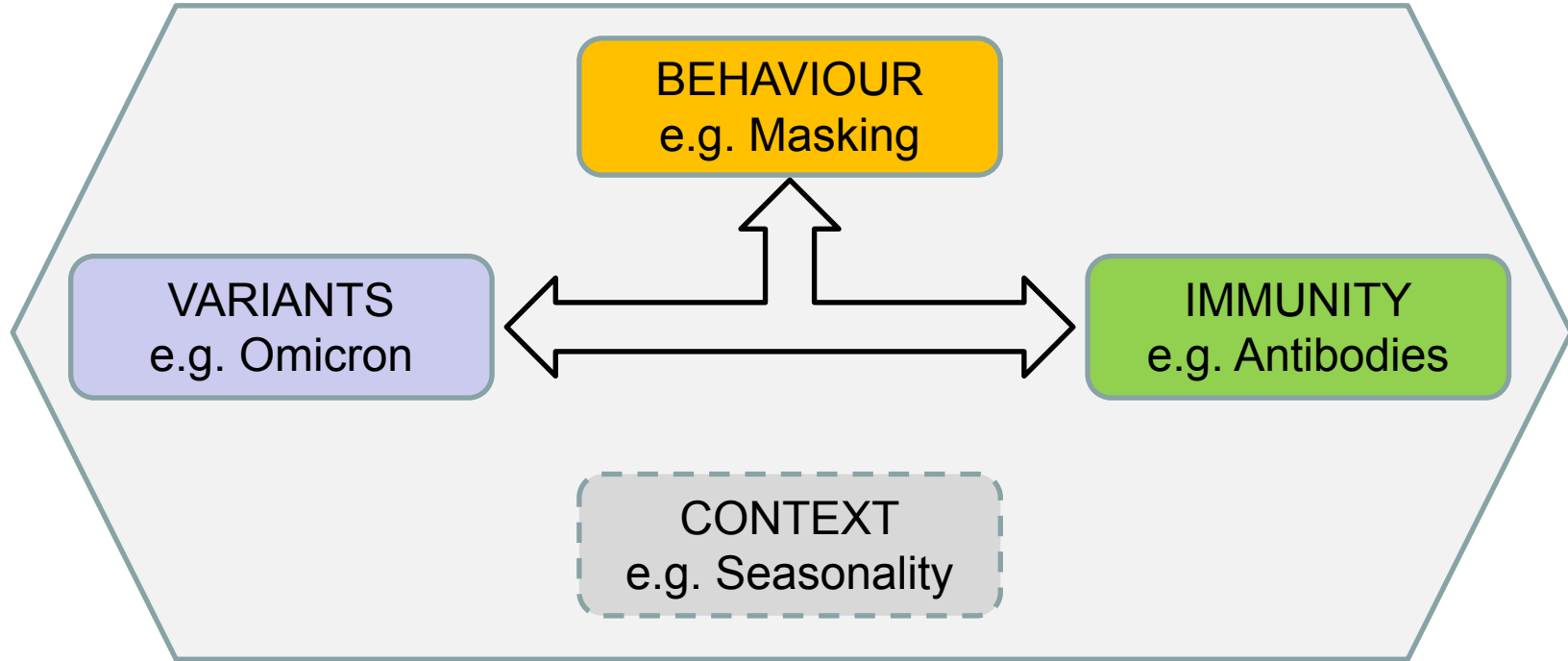
vs

Unsustained Trajectory

- Continued increase in cases, positivity, admissions and deaths
- First since the ending of the state of disaster – reduced restrictions
- First to be driven by a sub-variant – sublineage of Omicron

- Short-lived following Easter weekend and lifting of restrictions
- Repeat of the short-lived BA.2 resurgence at the tail end of the 4th wave
- The delicate balance of retained and lost immunity against Omicron

What is driving the 5th wave?



Approach to COVID-19 in SA

Containment (Prevention) (Focus on communities) vs

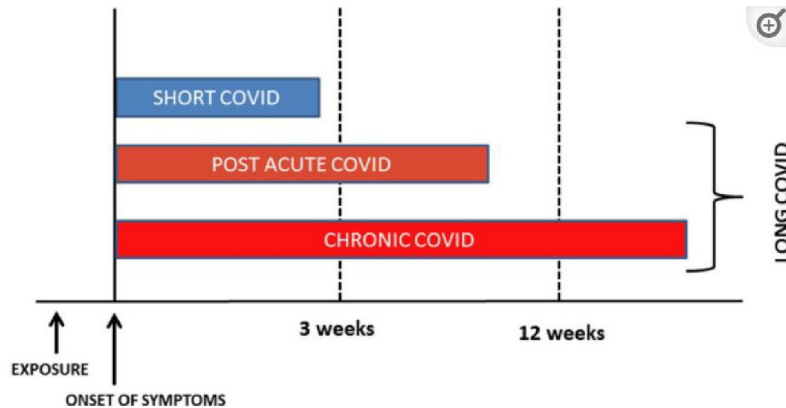
- Personal responsibility to protect self and others
- Public health and social measures (previously non-pharmaceutical interventions)
- Self-isolation when mildly symptomatic
- Seeking healthcare when symptoms get worse

Mitigation (Response) (Focus on Health Systems)

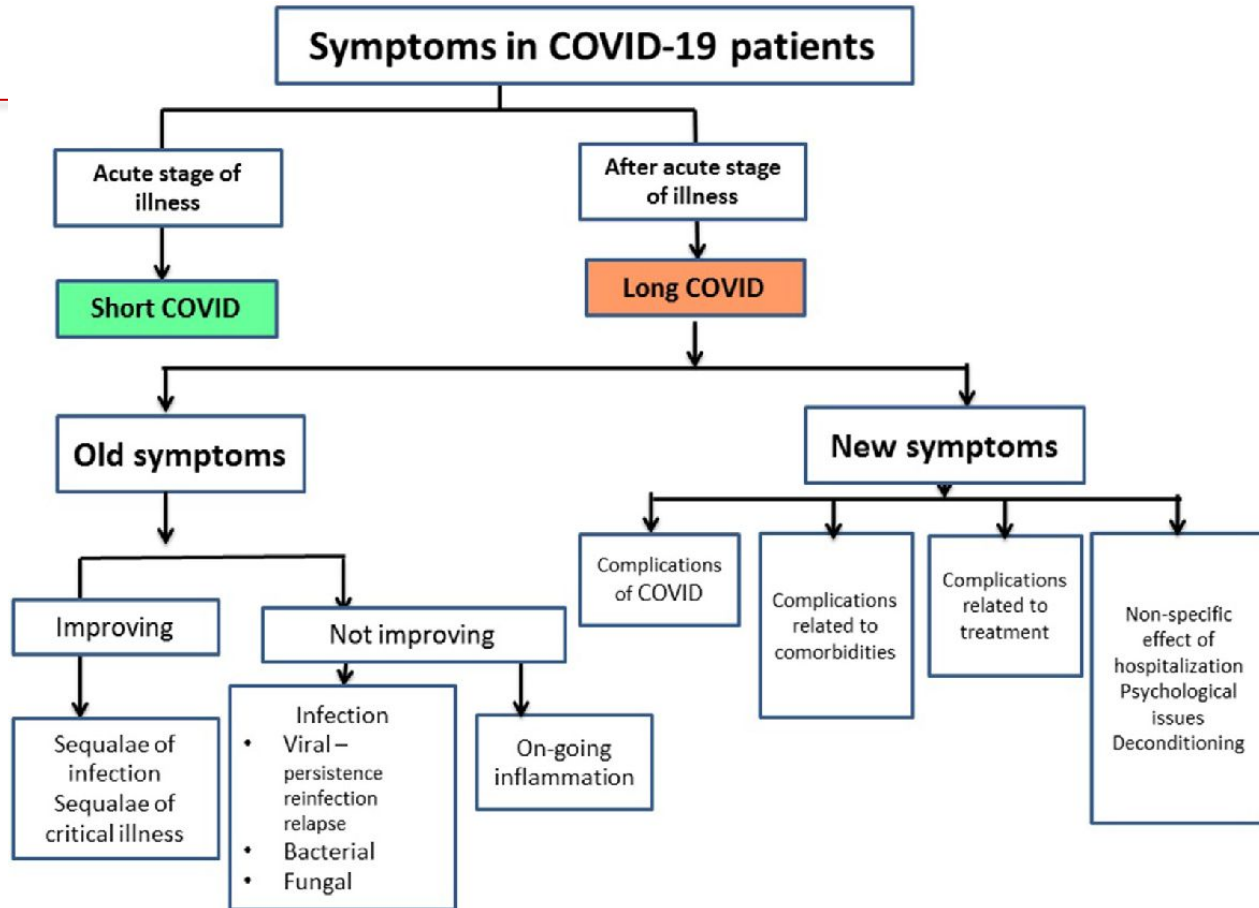
- State responsibility to protect the health system from excessive strain
- Protecting the health workforce and services
- Management of severe disease in hospitals and clinics
- Active surveillance and management of cluster outbreaks

Prevent the effects of Long Covid

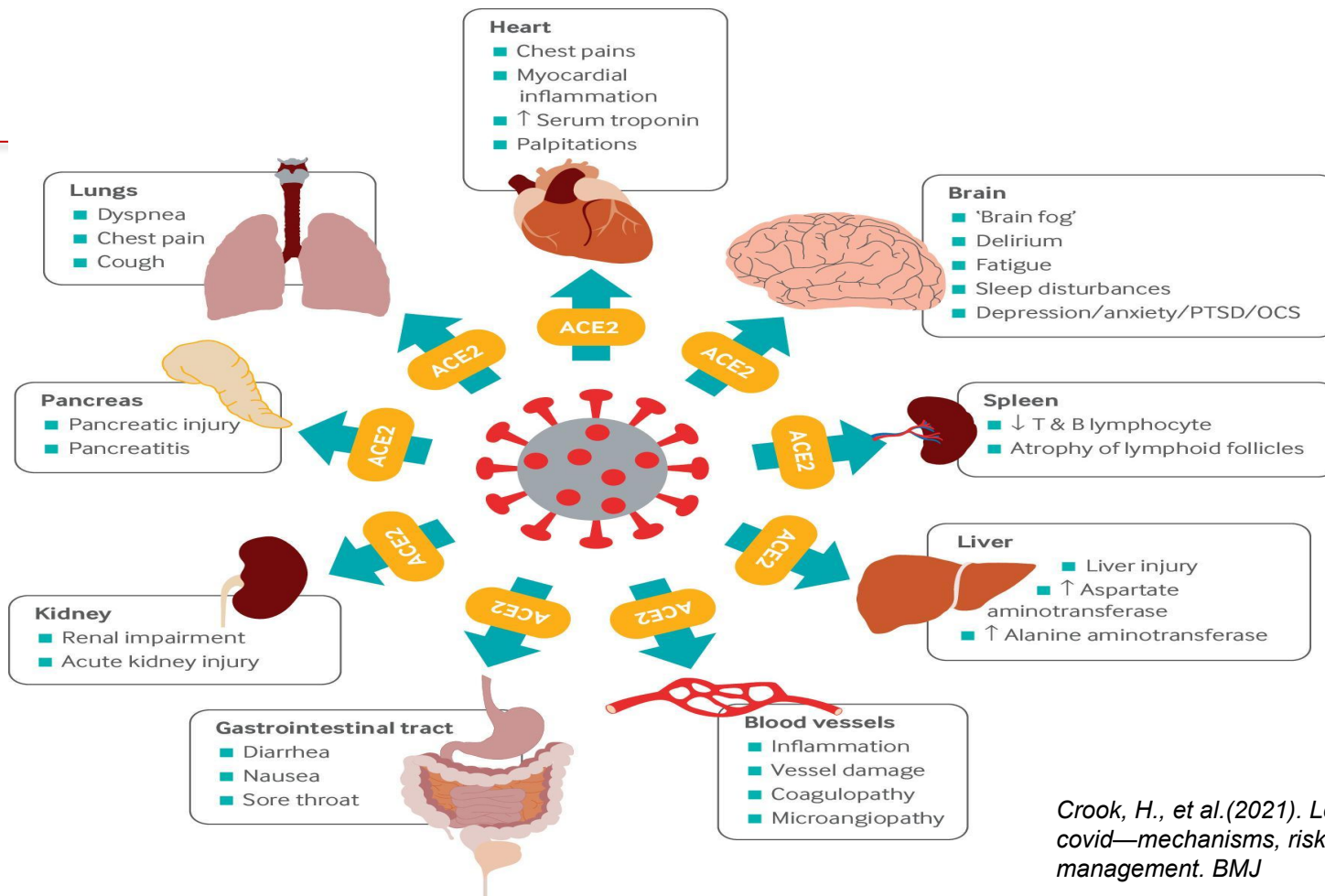
- The symptoms that continue or develop after acute covid-19 infection and which cannot be explained by an alternative diagnosis.
- Includes ongoing symptomatic Covid-19, from 4 - 12 weeks post-infection, and post-Covid-19 syndrome, beyond 12 weeks post-infection.



Raveendran, A. V., et al (2021). Long COVID: An overview. Diabetes Metab Syndr



Raveendran, A. V., et al (2021). Long COVID: An overview. *Diabetes Metab Syndr*



Crook, H., et al. (2021). Long covid—mechanisms, risk factors, and management. *BMJ*

Growing Problem of Co-Infections

- **Co-infection**
 - Discovery of other respiratory pathogens in patients with SARS-CoV-2 infection at the time of a SARS-CoV-2 infection diagnosis (*Musuuzza et al. (2021), PLoS ONE*)
- **Superinfection**
 - Subsequent discovery of other respiratory pathogens during care for SARS-CoV-2 infection.
- Co-infection with influenza viruses was associated with increased odds of receiving invasive mechanical ventilation compared with SARS-CoV-2 mono-infection*.
- SARS-CoV-2 co-infections with influenza viruses and adenoviruses were each significantly associated with increased odds of death (*Swets et al. (2022), The Lancet*)

Protect the Most Vulnerable

- Covid-19 infection rates and deaths are unequal, with the greatest hardship on those individuals living with intersecting vulnerabilities
- Most vulnerable:
 - underlying co-morbidities, children, homeless, people with disabilities, women, pregnant, migrants, prisoners and foreign nationals.
- In SA, health outcomes and access to ICU vary by race between the public and the private sector (*Jassat et al. In Press*)
- Targeted policies and actions are needed to protect those with the greatest socioeconomic vulnerability.

In a Nutshell...

- For all intents and purposes, we have entered the 5th wave in SA, but need to continue to monitor trends, drivers and outcomes.
- Drivers of the rise in infections include a complex interaction between behaviour, variants and immunity, in a constantly changing environment.
- Ending of the state of disaster means the State need to protect the integrity of the health system, and ensure adequate services when individuals present for care.
- Individuals need to protect themselves and one another from the spread of infections, and seek care when needed.
- Need to protect people from effects of Long Covid, co-infections and direct services towards the most vulnerable.