

National Conference on COVID-19: Impact, mitigation, opportunities, and building resilience [presentation ID: HLO-06]

The Use of Vitamin D To Boost Innate Immunity — Prevention of COVID-19, Complications, & Deaths

Sunil J. Wimalawansa, MD, Ph.D., MBA, FRCP, FRCPATH, FACE, FACP, DSc

Professor of Medicine, Endocrinology & Nutrition

Cardiometabolic & Endocrine Institute, N.J., USA

Dr. Athula Polonowita, MD, MBChB, MPM, FRANZCP, Dip Health Sci

Senior Psychiatrist; Mednet Australia, Melbourne, Australia

Lack of Exposure to Sunlight—Low Vitamin D—and Deaths From COVID-19

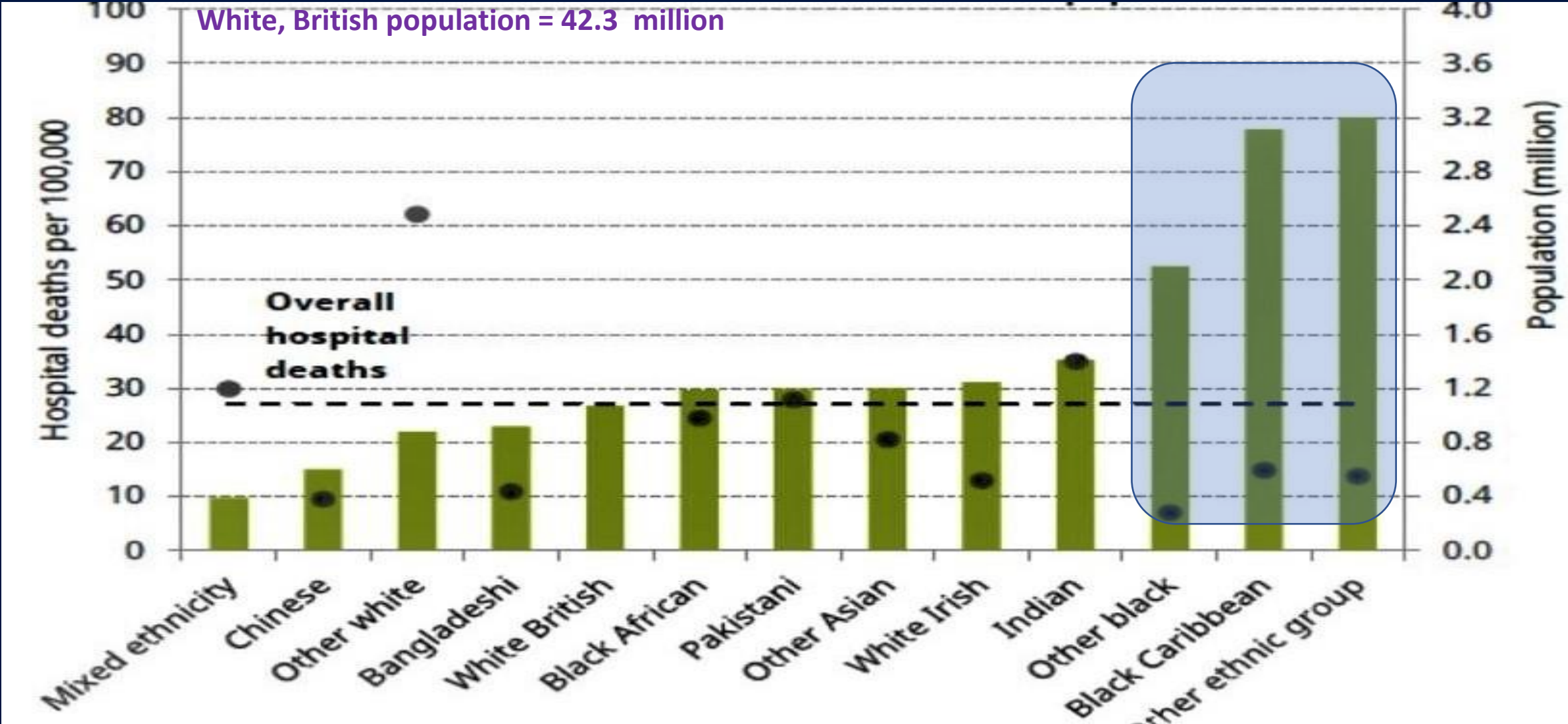
- **Deaths in nursing home residents could have been reduced by 70% by supplementing with vitamin D₃ from the beginning**
- **The combination of, advanced age, poor health, co-morbidities, and vitamin D deficiency is lethal**

Grant WB, et al., Nursing home residents could reduce risk of COVID-19 by supplementing with vitamin D3. Rapid response to: Covid-19: Continued outbreaks in care homes risk extending pandemic. June, 2020 2020. <https://www.bmj.com/content/369/bmj.m2530/r>

Observational Studies of COVID-19: Respect to serum 25(OH)D

- Observational studies and RCTs to date, reported an inverse correlations of serum 25(OH)D concentration with COVID-19 risk, severity, & death.
- In general:
 - Death: 25(OH)D <10 ng/mL (25 nmol/L)
 - Severe disease: 25(OH)D <20 ng/mL
 - Moderate disease: 20 ng/mL <25(OH)D <30 ng/mL
 - Mild or asymptomatic disease: 25(OH)D >30 ng/mL

Registered Hospital Deaths From COVID-19 per 100,000 people in England by Ethnic Groups

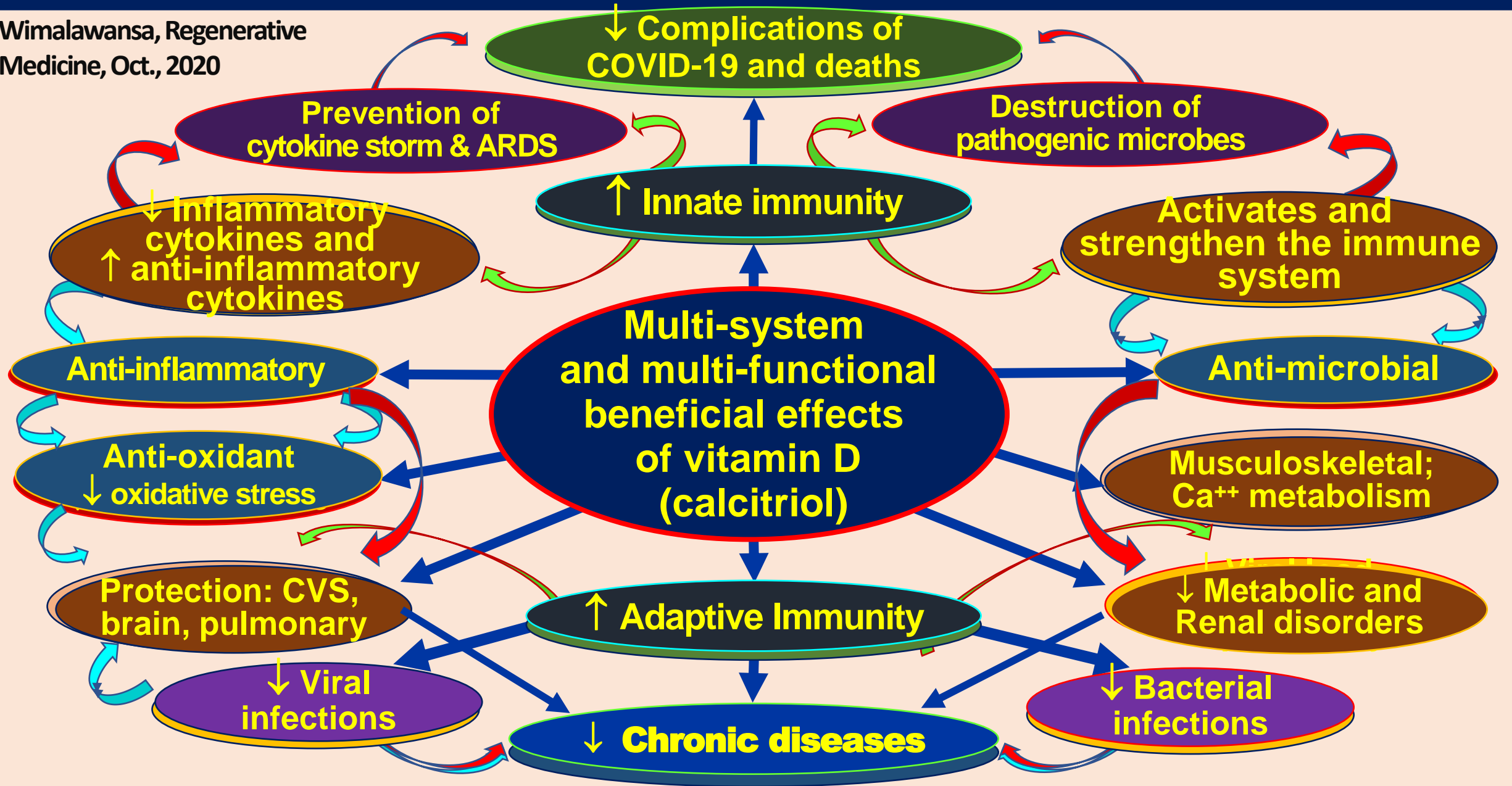




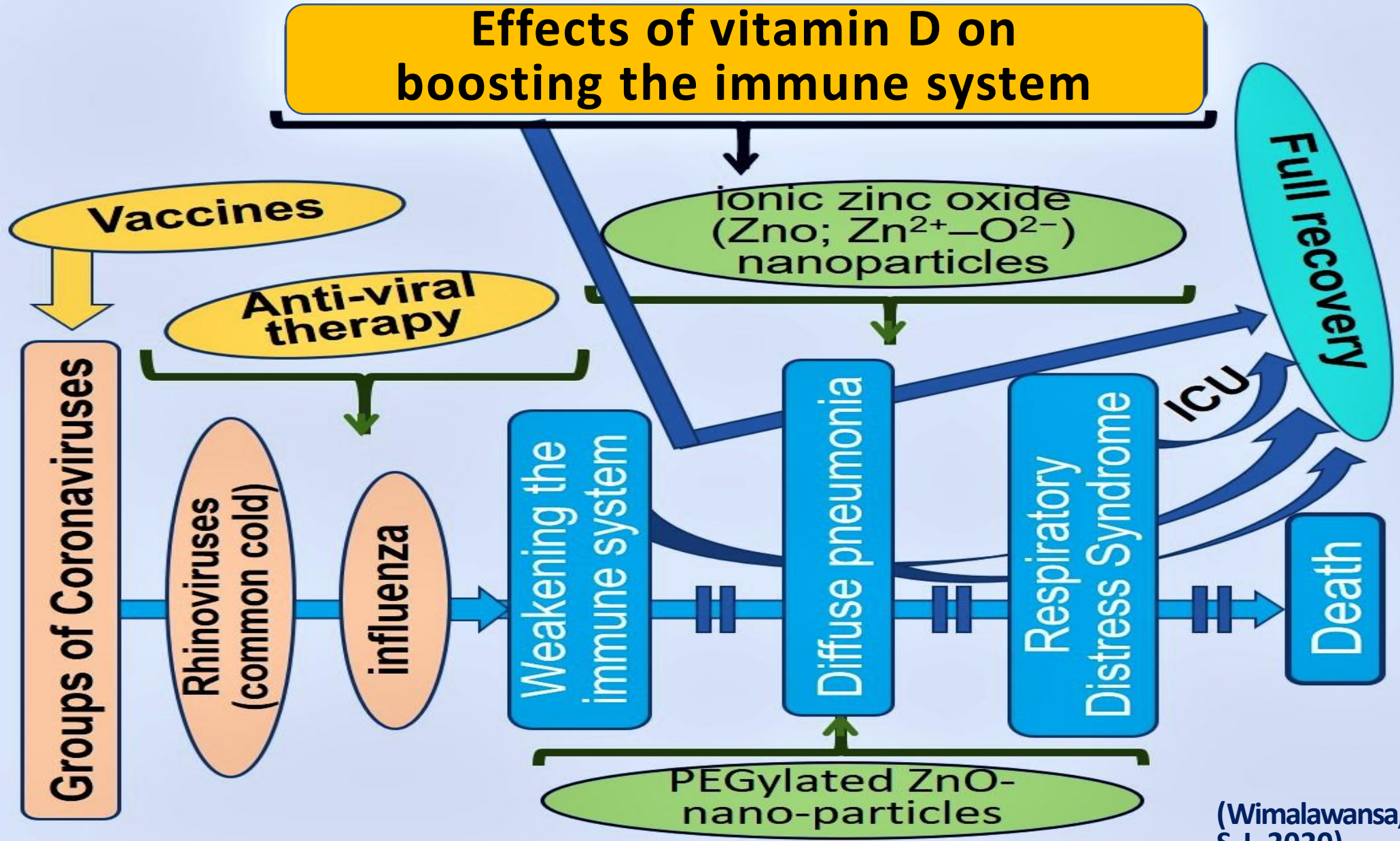
Proper use of effective face masks such as N95 is the single most effective mean of reducing the viral entry (aerosolized particles and microdroplets).

Frequent hand washing with soap and water reduces the entry of COVID-19 through mucous membrane via contaminated fingers.

Avoid or minimize participating in crowd gatherings, enclosed rooms, travel, and prolonged exposure, minimize strangers, will reduce viral loads.



Postulated Defenses Against COVID-19



(Wimalawansa, S.J, 2020)

Summary:—Concept Diagram: Coronavirus—COVID-19

