

# Palestine: Developing a Model of Extreme Healthcare Through Clinical Research and Audit

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# The Need For A New Discipline Of Public Healthcare Under Extreme Conditions

- ▶ Good health is a basic Human Right as defined by the WHO and the International Declaration of Human Rights
- ▶ To the majority of the world population living under extreme conditions this is just a dream
- ▶ For example, the current mortality rate of Palestinian women in Lebanese refugee camps is 42/100,000 live births compared with 13/100,000 in the UK
- ▶ The Palestinian 4<sup>th</sup> Conference on Clinical Audit and Clinical Research has a golden opportunity to establish a new matrix of healthcare learning badged as Extreme Healthcare

# The Secrets Of A Flexible Mind: James Lovelock And Gaia Theory

- ▶ In 1970, UK Scientist James Lovelock developed the theory he termed Gaia
- ▶ This proposes that over 3.8 billion years, Planet Earth has developed self-regulating mechanisms preventing self-destruction
- ▶ He was also many decades ahead of others in predicting dire consequences if humanity went on expanding its population and consumer culture particularly with fossil fuels
- ▶ He taught many of us to challenge every single aspect of our educational programming and remember “today's dogma is tomorrow's nonsense”

# The Sixth Extinction and Historical Causes

- ▶ The invention of the steam engine in 1786 and internal combustion engine in 1860
- ▶ The need for fossil fuels to service that development
- ▶ The rapid financing of the Industrial Revolution through slavery and huge profits in North America and Caribbean from sugar and cotton
- ▶ The rise of global capitalism leading inevitably to concentrated power in a tiny elite
- ▶ Great advances in medicine, particularly in vaccinations, resulting in lower infant mortality and much longer life expectancy

# The Sixth Extinction and Historical Causes (continued)

- ▶ The resultant population explosion from just over 1.5 billion in 1900 to 8 billion in 2022
- ▶ An accompanying massive increase in domestic animal numbers globally
- ▶ All above leading predictably to dangerous levels of gases ( $CO_2$ ,  $N_2O$ , methane)
- ▶ An increase in global temperatures from pre-IR levels by roughly  $1^{\circ}$  Celsius today to  $2.5^{\circ}C$  in 2050
- ▶ Industrialised arable farming, herbicide and insecticide elimination of essential pollinators and soil degradation through impaction with heavy machinery.

# Climate Change, Gaia And An Anthropocene Epoch In Evolution

- ▶ To sustain a fair standard of living of 8 billion people would need 3 Planet Earths
- ▶ The geopolitical changes wrought by humanity over the past 300 years has resulted in a new Anthropocene Epoch in evolution
- ▶ The Gaia theory may have been invalidated by the impact of humanity
- ▶ Palestinians are best placed to develop a new discipline dealing with public health under extreme conditions

# Future Challenges to Public Health Worldwide

- ▶ Desertification and loss of farming land, hence food and water insecurity
- ▶ Acidification, rise in temperature and pollution of oceans and loss of marine life
- ▶ Massive migration of desperate humans from the South to Northern Hemisphere and internally displaced in refugee camps
- ▶ Diminished atmospheric oxygen as tropical rain forests are destroyed

# Future Challenges to Public Health Worldwide (continued)

- ▶ Military conflict over ever diminishing resources (e.g. lithium replacing oil as main source of dispute)
- ▶ Frequent pandemics of pathogenic organisms
- ▶ Massive increase in pathological nanoparticles capable of entering and damaging cells and travelling thousands of miles in the atmosphere

# Extreme Healthcare: A Flexible Public Health System to Address These Challenges

- ▶ Many of these challenges can only be addressed by geopolitical and economic changes
- ▶ This involves total cooperation on a global UN scale
- ▶ Palestine could be at the centre of a new health discipline badged as **Extreme Healthcare**
- ▶ I believe that this can only be based on high quality clinical audit and research

# The History And Role Of Clinical Audit In The Improvement Of Global Health Care

- ▶ Quality control based on Clinical Audit is a relatively recent innovation but today widely regarded as central to improving healthcare for all not just those in high income societies
- ▶ In 1798, Jenner invented the first smallpox vaccine after close observation of the protection provided by cowpox
- ▶ In 1854, Florence Nightingale and her team of nurses adopted hygiene measures (antiseptics far from asepsis) in wounded soldiers in the Crimean War and reduced mortality from 40% to 2%
- ▶ In 1907, Ernest Codman in Boston USA developed an 'end result system'
- ▶ In 1989, an NHS paper called 'Working for Patients' was published and adopted in 1993



**Thank you for Listening**