The Epidemiological Transition: Omran’s Model

1. Basic Terminology
   • Mortality
     • Levels (and causes) of death in a population
   • Morbidity
     • Levels (and causes) of illness in a population
   • Infectious and parasitic diseases
     • Diseases caused by transmissible agents
   • Chronic and degenerative diseases
     • Cancers, heart disease, etc.
   • Epidemiology
     • The branch of public health medicine concerned with disease causation, distribution and control

2. The Epidemiological Transition
   • The ‘theory’ was first proposed by the Egyptian sociologist Abdel Omran
   • Underpinnings:
     • Societies appear to demonstrate shifts in the patterns of morbidity and (in particular) mortality during the process of economic development
   • With economic development:
     • Morbidity and mortality rates fall
     • The dominant causes of morbidity and mortality in the population change
     • Life expectancy increases
   • According to Abdel Omran:
     • “The theory of epidemiological transition focuses on the complex changes in patterns of health and disease and their demographic, socio-economic, and ecobiologic determinants and consequences in various population groups.”
     • Here, the term epidemiological refers to the underlying patterns of morbidity and mortality in a society - ‘epidemiological transition’ implying change in patterns
   • 5 key proposition underpin the theory of epidemiological transition:
     • Proposition 1 - Mortality is a fundamental factor in population dynamics
     • Proposition 2 - Transition is characterised by a long-term shift through three stages of mortality:
       • Stage 1: The Age of Pestilence and Famine
         • Characterises pre-modern societies, though less developed countries persisted in this stage well into the 20th century
         • High background levels of mortality
         • Associated with infectious diseases, pandemics, famine, war, etc.
         • This stage lasted in London until approximately 1750
       • Stage 2: The Age of Receding Pandemics
         • Falling deaths from pandemic outbreaks and infectious diseases - waning of their importance
         • This stage ended in London circa 1920
       • Stage 3: The Age of Degenerative and Man-made Diseases
         • Dominant causes of death and mortality are chronic and degenerative diseases, those associated with pollution, diet, etc.
     • Proposition 3 - The epidemiological transition favours: