Researchers debunk long-held public health theory, call for new global public health

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In a series of 11 articles published this week in a special series of the peer reviewed open access journal Global Health Action, researchers believe they have collected the most definitive evidence to date to debunk one of the central theoretical frameworks that for decades has helped guide public health policy and programs globally. The work holds particular significance for low-to-middle income countries where disease patterns divergent from more developed nations are emerging, namely, the so-called "double burden" of both infectious and chronic diseases.

"The ability to accurately predict disease patterns is a key element in the development of effective healthcare policies and programs worldwide," said Professor Kuate Barthelemy Defo, Guest Editor of the supplement titled Epidemiological Transitions: Beyond Omran's theory, and a professor at the Public Health Research Institute and PRONUSTIC Research Program, University of Montreal.

While many factors have influenced thinking around shifts in disease profiles, Abdel Omran's 1971 theory of epidemiological transition is arguably the most influential, adds Defo. It was formulated based on observations of European and North American populations between the mid-18th century and the 1950s and noted changes in disease patterns – specifically, the shift from the prevalence of infectious diseases to chronic diseases as societies developed. It has long been used to predict disease patterns globally – and as a result, has led to a long-standing myth that as countries experience economic development infectious diseases are replaced by chronic diseases.

Omran's theory has faced growing criticism for many years, in particular over its questionable applicability in low-to-middle income countries; for its failure to recognise and analyse the importance of cultural and social beliefs and values, political forces and health policy in understanding epidemiological profiles.

Among the data analysed in this work are 60 years-worth of mortality data collected by the United Nations.

In many developing countries, where little data exists to illuminate the public health landscape, and governments and policy makers are additionally challenged by poverty and lack of affordable healthcare, there is a renewed interest in the patterns of demographic and epidemiological profiles.

In this collection of papers, which build on earlier discussions initiated by the United States Academy of Sciences, researchers dismiss the Omran model as relevant to contemporary developing countries and suggest the foundation for a new framework better suited for guiding and understanding past and future epidemiological changes within these populations. The framework highlights the need for multilevel life course data collections and analyses to inform understandings of the underlying mechanisms of demographic and epidemiological changes and health system responses to these. It underscores, according to Defo, the need for a "new global health."

More information: Epidemiological Transitions - Beyond Omran's Theory. (Published: 16 May 2014). Global Health Action eISSN 1654-9880. www.globalhealthaction.net/ind … ue/view/1602#Special %20Issue:%20Epidemiological%20Transitions%20-%20Beyond%20O mran's%20Theory