

Thursday 11 August 2011
 Chair: Dr. Cesar Victora, Brazil

Plenary XVIII

INCLIN SESSION
CONVERGENCE OF ECONOMICS WITH HEALTH: A CASE
FOR CHRONIC DISEASES PREVENTION IN LOW AND
MIDDLE INCOME COUNTRIES



doi:10.1136/jech.2011.142976a.13

N K Arora. *India*

In last 2–3 decades, developing countries like India and China have witnessed unprecedented economic growth. Globalisation has created environmental conditions that overwhelm human biology. The poor alignment between biology, markets and society is reflected in rise of chronic disease and obesity along with issues regarding food and nutrition, security, poverty and health inequality. Brain-to-Society model of motivated choice is a broad integrative approach to understanding, mapping, modelling and ultimately guiding in a more adaptive direction, the pathways in which brain systems (considering genetic background and psychological predisposition) and society systems singly and jointly determine individual choices in the domains of motivated adaptive behaviours. Key sectors shaping the environment and the individual life style choices are food and agriculture, education, media, finance, management, law, politics and economics.

Brain-to-Society paradigm examines how individuals vary in their neurobiological response patterns to environments; how environments, in turn vary in the adaptive challenge they pose; and how complexity and computational approaches can bridge the different levels of evidence affecting individual choices and the organisational and societal choices that create such environments. Rapidly changing environments of developing countries offer unique opportunities to revisit some of the fundamental ways in which individuals, families, communities, organisations and government, exist and operate. Computational and mathematical modelling using machine learning approaches, agent based system dynamics and network science models are required. The aim is to support the real time weaving of research in to real world decision making and governance for prevention and management of life style related diseases.