Abstract

Urban dwellers are exposed to numerous psychosocial and environmental stressors that may affect our health. The relationship between complex environmental exposures and health is not linear. There is also a complex interaction between stress and resilience factors and health. It is increasingly recognized that exposures might adversely affect numerous health indicators rather than be the culprit of a specific disease. Finally, there is a complex gene-environment interaction in terms of health and disease.

The talk will focus on current stress-disease theories and means to study stress in real life. Special focus will be placed on highlighting some of the challenges stress researchers phase in modeling health effects based on limited-size data sets with multiple variables.

The presenter looks forward to exploring the role of mathematics in enhancing our understanding of complex urban stressors and health.

Bengt B. Arnetz, MD, PhD, MPH, MScEpi holds MD and PhD degrees from the Karolinska Institute, Stockholm, Sweden. He received his MPH and MScEPI from Harvard School of Public Health, where he also trained in occupational and environmental medicine. He is currently Professor and Vice Chair, Department of Family Medicine and Public Health Sciences in the School of Medicine.