

## **Determinants of blood pressure changes due to urbanization: a longitudinal study**

### **Abstract:**

Changes in blood pressure (BP) and associated factors which occur on migration from a rural to an urban environment are under observation in a longitudinal study. Blood pressures, heart rate (HR), urinary electrolytes, sociological and anthropometric data are recorded at 0, 3, 6, 12, 18 and 24 months following migration and compared with a cohort of age and sex-matched rural based controls. Data from the first 6 months' follow-up reveal that the migrants' BPs are higher and tend to rise compared with controls, in whom BP falls progressively with time. Changes in body weight and dietary electrolytes appear to explain some of the BP differences, while differences in pulse rates between groups suggest that a further mechanism operative through the autonomic nervous system is responsible for some of the elevation of systolic BP shown amongst migrants, particularly on arrival in the urban area