

Population migration: the forgotten factor in disease aetiology

Clive Sabel

Karolinska Intitutet, Sweden
Email: Clive.Sabel@klinvet.ki.se

**Presented at GeoHealth 2002
Victoria University of Wellington
December 3-5th 2002**

ABSTRACT

Geographical patterns of incidence or mortality are frequently examined for clues as to the causes of disease. A conventional assumption in these studies is that the current place of residence or place of death is an adequate measure of lifetime exposure to possible risk factors.

However, population migration limits the utility of adopting this last place of residence as the basis for subsequent analysis. This migration effect is highest for those diseases with longer latency periods (allowing for multiple changes of residence) and which strike people primarily in later life, or amongst highly mobile populations.

In this presentation, we examine these confounding effects illustrated with a case-study of ALS (Lou Gehrig's disease) in Finland. Findings suggest a clear cluster at birthplace, less evidence at deathplace, reinforcing the idea of examining all of a cases life history. Policy implications to stress are the implications of examining only the most recent residential location (where one might miss important aetiological clues) and hence the need for wider data availability possibly through register linkage, at a time when public opinion and governmental policy is moving in the reverse direction, as evidenced by the recent efforts of the EU is try to further restrict access to health data at the individual level.