Thought-Piece: Jan Rigby

My recent academic background can probably be described as spatial epidemiology, involving the application of geographical approaches to the description of disease patterns, and to attempts to model those patterns and underlying processes. My PhD thesis explored breast cancer data, which was somewhat reluctant to produce spatial patterns at various scales, or to be modelled using census variables. It offers the geographer further headaches concerning disease latency, migration issues, data aggregation... We are all aware of these data problems.

The thesis also involved in-depth interviews with women both with, and without, breast cancer to collect individual life histories. These were explored from a basic epidemiological perspective, and mostly in an aspatial format. Despite there being considerable information resources available about this particular disease, the level of awareness of these women was often quite low.

In New Zealand we have just completed an initial piece of work for the National Screening Unit, looking at the uptake of women's screening services (for both breast and cervical cancers). Here we find that incidence of, and mortality from, those cancers are higher in women of Maori and Pacific Island ethnicities than those who are termed 'white European'. [In addition, Maori mortality from lung cancer is among the highest in the world.] Yet the uptake rates of the screening services show that they seem to be failing Maori and Pacific Island women. Hence those who are statistically most 'at risk' are using the preventive services least. Further, although income is a major barrier for some women to access healthcare, the differences are not explained by deprivation, and recent qualitative research suggests that cultural beliefs and practices do not account for the differences either. We do know that, at a regional level, the higher the proportion of Maori women who live in an area, the higher the proportion of those women who attend for screening.

Hence one major question for me is how we can build in complex individual viewpoints and knowledges to understand what people know about risks to their health.

Further, to what extent can we use geography to convey health risks both to the policy makers and to the public? New Zealand is overdue an epidemic of measles, and the immunisation status of the population is both poor, and poorly known. If we can improve the quality of the data, how do we convey its meaning to those people whose children are at risk, and how do we ascertain their understanding of that risk?