Health Geography in Knowledge Crossover

Helena Ribeiro
Scientific Editor
Titular Professor, Department of Environmental Health
Faculdade de Saúde Pública da Universidade de São Paulo
E-mail: lena@usp.br

The dossier of articles in Health Geography is one of the results of the I Congress on the Health Geography of Portuguese Speaking Countries (Geosaúde 2014), which took place in early 2014 at the Universidade de Coimbra, Portugal. The topic of the Congress was Health Geography in Knowledge Crossover, with a logic covering multiple dimensions. The Congress brought together researchers from different knowledge areas who had contributed to re-directing the health agenda, as the preface to the annals shows.

Health Geography is a way of studying health that is both very old and very modern. There are multiple relationships between geography and health conditions and disease, involving social, environmental, political, human, behavioral, cultural, historical and biological dimensions. However, throughout history, the emphasis placed on the relationship of space with human health has waxed and waned.

In the last few decades, faced with environmental, social and economic crises that impact on health and, consequently, on health care systems, Health Geography has renewed and expanded itself with innovative methods of research and treating data, bringing new reflections and contributing greatly to understanding health and disease conditions from a collective perspective. This contribution, however, goes beyond the panorama of past, current and future collective health; it has taken on a crucial role in health care service planning and organization and making health promoting actions in the territory more efficient, based on real data and actual demand.

If Medical Geography (as it was commonly known) was formerly strongly marked by drawing up maps of diseases, today it is much more than maps and diseases. Nowadays, covering more than spatial distribution of diseases, it has come to be known as Health Geography. Maps continue to be its most expressive language, but they are just one research stage, important for formulating etiological hypothesis and establishing spatial relationships. The following citation from Rita Barradas Barata, a well-known Brazilian epidemiologist, highlights the importance of the geographic method.

The advantage of using geographical spaces as indicators of living conditions means taking the complexity of social organization as a whole, rather than fragmenting it into different variables (Barata, 2012, p. 35).

Thus, the use of geo-processing and Geographic Information Systems - GIS, has become popular not only to understand the spatial distribution of health care risks and to make etiological hypotheses but also to deal with them more efficiently in the territory, as they enable health inequalities and inequities there to be identified.

The 4 studies in the dossier were selected by the Geosaúde 2014 Scientific Committee and the Saúde e Sociedade Editorial Committee from the 954 scientific studies submitted to the Congress. They portray different foci of current Health Geography and were produced by researchers from Portugal and Brazil.

The article Ambiente e Saúde da mulher trabalhadora: transformações numa comunidade da Amazônia Brasileira, by José Aldemir Oliveira and Socorro de Fátima Moraes Nina, reports research conducted in the municipality of Itacoatiara in the state of Amazonas, and shows our readers the path of the transformation of work for women in the Amazon who, in addition to being housewives began to work in agriculture and the agro-industry, in an environment linked to the water, earth and forest, with serious health implications. Their path helps us to understand the transformation the space of the Amazon is undergoing, in which rural and urban are interlinked. It is based on a qualitative analysis conducted in the spaces where the women work and produce.

The article Efeitos da Distância na acessibilidade aos Serviços de Urgência em Portugal, by Pedro Ramos and Sonia Vaz, portrays a totally different
space and situation. The authors measured the distance covered by the victims of over 200 thousand episodes in which individuals made use of Portuguese Emergency Services and the different categories of seriousness on admission. ArcGIS software was used to analyze the data, with distance being used as the key variable. This type of Geography contribution to analyzing services has grown, especially right now, a time in which health care services are under pressure to become more efficient, due to economic and financial contingencies that individuals and countries have undergone, as in the example of Portugal.

The other two articles in the dossier, one from Portugal and the other by authors from both countries, conducting a comparative analysis of the São Paulo and Lisbon Metropolitan Regions, use geographic methods to verify health inequalities and inequities and their relationship with socio-economic aspects.

The article by Maria Gregório, Pedro Graça, Andréia Costa and Paulo Nogueira, *Iniquidades regionais na insegurança alimentar em Portugal*, identifies regional disparities in the food insecurity situation in Portugal, bearing in mind the unfavorable economic circumstances in 2011-2013. Questionnaires were completed by randomly selected service users cared for by nurses on duty, in Health Care Centers and at home. The data underwent multi-factorial logistical regression and health care regions were compared.

In the article by Marina Miranda, Claudia Costa, Paula Santana and Ligia Barroso, *Associação espacial entre variáveis socioeconómicas e nascimentos pré-termo na RMSP e AML*, an association was found between socio-economic variables and premature births in the RMSP and AML. The study found that socio-economic conditions (unemployment rate, literacy rate and percentage of slums), linked to the geographic context and associated with premature birth, based on a retrospective exploratory analysis of the period from 2000 to 2010.

This dossier demonstrates, even with such a reduced sample, the variety of the contributions that Health Geography can provide an understanding of health issues at various levels and in different contexts, using different research techniques for spatial analysis, and for dealing with these issues more appropriately, leading to resource optimization and improved living and health conditions.

**Reference**