

## EDITORIAL

# Our home and our cities - present and future investigation in the aim of people's health

Nuestro hogar y nuestras ciudades - investigación presente y futura en el objetivo de salud de las personas

Nosso lar e nossas cidades - investigação atual e futura na saúde das pessoas

Notre maison et nos villes - recherche actuelle et future pour la santé humaine

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Nowadays, the “Horizonte Sanitario’s” journal is a relevant Journal in health rules, mainly to Latin American countries, which involves a huge territory. Some of those countries are achieving the last phase of what it's been called Theoretical and Epidemiological Transition. The invoked theoretical framework had as its mentor Abdel Omran, in 1971. It highlights the type/spectrum of diseases that each country and region has in connection to the type of achieved development. It is highly connected within the Theory of Demographic Transition (focused in the evolution of the fecundity and mortality rates) proposed by Thompson, in 1929. In this case, starting from the observation of European countries.

Also, as we all know, Latin American and European countries are deep social and cultural diversity territories, and in each of them the rural and urban spaces are still showing deep inequalities.

But why am I mentioning these theories? Because many of those countries have achieved huge improvements in people's health, in the last decades, but people continue being affected by several environmental influences/impacts and began to suffer also from new diseases.

We must be aware of the fact that several rules of our daily life are still badly investigated. One of these rules is the effect, felt within our own houses, of pollution from several elements, like the ones related with the materials used in the construction of the houses. To be exposed to granitic rocks that release the radon (a colorless, odorless, radioactive gas discovered in the 19th century) is highly harmful to our health and it is the basis for lung cancer, for example. This has been very well documented in the United States of America. Radon is the second leading cause of death of lung

cancer in the USA, after the consumption of cigarettes.

We cannot also forget the increasingly use of electrical equipment at home, and, most of the times concentrated in some parts of the houses, such as kitchens and bedrooms. The relevant improvement of access of the population to TV, refrigerator, microwave, dishwasher, and washing machine, has increased the exposition to invisible pollution. Also some characteristics of some elements of the houses give place to the development of respiratory diseases, such as conditioned air. The intensive use of mobile phones and its placement during the night nearby the bed is also a relevant issue that has to be investigated, as mobile phones are, nowadays, used by an estimated amount of users of six billions, worldwide.

Besides the immediate environment impacts mentioned before, the accelerated urbanization process has induced relevant environmental and social problems deriving from consumption patterns and adopted lifestyles (Alves, Silva and Remoaldo, 2015).

Noise pollution is another problem that is connected with modern life and urbanization, and it is considered to be one of the main factors of the degradation of urban life. This can be important either in Latin American or in European cities. So, the increasing of the population of some territories and the technological development experienced are important factors that should be considered in our present and future research.

The noise exposure has been increasing in the developed countries and it is estimated that it is also increasing the Disability-Adjusted Life Years (DALYs) lost due to environmental noise. The World Health Organization

(WHO) speaks of about 6,000 years for ischemic heart disease, 45,000 years for cognitive impairment of children and 903,000 years for sleeping disturbance, as highlighted in a report dated from 2011.

It was after the 1970s that several studies were produced underlining the discomfort caused by environmental noise, but these studies were more concerned with traffic noise. The exposure of the population to low-frequency noise from power poles in residential areas can be also an important issue to be investigated and it has been studied more frequently at present, so called, more developed countries. It has significant impacts on physical and mental human health and can cause, for example, sleeping disturbances, psychological distress, cognitive impairment, increased social conflict, and anxiety (Alves, Silva and Remoaldo, 2015).

Related to this environmental issue is the possible carcinogenic effects in residents that live nearby high voltage lines and poles. The evidence is still limited on the carcinogenic potential of extremely low frequency magnetic fields and vis-à-vis the occurrence, for example, of leukemia in children. This limitation has led WHO, in 2007, to classify extremely low frequency magnetic fields as possibly carcinogenic to humans.

In June 2007, WHO published the Environmental Health Criteria 238: Extremely Low Frequency Fields. The recommendations included in this document had already been published, in 2002, in the IARC monographs on the evaluation of carcinogenic risks to humans, by the International Agency for Research on Cancer (IARC).

This means that investigators need to do more researches on the relationship between place and health. Place and health have been more investigated in recent years, as noticed by some international journals concerned with health and relating to the Social Science contribution, such as *Social Science and Medicine* (a Journal from Elsevier). But there is place to enlarge those research contributions a lot. Inequalities in health, mental health, politics in health, obesity, diabetes, genetic, technology and practices in health, nutrition and human habits have been, until present, the most investigated issues.

Having in mind all these expressed concerns, I want to motivate investigators to be more focused on other thematic than the ones that have been published in the "Horizonte Sanitario's" Journal until now. The papers published in this journal have followed what is published in other relevant international Journals. Marketing and Health, Economy and Health, the Quality and Management of Health Services have been published by the Journal in its major issues. As commented, I do believe that future research should concede

much more attention to our own house environment. This way, we will be able, as well, to help people become more empowered to take care of those damages!

### References

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