



EDITORIAL

It is time for planetary paediatrics[☆]

Es la hora de la pediatría planetaria

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The *Homo* (or human) genus emerged approximately 2 million years ago, 4500 million years after the formation of planet Earth. With the extinction of *Homo neanderthalensis* and in only 30 000 years, *Homo sapiens* became the only human species left on the planet, overcoming challenge after challenge with milestones like the agricultural, the industrial and the digital revolutions. In recent years, we have achieved substantial well-being for a large part of the human population worldwide, but at the cost of excessive exploitation of global resources and the deterioration of our habitat and natural ecosystems. In coming decades, the survival of the human being and the habitability of the planet will be at risk.

Climate change, air pollution, deforestation and desertification, ocean and sea health, the loss of biodiversity or microplastics are some of the greatest challenges we face in relation to the health of the planet, but especially to the health and well-being of children and adolescents.¹ Different terms with specific nuances have been used to describe this intersection between the impact on the environment and the impact on human health: environmental health, One Health or, more recently, planetary health, among others.

Children have unique characteristics that make them most vulnerable to exposure to environmental risk factors. According to the World Health Organization (WHO), more than 88% of the burden of disease attributable to climate change will correspond to children under 5 years, despite the

fact that this group only constitutes 12% of the global human population. It is therefore no surprise that the development of these emerging human and environmental health specialties has particularly focused on the paediatric population. Thus, environmental paediatrics or paediatric environmental health (PEH) focuses on environmental risks and diseases from preconception to the end of adolescence.

In this regard, in 2010 the WHO advocated for the creation of Paediatric Environmental Health Specialty Units (PEHSUs) to provide care to affected patients and families; educate the general population on the detection and reduction of environmental risk through community-based interventions; educate and train maternal and child health care professionals; conduct research and generate evidence and provide guidance to national or regional governmental bodies on the subject of PEH. The creation of regional PEHSUs combined with plans for development of regional networks involving both the primary care and hospital levels could be a major contribution to the improvement of the environment and health of children and adolescents.

The pursuit of paediatric environmental health is likely to require overcoming certain structural factors affecting the current health system in order to safeguard the rights of children and specially to provide a healthy environment. Poverty continues to affect millions of children worldwide. Based on data from the 2020 survey of European Union income and living conditions, Spain is the third country with the largest proportion of minors under 18 years living in poverty or social exclusion, with 1 in 3 Spanish children lacking regular access to healthy nutrition and adequate housing. Children of poorer socioeconomic status are also more likely to be exposed to environmental risks like tobacco, alcohol and

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other drugs, have a lower life expectancy and generally are likely to experience more hardship in the future. More than 90% of children in Europe breathe polluted air, which has a deleterious impact on health and neurodevelopment and diminishes future prospects due to poorer academic performance. In many cases, the school environments where our children spend a large part of their days cannot be considered safe or healthy due to motor vehicle traffic, which causes significant air and noise pollution. These are key issues in health, environmental justice and equity that demand our attention and require the implementation of policy at the local, regional and national levels.

The increasing urbanization of our nations is yet another challenge in PEH. In 2018, 74.5% of the European population and 80.7% of the population of Latin America and the Caribbean resided in urban areas, and it is expected that by 2050 these percentages will have grown to 83.7 and 87.8%, respectively, nearly doubling the percentages in 1950.² A study by Jiménez et al found that compared to adolescents that resided in urban settings, adolescents in rural settings rated better in health-related quality of life, psychological well-being, autonomy and duration of sleep.³ In the current context of rural depopulation, population pressure, global pandemic and limited contact with nature, the promotion of rural living and the renaturing of cities through initiatives like “Bosques para la Salud” (Forests for Health) can contribute to improve health and quality of life in children and adolescents.

In 2005, *Anales de Pediatría* published an editorial titled “Paediatric Environmental Health in Spain. Where are the paediatricians?”⁴ Since then, there have been some advances in paediatric environmental health, such as the creation of two PEHSUs in the Region of Murcia and in Catalonia that carry out a broad range of activities (they both publish annual reports, which can be found at www.pehsu.org and www.pehsu.cat), the consolidation of the Committee on Environmental Health of the Spanish Association of Paediatrics and the creation of working groups on PEH in regional paediatric societies. But the harvest is plentiful and the labourers few. Most autonomous communities in Spain still lack a PEHSU, and training in PEH has yet to be universally included in education curriculums at the undergraduate or graduate levels of medical education or the paediatrics speciality.

As paediatricians, we are in a privileged position to exert influence in our communities. According to the UNICEF survey of children and adolescents for the 2020–2021 period, doctors are the professionals most trusted by minors. Chil-

dren and adolescents, who do not have the right to vote, have raised their voices to demand healthier environments, at the urban and planetary levels, in initiatives like Fridays for Future or Revuelta Escolar (school revolt). In this regard, from the Committee on Environmental Health, the Spanish Association of Paediatrics endorses the International Pediatric Association statement “Responding to the Impact of Climate Change on Children”, whereby we commit to “work individually and collectively to minimize the use of fossil fuels, decrease global carbon emissions, mitigate the impact of climate change on children, and achieve climate justice in an ecologically grounded and sustainable world”.⁵ The statement defines several areas to work on and actions to be taken in pursuit of these goals. Will we do what it takes?

Roughly 80% of the determinants of human health are outside the scope of the health care system and in the sphere of politics. Therefore, our commitment to children and adolescents as regards physical and environmental health cannot be circumscribed to the primary care and hospital settings. As individuals or collectively in the form of paediatric teams or scientific societies, we can and must make greater efforts to give our children and adolescents the chance to have a healthy life on this planet. It is urgent and necessary. It is time for planetary paediatrics.

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