

## In this issue

### Physiotherapy Research *Scientometrics for India*

Physiotherapy is now an established practice in India. Regular, well-established Masters and Ph D degrees in the field are awarded by universities and academic institutions. Thus, it stands to reason that knowledge production in the field should also keep pace. And indeed, between 2004 and 2014, the number of papers published per year greatly increased.

But what are the concerns of researchers in this field? On what aspects of physiotherapy does research focus? What format of communication do researchers commonly use? What are they missing out?

A General Article examines scientometric data from ten years of Indian research on physiotherapy. Which universities/institutions in India contribute more to this area of research? Are there differences in the quantity of contributions from the North, South, East or West of India? Turn to **page 2226** in this issue to find the answers.

### Protecting Plant Varieties *Farmers ignorant of rights*

The beginning of this century is significant: seeds that were being transferred from hand to hand between farmers, breeders and researchers became subject to legal bindings. Initiated and partly prompted by the TRIPS agreement with WTO, and modulated by the reactions of farmers, NGOs and activists against the corporatisation of seeds, the Protection of Plant Varieties and Farmers Rights Act came into being in 2001.

This issue presents data collected 10 years later on perceptions of stakeholders – research organizations, scientists, seed companies, breeders and farmers – on the impact of the Act.

The data reflects the strengths and weaknesses of the Act as it exists now and provokes thoughts that promote action on the Act itself as well as on grassroots.

In a General article on **page 2239**, scientists from the Indian Agricultural Research Institute, New Delhi, argue that though research institutions and, to some extent, seed companies, are happy about the Act, farmers are unaware of the Act and the Rights provided to them therein. By providing the main information sources for farmers on issues related to agriculture the article shows us in what direction to take action, such that the objectives behind the Act are achieved.

### Pollution: From Air to Soil *Polycyclic hydrocarbons and metals*

Heavily loaded lorries on the road belch out dark smoke that makes you flinch and hold your breath. Polycyclic aromatic hydrocarbons. They smell toxic. But not heavy metals. Mostly, not only lead from fuel but also copper and other heavy metals, that are as toxic, float around.

By examining the soil, you can, in a manner of speaking, unveil the history and geography of pollution in a particular location. That is what a Research Communication on **page 2285** does. Scientists from different institutions in Guwahati got together and examined 15 distinct sites in the city.

By merely examining soils samples, they can tell us a lot such as which site is more polluted and why. They can also make reliable deductions about possible sources of pollutants in specific locations.

The paper presents a useful methodology for monitoring the pollution status of the soils, one that

can be easily replicated in other cities.

### Infant Mortality in Mizoram *Links between development indices*

The Infant Mortality Rate – the number of infants who die out of a thousand live births – in India has been coming down and is a little above thirty now. And there is a possibility of targeting an IMR of twenty by 2020. A Research Communication on **page 2280** in this issue presents data that is relevant to achieve such a target.

Mizoram, for instance, has an infant mortality rate of 35. The statistic hides a truth by averaging out. Because the Saiha district in the state has an IMR of a whopping 219! The targets for average values can be achieved by focusing action and resources available for reducing infant mortality on such locations.

The communication delves into the contributing factors for this high IMR. And the foremost is nutritional deficiency. While carbohydrate intake is adequate, proteins, fats, vitamins and minerals are lower than recommended levels. Some factors, like iron, phosphorus, folic acid, and vitamin B complex necessary for pregnant women and infants were far too low.

The reason for this is not merely poverty. These are remote locations. Access to health care, education and other public services is limited. Assuring food security, agricultural extension and public distribution, and providing health and education facilities to such pockets of high IMR will have high impact on the development indicator.

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