Round table number 4 : Environmental impact of drugs : inventory and preventive measures

Spadework done on a broad and lesser known subject never before discussed in Giens

The environmental impact of drugs has been widely researched in the past few years with many publications on the subject. It is a very wide topic so, for a first exploration, the workshop has been focusing on the sanitary impact of drug remnants in water.
The first statement made was that our knowledge on the subject is fragmentary, diffuse and insufficient. It is thus urgent to develop our knowledge on the environmental impact of drugs and how it affects people's health. First, and before methodological standards to study remnants as a whole are available, we recommend to focus on certain drugs which are known to be potentially polluting (hormones, anti-tumoral and cytotoxic drugs, antibiotics) as well as new drugs stemming from bio and nanotechnologies.
It is then useful to question the efficiency and actual results of liquid waste treatment methods at their various stages. One should also improve the treatment of drug remnants by patients at the start of the process and encourage as much as possible research towards neutralizing treatments for some targeted drugs known to be particularly polluting.
In order to reduce the sources of pollution it is recommended that efforts be made to encourage people to return unused drugs (Cyclamed), carrying on and developing awareness campaigns towards the general public.
It is also recommended to assess and optimize as much as is needed the still fragmentary treatment of remnants at various stages where the potential sources of pollution are likely to be highly concentrated (hospital and industrial rubbish, remnants from research laboratories…)
In order to better understand the environmental impact of drugs and its consequences on people's health, it appears necessary to develop adequate methods of research and assessment, in particular in ecopharmacoepidemiology.

Besides, a number of potential regulations have been suggested : to introduce ecopharmacoepidemiological surveys in statutory requirements (environmental aspect of Risk Management Plans (PGR) in particular), integrate the assessment of the environmental impact of drugs within the information given to public decision makers : on that subject, no agreement has been found on which organization (necessarily multidisciplinary) should be involved in that assessment nor on which criterion should be used (possibly under a modified

form of the ` Interest of Public Health' legal heading?)
The creation of an eco-bonus should be put on the agenda of the next CSIS (Strategic Council of Healthcare Industries). The concept of sustainable development should be introduced into the LEEM-CEPS framework agreement.

Finally, training of health professionals on the subject itself and the role that they could indirectly play to raise public awareness is to be envisaged.
One of the general conclusions of this workshop has been the necessity to carry on discussions in this new field, the importance of which in terms of public health is still difficult to assess. The group recommends that, on the one hand, in discussions drugs should not be seen as an isolated polluting agent and, on the other hand, that it would be its main feature. The environmental impact of drugs on people's health must be assessed on the basis of population based surveys and taking into account the therapeutic benefit that it offers to people.