

Preventive measures reducing the pharmaceutical input into the environment – some spotlights

Dr.-Ing. M. Winker, Dr. K. Götz, H. Kerber, A. Klipstein, Dr. E. Schramm. ISOE – Institute for Social-Ecological Research, Hamburger Allee 45, 60486 Frankfurt am Main, Germany.

Email of corresponding author: winker@isoe.de

Keywords: hospital, nursing home, education, communication, behaviour change

Pharmaceutical residues are present in all compartments of our environment. Therefore, measures reaching from design of new substances to technical up scaling of wastewater treatment plants are discussed (ISOE, 2008; Götz et al. 2012). It became obvious that preventive measures play an important role to minimise the problem at source. This abstract provides some spotlights on innovative on-going efforts.

“Arznei für Mensch und Umwelt?”¹. The project aims to raise environmental awareness of physicians regarding pharmaceutical usage through implementing specific communication strategies. The impacts of the residues and their relations with physicians’ actions are integrated into their education and trainings to sharpening their awareness.

“Sauber+”². The project analyses the management and emission of pharmaceutical residues in hospitals, sanatoriums, convalescent and nursing homes. Measures in this context seem to be specifically relevant for facilities located in small cities and villages as their effluents have a major impact on the communal ones.

„Den Spurenstoffen auf der Spur”³. The project analyses how pharmaceutical residue can be reduced in the regional water cycle by means of technical and communications measures within the city of Dülmen (North Rhine-Westphalia). Communication tools are events for citizen information, panel discussions, an internet platform, flyers and local media and have a major focus on the inclusion of the local health sector (physicians, pharmacists and employees of the hospital). The transdisciplinary process is led by the regional wastewater utility and the city council.

The authors thank their partners in the three projects for the good collaboration and joint work as well as the BMBF and UBA for funding the work on preventive measures.

References

Götz, Konrad/Corinne Benzing/Jutta Deffner/Florian Keil (2012): Handbook Communication strategies for sharpening environmental awareness in the handling of pharmaceutical drugs. ISOE-Studientexte, No. 16/English Version. Frankfurt am Main, Germany.

ISOE – Institute for Social-Ecological Research (2008): Pharmaceuticals for human use: options of action for reducing the contamination of water bodies. A practical guide. Frankfurt am Main, Germany.

¹ English project title “Medicaments for humans and the environment?”.

² English title „Clean+“. www.sauberplus.de

³ English title „Tracking down micropollutants“. www.dsads.de