

One Health Concept as driver for transdisciplinary cooperation



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The *One Health* Concept (OHC) recognizes the interconnection between human, animal, and environmental health, emphasizing a holistic approach to current challenges in healthcare. It encourages experts from fields like medicine, veterinary science, ecology, sanitary engineering and more to work together. Due to different traditions, methodologies and structures in the sectors, already well-established knowledge and solutions in one sector may be completely new to another sector. The OHC stresses the importance of breaking down traditional silos to commonly address complex health issues, including zoonotic diseases. By embracing the OHC, professionals can develop innovative solutions to global health challenges, leading to a healthier, more sustainable future for both humans and the environment.

As a current example the still ongoing SARS-CoV-2 pandemic boosted the implementation of the OHC by closely bringing together the human medical sector and sanitary engineering in the not really new, but now emerging field of wastewater-based epidemiology (WBE). Wastewater as a “mirror of our society” collecting not only human wastes, but excreted human pathogens as viruses, bacteria and protozoa too, proved helpful for providing supplementary information for pandemic management. That example demonstrated too, that a mutual understanding of sectoral challenges, relevant questions, methodological approaches / limitations and a basic understanding of the counterpart is essential for bringing solutions forward. Antibiotic resistance is another topic that right now is seeing an even more extended approach involving environmental sciences and the veterinarian sector too.

The *One Health* Approach also underlines the need for policy changes and research initiatives that support this collaborative approach as e.g. the programme “EU4Environment – Water Resources and Environmental Data” where WBE is one of the activities. Further on new communication and collaboration structures of already established and operative bodies within the involved sectors have to be established by politics and administration. This has to be implemented on regional, national and international level.

