

# BILBAO SPAIN

## Olaf Rose

### Bio



Olaf holds a degree in pharmacy (University of Münster), a PharmD (UF) and a PhD (University of Bonn). He is a senior researcher and lecturer for pharmacotherapy and translational research at the Paracelsus Medical University in Salzburg (Austria), serves as member of the national German guideline committees for hypertension and coronary artery disease and is owner of three pharmacies in Münster, Germany. His research focus is set on optimizing pharmacotherapy and clinical pharmacy services. Current projects include medication management, artificial intelligence in pharmacotherapy, Parkinson's disease and Parkinson's disease psychosis, assisted suicide, generic switching and cardiovascular prevention/screenings.

## Abstract

Drug shortages have substantially increased during the past years, posing a tremendous and unexpected burden to patients, pharmacists, physicians and manufacturers. This study aims to investigate the causes, scope, perception, impact, and potential solutions to drug shortages. Conducted across multiple centers in Kosovo, Austria, and Germany, the research involves a mixed-methods approach, including questionnaires and semi-structured interviews with various stakeholders. Initial results from 316 pharmacist questionnaires, 8 physician questionnaires and an interview with the German association of generic drug manufacturers reveal the widespread impact of drug shortages on patient care. Pharmacists stated that every third patient encounter is affected by drug shortages (39% in Germany and 30% in Austria). Time to handle the problem in affected patients took 16 minutes (Germany pharmacists), 10 minutes (Austrian pharmacists) and 9 minutes (German GPs). Both professions stated that care in around 14% of the patients is jeopardized. Patients perceived the activities of their pharmacies mainly positively and held politicians responsible. Physicians stated that they either solved issues with drug shortages themselves or left it to the pharmacists. Manufacturers attributed the problem to inflation and price deadlocks.