

EuroDURG BULLETIN

NEWSLETTER of the EUROPEAN CHAPTER of the SPECIAL INTEREST GROUP of
DRUG UTILISATION RESEARCH (SIG-DUR) of
the INTERNATIONAL SOCIETY OF PHARMACOEPIDEMOLOGY (ISPE)



Welcome message from the chair

BY ELISABETTA POLUZZI

Dear friends,

It's a great honour to have the opportunity to stand for the skilled and enthusiastic community of the European Drug Utilisation Research Group (EuroDURG). I am following Katja Taxis in this role, who guided us in the challenging time of 2020-23, when she, supported by the past chairs and the Executive committee members, was able to maintain and reinforce drug utilisation research.

 **EuroDURG**
European Drug Utilization Research Group

 **ispe** International Society
for Pharmacoepidemiology

Inside:

Chair's Notes •

A look into EuroDURG
Conference •

Projects •
News about the 2nd
edition of the DUR book •

Upcoming events •
Summer school •

Executive Committee
2023-2025 •

This was possible through educational activities (summer schools), contributions at many national and international conferences, participation in research projects where drug utilisation was a key issue and supporting the huge work for preparing the second edition of the DUR book.

My duty started during the EuroDURG Bologna conference, organized in June 2023. At that time, we received really useful inputs for defining the most important aspects of DUR to be dealt with in the next few years: overcoming barriers in DU data access and supporting the availability of DU open data, adapting DUR methods to available and emerging data sources, supporting educational initiatives for disseminating advanced DU methods in various settings, providing DU researchers

with opportunities to disseminate their DU activities. We should overall join our efforts on raising awareness of the strategic role of drug utilisation in even more research subjects, especially in international research projects where drug exposure, drug prescriptions/supplying or even unmet drug treatment needs are involved in the research plan.

We strongly appreciate the contribution of each member of the DU community for giving Drug Utilisation Research the place it deserves in all areas related to DU, from health policy to clinical research.

ELISABETTA POLUZZI



Post Conference Report

**ISPE European Drug Utilization Research Group (EuroDURG) Conference 2023
Sustainability of drug use: equity and innovation**

June 27th - 30th 2023

Complesso Belmeloro, University of Bologna, Italy

For the complete report, please read QR code.



Executive summary

At the end of June 2023, EuroDURG, the European chapter of ISPE special interest group for Drug Utilization Research, welcomed 243 delegates, from 34 countries to our 4-day meeting entitled Sustainability of drug use: equity and Innovation, held in Bologna, Italy at the University of Bologna.



Our ambition was to challenge ourselves to consider the sustainability of the use of medicines from a global perspective and the unmet needs in drug utilization. The conference speakers (16 invited speakers and 22 invited chairs) rose to the challenge.

The conference was centred around three key plenary sessions: **“Sustainability of drug utilization”**, **“Globalization of the medicines use”** and **“Unmet needs in drug utilization”** from a clinical, patient and drug policy perspective. Celebration of the 50 years of drug utilization research closed the conference.

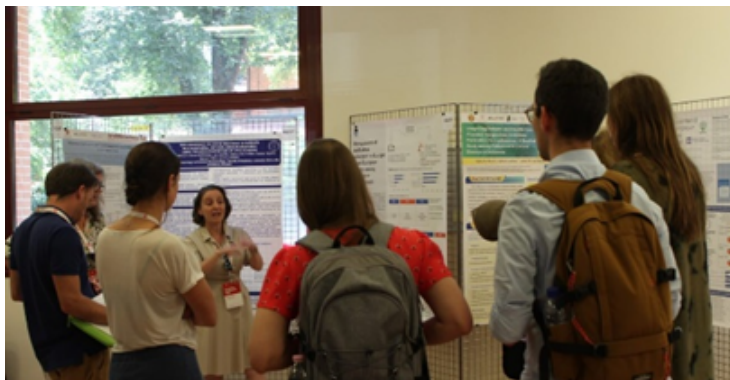
Plenary sessions were complemented by an extensive program of introductory and advanced education sessions, and a mix of plenary and parallel sessions and workshops. Before the main program, the second edition of the ENABLE Training School was hosted. A total of 50 oral abstract presentations and 181 posters contributed to stimulate scientific discussion.

The scientific program was accompanied by a EuroDURG social program to promote networking across the 3 days. We started with a Welcome Reception, hosted by Palazzo De’ Toschi, in the city centre, introduced by local authorities and enriched by a historical lecture. On Thursday night, delegates were invited to a gala dinner in Palazzo Isolani, another precious historical building in the city centre. They also had the opportunity to visit the main University museum in the early morning or late afternoon of the conference days.

Exhibition/Sponsorship

There were exhibitors from the WHO Collaboration Centres and NuPhaC (Nurse and Pharmaceutical Care network).





Speakers

1st plenary session, titled **Sustainability of drug utilization-economic, social and environmental aspects** with lectures given by **Giampiero Mazzaglia** from the University of Milano-Bicocca, **Aukje Mantel-Teeuwisse** from the Utrecht University, and **Marmar Nekoro** from the Uppsala University.

2nd plenary session was dedicated to **globalization of medicine use: advances in DUR across the globe**. **Lisa Pont** from the University of Technology Sydney opened the session with a lecture on the extent and scope of DUR across the globe, informed and drawn from the globalization section in the second edition of our DUR Methods and Applications book. This followed by lectures by **Claudia Osorio** from the Fundação Oswaldo Cruz focusing on Region South-Central America, and **Amanj Kurdi** from the University of Strathclyde focusing on Region Africa, both presenting summaries for regions, highlights, challenges and opportunities for cross-national studies.



The full conference program book and abstract book are available through the EuroDURG conference [website](#).



3rd plenary session focused on **unmet needs in drug utilization - clinical, patient and drug policy perspective**, and provided an overview of the drug development during the last 50 years and key challenges remaining in terms of unmet needs and areas where future DUR studies may help in meeting this need. **Björn Wettermark**, from Uppsala University, gave an overview of drug development during the last 50 years and changes that the drug utilization encountered. This was followed by a lecture by **Aukje Mantel-Teeuwisse** with the update on the WHO priority medicine report, describing the situation today, the key unmet needs or gaps with large disease burden in terms of DALY and no/poor treatment alternatives.

The last plenary was followed by a **celebration of the 50 years of drug utilization research** in which pioneers in the field together with new researchers discussed the history and the future perspective on drug utilization research. The invited pioneers were Ulf Bergman (Karolinska Institutet), Monique Elseviers (University of Antwerp), Frank May (University of Queensland), Nicola Montanaro (University of Bologna), Gyöngyver Soos (University of Szeged), and Robert Vander Stichele (University of Gent). Following the pioneers' contribution, representatives of young DURGers discussed their view on the future Drug Utilisation Research challenges: Isabella Ekheden (Karolinska Institutet), Tanja Mueller (University of Strathclyde), Andrea Spini (University of Verona), Indre Trečiokienė (University of Vilnius).

Our plenary sessions were complimented by an **extensive program of introductory and advanced education sessions**, led by international experts, including the educational session held together with the ENABLE cost action focusing on adherence, to kick off the conference on Tuesday afternoon. Before the main program, the second edition of the **ENABLE Training School** was hosted.

This was followed by a mix of interspersed parallel sessions and workshops and mini symposia focused on adherence, cross-national comparisons, methodological challenges in DUR, AI/Machine learning and big data, DUR in specific therapeutic areas, health policy, safety, drugs and environment, polypharmacy, deprescribing, patient perspectives, the impact of COVID-19 on DU, sustainable DU and challenges with new medications.



A total of 231 abstracts originating from 34 countries were received via the conference website managed by Fondazione Alma Mater.

A full review process was undertaken by the EuroDURG Scientific Committee, supported by an extended cohort of reviewers. Overall, 181 posters were accepted (DUR and safety, quality of medicine use, specific populations and therapeutic areas, health policy, polypharmacy and deprescribing, methodological advances in DU, cross-national comparison, DUR and pandemics, interventions and implementation, patient perspectives, medication adherence) and poster sessions took place in the afternoons of Wednesday 28th and Thursday 29th June. A further 50 abstracts were accepted as oral presentations.

EuroDURG Best Poster Awards 2023

Exploring Current Approaches towards Patient Prioritisation for Clinical Pharmacy Services in Inpatient Mental Health Care in the UK: a multi-method research study.

Fatema Alshaikhmubarak, Richard Keers, Petra Brown, Penny Lewis

University of Manchester, Manchester, United Kingdom. NIHR Greater Manchester Patient Safety Translational Research Centre, Manchester, United Kingdom. Pennine Care NHS Foundation Trust, Manchester, United Kingdom. Manchester University NHS Foundation Trust, Manchester, United Kingdom

The association between ADHD medication use in children, adolescents and young adults and the risk of injuries leading to emergency department admission or hospitalization

Helen-Maria Vasiliadis, Carlotta Lunghi, Elham Rahme, Louis Rochette, Martin Gignac, Victoria Massamba, Fatoumata Binta Diallo, Alvine Fansi, Samuele Cortese, Alain Lesage

Department of Community Health Science, University of Sherbrooke, Centre de Recherche Charles-Le Moyne, Longueuil, Canada. Department of Medical and Surgical Sciences, University of Bologna, Bologna, Italy. Department of Health Sciences, Université du Québec à Rimouski, Lévis, Canada. Department of Medicine, Division of Clinical Epidemiology, McGill University, Montreal, Canada. Institut national de santé publique du Québec, Quebec, Canada. Montreal Children's Hospital, McGill University Montreal, Montreal, Canada. Centre intégré universitaire de santé et de services sociaux de l'Ouest-de-l'Île-de-Montréal, Montreal, Canada. University of Southampton, Southampton, United Kingdom. Department of Psychiatry, University of Montreal, Montreal, Canada

General Practitioner Adherence to Antibiotic Prescribing Guidelines for Ear and Respiratory Conditions in Dutch General Practice Before and During COVID-19

Maarten Lambert, Renee Veldkamp, Jochen Cals, Anke Lambooij, Liset Van Dijk, Karin Hek
University of Groningen, Groningen, Netherlands. Netherlands Institute for Health Services Research, Utrecht, Netherlands. Maastricht University, Maastricht, Netherlands. Dutch Institute for Rational Use of Medicine, Utrecht, Netherlands

Medication use during COVID pandemic in Hungary

Márta Csatornai, Ria Benkő, Zsófia Engi, Helga Hambalek, Mária Matuz, Dezső Csupor, Péter Doró
University of Szeged, Szeged, Hungary

Tolvaptan's impact on the quality of life: a monocentric observational study in the Nephrology, Dialysis and Renal Transplantation Unit of Bologna

Michele Fusaroli, Valentina Giunchi, Valeria Aiello, Emanuel Raschi, Elisabetta Poluzzi, Irene Capelli
Department of Medical and Surgical Sciences, University of Bologna, Bologna, Italy. Nephrology, Dialysis and Renal Transplant Unit, IRCCS - Azienda Ospedaliero-Universitaria di Bologna, Alma Mater Studiorum University of Bologna, Bologna, Italy

Pharmacist and patient perspectives on the use of video consultations in primary care in Scotland

Aimee Ferguson, Rosemary Newham, Emma Dunlop, Kate Preston, Marion Bennie
Strathclyde Institute of Pharmacy and Biomedical Sciences, University of Strathclyde, Glasgow, United Kingdom. Public Health Scotland, Edinburgh, United Kingdom

CONGRATS
to

WINNERS

Report on European Projects

- **DURDAM**
- **Transparency of ATC/DDDs**
- **Adherence project**
- **Happy patient**
- **Polypharmacy, IQVIA**
- **CNC Biological drugs**
- **RiskAwareTTS**



**SCIENCE &
TEAM
WORK**

EuroDURG

DURDAM

The DURDAM project seeks consensus on dimensions of drug utilization dataset maturity, laying the groundwork for a Drug Utilization (DU) database maturity appraisal tool. The four key drug utilization insights; patterns of drug use, quality of drug use, determinants of drug use, and outcomes of drug use guide our understanding. To achieve comprehensive insights for all medicines and all citizens, mature drug utilization research databases are essential, embodying both comprehensiveness and completeness.

The project is currently refining and building consensus around statements for dimensions of drug utilization dataset maturity. Once this is completed then a Drug Utilization (DU) database maturity appraisal tool will be developed.

by Sean MacBride-Stewart

ATC/DDD

On 21st December 2023 the project "ATC/DDD system implementation, maintenance and reporting" was kicked off. The initiative, which stems from a lively discussion held during the session "Methods in DUR" at the last EURODURG conference in Bologna, has three main objectives: 1) to collect information on national procedures for the creation and maintenance of national registers with a link between the ATC/DDD index and the National Medicinal Product Dictionary, the corresponding calculated number of DDD per package and their availability in the public domain; 2) to describe how pharmacoepidemiologists report on the use ATC/DDD methodology in the published literature; 3) to develop recommendations for the design and creation of a prototype online application for the certified calculation of number of DDDs per package. The expected result from this research project, which currently involves about 30 researchers from over 20 different institutions from around the globe, will contribute to further promoting harmonization of the application and use of the ATC/DDD standard across countries and finally facilitating DUR worldwide.

by Giuseppe Roberto

COST ENABLE project releases a repository of Medication Adherence Technologies

During 2023 The EU-funded European Network to Advance Best practices & technology on medication adherence (ENABLE) project launched its new online repository of available Medication Adherence Technologies (MATech) in Europe. MATech include, e.g., electronic devices that record medication intake, dose dispensers that instruct on time or mode of administration, mobile applications that provide information about a health condition or medication or reminders, etc. The aim of the repository is to facilitate the implementation of evidence-based solutions to promote better adherence, a challenge that has remained the same over many years. Other activities taking place within the project during 2023, are the annual general assembly in Zagreb, and a training school organized in connection with the EuroDURG conference in Bologna, Italy focusing on MATech. Surveys have been conducted for policymakers and healthcare professionals and several researchers were funded for short-term scientific missions, i.e., scientific visits to other universities to learn and establish research collaboration around adherence. In 2024, the project enters the last year.

In 2024, the project enters the last year. There is an upcoming spring conference in Istanbul, Turkey and in August, the World Adherence Forum will be arranged in Brussels. The network includes more than 100 researchers from 40 European countries.

Drug utilization researchers interested in medication adherence are most welcome to join the Enable project. More information is found on the project [website](#).

by Bjorn Wettermark.



Happy patient

This project evaluated the impact of a multifaceted intervention programme on antibiotic prescribing and dispensing in four patient-centred settings in five European countries. As EuroDURG, we participated in work package 6, the community pharmacists. And this is part of the PhD project of Maarten Lambert which he also presented at the EuroDURG conference in Bologna. The project was completed in December 2023 and we are preparing the main publications from the project at the moment. In a nutshell, the methods and results are as follows: Following the Audit Project Odense method, health care professionals (HCPs) from general practice, out-of-hours services, nursing homes, and pharmacies across five European countries, self-registered encounters with patients related to antibiotic prescribing and dispensing before and after a multifaceted intervention. A total of 345 HCPs registered 10,744 infections in the first registration period and 10,207 infections in the second period. There was a significant reduction in unnecessary antibiotic prescriptions in general practice, whereas limited or no effect was observed in out-of-hours services and nursing homes.

Pharmacies demonstrated significant improvements in safety checks and providing correct advice to patients. Some external factors (the COVID-19 pandemic and shortage of narrow-spectrum antibiotics) might have hampered the benefits of this intervention. More information [here](#).

Polypharmacy-IQVIA

This project is a collaboration between EuroDURG members and IQVIA. We measured the prevalence of polypharmacy and described the prescribing of selected medications known for overuse in older people with polypharmacy in primary care. This was a multi-national retrospective cohort study across six countries: Belgium, France, Germany, Italy, Spain, UK. We used anonymized longitudinal patient-level information from general practice databases hosted by IQVIA. Patients ≥ 65 years were included. Polypharmacy was defined as having 5-9, and ≥ 10 distinct drug classes (ATC Level 3) prescribed during 6 months. Selected medications were: opioids, antipsychotics, proton pump inhibitors (PPI), and benzodiazepines (ATC Level 5). We included country experts in the health care context to interpret findings. Our main findings were that more than half of older people were prescribed ≥ 5 drugs in four of the six countries. High usage of PPIs and benzodiazepines is concerning given known adverse effects and should be a focus for polypharmacy management. Cross-national studies, using routine data are an efficient tool for surveillance and evaluation. We submitted the manuscript of the project to a journal.

by Katja Taxis

Cross-national comparative study on biopharmaceuticals

During the last decades, biopharmaceutical drugs have improved the treatment of a large range of different diseases. The biopharmaceuticals market has developed much faster than the market for traditional small molecules and is believed to have a large potential for further growth with many new interesting drugs in the pipeline. However, many of these new drugs are expensive which challenges health systems, potentially leading to inequities in access between and within countries.

A cross-national comparative study on the uptake of biopharmaceuticals in different European countries is therefore planned to take place during 2024. The study is organized by Uppsala University as a part of a master's thesis. The study aims to assess differences in the diffusion of biopharmaceuticals across different European countries and to identify key factors, such as different policies, healthcare infrastructure or economic considerations, that are influencing the rate of introduction and diffusion.

An invitation to participate in the project and a request for comparable drug utilization data has been sent out to selected EuroDURG members in most European countries. For more information, please contact the research team from Uppsala University:

[Ivar Veszelej](#), master student
[Björn Wettermark](#), professor

Impact of EU label changes and regulatory communication on SARS-CoV-2 adenovirus vector vaccines in the context of thrombosis with thrombocytopenia syndrome (TTS): risk awareness and adherence (RiskAwareTTS)

The European Medicines Agency (EMA) in 2021 has provided recommendations to learned societies and healthcare professionals when assessing people with signs and symptoms of thrombosis with thrombocytopenia syndrome (TTS) after being vaccinated with Vaxzevria or COVID-19 Vaccine Janssen. In addition, the EMA also published safety updates on these vaccines, highlights from expert meetings and news items on its website. This study aimed to evaluate the impact of the regulatory actions for Vaxzevria and for COVID-19 Vaccine Janssen following the 2021 review.

The multi-country study was conducted in six member states of the European Union:

Denmark, and Greece. Latvia, Netherlands, Portugal and Slovenia.

We reviewed policy documents in these countries, surveyed 1659 and interviewed 41 healthcare professionals, and surveyed 4572 citizens. We observed a great variability across countries as to the implementation of their vaccination policies and subsequent changes following the regulatory communications. The outcomes from the healthcare professionals' surveys indicated that while awareness about the risk of TTS was extremely high among healthcare professionals across the countries studied, some gaps existed in their knowledge about signs and symptoms of TTS and its likely outcomes and perceptions of risk groups. Healthcare professionals reported a clear preference for national guidelines as a source of information on TTS risk, with the actual use of the EMA information remaining relatively moderate across countries, with some variations. The public respondents were also aware of TTS risk but had limited knowledge about its signs and symptoms. Across most countries, attitudes towards COVID-19 vaccination remained more positive than negative, yet perceptions towards the safety of COVID-19 vaccines were altered, most likely due to the reports about TTS than to the changes to the vaccination policies. For more information, please contact the PI of the project:

teresa.leonardo.alves@rivm.nl

ENCePP activities

The European Network of Centres for Pharmacoepidemiology and Pharmacovigilance (ENCePP®) is a network coordinated by the European Medicines Agency (EMA). The members of this network (the ENCePP partners) are public institutions and contract and research organisations involved in research in pharmacoepidemiology and pharmacovigilance.

One of the notable achievements in ENCePP's 2023 activities is the release of the 11th Revision of the [ENCePP Guide on Methodological Standards in Pharmacoepidemiology](#). This revision, a collaborative effort between EMA and the ENCePP Research Standards and Guidance Working Group, includes a revamped structure to better depict the flow of evidence generation and places increased emphasis on crucial methodologies. Several chapters have been updated, and some have undergone revisions to address the rapidly changing landscape, incorporating elements such as the use of DARWIN EU®, comparative effectiveness research, artificial intelligence, and real-world evidence (RWE) in pharmacoepidemiology.

Three ENCePP Working Groups actively pursued various topics in 2023, including regulatory outcomes of studies requested by regulators, evaluation of secondary data utilization in observational studies registered in the EU PAS Register, and post-authorization studies in the pediatric population using data from the EU-PAS registry. ENCePP conducted two Steering Group meetings and a virtual annual plenary meeting for its partners in 2023. Participants deliberated on the future direction of ENCePP, positioning its work within the broader context of a changing regulatory environment. Discussions also covered potential changes to ENCePP and Steering Group mandates, along with updates to the ENCePP work plan.

As part of its activities in 2023, ENCePP focused on developing a new website and EMA catalogues related to real-world data (RWD) sources and non-interventional studies (NIS). These resources are intended to replace the ENCePP Resource Database and the EU PAS Register.

Establishing a comprehensive catalogue of data sources and enhancing the study catalogue aims to enhance transparency in observational studies, improve the discoverability of studies and data sources, and contribute to the safety and effectiveness of medicinal products.

by Katarina Gvozdanović

[Source](#)

SIG DUR

As the incoming chair of the ISPE DUR SIG, I am really looking forward to supporting and promoting a collaborative and interactive forum across all areas of DUR to inform clinical practice and policy to improve quality use of medicines over the next 2 years. I also believe in the importance of supporting our next generation of DUR leaders through increased mentorship and engagement with our PhD/early career researchers. We are planning on holding bi-monthly meetings that includes topics such as SIG updates, presentations of research, protocols and establishment of collaborative working groups including topics such as mental health, antibiotic use and drug shortages. We held our first meeting of the year in January, with the next one planned for March. I would encourage you to sign up for ISPE's [Exchange site](#) where we will be posting notifications of upcoming meetings, calls for presenters and any DUR SIG news.

I have been involved with the DUR SIG for many years, including Chair of the Education Committee, Spotlight Poster Sessions and am currently serving on ISPE's Board of Directors Academic representative Asia/Pacific. I am Research Professor at University of South Australia and Co-Director of the Registry of Senior Australians Research Centre at the South Australian Health and Medical Research Centre, that aims to evaluate the quality of ageing and aged care services including medication utilisation, safety and effectiveness for older Australians.

by Gillian Caughey

European Medicines Agency (EMA) activities

In 2023, EMA continued various activities aimed at facilitating the integration of RWE into drug regulatory decision-making. This primarily concerns the continuation of activities related to Data Analysis and Real-World Interrogation Network (DARWIN EU), the publication of the Data Quality Framework for EU medicines regulation and the continuation of activities related to the migration of the EU PAS Register and ENCePP Resources Database to new electronic catalogues.

DARWIN EU has completed its first year of operations. After the initial onboarding of 10 data partners, the network has launched its first four studies utilising real-world data (RWD) from across Europe to better understand diseases, populations, and the uses and effects of medicines. The second phase of implementation is in progress with 16 studies (including different use cases across the medicinal product lifecycle), the selection of a further 10 data partners, and the establishment of analytical pipelines and codes.

On October 30th 2023, EMA published a Data Quality Framework for EU medicines regulation. The document provides general considerations that can be applied to a wide range of data sources to characterise and assess data quality for decision-making. It also outlines what data quality actions and metrics can be put in place in different regulatory decision-making scenarios and introduces maturity models for the characterisation of data quality for regulatory purposes.

In addition, in 2023, EMA continued plans for the EU PAS Register and ENCePP Resources Database migration to new electronic catalogues. This new catalogue will replace and enhance the current ENCePP Resources Database and the EU PAS Register, improving this way data discoverability by providing improved catalogue search features on a wider set of metadata. The new catalogue will facilitate researchers in discovering the most suitable data sources for their studies and it will support the assessment of study protocols and study results. Also, it aims to provide higher interoperability between studies and data sources.

*by Katarina Gvozdanović and
Carla Torre*



EUROPEAN MEDICINES AGENCY
SCIENCE MEDICINES HEALTH

NuPhaC projects

by Tinne Dilles

SelfMADiP

(2020–2025) is a project under the supervision of Tinne Dilles and Eva Goossens and the PhD project of Laura Mortelmans (University of Antwerp, NuPhaC). The main goal of the SelfMADiP project is to evaluate the effectiveness of in-hospital medication self-management on medication adherence after hospital discharge. However, before evaluating the SelfMED intervention, measures to support medication self-management are developed.

The SelfMADiP-project aims:

1. To explore medication self-management deficiencies after hospital discharge in patients with polypharmacy.
2. To develop and evaluate recommendations for healthcare providers to support patients with medication self-management problems.
3. To explore medication-related shared decision-making (SDM) between nurses and patients as a supportive measure for medication self-management.
4. To assess the feasibility and validity of a combined set of methods measuring medication adherence (i.e., a medication diary, self-report questionnaire and pill count) in patients with polypharmacy from a longitudinal perspective.
5. To evaluate the effect of an in-hospital medication self-management intervention on medication adherence after discharge in patients with polypharmacy.

DEPEND

(2020–2024) is a project under the supervision of Tinne Dilles, Kristel Paque (University of Antwerp, NuPhaC) and Joachim Cohen (Vrije Universiteit Brussel, End of Life Care Research Group) and the PhD project of Degefaye Anlay. The project Uses big data to strengthen the evidence about the effects of prescribing and deprescribing medications in older people with limited life expectancy. Background and aim: Generally, nursing home (NH) residents use many medications. Medications are beneficial and needed to treat symptoms and diseases, but some medications have questionable benefits at the end of life. These medications with questionable benefits are suitable for deprescribing. Deprescribing means stopping or tapering a medication. Up to now, we do not know the effects of changes in medication use (e.g. deprescribing medications with questionable benefits and initiating beneficial medications) at the end of life. In this project, we aim to evaluate these effects on the quality of life of NH residents with limited life expectancy, using innovative data techniques.

Project aims:

- (1) a qualitative study to explore the factors that facilitate or hinder deprescribing of medications from physicians', nurses' and pharmacists' point of view,
- (2) an interrupted time series study to evaluate the effects of clinical practice deprescribing guidelines on actual changes in medication use,
- (3) a prospective cohort study to describe health and medication changes of a cohort of NH residents with limited life expectancy, and
- (4) quasi-experimental matched cohort analyses to measure the effects of changes in medication use on quality of life, morbidity and mortality.

Diversity, Polypharmacy & Pharmaceutical Care

(2020 - 2026) (Tinne Dilles and Hilde Feyen, University of Antwerp, NuPhaC) investigates the factors of societal diversity related to the way patients are dealing with polypharmacy. The population of Antwerp, Flanders and Belgium is getting more and more diverse. Diversity means heterogeneity and individuality and is all around society. In health care diversity is associated with problems and difficulties. Numerous research demonstrates inequality in access and use of healthcare; healthcare outcomes; and differences in the quality of care received. Medication is worldwide the most used intervention in health care.

Dealing with complex pharmacotherapy or polypharmacy (use of 5 or more medicines) can be quite a challenge for the patient. Tailored pharmaceutical care can help to reduce the negative impact of polypharmacy on quality of life and improve medication adherence. To provide tailored-made care for a diverse population, it is important to have insight into the influence of factors of diversity that might impact dealing with polypharmacy.

by Monique Elseviers

Glasgow Declaration: Increasing Access to Drug Utilization Data

The EuroDURG community initiated an action to increase access to drug utilization (DU) data during the EuroDURG Conference in Glasgow in November 2017. A DU data working group with global representation was created aiming to improve the Declaration and to develop a strategy for dissemination. During the 2018 ISPE (International Society of Pharmacoepidemiology) Conference in Prague, a workshop was organized to discuss the challenges of accessing DU data in different parts of the world, to identify barriers and enablers and to propose strategies to address these. From the workshop findings, a final version of the Declaration was presented at the EuroDURG conference in Szeged, Hungary in 2020. This was followed by an engagement of ISPE with their endorsement of the Declaration secured in February 2022.

During the coming month, the Declaration will be made available on the ISPE website and distributed to international and national organizations involved in the health care of patients at the global or national level. Additionally, the declaration will be disseminated using social media techniques with a call for subscribing to the Declaration on an individual base. All these forms of support will be assembled and brought to the attention of policymakers, calling for improved DU data availability and accessibility to DU researchers with the ultimate goal of improving health care for all, at the national and the global level.

DURbook: Drug Utilization Research: Methods and Applications, second edition

It is with great pleasure that we announce the publication of the second edition of the DURbook in the springtime of 2024. Thanks to the participation of 19 editorial board members, 97 authors, and 67 external reviewers, we are reaching this result after five years of intense collaborative and sustained efforts.

We started our editorial activities in 2020 by questioning our stakeholders about specific requirements followed by a year of finetuning the content of this new edition. Mainly in 2022, the making of this second edition followed a strict organizational pattern. The editorial board (EB) met virtually monthly. Two EB members were assigned to each section of the book. They were responsible for communicating with the authors of their chapters, discussing the content, keeping deadlines, and having a first critical reading of the delivered chapters. A further internal review of each chapter was completed during hybrid DURbook weekends organized at the universities of Vilnius, Copenhagen, Uppsala, Bologna and Antwerp. Afterwards, a revised version of each chapter was sent for further comments to one or two external reviewers not involved in the book's development.

The new edition consists of four overarching sections: introduction, methods, applications and a new fourth section on the globalization of DUR. New chapters were added handling, e.g., aggregate level analyses of DU data, artificial intelligence/machine learning, ethical aspects in DUR, and environmental pharmacoepidemiology. More than in the previous edition, the application section focuses on specific challenges, and expands on how to deal with these, keeping in mind the educational purpose of the book. We hope that this second edition of the DURbook will become a helpful tool and a source of inspiration for all researchers working with DU data.



MATech repository

Do you know **medication adherence technology (in short, MATech)** that should be included in the international ENABLE repository?

And even better, do you have the contact details of someone in the company who can decide on the inclusion in the repository? We would appreciate you sharing this information with us. It would also be helpful if you could share this request within your network. You can access the repository and look at the first [MATech](#) included.

We are contacting you on behalf of the European Network to Advance Best practices & technology on medication adherence (ENABLE). [ENABLE](#) is a European Cooperation In Science and Technology (COST) project (CA19132) that started in October 2020, includes over 150 members from 40 countries, and aims to facilitate the development and implementation of medication adherence support practices and technologies by European health systems in effective, safe and sustainable ways.

We aim to improve the accessibility of medication adherence technologies to their intended users. To this end, ENABLE is currently developing an online repository, a website where interested people (patients, professionals, researchers, etc.) would be able to search for MATech that suit their needs and learn about them, so that they can make informed decisions on whether they may want to try them out in their research or practice. The repository is aimed to include all varieties of adherence-improving technologies, e.g., electronic devices that record medication intake, dose dispensers that instruct on time or mode of administration, mobile applications that provide information about a health condition or medication or reminders, methods for clinicians to apply in consultation to assess and support adherence, etc., etc. For technology developers, the repository is aimed to provide visibility for their products in a structured non-commercial way and in that way aid increase in overall recognition and use of adherence technology.

Which technologies qualify for inclusion in the repository?

A MATech is defined for this repository as evidence-based health technologies (i.e., devices, techniques, procedures/services, or systems) used in management of medication adherence by diverse stakeholders (i.e., patients, caregivers, health care professionals, etc.).

The following inclusion criteria are considered:

- Presented as aiming to cover at least one aspect of medication adherence management o obtaining information about medication intake according to plan (e.g. automatically recording intake time with an electronic monitoring device), and/or o offering support if difficulties encountered or to prevent difficulties (e.g. automatic reminder of intake time, visual feedback of past medication intake performance compared to goals)
- Having a digital component - i.e. using information and communication technology (ICT). A definition of digital health is available [here](#). A list of domains included in ICT is available [here](#).
- At a development stage of at least small-scale prototype validated in local environment (Technology Readiness Level [TRL] 4 and above; a brief description of TRL can be found [here](#)).

Exclusion criterion:

Since the main objective of the repository is to encourage collaborative work, MATechs that currently do not have a point of contact for further research or use/implementation by users in routine care should be excluded.

by Tinne Dilles





ISPE 2024

2024 ISPE
ANNUAL MEETING

ispe2024.org

ispe
International Society
for Pharmacoepidemiology

August 24-28 **BERLIN, GERMANY**
ESTREL CONGRESS CENTER

Celebrating 40 years of
Advancing Pharmacoepidemiology

ABSTRACT INFORMATION

Abstracts site closes: February 14, 2024

Hotel Information

Estrel Berlin
Sonnenallee 225, 12057 Berlin,
Germany
+49 30 68 310

Program Outline

Meeting dates/location: August 24-
28, 2024, Estrel Congress Center
(ECC), Berlin, Germany
Draft program is [here](#).

DISCOVER THE CONFERENCES THIS YEAR

HEALTH DATA RESEARCH (HDR) UK CONFERENCE 2024

Health Data Research (HDR) UK Conference 2024
Theme: The grand challenges in health data, Leeds, UK
5-6 March

MID-YEAR MEETING OF THE INTERNATIONAL SOCIETY OF PHARMACOEPIDEMIOLOGY (ISPE)

Theme: Expanding pharmacoepidemiology to address emerging global challenges, Orlando, Florida/USA
14-16 April

INTERNATIONAL WORKSHOP OF THE EUROPEAN SOCIETY OF CLINICAL PHARMACY (ESCP)

Theme: Pharmacotherapy challenges in the developing years: from conception to adolescence, Bratislava, Slovakia
25-26 April 2024

HEALTH SERVICES RESEARCH AND PHARMACY PRACTICE (HSRPP) CONFERENCE 2024

Theme: Sustainable development in healthcare, Cork, Ireland
25-26 April 2024

ISPOR 2024

Atlanta, Georgia/USA
5 - 8 May 2024

22. INTERNATIONAL SOCIAL PHARMACY WORKSHOP

Theme: Reaching new heights: expanding pharmacy practice, Banff, Canada
7 - 11 June 2024

16. CONGRESS OF THE EUROPEAN ASSOCIATION FOR CLINICAL PHARMACOLOGY AND THERAPEUTICS

EACPT 2024 Rotterdam-Precision Clinical Pharmacology, Rotterdam, Netherlands
18-11 June 2024

FEDERATION OF EUROPEAN PHARMACOLOGICAL SOCIETIES (EPHAR) 9TH EUROPEAN CONGRESS OF PHARMACOLOGY

Athens, Greece
23 - 26 June 2024

40. INTERNATIONAL CONFERENCE ON PHARMACOEPIDEMIOLOGY & THERAPEUTIC RISK MANAGEMENT (ICPE)

Theme: 40 years of real-world evidence science, Berlin, Germany
24 - 28 August 2024

82. INTERNATIONAL FEDERATION OF PHARMACISTS (FIP) WORLD CONGRESS OF PHARMACY AND PHARMACEUTICAL SCIENCES

Theme: Innovating for the future of healthcare, Cape Town, South Africa
1 - 4 September 2024

2024 INTERNATIONAL POPULATION DATA LINKAGE NETWORK CONFERENCE

Chicago, Illinois/USA
15 - 18 September 2024

20. CONFERENCE OF THE EUROPEAN GERIATRIC MEDICINE SOCIETY (EUGMS)

Valencia, Spain
18 - 20 September 2024

52. EUROPEAN SOCIETY OF CLINICAL PHARMACY (ESCP) SYMPOSIUM

Theme: Implementing and scaling sustainable Clinical Pharmacy Practice, Krakow, Poland
Week of 21 October 2024 (exact dates TBC)

17. EUROPEAN PUBLIC HEALTH CONFERENCE 2024

Theme: Sailing the waves of European public health: exploring a sea of innovation, Lisbon, Portugal
12 - 15 November 2024

ISPOR EUROPE 2024

Barcelona, Spain
17 - 20 November 2024

16. ANNUAL MEETING OF THE NORDIC PHARMACOEPIDEMIOLOGY NETWORK (NORPEN)

Copenhagen, Denmark
18 - 20 November 2024

ESPACOMP 2024

November 2024

OTHER RELATED MEETINGS

28th Congress of the EAHP
20-22 March 2024, Bordeaux, France

Access to medicines, Vienna (Austria), April 25-26, 2025

Social Pharmacy, Banff (Canada), July 7-11, 2024

Pharmaceutical innovations, Amsterdam (NL), July 16-19, 2024

PRIMM CONFERENCE

PRIMM presents a fantastic opportunity for multi-disciplinary practitioners and researchers involved in medicines management and optimisation practice, quality improvement and research to network, share and learn.



Researchers including Laura Sahm, Stephen Byrne, Kieran Dalton and Kevin Murphy of the School of Pharmacy UCC, are currently assisting in the data analysis and manuscript drafting for publications emanating from this project.

In addition, Professor Mike Scott ([MOIC](#)) has agreed to speak at the upcoming [PRIMM](#) conference on his work within **iSIMPATHY**.

Members of EuroDURG are encouraged to submit an abstract for this conference, at which, our very own, Prof Bjorn Wettermark is also an invited speaker!

Abstracts accepted for [PRIMM](#) are published in [Pharmacoepidemiology and Drug Safety](#).

The submission deadline is Wednesday January 31, 2024



Further guidelines [here](#)

Call for Abstracts

Guidelines | PRIMM

Abstract Topics

- Using drug utilisation research to inform policy and/or clinical decisions.
- Evaluating interventions using drug utilisation research
- How greener drug utilisation can also improve patient outcomes
- Medicines optimisation and involving the patient
- Improving patient outcomes through enhancing value
- Patient knowledge/views of medicines and relationship to adherence
- Patient outcome measures and service improvement co-produced with patients/public
- Health literacy and accessibility of medicines to patients /people

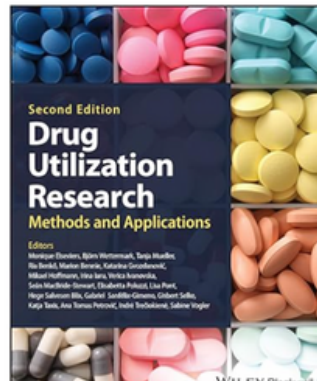
DRUG UTILIZATION RESEARCH SUMMER SCHOOL VILNIUS

24th-28th of
June 2024

A transformative and captivating school kicks off on Monday and wraps up with a flourish by Friday at lunch, ensuring a week filled with knowledge and inspiration

- ✓ Up to **30 participants**
- ✓ On the Vilnius University **campus**
- ✓ **Social events**
- ✓ Research, connections and **fun!**

Dive into the world of Drug Utilization Research with our enlightening lectures, crafted around the principles outlined in the esteemed 2nd Edition: 'Drug Utilization Research. Methods and Applications'



Organized by:

 **EuroDURG**
European Drug Utilization Research Group



**Vilnius
University**

Registration starts
on the 1st of February!
Participation fee €450*

*Project, abstract or problem
question in DUR required for
application.

The Drug Utilization Research Summer School will be held in Vilnius in June 2024. The school activities consist of lectures, seminars and workshops to provide participants with a thorough methodological background on drug utilization research (data sources, study designs, measurements, statistical/analytical methods, qualitative research methods and ethics) and examples of applications (DUR in older people, antimicrobials, adherence, cross-national comparative studies and health policy). Critical appraisal of the literature will be exercised in an interactive workshop in small groups. Participants will also present an overview of their research ideas and discuss them in small groups.

Follow the agenda, registration terms and requirements are [here](#).

24 - 28 June 2024
SAVE THE DATE

Organiser: Indre Trečiokienė



*lifelong
learning*

COURSES AND SUMMER SCHOOLS

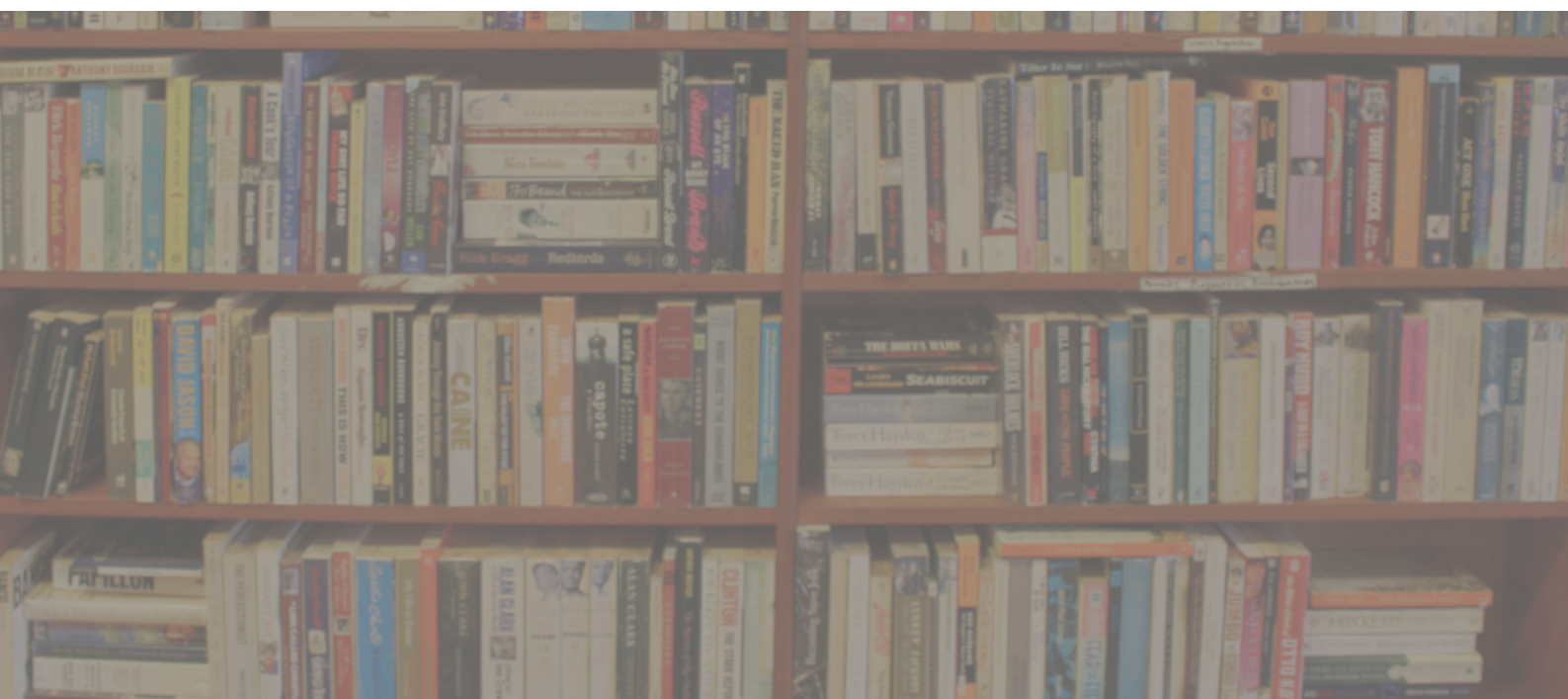
Online free-of-charge courses on patients' perspectives on medicine use:

[Coursera link 1](#)

[Coursera link 2](#)

Pharmacoepidemiology Summer School, Grenaa (DK),
For more info click [here](#). June 10-14, 2024

A PhD course open to everyone "Artificial intelligence and Big Data for Pharmacoepidemiology", Copenhagen (DK), November 25-29, 2024
For more info click [here](#).





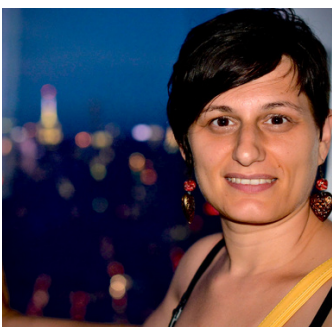
MARTIN WAWRUCH

Full Professor in Clinical Pharmacology, Head of the Institute of Pharmacology and Clinical Pharmacology of the Faculty of Medicine of Comenius University in Bratislava, **Slovakia**. Employed at the Institute since 2000. The main field of his scientific interest is pharmacoepidemiologic analysis of pharmacotherapy in older patients: potentially inappropriate medication; drugs with anticholinergic effects; analyses of antihypertensive, antithrombotic and antibiotic medication; evaluation of adverse drug reactions in hospitalised patients; adherence to secondary preventive medication in older patients after stroke/transient ischemic attack and with peripheral arterial disease. Member of EuroDURG since 2011 (Conference in Antwerp).



LAURA SAHM

Laura is currently a Professor of Clinical Pharmacy at the School of Pharmacy UCC. Laura is also on the organising committee of PRIMM (formerly DURG UK and **Ireland**). Laura Sahn received a B.Sc. Pharm(Hons) from the University of Brighton and won a scholarship from the Royal Pharmaceutical Society of Great Britain (RPSGB) to pursue her postgraduate studies in the Grade 5A* Department of Pharmacy and Pharmacology, University of Bath. Laura obtained her PhD in Pharmaceutics (Site-specific drug delivery of methotrexate to melanoma) in 1995. She moved to Germany in 1996 where she worked in a community pharmacy and for the pharmaceutical industry (Takeda GmbH).



CARLOTTA LUNGHI

Currently a researcher at the University of Bologna's Department of Medical and Surgical Sciences and holds an adjunct research position at CHU de Québec-Université Laval Research Center and Université Laval's Faculty of Pharmacy. Her expertise in pharmacoepidemiology and drug utilization shines through her focused research on optimizing drug use in the elderly, understanding medication adherence and trajectories, examining psychotropic medication patterns and their impact among individuals with personality disorders and ADHD, and evaluating the ecological footprint of pharmaceuticals. (**Italy**)



TANJA MULLER

Dr Tanja Mueller is a lecturer in Pharmacoepidemiology and Health Services Research at the University of Strathclyde in Glasgow, **Scotland**. She graduated with a degree in pharmacy from TU Braunschweig and worked in community pharmacies in Germany before obtaining an MPH at Lund University (Sweden). She completed a PhD in Pharmacoepidemiology at the University of Strathclyde in 2017. Her main areas of expertise are drug utilisation research/medication adherence; mixed-methods research; and the design, conduct, and analyses of cohort studies.



CARLA TORRE

Assistant Professor of Pharmacoepidemiology, Pharmacovigilance/Risk Management at the Faculty of Pharmacy of the University of Lisbon (UL), **Portugal**. Co-coordinator of the Master in Regulation and Evaluation of Medicines and Health Products (UL). Carla Torre graduated in Pharmaceutical Sciences, holds a master's degree in Epidemiology and a PhD in Pharmacoepidemiology. Carla Torre leads the Epidemiology, Pharmacoepidemiology & Pharmacovigilance sub-group at the Research Institute for Medicines hosted at UL. Carla Torre is member of the Evaluation Board of Medicines of the Portuguese National Authority of Medicines and Health Products (INFARMED), co-opted member for Pharmacoepidemiology of CHMP and alternate member of PRAC at EMA.



RAMUNE JACOBSEN

Dr. Ramune Jacobsen is an associate professor at the Research Group for Social and Clinical Pharmacy, Department of Pharmacy, University of Copenhagen. The research group with which Ramune is affiliated is designated as a WHO Collaborating Center for Research and Training in Patient Perspectives on Medicines Use. Ramune has a background in medical biology and public health and holds a PhD in social pharmacy from the University of Copenhagen. Her research interests include patients' perspectives on medicine use, focusing on vulnerable groups. In addition to her research and teaching at the Department of Pharmacy, University of Copenhagen, Ramune teaches patient perspectives on medicine use among minorities at Vilnius University. She is also the managing editor for the "Exploratory Research in Social and Clinical Pharmacy" journal (**Denmark**)



GAYE HAFEZ

Gaye Hafez is a pharmacologist and serves as the head of pharmacology department at Altınbaş University Faculty of Pharmacy, **Istanbul, Turkey**. With a multifaceted career, she managed her own pharmacy but also served as a consultant in an international company, specializing in drug databases for electronic claim process projects. As an educator, she imparts her expertise in various disciplines, including medicine, pharmacy, and dentistry. After completing post-doctoral studies, she redirected her research towards neuroscience, focusing on neuropsychopharmacology, cognitive dysfunction, and digital health. Actively involved in diverse European projects and committed to science communication, she stands as a leader in advancing pharmaceutical knowledge and fostering interdisciplinary collaboration.



LOTTE RASMUSSEN

Lotte Rasmussen is trained as a pharmacist and currently holds a position as an assistant professor in the pharmacoepidemiological research group at the University of Southern **Denmark**. Her research focuses on drug utilization using primarily the Danish and Scandinavian health care registries to describe and analyze patterns of drug use. She has conducted drug utilization research within a range of different therapeutic areas, but her main interest is in psychiatry. Lotte is active in ISPE's special interest group in drug utilization research and is the current chair of the Nordic Pharmacoepidemiological Network (NorPEN)'s executive committee.



TINNE DILLES

Prof Dilles serves as chair of the Centre for Research and Innovation in Care at the University of Antwerp, **Belgium**. She coordinates the educational program in research methodology, statistics, and pharmacotherapy within the Faculty of Medicine and Health Care Sciences, master's in nursing and midwifery. Prof. Dilles is the founder, chair, and researcher at NuPhaC (Nurse and Pharmaceutical Care). Her focus lies in enhancing the quality of care, optimizing medicine use, and ultimately improving patient outcomes in the realm of pharmaceutical care. Her research areas encompass evidence-based interventions, quality of prescribing and drug monitoring, adherence, medication management and safety, nurses' role and interprofessional collaboration, person-centred care, and integrated care.



LIVE STOREHAGEN DANSIE

Live Storehagen Dansie is a Senior Advisor at the WHO Collaborating Centre for Drug Statistics Methodology and the Department of Drug Statistics, Norwegian Institute of Public Health. Her work involves classifying drugs in the ATC system, assigning DDDs, and organizing training courses about the ATC/DDD methodology. She is the editor of the last two annual national reports on drug consumption in Norway and has been involved in different international projects related to antimicrobial resistance. Live holds master's in Pharmacy and International Community Health and has worked both for the public and private sectors as well as internationally for Gavi. (**Norway**)



NATALIIA KHANYK

Nataliia Khanyk is an Associate Professor in the Department of Organization and Economics of Pharmacy at Danylo Halytsky Lviv National Medical University in **Ukraine**, bringing over 20 years of expertise in high school pedagogy and research. Her 2009 PhD focused on the utilization research of non-steroidal anti-inflammatory drugs for rheumatic joint diseases. For the past two years, Nataliia has been a guest researcher at Uppsala University in the Pharmacoepidemiology and Social Pharmacy Group. During this time, she has been focused on studying the impact of crises on healthcare, drug treatment, and medication adherence, with a particular emphasis on patients with diabetes.

IRENE LANGNER

Irene Langner works at AOK Research Institute (WIdO) as a researcher and product manager for specialised software tools used by pharmacists within AOK public health fund. These tools allow non-technical users to perform analyses on databases of anonymised drug prescription claims data. They focus on one hand on market analyses, on the other on academic detailing activities. Irene's topics of interest include quality indicators, drug treatment in patients with multimorbidity/deprescribing, safe use of drugs, cross-country comparisons as well as informing policy making regarding measures for affordable and efficient health care. (**Germany**)

welcome to all!

EXECUTIVE COMMITTEE 2023-25

Elisabetta Poluzzi (Chair)

Department of Medical and Surgical Sciences,
Pharmacology Unit, University of Bologna
Via Irnerio 48, I 40126 Bologna, Italy
Tel: +390512091809
E-mail: elisabetta.poluzzi@unibo.it

Katja Taxis (Past Chair)

Department of Pharmacy Section of
Pharmacotherapy and Pharmaceutical Care
University of Groningen, Ant. Deusinglaan 1, 9713 AV
Groningen, The Netherlands
Tel: +31(0)503638205, Fax: +31(0)503632772
E-mail: k.taxis@rug.nl

Björn Wettermark

Department of Pharmacy, Faculty of Pharmacy,
Disciplinary Domain of Medicine and Pharmacy
Uppsala University, Biomedicinskt Centrum BMC,
Husargatan 3, 752 37 Uppsala
Postal address: Box 580, 751 23 Uppsala, Sweden
Tel: +467055856 41
e-mail: bjorn.wettermark@farmaci.uu.se

Ria Benko (Secretary)

Dept. of Clinical Pharmacy, University of Szeged
Szikra utca 8, Szeged H-6725, Hungary
Tel/Fax: +3662544921, E-mail: benkoria@gmail.com

Tinne Dilles

NuPhaC, CRIC, Faculty of Medicine and Health
Sciences, University of Antwerp
Universiteitsplein 1 DR.3.28, 2610 Antwerp, Belgium
E-mail: tinne.dilles@uantwerpen.be

Irene Langner

AOK Research Institute (WldO), Rosenthaler Str. 31,
10178 Berlin, Germany
Tel : +4930346462151
E-mail: irene.langner@wido.bv.aok.de

Carlotta Lunghi

Department of Medical and Surgical Sciences
University of Bologna, Via Irnerio 48, 40126 Bologna,
Italy
Tel: +393290919579
E-mail: carlotta.lunghi@unibo.it

Verica Ivanovska

Faculty of Medical Sciences, University "Goce
Delcev" - Stip, Fyr Macedonia
Tel: +38970980671
E-mail: vericaivanovska@hotmail.com

Access, Use and Innovation

Essential Medicines and Health Products
World Health Organization, Geneva Switzerland
Tel: +41227914618, mobile: +41787320857

Katarina Gvozdanic

School of Medicine, University of Zagreb
Zagreb, 10 000, Croatia
Tel:+385(0)996651941
E-mail: katarina.gvozdanic@gmail.com

Gaye Hafez

Department of Pharmacology, Faculty of
Pharmacy, Altinbas University
Incirli Cad., 34147 Bakirkoy, Istanbul, Turkey
Tel: +905323843500
E-mail: gaye.hafez@altinbas.edu.tr
gayehafez@yahoo.com

Irina Iaru

Department of Pharmacology, Physiology and
Pathophysiology, Faculty of Pharmacy
University of Medicine and Pharmacy "Iuliu
Hatieganu", 6A Louis Pasteur Street, 1st floor,
400012 Cluj-Napoca, Romania
Tel: +40746229455
E-mail: Cazacu.Irina@umfcluj.ro

Ramune Jacobsen

Research group for Social and Clinical
Pharmacy, Department of Pharmacy, University
of Copenhagen, Universitetsparken 2, 2100
Copenhagen, Denmark
Tel: +4535334813
E-mail: ramune.jacobsen@sund.ku.dk

Nataliia Khanyk

Department of Organization and Economics of Pharmacy, Danylo Halytsky Lviv National Medical University, Ukraine

Department of Pharmacy, Faculty of Pharmacy Uppsala University, Sweden

Tel: +46700410056

E-mail: nataliia.khanyk@farmaci.uu.se

Sean MacBride Stewart

Prescribing and Pharmacy Support Unit
NHS Greater Glasgow and Clyde
2nd Floor Main Building - West Glasgow ACH,
Dalnair Street - Yorkhill, Glasgow G3 8SJ
Scotland

Tel: +441412321710, mobile: +4407903680954

E-mail: sean.macbride-stewart@ggc.scot.nhs.uk

Tanja Mueller

Strathclyde Institute of Pharmacy and Biomedical Sciences, University of Strathclyde
161 Cathedral Street, Glasgow G4 0RE, Scotland

Tel: +441415482865

E-mail: tanja.mueller@strath.ac.uk

Lotte Rasmussen

IST Clinical Pharmacology, Pharmacy and Environmental Medicine, University of Southern Denmark

J.B. Winsløws Vej 17A, DK-5000 Odense C,
Denmark

Tel: +4565507194

E-mail: lorasmussen@health.sdu.dk

Laura J Sahn

School of Pharmacy, University College Cork
Cork T12 K8AF, Ireland

Tel: +353214901688

E-mail: L.Sahn@ucc.ie

Gabriel Sanfelix-Gimeno

Health Services Research Unit
Center for Public Health Research (CSISP-FISABIO)

Av. Catalunya 2, 46020 Valencia, Spain

Tel:+34961925970

E-mail: sanfelix_gab@gva.es

Live Storehagen Dansie

WHO Collaborating Centre for Drug Statistics Methodology / Norwegian Institute of Public Health, PO Box 222 Skøyen, Oslo N-0213, Norway

Tel: +4721077000

E-mail: livestorehagen.dansie@fhi.no

Ana Tomas Petrovic

Department of Pharmacology, toxicology and clinical pharmacology, Faculty of Medicine University of Novi Sad, Hajduk Veljkova 3, 21000 Novi Sad, Serbia

Tel: +38121522172

E-mail: ana.tomas@mf.uns.ac.rs

Carla Torre

Faculty of Pharmacy, University of Lisbon
Avenida Professor Gama Pinto, 649-003 Lisboa
Portugal

Tel: +351918416076

E-mail: carla.torre@ff.ulisboa.pt

Indre Treciokiene

Pharmacy center, Institute of Biomedical Science Faculty of Medicine, Vilnius University
M. K. Ciurlionio str. 21/27, LT-03101 Vilnius, Lithuania

Tel: +37052398771

E-mail: indre.treciokiene@mf.vu.lt

Sabine Vogler

WHO Collaborating Centre for Pharmaceutical Pricing and Reimbursement Policies, Pharmacoeconomics Department, Gesundheit Österreich GmbH, Stubenring 6, 1010 Vienna, Austria

Tel: +43151561147, Fax: +4315138472

Email: sabine.vogler@goeg.at

Martin Wawruch

Institute of Pharmacology and Clinical Pharmacology, Faculty of Medicine Comenius University, Sasinkova 4, 811 08 Bratislava, Slovakia

Tel: +421290119229

Email martin.wawruch@gmail.com

EuroDURG on SOCIAL MEDIA



You can find us on LinkedIn and Twitter (now X) to stay up to date with all the activities we have planned for 2024. Three years ago, we launched our social media pages to easily disseminate EuroDURG activities. In the past year, we have provided updates on projects and worked on the DUR book, and the ENABLE summer school, but the main focus was on the EuroDURG 2023 conference in Bologna. We were happy to see all the mentions and tags of EuroDURG on social media during and after the conference, we thank everyone for the support and for increasing the visibility.

Our social media community is growing in numbers, and we would like to encourage you to continue interacting with our updates and invite others interested in joining us. Our Twitter (now X) page was launched in June 2021 and has now reached a total of 164 followers. Just during the past year, our LinkedIn page follower number has almost doubled, reaching more than 400 followers, and the different content has been shown over the feeds of LinkedIn members more than 12.000 times.

We look forward to growing our network further, and we count on you, like-minded DUR enthusiasts, to make that happen. Stay tuned!

EDITORS

The Bulletin was prepared by the EuroDURG ExCo members.

See contributors below each part. The photos are made public with permission or from personal collections.

Edited by Gaye Hafez, Irina Iaru and Ria Benko. Send reactions to benkoria@gmail.com

CONTACT

For social media updates contact

[Ana Tomas Petrović](mailto:Ana.Tomas.Petrovic@eurodurg.org)

[Irina Iaru](mailto:Irina.Iaru@eurodurg.org)

<https://www.pharmacoepi.org/eurodurg/>

