



## Preface

Dear pharmacists,

We hereby present you our Spring newsletter in English, since the newsletter is also meant to inform our international colleagues. You may find latest developments of our University Groningen prescription database IADB.nl as well as on the linkage with the Lifelines cohort data, referred to as “PharmLines”.

We will present an overview of recent research projects conducted by PhDs, bachelor and masterstudents. Since the last newsletter of our department in October 2018, 14 studies have been performed with IADB.nl by students, PhD's and researchers. Of those, to date, two projects were finalized. As of January 2018, we have performed 43 studies with IADB.nl, of which 18 have been successfully finalized. Understandably, not all studies with IADB.nl data have led to a publication, but were presented at a pharmacy presentation of our unit and reported in writing as part of the education.

In this newsletter Jens Bos, datamanager of IADB.nl further describes the current status of the IADB.nl prescription database. The final part of this newsletter contains information about internships from 'Het stagebureau' and will be written in Dutch. Yael Benjamins, coordinator of pharmaceutical internships, will present her opinion on cultural differences in pharmacies.

## IADB.nl news

As we all have noticed, as of May 25<sup>th</sup>, 2018 GDPR (AVG) has become effective. We have checked all our procedures and documents for compliance with the new regulations.

Bert Bijker has successfully finalized the course “HBO Data Protection Officer (DPO)”. He has been appointed as privacy officer IADB.nl. He can advise and support IADB.nl and our department in all privacy related issues. All participating pharmacies have received Data Processing Agreements. The majority of pharmacies have signed the agreement and returned it to us.

IADB.nl and Lifelines started “PharmLines” to facilitate precision medicine research. In 2018, IADB.nl and the Lifelines cohort study formally started collaborations to facilitate research in precision medicine. This is only the beginning of the further development of the Northern academic network for pharmacies in Groningen combining research of PhD students, staff and practicing pharmacists in the region as well as education for students. The IADB.nl team represented by Dr. Nynke Schuiling-Veninga, Jens Bos, Bert Bijker, prof. Dr. Bob Wilffert, and the undersigned have worked incredibly hard over the last years to realize our ambitions. In 2018, 45 of the 60 pharmacy master students performed a master research project within our unit PharmacoTherapy, -Epidemiology and -Economics. The overwhelming enthusiasm for our research, which attracts so many students, indicates that our study research topics and supervision is perceived well, but even more important, that we provide adequate facilities to perform dedicated research that can lead to good quality reports. It is thanks to the collaboration of all of you, pharmacists in our region, that we can offer these facilities to our students!

What are the next steps? The IADB.nl team and staff members from our unit are currently approaching more pharmacies in the region, notably the pharmacies in the geographic area of the Lifelines study, to participate in IADB.nl. We have made IADB.nl AVG-proof, which ensures a safe and optimal collaboration between the parties. Last year, pharmacies from in Assen, Drachten and Pekela joined our network. The first four large PharmLines PhD research projects have started and we will further optimize the logistics of research applications and data-technical steps to work with the data. We want to invite more principal investigators from in- and outside the UMCG to value the potential of the wealth of data available for precision medicine research. Several departments have shown their interest, Genetics, Epidemiology, Internal Medicine, Cardiovascular, Gastro-Intestinal and Infectious Diseases. We are also talking with the HANNN, Healthy Ageing Network Northern Netherlands, about potential studies regarding reducing medicine waste in the environment. Furthermore, we firmly believe that especially now the EMA will come to the Netherlands and will attract attention from all over Europe with respect to pharmaceutical research, we will need more research-trained pharmacists. Academic concepts such as a combined PharmD-PhD trajectory, which is a combination of PhD

and master research, and external PhD traineeships where pharmacists can combine their work in the pharmacy with academic research may help to increase the pool of academic pharmacists in the Northern Netherlands. Furthermore, it would be helpful to attract Top-Institute-like organizations where private and public money is invested in talented pharmacy students or pharmacists who may apply for grants.

How can you contribute? First, please stay member of our academic network, and follow and support us where you can. Tell your colleagues in the region about us. Help us to supervise students, to supply us with research topics that are relevant to your work. Email us if you would like to give your career a boost with combining PhD work with your current work.

For now, on behalf of the IADB.nl team, I would like to thank you for all your support in 2018 and continued support in 2019!

Prof. dr. Eelko Hak, pharmacoepidemiologist  
e.hak@rug.nl

## **PharmLines Initiative: long-term detailed drug prescription data available**

In 2017, the Groningen Research Institute of Pharmacy (GRIP) and Lifelines started the “PharmLines Initiative” to link the multidisciplinary data of the Lifelines Cohort Study to the medication data of the widely researched prescription database, IADB.nl. The aim of the PharmLines Initiative is to facilitate research on medical drug data in combination with the broad health and biobank data of Lifelines. The IADB.nl staff has invested in expanding the database to include pharmacies in the Lifelines regions and from September 1, 2018 the 2017 database covering approximately 1.5 million persons is available for linkage. Researchers worldwide and from diverse disciplines can now apply for the unique use of these linked Lifelines and IADB.nl prescription data. A further initiative is the linkage of genetic data to enable pharmacogenetic research.

Prescription data from an estimated 60,000 to 80,000 adult Lifelines participants are linked.

Both Lifelines cohort data and IADB.nl database are linked at the patient level by Statistics Netherlands (Dutch: Centraal Bureau voor de Statistiek; CBS) as Trusted Third Party. Deterministic linkage is used on the basis of unique identifiable information. In a concordance study in 2017, the Lifelines database was restricted to all adults ( $\geq 18$  years) of whom baseline information was recorded. After linkage of the two databases the total overlap consisted of 45,000 adult Lifelines participants. As GRIP has invested in further expanding the IADB.nl database, it is expected that approximately 60,000 to 80,000 Lifelines participants will be linked, and that the majority of the Lifeline populations will be covered by the linkage in 2019.

### ***New possibilities for multidisciplinary research projects***

Linking available microdata from both databases enhances the possibilities for multidisciplinary scientific research. The prescription records of the IADB.nl database deliver detailed information about the medication, for example, the ATC code, date and quantity of dispensing and dosage of the administered drug. Even cost data of the drugs is available through the Z-index and tools are available to calculate the drug adherence rate. The IADB.nl database provides virtually complete medication records for more than 20 years (1994-2017), except for over the counter drugs and medication dispensed during hospitalization. Lifelines, on the other hand, has microdata on different topics from its field of healthy ageing, like health and disease, lifestyle, psycho-social status, work and sleep. Additionally, data on a large array of biomarkers, genetic data and data derived from physical measurements, like anthropometry, blood pressure, ECG and lung function tests are available for study. Combining these data offers new possibilities for unique research projects in the field of “real-world” assessment of personalized medicine and drug trajectories, risk factors for drug starting, dosing and drug adherence, preventive and therapeutic drug effects, drug safety regarding clinical as well as psycho-social endpoints, drug interactions, pharmacogenetics, drug rediscovery and pharmaco-economics.

The linked data from the Lifelines Cohort Study and IADB.nl database have already been used in a first study with the aim to assess the concordance of the self-reported medication use as collected by Lifelines with information of the prescription database IADB.nl (Sediq et al, 2018, *Clin Epidemiol, open access*).

### ***Application process***

Researchers wanting to submit an application for the linked data must follow the procedure of data linkage from the PharmLines Initiative.

If you have any questions about this news item or if you want to receive more information about the possibilities of the PharmLines Initiative, please contact the Lifelines Research Office (research@lifelines.nl) or contact prof. Eelko Hak at e.hak@rug.nl.

#### Pharmacy description database

The IADB.nl database is a growing pharmacy database and it is expected that the 2017 data release will cover more than 70 public pharmacies with drug prescription data from approximately 1,500,000 patients in the Northern part of the Netherlands. Since the Lifelines participants were also recruited from the Northern provinces of the Netherlands, there is a major overlap between the two databases.

## Education and research

Below, we present examples of projects conducted by bachelor and masterstudents over the last 6 months.

### Student projects

#### *Influence of H1receptor, 5-HT2aand 5-HT2creceptor and M3receptor antagonism on the risk of Type 2 Diabetes Mellitus in antipsychotic-treated patients: a case-control study*

by Tine Folkertsma, Bob Willfert, Jens Bos, Nynke Schuiling-Veninga

#### **Background**

Receptor antagonism of M<sub>3</sub> muscarinic receptor, H<sub>1</sub> histaminergic receptor, 5-HT<sub>2a</sub> serotonergic receptor, and 5-HT<sub>2c</sub> serotonergic receptor has been associated with glucose regulation disturbances, beta cell dysfunction and development of type 2 diabetes mellitus.

#### **Objective**

The objective of this study is to examine the risk of developing type 2 diabetes mellitus in patients who were using antipsychotics with or without antagonistic affinity at M<sub>3</sub> muscarinic receptor, H<sub>1</sub> histaminergic receptor, 5-HT<sub>2a</sub> serotonergic receptor, and 5-HT<sub>2c</sub> serotonergic receptor (AP\_\_(non)antaM<sub>3</sub>, AP\_(non)antaH<sub>1</sub>, AP\_(non)anta5-HT<sub>2a</sub>, and AP\_(non)anta5-HT<sub>2c</sub>, respectively).

#### **Methods**

A case-control study was designed with the pharmacy prescription database *IADB.nl*. Patients who started antipsychotic drug use (ATC code N05A\*) between 20 and 50 years old during the study period (1994-2015) were included. Patients were excluded if they received a prescription of any anti-diabetic drug (ATC code A10A\* and A10B\*) before cohort entry. Cases were defined as patients who developed type 2 diabetes mellitus after the index date (only prescriptions of oral anti-diabetic drugs (ATC code A10B\*)). Ten controls were randomly matched to a case from the study population and these patients did not develop type 2 diabetes mellitus.

#### **Results**

126 cases with new-onset type 2 diabetes mellitus and 1260 matched controls were included. Recent exposure (within previous 6 months) to AP\_antaM<sub>3</sub>, AP\_antaH<sub>1</sub> and AP\_anta5-HT<sub>2a</sub> was associated with an adjusted OR of 4.99, 4.88 and 3.30 (95% CI: 2.16-11.54 2.12-11.27 and 1.61-6.78, respectively) times higher risk of type 2 diabetes mellitus compared to past exposure (antipsychotic drug use that lasted more than two years before index date). Recent exposure to AP\_nonantaM<sub>3</sub>, AP\_nonantaH<sub>1</sub> and AP\_nonanta5-HT<sub>2a</sub> was associated with an adjusted OR of 2.71, 2.73 and 3.48 (95% CI: 1.30-5.63, 1.31-6.57 and 1.45-8.48, respectively) times higher risk. A positive association between dose and risk is found. Patients who were female, age <45 years and had no comorbidities, were more likely to develop type 2 diabetes mellitus.

#### **Conclusion**

Exposure to AP\_antaM<sub>3</sub>, AP\_antaH<sub>1</sub> and AP\_anta5-HT<sub>2a</sub> was associated with development of type 2 diabetes mellitus in antipsychotic-treated patients, but antagonism of these receptors is not the only underlying mechanism of developing type 2 diabetes mellitus among these patients.

## *The prescription trends of ADHD drug use and concomitant pharmacotherapy of psychotropic medications in Dutch children and adolescents*

Alexis Blaauwhof, Eelko Hak, Jens Bos, Nynke Schuiling-Veninga

### **Background**

Attention-deficit hyperactivity disorder (ADHD) is a common psychiatric developmental disorder associated with concentration and behavior problems. Comorbidities present in ADHD children include behavioral disorders, anxiety, autism, bipolar, depression and sleeping problems. There are however mixed findings regarding the association between these comorbidities and ADHD psychostimulant medication. A Bachman et al study conducted from 2005-2012 found a distinct ADHD drug use increase in The Netherlands. Subsequently, previous studies conclude increased psychotropic pediatric prescribing (2009-2012).

### **Objective**

To evaluate the prescription patterns of ADHD medication use alone and concomitant with psychotropic drugs in children and adolescents in The Netherlands. Furthermore, to analyze the prescription order of ADHD and psychotropic medications.

### **Methods**

A descriptive study and a prescription sequence symmetry analysis (PSSA) study design was conducted, pertaining to pharmacy records of children and adolescents using the IADB.nl database at the University of Groningen. The descriptive study included  $\leq 19$  years old's who received at least 2 ADHD psychostimulant prescriptions within 6 months and/or concomitant with a psychotropic medication from 2005-2016. The PSSA study included  $\leq 19$  years old's prescribed with at least 2 ADHD psychostimulant prescriptions within 6 months and concomitant with a psychotropic drug from 2008-2017. According to the Anatomical Therapeutic Chemical (ATC) Classification System, the categories to classify the drugs prescribed included: (1) ADHD drugs, (2) psychotropic drugs, (3) psycholeptic drugs and (4) psychoanaleptic drugs. 1. ADHD drugs included methylphenidate, atomoxetine and dexamphetamine. 2. Psychotropic drugs included all psycholeptic and psychoanaleptic drugs. 3. Psycholeptic drugs included anxiolytics, antipsychotics, sedatives and hypnotics. 4. Psychoanaleptic drugs included antidepressants, antimentia, xanthine derivatives and other psychostimulants and nootropics. The different prescription trend outcomes are the prevalence of ADHD medication and/or concomitant with a psychotropic drug and the incidence of ADHD medication per 100 children and adolescents per year. The results were stratified for gender, age groups (0-4, 5-9, 10-14, 15-19) as well as for ADHD medication and psychotropic drugs. For the PSSA study a sequence ratio was calculated.

### **Results**

The annual prevalence of ADHD medication increased from 1,6% in 2005 to 3,6% in 2016. The use of ADHD medication slightly decreased from 2014 to 2016. The ADHD incidence pattern remained constant. Males were prescribed two to three times more than females. The male:female ratio continued to decrease from 3,81 in 2005, 3,10 in 2012 to 2,84 in 2016. Most ADHD medication users were 10-14 years at 6,83% [95% CI= 6,58-7,09] in 2016. Whereas, ADHD medication was most often prescribed for the first time to 5-9 year old's at 0,72% [95%CI=0,64-0,81] in 2016. The age group 15-19 years old's increased the most by 3,5 fold. In 2016, 90,55% of ADHD drug users were prescribed with methylphenidate and 98,7% of children and adolescents were prescribed with methylphenidate for the first time. Dexamphetamine pertained the largest prevalent increase from 2005-2016. Antipsychotics were the most prescribed among ADHD medication users. The male:female ratio was the greatest for concomitant antipsychotics and hypnotics and sedatives, mostly prescribed to 10-14 year old's. On the other hand, antidepressants and anxiolytics were mostly dispensed to 15-19 year old's. For the PSSA, more children and adolescents were prescribed with an ADHD drug first. However, only atomoxetine and psychological problems presented a statistically significant adjusted sequence ratio (ASR).

### **Conclusion**

The prevalence of ADHD medication and psychotropic drugs increased from 2005 to 2016. Interestingly, a recent stabilizing prescribing level has been reached with ADHD medication and concomitant psychotropic drugs. The number of female ADHD and psychotropic drug users continued to increase, which is possibly due to better recognition, diagnoses and availability of pharmacological treatment. Methylphenidate is almost always prescribed first, while dexamphetamine is the most prescribed alternative. ADHD and psychological problems are not associated. This confirms that psychological problems in children and adolescents can be due to ADHD psychostimulant medication, comorbidity or the ADHD condition itself.

## *The trends in psychotropic drug use before, during and after pregnancy in The Netherlands*

**Mathilde Wienk, Jens Bos, Eelko Hak, Nynke Schuiling-Veninga**

### **Background**

Approximately 79% of women use medication during pregnancy for chronic, occasional or pregnancy related indications. The aim of this study is to assess the trends in use of psychotropic drugs in the Netherlands before, during and after pregnancy from 1995-2014.

### **Methods**

A descriptive drug utilization study was performed by using a large mother-infant subset extracted from the main IADB.nl database referred to as "pregnancy IADB" database. All mothers who were present in the database from 6 months before the theoretical conception date (theoretical conception date = 273 days before date of birth of the child) till 6 months after giving birth were included. The study period was from 1995 till 2014. All pregnant women receiving one or more prescriptions for one of the following drugs were identified: antipsychotics, anxiolytics, hypnotics, sedatives, antidepressants, psycho stimulants. We assessed the prevalence and incidence of drug use for different periods (6 months before pregnancy, first trimester, second trimester, third trimester and 6 months after giving birth), and identified the top 5 most used drug per drug group. Furthermore we assessed the percentage of women restarting, continuing or stopping the use of the included drugs.

### **Results**

A total of 55295 pregnancies were identified in this period. The use of all psychotropic drugs together increased 2,5-fold from 17,97 users per 1000 pregnancies in 1995 to 48,48 per 1000 pregnancies in 2014. The use of antidepressants during pregnancy increased 9-fold from a prevalence of 3,46 per 1000 pregnancies in 1995 to 31,82 per 1000 pregnancies in 2014 (most used antidepressant: paroxetine). The use of antipsychotics during pregnancy increased 1,5-fold from 2,07 per 1000 pregnancies in 1995 to 5,30 per 1000 pregnancies in 2014 (most used antipsychotic: haloperidol). The use of anxiolytics during pregnancy increased from 8,98 per 1000 pregnancies in 1995 to 10,61 per 1000 pregnancies in 2014 (most used anxiolyticum: oxazepam). The use of hypnotics and sedatives during pregnancy increased 4-fold from a prevalence of 3,46 per 1000 pregnancies in 1995 to 13,64 per 1000 pregnancies in 2014 (most used: lormetazepam). Psychostimulants were used during pregnancy since 2003 and the prevalence of use was 0,76 per 1000 pregnancies in 2014.

When looking at different age groups, it becomes clear that the use is the highest in 35+ age group.

The highest incidence is seen during the 6 months before pregnancy and decreases for all drug groups during pregnancy

Antipsychotics, sedatives and hypnotics are the least restarted drugs after pregnancy whereas the most restarted drugs after pregnancy are psychostimulants. Sedatives and hypnotics are the least continued drugs during pregnancy and the antipsychotics are the most continued drugs during pregnancy.

### **Conclusions**

The use of psycho pharmaceuticals and especially antidepressants increased substantially from 1995-2014. Although the drugs prescribed are according the guidelines, it seems important to monitor the prescribing, use and safety of these drugs during pregnancy.

## PhD Research

Akhbar Bahar (PhD) has performed research with IADB data. Below the results.

### *Discontinuation and Dose Adjustments of Metoprolol after Metoprolol- Paroxetine/Fluoxetine Co-prescriptions in Dutch Elderly*

**Muh. Akbar Bahar, Yuanyuan Wang, Jens H.J. Bos, Bob Wilffert, Eelko Hak**

Clinically relevant cytochrome P450 mediated drug-drug interactions (DDI) are prevalent in geriatric patients with multiple comorbidities such as cardiovascular and psychiatric diseases. Metoprolol (a CYP2D6 substrate) and paroxetine/fluoxetine (a strong CYP2D6 inhibitor) as the drugs of choice for treating these chronic illnesses consecutively, is often observed to be co-prescribed in the elderly. Several studies have reported that the combination triggers cytochrome P450 2D6 (CYP2D6) mediated pharmacokinetic DDI. However, data on the clinical consequences of this DDI are limited and inconclusive. Therefore, we assessed the effect of paroxetine/fluoxetine initiation on the existing treatment with metoprolol on the discontinuation and/or dose adjustment of metoprolol among elderly.

We performed a cohort study using the University of Groningen IADB.nl prescription database ([www.IADB.nl](http://www.IADB.nl)). We selected all elderly ( $\geq 60$  years) who had ever been prescribed metoprolol and had a first co-prescription of paroxetine, fluoxetine, or mirtazapine from 1994 to 2015. The exposure group was metoprolol users with a paroxetine/fluoxetine co-prescription and the other groups acted as a control.

Combinations of metoprolol-paroxetine/fluoxetine and metoprolol-mirtazapine groups were started in 528 and 625 patients, respectively. In comparison with metoprolol-mirtazapine, metoprolol-paroxetine/fluoxetine was associated with a significant 43% relative increase in early discontinuation of metoprolol (OR=1.43, 95% CI:1.01-2.02) but no difference in the risk of dose adjustment. Stratified analysis by gender showed that women have a significantly high risk of metoprolol early discontinuation (OR=1.62, 95% CI:1.03-2.53).

As a conclusion, paroxetine/fluoxetine initiation in metoprolol prescriptions, especially for female older patients, is associated with the risk of early discontinuation of metoprolol.



## Studies from October 2018 until recent

Below a list of studies that have been performed by students as well as PhD's on the IADB database.

<b>Auteur</b>	<b>Naam</b>
Brenda Baak	Bile acid sequestrants and the risk of Alzheimer's Disease: a cohort study
Marleen Bokern	Prenatal exposure to antidepressants and the risk of psychiatric disorders in childhood and adolescence
Lotte van Leeuwen	The risk of antidepressant and benzodiazepine exposure during pregnancy: a crossover, case control study of infants with the psychiatric deficit ADHD
Yldou van der Ende	(PharmLines) The validity of self-reported cardiovascular medication use and the prevalence of cardiovascular medication use at entry to the Lifelines cohort and during follow up among adults according
Lisa Verzijde	Geneesmiddelsubstitutie in de praktijk – een pilot studie met levothyroxine en simvastatine
Akkad Issa, Danique Koopman	De ontwikkeling van bloedarmoede door langdurig PPI of H2-RA gebruik onder volwassenen.
Diana Maric, Friso Tichelaar	De trends in de preventieve behandeling van migraine
Tine Folkertsma	Trends in antipsychotic drug use among Dutch adults aged 20 – 50 years from 2002-2017: a drug utilization study.
Pascal Bruins	Finding a relationship between antidepressant use and constipation: a retrospective cohort study.
M. L. Ispording (Luka)	Clozapine versus long-acting injectable antipsychotics in treatment-resistant schizophrenia
Alexis Blaauwhof	ADHD medication and psychotropic prescription trends in children and adolescents, 2008- 2017: a prescription sequence symmetry analysis
Marghalara Zaher, Demi Zhang	De relatie tussen antipsychoticagebruik en het risico op urineweginfecties bij volwassenen: een cohort studie
Naira Khachatryan	Antibiotic Prescription Patterns For Dutch Children 0-4 years of age.
Lotte van Leeuwen	The risk of antidepressant and benzodiazepine exposure during pregnancy: a case control study of infants with the psychiatric deficit ADHD

## The IADB.nl database (Jens Bos)

### Background

The IADB project started in 1998 as a joint effort of the Department of Pharmacotherapy, -Epidemiology & -Economics (PTEE), Groningen Institute of Pharmacy together with pharmacists from community

### Pharmacies.

The aim is to create a "laboratory" for scientific research in pharmaco-epidemiology, therapeutics and -economics as well as pharmacy-practice related topics using prescription data from these pharmacies. Currently 25 PhD theses have been published where IADB.nl played an important role and more than 100 publications are based on research with IADB.nl.

These data can be used to:

1. Generate ideas and signals on rational use of drugs,
2. Develop interventions to optimize drug use,
3. Evaluate effectiveness and side effects of these interventions.

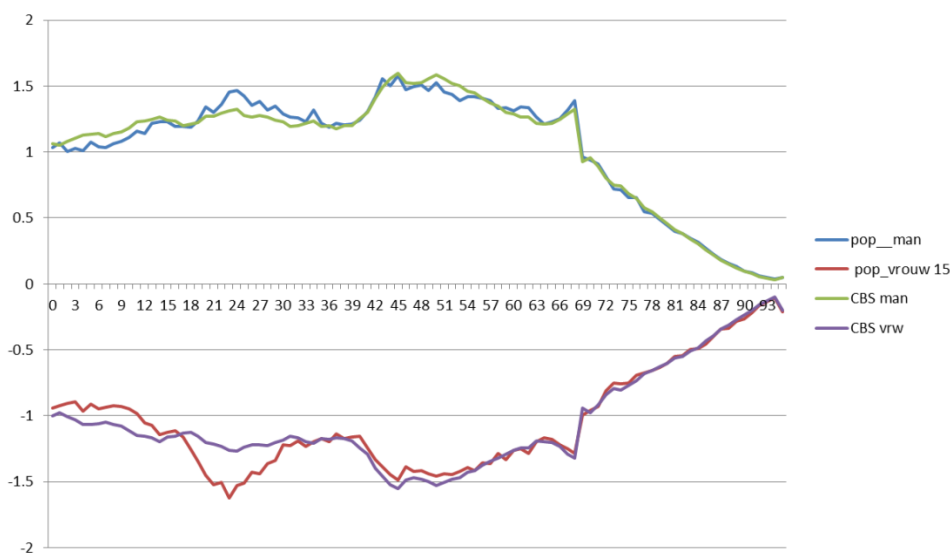
IADB.nl is a longitudinal database that contains prescription data, with information on users, prescribers, and costs of drug prescriptions.

Information on users and prescribers is stored anonymously.

IADB.nl does not only provide data, but also expertise in epidemiological, economical and statistical research methods. For specific research projects these data can be and have been linked with other data from pharmacies, general practitioners, hospitals, and other research projects.

### Population

The catchment population of the IADB.nl is approximately 630,000 people. Data from most pharmacies are available from 1999 forward. In some cases data are available since 1994. Comparing the population pyramid of the IADB.nl with the population pyramid of the Netherlands is part of the validation of the population estimate.

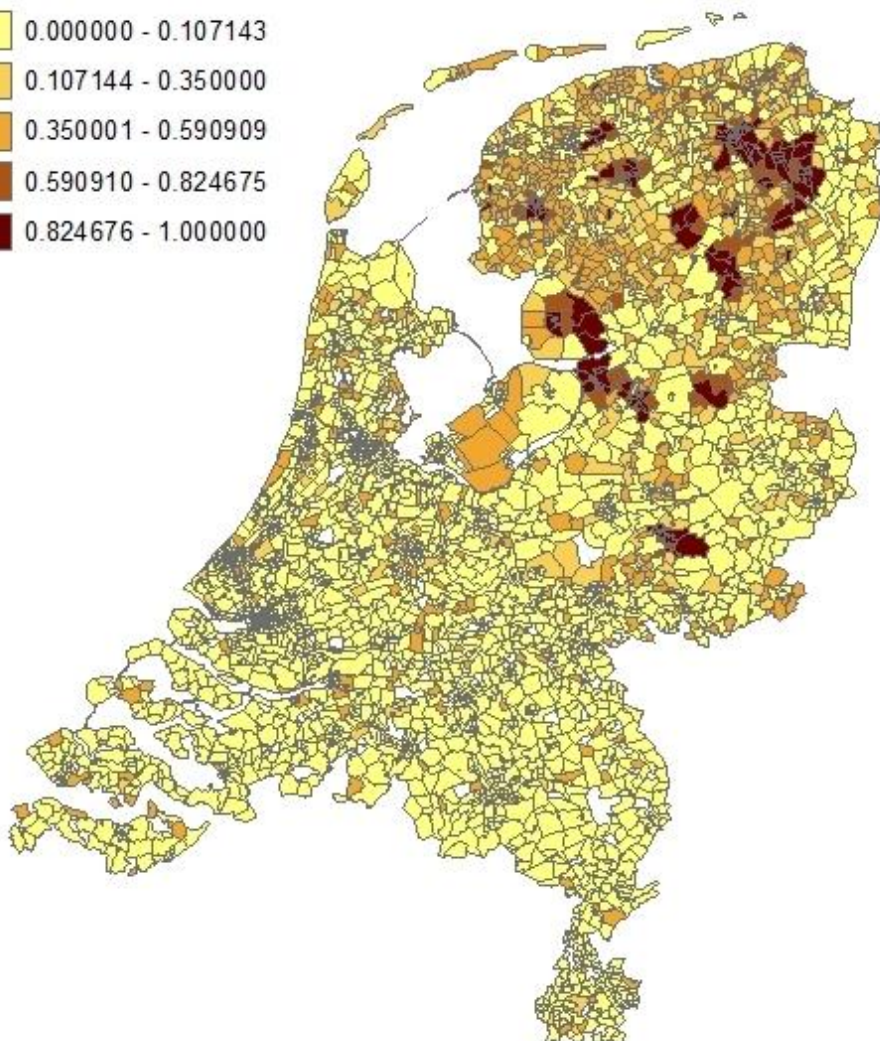
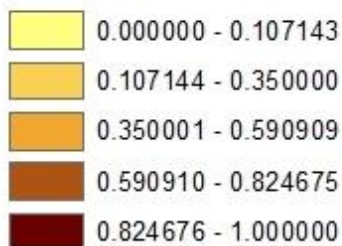




## Region

Data are collected from 70 community pharmacies located in the northern and eastern part of the Netherlands. The database is still expanding, aiming to also cover the region of the LifeLines Cohort Study. Prescription rates among the database population have been found to be representative of the Netherlands as a whole.

### Legend



## Pregnancy database

The IADB.nl pregnancy database is part of the IADB.nl database. In this database mothers are linked to their children using a so called “woonverbandnummer”: an unique number for an address within a pharmacy. There should only be one possible mother located at the same address as the child at the date of birth. This mother is linked to the child if she is aged between 15 and 50 at the date of birth.

## Linkage

In 2017, the Groningen Research Institute of Pharmacy (GRIP) and Lifelines started the “PharmLines Initiative” to link the multidisciplinary data of the Lifelines Cohort Study to the medication data of the widely researched prescription database.

Furthermore the database is linked to the PREVEND study of the UMCG and Statistics Netherlands (Dutch: Centraal Bureau voor de Statistiek).

## Nieuwsbrief: Stagebureau Farmacie (in Dutch)

### Cultuurverschillen op de werkvloer

Binnen de opleiding krijgen wij steeds vaker te maken met studenten van verschillende afkomst. Als docent merk ik dat dit mijn blik verrijkt. Deze ontwikkeling biedt ook uitdagingen. Zo werd ik afgelopen jaar door twee apotheker-opleiders gebeld. De stagiair die in hun apotheek was geplaatst wilde vanuit geloofsovertuiging geen handen schudden met vrouwen. Beide collega's hadden dit nog niet eerder meegemaakt en waren daardoor, evenals hun team, overvallen.

Ik ben altijd blij met dergelijke signalen uit de praktijk. Dat zet mij het denken. De vraag was hoe wij met deze situatie als op leiding omgaan. Ik wist het eigenlijk niet. Ik kon mij de wens van de student voorstellen. Aan de andere kant begreep ik ook dat vrouwelijke collega's of patiënten het gevoel zouden kunnen krijgen niet gerespecteerd te worden als hun hand wordt geweigerd.

Om een beter beeld te krijgen heb ik contact gehad met de juridische afdeling van de KNMP en de RUG. Beide organisaties gaven aan nog geen beleid te hebben bepaald t.a.v. deze situatie. Ze hebben mij wel geholpen met een aantal wetsteksten.

In Nederland heeft iedereen vrijheid van godsdienst, en heeft een man vanuit zijn geloofsovertuiging het recht om ervoor te kiezen vrouwen niet de hand te schudden. Daartegenover staat het recht van de vrouw om niet gediscrimineerd te worden en de wens van een zorginstelling om goede zorg te leveren. De Algemene wet gelijke behandeling heeft als doel om een samenleving te bevorderen met respect voor verschillen.

In de praktijk komt het erop neer dat een medewerker/stagiair vrij is om zijn godsdienst uit te oefenen en daarbij te weigeren om vrouwen de hand te schudden. Criteria hierbij zijn of het een wezenlijk onderdeel van de werkzaamheden betreft of dat het werk ook prima uitgeoefend kan worden zonder de hand van vrouwen te schudden of juist niet. Pas als er sprake is van confronterende, onaangename, beledigende en/of onveilige situaties door de weigering dient de medewerker/stagiair gewoon de hand te schudden van de vrouwen of kan de werkgever een medewerker afwijzen.

Bovenstaande riep bij mij de volgende vragen op:

- Kan een apotheker zijn/haar beroep niet (goed) uitoefenen als hij weigert handen te schudden van iemand van het andere geslacht? Hoeveel effect heeft dat op de vertrouwensrelatie tussen zorgverlener en patiënt, maar ook die tussen collega's?
- Is er sprake van een beledigende, onaangename, confronterend of onveilige situatie als een apotheker de hand van de ander weigert te schudden?

Het zou makkelijk zijn als het antwoord op die vragen zwart-wit zou zijn, maar het blijft een grijs gebied. Wat belangrijk is dat beide partijen bereid zijn om de situatie bespreekbaar te maken. Wij hebben aan de betreffende opleiders het advies gegeven om afspraken te maken over de wijze waarop de stagiair zorg kan en wil dragen voor respect en vertrouwen in de relatie met vrouwelijke patiënten en collega's. De betreffende stagiair lost dit in de praktijk op door met zijn hand op zijn hart een buiging te maken in plaats van een hand te geven aan een vrouwelijk patiënt of collega. Ook legt hij uit dat hij uit geloofsovertuiging geen handen wil schudden met vrouwen.

Aankomende mannelijke stagiairs met dezelfde geloofsovertuiging geven wij mee om voorafgaand aan de kennismaking duidelijk te maken dat zij vrouwen geen hand willen schudden. Hiermee kunnen zij mogelijke ongemakkelijke situaties voorkomen.

Ook merk ik dat dit vraagstuk steeds vaker een onderwerp is dat besproken wordt tijdens de intervisiebijeenkomsten. Deze bijeenkomsten vind ik doorgaans erg constructief omdat de situatie van meerdere kanten wordt belicht waardoor er respect ontstaat voor de verschillen binnen onze studentenpopulatie.

Yael Benjamins, docent stages en professioneel en academisch handelen

### **Stage onvoldoende:**

Het gebeurt een enkele keer dat een stagebegeleider twijfels heeft over het functioneren van een stagiair. Meestal heeft dat te maken met de beperkte professionele houding van student al dan niet in combinatie met onvoldoende farmaceutische kennis en inzicht in de praktijk. Bij deze wil ik u als stagebegeleider uitnodigen om in deze situaties zo snel mogelijk contact met mij op te nemen. We kunnen dan overleggen hoe de student het beste aangesproken en begeleid kan worden en ik kom ook graag langs in de apotheek voor een gesprek. Daarnaast is het belangrijk om duidelijke feedback te geven tijdens de tussenevaluatie en er zo nodig consequenties aan te verbinden als de houding van de stagiair niet verandert in de resterende weken van de stage.

Uiteraard proberen wij onze studenten zo goed mogelijk voor te bereiden op hun stages, maar het kan altijd anders in de praktijk uitpakken dan verwacht. Schroom dus niet om te bellen of te mailen!

Yael Benjamins, docent stages en professioneel en academisch handelen  
Tel. 050-3633162, mail: [y.benjamins@rug.nl](mailto:y.benjamins@rug.nl)

### **Vijf keer stage Z per jaar:**

Vanwege het structurele tekort aan stageplaatsen in de noordelijke ziekenhuisapotheken zijn dit collegejaar voor het eerst vijf ziekenhuisstages gepland i.p.v. de gebruikelijke vier. Bij deze willen wij u vragen hoe dit bevalt en of u uw ervaringen met ons wilt delen. Wilt u iets kwijt hierover, stuur dan een mailtje naar Anja Postuma, stagecoördinator: [stage.farm@rug.nl](mailto:stage.farm@rug.nl).

## Publications IADB.nl in 2018:

Sediq R, van der Schans J, Dotinga A, Alingh R, Wilffert B, Schuiling-Veninga CCM, Hak E. Concordance assessment of self-reported medication use in the Netherlands three-generation Lifelines Cohort Study with the pharmacy database IADB.nl: The PharmLines Initiative. *Clinical Epidemiology* 2018;2010;1-9. *Journal of Clinical Epidemiology*. 2018 Aug 16;10:981-989.

Zakiah N, Ter Heijne LF, Bos JH, Hak E, Postma MJ, Schuiling-Veninga CCM. Antidepressant use during pregnancy and the risk of developing gestational hypertension: A retrospective cohort study. *BMC Pregnancy and Childbirth*. 2018 May 29;18(1):187. 187.

Kloosterboer SM, Schuiling-Veninga CCM, Bos JHJ, Kalverdijk LJ, Koch BCP, Dieleman GC et al. Antipsychotics in Dutch Youth: Prevalence, Dosages, and Duration of Use from 2005 to 2015. *Journal of Child and Adolescent Psychopharmacology*. 2018 Apr;28(3):173-179.

Bahar MA, Wang Y, Bos H, Wilffert B, Hak E. Discontinuation and dose-adjustments of metoprolol after metoprolol-paroxetine/fluoxetine co-prescription in Dutch elderly. 2018. Abstract from German Pharm-Tox Summit, Göttingen, Germany.

Alfian SD, Worawutputtpong P, Schuiling-Veninga CCM, van der Schans J, Bos JH, Hak E. Pharmacy-based predictors of non-persistence with and non-adherence to statin treatment among patients on oral diabetes medication in the Netherlands. *Current Medical Research and Opinion*. 2018;34(6):1013-1019.