

CURRICULUM VITAE

November 2020

Maarten J. Bijlsma, Ph.D.

Max Planck Institute for Demographic Research
Konrad-Zuse Str. 1, 18057
Rostock, Germany

Bijlsma@demogr.mpg.de
<https://maartenbijlsma.com/>
github.com/maartenbijlsma

ACADEMIC POSITIONS

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| 2020, July 1 st – Current | Deputy Head , Laboratory of Population Health, Max Planck Institute for Demographic Research, Germany |
| 2015, Nov 1 st – 2020, June 30 th | Research Scientist , Laboratory of Population Health, Max Planck Institute for Demographic Research, Germany |
| 2018, March 15 th – April 25 th | Visiting Scholar , Population Studies Center, University of Pennsylvania, USA |
| 2011, Oct 1 st – 2015, Sept 30 th | PhD Fellow (AIO) , Unit Pharmacoepidemiology & Pharmacoeconomics, University of Groningen, the Netherlands |
| 2015, March 1 st – May 31 st | Visiting Scholar , Department of Medical Statistics, London School of Hygiene and Tropical Medicine, UK |
| 2011, March 1 st – March 31 st | Visiting Scholar , Department of Social Statistics & Demography, University of Southampton, UK |

EDUCATION

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| 2016 | Ph.D. Pharmacoepidemiology Advisors: | University of Groningen, the Netherlands Prof. Dr. Eelko Hak (Epidemiologist) Prof. Dr. Stijn Vansteelandt (Statistician) Dr. Fanny Janssen (Demographer) |
| 2014 | M.Sc. Applied Statistics* | University of Ghent, Belgium |
| 2011 | M.Sc. Demography (research)** | University of Groningen, the Netherlands |
| 2009 | B.Sc. Human Geography** | University of Groningen, the Netherlands |

* *with distinction*; ** *with highest distinction*

PEER REVIEWED PUBLICATIONS

- 2020 Diallo AO, Ali MK, Geldsetzer P, Gower EW, Mukama T, Wagner RG, Davies J, **Bijlsma MJ**, Sudharsanan N. Systolic blood pressure and mortality in South Africa: Evidence from a nationally representative cohort study. *The Lancet: Healthy Longevity* (accepted for publication).
- 2020 **Bijlsma MJ**, Wilson B. Modelling the socio-economic determinants of fertility: a mediation analysis using the parametric g-formula. *Journal of the Royal Statistical Society: Series A (Statistics in Society)* 2020; 183(2):493-513.
- 2019 **Bijlsma MJ**, Wilson B, Tarkiainen L, Myrskylä M, Martikainen P. The impact of unemployment on antidepressant purchasing: adjusting for unobserved time constant confounding in the g-formula. *Epidemiology* 2019;30: 388–395.
- 2018 Vidra N, **Bijlsma MJ**, Trias-Llimós S, Janssen F. Past trends of obesity attributable mortality in eight European countries: an application of age-period-cohort analysis. *International Journal of Public Health* 2018; 63(6):683-692.
- 2018 Vidra N, **Bijlsma MJ**, Janssen F. Impact of Different Estimation Methods on Obesity-Attributable Mortality Levels and Trends: The Case of The Netherlands. *Int J Environ Res Public Health*. 2018;15(10):2146.
- 2018 Mulder B, **Bijlsma MJ**, Schuiling-Veninga CCM, Morssink LP, van Puijenbroek E, Aarnoudse JG, Hak E, de Vries TW. Risks versus benefits of medication use during pregnancy: what do women perceive? *Patient Preference & Adherence* 2018; 12: 1–8.
- 2017 **Bijlsma MJ**, Tarkiainen L, Myrskylä M, Martikainen P. Unemployment and subsequent depression: a mediation analysis using the parametric g-formula. *Social Science & Medicine* 2017;194:142-150.
- 2017 **Bijlsma MJ**, Daniel RM, Janssen F, De Stavola BL. An assessment and extension of the mechanism-based approach to the identification of age-period-cohort models. *Demography* 2017; 54: 721-743.
- 2017 Trias-Llimós S, **Bijlsma MJ**, Janssen F. The role of birth cohorts in long-term trends in liver cirrhosis mortality across eight European countries. *Addiction* 2017; 112(2):250-258.
- 2017 Darvishian M, Dijkstra F, Van Doorn E, **Bijlsma MJ**, Donker GA, De Lange MA, Cadenau LM, Hak E, Meijer A. Influenza vaccine effectiveness in the Netherlands from 2003/2004 through 2013/2014: the importance of circulating influenza virus types and subtypes. *PLoS One*. 2017 9;12(1).
- 2016 **Bijlsma MJ**, Janssen F, Hak E. Estimating time-varying drug adherence using electronic records: extending the Proportion of Days Covered (PDC) method. *Pharmacoepidemiology & Drug Safety* 2016;25(3):325-32.
- 2016 **Bijlsma MJ**, Vansteelandt S, Janssen F, Hak E. The effect of adherence to statin therapy on cardiovascular mortality: quantification of unmeasured bias using falsification end-points. *BMC Public Health*. 2016 11;16:303.
- 2016 Berm EJJ, Odigie B, **Bijlsma MJ**, Wilffert B, Touw DJ, Maring JG. A clinical validation study for application of dried blood spots in therapeutic drug monitoring of antidepressants. *Bioanalysis* 2016;8(5):413-24.

- 2016 Nguyen TP, Wright EP, Nguyen TT, Schuiling-Veninga CC, **Bijlsma MJ**, Nguyen TB, Postma MJ. Cost-effectiveness analysis of screening for and managing identified hypertension for cardiovascular disease prevention in Vietnam. *PLoS One*. 2016; 11(5).
- 2015 **Bijlsma MJ**, Janssen F, Bos HJ, Kamphuisen PW, Vansteelandt S, Hak E. Brief Report: Association Between Statin Use and Cardiovascular Mortality at the Population Level: An Ecologic Study. *Epidemiology* 2015;26(6):802-5.
- 2015 **Bijlsma MJ**, Janssen F, Lub R, Bos HJ, De Vries FM, Vansteelandt S, Hak E. Birth cohort appeared to confound effect estimates of guideline changes on statin utilization. *Journal of Clinical Epidemiology* 2015; 68(3):334-40.
- 2015 Kröpelin TF, de Zeeuw D, Andress DL, **Bijlsma MJ**, Persson F, Parving HH, Lambers Heerspink HJ. Number and Frequency of Albuminuria Measurements in Clinical Trials in Diabetic Nephropathy. *Clinical Journal of the American Society of Nephrology* 2015; 10(3):410-6.
- 2014 **Bijlsma MJ**. Commentary: G-computation might be used to control for confounding when estimating the population-level impact of interventions through outcome distribution curves. *Journal of Clinical Epidemiology*. 2014. 67(11):1286.
- 2014 Darvishian M, **Bijlsma MJ**, Hak E, Van den Heuvel ER. Seasonal influenza vaccine effectiveness among the community-dwelling elderly: a meta-analysis of test-negative design case-control studies. *The Lancet: Infectious Diseases* 2014; 14(12):1228-39.
- 2014 Gefenaite G, **Bijlsma MJ**, Bos HJ, Hak E. Did introduction of pneumococcal vaccines in the Netherlands decrease the need for respiratory antibiotics in children? Analysis of 2002 to 2013 data. *Eurosurveillance*. 2014; 19(44).
- 2013 **Bijlsma MJ**, Hak E, Bos HJ, De Jong-van den Berg LTW, Janssen F. Assessing the effect of a guideline change on prevalence of benzodiazepine use by including the birth cohort dimension: interrupted time series studies. *Pharmacoepidemiology & Drug Safety* 2013; 22(9): 933-941.
- 2012 Klaassens M, **Bijlsma MJ**. New places of remembrance: Individual Web memorials in the Netherlands. *Death Studies* 2013. DOI: 10.1080/07481187.2012.742474.
- 2012 **Bijlsma MJ**, Hak E, Bos HJ, De Jong-Van den Berg LTW, Janssen F. Inclusion of the birth cohort dimension improved description and explanation of trends in statin use. *Journal of Clinical Epidemiology* 2012; 65: 1052-1060.

UNDER REVIEW

- Sudharsanan N, **Bijlsma MJ**. Causal decomposition of population health differences using Monte Carlo integration and the g-formula (Revise and Resubmit at *International Journal of Epidemiology*).
- Hu Y, Korhonen K, Li P, Holmes MV, Bobak M, Martikainen P, **Bijlsma MJ**. Relationship between alcohol use disorders and early- and late-onset dementia: is cardiovascular disease a mediator?
- Hale JM, **Bijlsma MJ**, Lorenti A. Does postponing retirement affect cognitive function? A counterfactual experiment to disentangle life course risk factors.

- Nisen J, **Bijlsma MJ**, Wilson B, Myrskylä M, Martikainen P. The gendered impacts of delayed parenthood on educational and labor market outcomes: a dynamic analysis of population-level effects over young adulthood.

INVITED TALKS

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| 2021, Spring | (Planned digital talk) Cornell Population Center, Cornell University, New York, USA. |
| 2020, Nov 12 th | (Digital talk) Dept. of Clinical Epidemiology, Karolinska Institute, Sweden |
| 2019, Dec 13 th | Centre for Demographic Studies, Barcelona, Spain. |
| 2019, Dec 5 th | Interdisciplinary Centre on Population Dynamics, Odense, Denmark. |
| 2019, Feb 12 th | Institute for Global Health, Heidelberg University, Germany. |
| 2019, Jan 17 th | Dept. of Medical Epidemiology and Biostatistics, Karolinska Institute, Sweden. |
| 2019, Jan 10 th | Demography Unit, Dept. of Sociology, Stockholm University, Sweden. |
| 2019, Jan 9 th | Dept. of Public Health Sciences, Stockholm University, Sweden. |
| 2018, April 23 rd | Population Studies Center, University of Pennsylvania, Pennsylvania, USA. |
| 2017, Oct 30 th | Nuffield College, Oxford University, United Kingdom. |
| 2017, Jan 20 th | Population Research Unit, University of Helsinki, Finland. |
| 2015, Sept 3 rd | Netherlands Interdisciplinary Demographic Institute, the Hague, the Netherlands. |
| 2015, May 21 st | Dept. of Medical Statistics, London School of Hygiene & Tropical Medicine, United Kingdom. |
| 2015, May 20 th | Dept. of Social Policy, London School of Economics & Political Science, United Kingdom. |
| 2015, May 7 th | Dept. of Methodology, London School of Economics & Political Science, United Kingdom. |

CONFERENCE PRESENTATIONS

Full list is available on request. I have given oral and poster presentations large national, European, and North American demography and (pharmaco)epidemiology conferences.

GRANTS

- **Ubbo Emmius Grant** in 2011 to fund my PhD research. Value: € 198,693.- over 4 years, ca. \$ 284,875.- using the August 2011 exchange rate. Highly competitive grant with 9% acceptance rate.

In addition, three ‘**close, but no cigar**’ applications, i.e. this funding was –not– received:

- Max Planck Research Group Leader Grant in 2020. Value ca. € 1.5 million. Ranked 6th out of 100+ applicants, and 4 received funding.

- NWO VENI grant in 2019. Value ca. € 250,000. Two external reviews returned which scored my proposal A+ and A, (an A+ is the highest score, A is just below it) but I did not receive an invitation for an interview.
- NWO Rubicon grant in 2016. Value ca. € 200,000. Ranked 11th out of 100+ applicants, and 8 received funding.

PROFESSIONAL ACTIVITIES

Professional associations

Population Association of America (PAA), European Association for Population Studies (EAPS), Netherlands Demographic Society (NVD).

Other professional activities

- 2012 – Current Co-founder and editor of Demotrends: weblog on demographic trends and research. <https://demotrends.org/>
- 2017 – 2018 Organizer Rostock Retreat on Causality (Budget: € 25,000.-).
- 2011 – 2012 Member PhD council SHARE Research Institute for Health Research, University Medical Centre Groningen.

SUPERVISION, COURSE COORDINATION, and TEACHING EXPERIENCE

Supervision of Ph.D. students

- Daily supervisor of Maria Gueltzow since 2020 (MPIDR core student, International Max Planck Research School for Population, Health and Data Science).
- External supervisor of Ph.D. students in the International Max Planck Research School for Population, Health and Data Science:
 - Lizbeth Burgos Ochoa since 2020 (Erasmus Medical Center Rotterdam).
 - Joonas Pitkänen since 2019 (University of Helsinki).

Course coordination

- Coordinated the International Max Planck Research School – Population, Health and Data Science course “Population Health”, Max Planck Institute for Demographic Research, Rostock, Germany in 2020.

Teaching

- Developed and taught a 5-day course ‘Introduction to Counterfactual Causal Inference’. European Doctoral School of Demography, Autonomous University of Barcelona, Spain, Taught in December 2019.
- Developed and taught a 5-day workshop ‘Causal Mediation Analysis’. University of Helsinki, Finland, Taught in May 2018 and May 2019. Student Rating: 4.5 out of 5.
- Co-supervised MSc theses at the University of Groningen, Dept. of Pharmacy, and at the University of Rostock, Dept. Social Sciences.
- Taught ‘Introduction to survival analysis’. Department of Demography, University of Groningen. Jan 2014 and Jan 2015. Student Rating: 4.0 out of 5.
- Student teaching assistant Analytical Demography. Department of Demography.

University of Groningen, Jan 2010 – Jan 2012.

- Student teaching assistant Statistics. Department of Economic Geography, University of Groningen. Sept 2008 – Aug 2011.

REVIEWED FOR

Advances in Life Course Research;
Archives of Gerontology & Geriatrics;
Clinical Epidemiology;
Death Studies;
Demography;
Demographic Research;
Drug Safety;
European Journal of Epidemiology;
Epidemiology;
Frontiers in Pharmacology;
Health & Place;
Injury Epidemiology;
International Journal of Cardiology;
International Journal of Chronic Obstructive Pulmonary Disease;
International Journal of Epidemiology;
Journal of Clinical Medicine;
Journal of Comparative Effectiveness Research;
Journal of the Royal Statistical Society Series A (Statistics in Society);
Nutrition, Metabolism & Cardiovascular Diseases;
*Pharmacoepidemiology & Drug Safety;
Philosophical Transactions of the Royal Society B (Biological Sciences)
PLoS ONE;
Public Understanding of Science.
Rejuvenation Research

** Rated by the editorial board as top reviewer in 2019 based on quality and timeliness of reviews.*

STATISTICAL LANGUAGES & SOFTWARE

Statistical programmes and languages

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| R, RStudio | Expert: 10+ years of daily programming experience, incl. teaching. |
| SPSS | Experienced user: 5+ years of daily user experience. |
| SAS; STATA | Working knowledge: 5 years of infrequent use. |
| Python | Beginner: currently investing time to learn this language. |

Database languages

MySQL, SQL server Working knowledge: 4 years of infrequent use.

Authored statistical packages

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| cfdecomp | An R-package for decomposing differences between populations, uses Monte Carlo integration for added flexibility. Available on CRAN & Github |
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WEBLOG ENTRIES (<https://demotrends.org/>)

- 2015, Sept 1st Bijlsma MJ. ‘Inferring population-level effects from individual-level effect estimates: G-computation’.
- 2014, Feb 17th Bijlsma MJ. ‘A hot topic and a futile quest? The recent discussion on age-period-cohort analysis’.
- 2013, Sept 4th Bijlsma MJ. ‘The bias-variance tradeoff, what it means for quantitative researchers’.
- 2013, Aug 23rd Bijlsma MJ. ‘Homage to the Lexis diagram’.
- 2013, Feb 12th Bijlsma MJ. ‘Demography and Epidemiology: Past and Future Directions’.

DUTCH LANGUAGE PUBLICATIONS * denotes peer reviewed publication

- 2017* Van Doorn E, Darvishian M, Dijkstra F, **Bijlsma MJ**, Donker GA, de Lange MMA, Cadenau LM, Hak E, Meijer A. Effectiviteit van influenzavaccinatie in Nederland: dominant circulerend virustype en match zijn bepalend. *Nederlands Tijdschrift voor Geneeskunde* 2017;161:D1648.
- 2015 **Bijlsma MJ**, Janssen F, Bos HJ, Kamphuisen PW, Vansteelandt S, Hak E. Associatie tussen gebruik van statine en cardiovasculaire sterfte in Nederland 1994-2010: een ecologische studie. *Medisch Farmaceutische Mededelingen* 2015; 4: 23-5.
- 2014* **Bijlsma MJ**, Oortgiesen BE, Beernink RHJ, Bos J, Wilffert B, Hak E. Het effect van de CBG-waarschuwing op de trend in SSRI- gebruik in Nederland van 1998 tot 2010. *Pharmaceutisch Weekblad Wetenschappelijk Platform* 2014;8:A1406.
- 2011* **Bijlsma MJ**, Bos HJ, De Jong-van den Berg LTW, Janssen F. Periodepatronen, leeftijdpatronen en cohortpatronen in de prevalentie van benzodiazepinegebruik en statinegebruik: de invloed van veranderde richtlijnen. *Pharmaceutisch Weekblad Wetenschappelijk Platform* 2011; 5(10): 169-173.
- 2010 **Bijlsma MJ**, Moerman JM. Herdenken in een post-geografische ruimte. *Rooilijn* 2010; 43(1): 22-7.

PRESS COVERAGE

- 2017, March 20th “Better Understanding of Alcohol-Related Mortality Trends in Europe”. *Population Europe*.

LANGUAGES

- Dutch Native speaker.
- English Highly advanced proficiency.
- German Independent user.
- Spanish Beginner.