

Report - IUSSP Seminar “Lifespan extension with Varying Cause-of-Death Trajectories in European Societies” Castle of Rauischholzhausen, Germany, February 11-13, 2019

Organized by

IUSSP Scientific Panel “Lifespan extension with Varying Cause-of-Death Trajectories”

- Ulrich Mueller (Panel Chair: Federal Institute for Population Research, Wiesbaden/Germany; Philipps-University Marburg/Germany)
- Vladimir Canudas-Romo (Panel Member: Max-Planck Odense Center, Odense/Denmark & Australian National University (ANU), Canberra/Australia.
- Nandita Saikia (Panel Member: Jawaharlal Nehru University (JNU) New Delhi/India & International Institute for Applied Systems Analysis, Laxenburg/Austria)
- Bernardo Queiroz (Universidade Federal de Minas Gerais)

Local Organizing Committee:

- Ulrich Mueller (Federal Institute for Population Research, Wiesbaden/Germany; Philipps-University Marburg/Germany)
- Andrea Werdecker (Federal Institute for Population Research, Wiesbaden/Germany)
- Ronny Westerman (Federal Institute for Population Research, Wiesbaden/Germany)

The IUSSP Scientific Panel on “Lifespan extension with Varying Cause-of-Death Trajectories” 2015-2019 focused on the divergence between a substantial and fairly uniform extension of the average life span in similarly prosperous countries, going hand in hand with an enormous change in the distribution of causes-of-death during that extension of the life span, and on the other side, the much larger differences in the incidence of single causes of death from country to country than in general mortality.

Thus, there must be great variation in the cause-of-death trajectories leading from the 50 years life expectancy societies around 1900 to the 80 years life expectancy societies in 2013, and even more variation, if we include developing/transitional societies which have experienced an even faster lifespan extension and a faster epidemiological transition at still lower levels of standard of living.

This great variation in the cause-of-death trajectories in societies otherwise similar in overall mortality was the focus of the proposed panel. Since many deaths occur by a combination of causes, disease incidence data had to be considered as well.

The Seminar on Lifespan extension with Varying Cause-of-Death Trajectories in European Societies was held 11-13 February 2019 at the Castle of Rauischholzhausen, Germany. The meeting was supported by the IUSSP and the German Research Foundation (DFG)¹.

After seminars in New Delhi (India) and Campinas (Brazil) in 2017, and a session at the 2017 International Population Conference in Cape Town (South Africa) this Seminar in Rauischholzhausen was the concluding event of the IUSSP Scientific Panel.

The seminar focused on themes related to mortality and causes-of-death studies in European countries, regional variation in cause of death profiles, methodological challenges in oldest-old mortality assessments in international settings, as well as methodologies for countries with limited data. The goal of the seminar was to bring together researchers from developing and developed countries with an interest in mortality and cause-of-death analysis. More specifically, the objectives of the seminar, as they evolved from the submissions' profile, were: i) to present studies of all-cause and cause-specific mortality covering disadvantaged and privileged populations in Europe to the international context of India; ii) to highlight new methodologies on mortality cause of death decomposition; and iii) to discuss possible small-area mortality estimates for Germany.

The scientific program consisted in 15 regular presentations, given by participants from a variety of disciplines – demographers, statisticians, economists and public health specialists – and included senior researchers, faculty as well as postdocs from Colombia, Denmark, Germany, India, Italy, Macedonia, the Netherlands, and Russia. The time available for discussions was extensively used. The After-Dinner Lecture was given by an internationally renowned expert in forensic imaging.

Presenters in alphabetical order, lead author in bold letters were:

1. **Vladimir Canudas-Romo** (Australian National University, Canberra/Australia), Timothy Adair (University of Melbourne, Australia), Stefano Mazzucco (University of Padova, Italy):
“Cause of death decomposition of cohort survival comparisons: The Truncated Cross-Average Length of Life (TCAL).”
2. **Inna Danilova** (Max Planck Institute for Demographic Research (MPIDR), Rostock/Germany), Vladimir Shkolnikov (MPIDR & National Research University

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- Higher School of Economics, Moscow/Russia), Dmitry Jdanov (MPIDR & National Research University Higher School of Economics, Moscow/Russia):
„Comparability of cause-of-death mortality data at older ages across European countries.”
3. **Ingrid van Dijk** (Rabound University, Nijmegen/Netherlands), Angelique P.P.O. Janssens (Rabound University), Ken R. Smith (University of Utah, United States of America):
“The long harm of childhood. Childhood exposure to mortality and subsequent risk of adult mortality in Utah and The Netherlands.”
 4. **Jana Förster** (Center for Population and Health, Wiesbaden/Germany):
„Persistence in regional differences in cause-of-death profiles across Bavarian administrative districts 1998 to 2015.”
 5. **Himanshu Himanshu** (International Institute for Population Sciences, Mumbai/India):
„Perceived health status and happiness assessment throughout life course factors in fifteen European countries: Results from world values survey.”
 6. Nandita Saikia (Jawaharlal Nehru University, New Delhi/India), Vladimir Shkolnikov (Max-Planck Institute for Demographic Research (MPIDR), Rostock/Germany), **Domantas Jasilionis** (MPIDR):
“Socio-economic patterns and determinants of adult deaths due to external-cause in India: Analysis of nationally representative population-based survey data in comparative perspective.”
 7. **Goran Miladinov** (Independent Researcher, Macedonia):
„Measuring of the Socioeconomic causes for infant mortality in Macedonia, Turkey and Albania.”
 8. **Sergio Páez-Moncaleano** (Universidad Nacional de Colombia, Bogotá/Colombia), **Juan J. Rubio** (Universidad Nacional de Colombia), B. Piedad Urdinola (Universidad Nacional de Colombia)
“Flexible regression using Generalized Additive Model for Location, Scale and Shape (GAMLSS) models for Old Age Patterns.”
 9. **Dhakad Moradhvaj** (Jawaharlal Nehru University, New Delhi/India):
“Decomposing socioeconomic inequality in Adult Mortality.”
 10. **Michael Mühlichen** (Federal Institute for Population Research, Wiesbaden/Germany):
„Avoidable Mortality in the German Baltic Sea Region Since Reunification: Convergence or Persistent Disparities?”

11. **Parmar Mukesh** (Jawaharlal Nehru University, New Delhi/India), Nandita Saikia (Jawaharlal Nehru University):
“Measuring Sex differences in Life expectancy and Life disparity.”
12. **Nandita Saikia** (Jawaharlal Nehru University, New Delhi/India), Jayanta Kumar Bora (Indian Institute of Dalit Studies, New Delhi/India):
„Neonatal and under-five mortality changes in Indian districts with reference to Sustainable Development Goal 3 – lessons for high infant mortality populations in Europe.”
13. **Giambattista Salinari** (University of Sassari, Italy), Cristina Giuliani (University of Bologna, Italy). Gustavo De Santis (University of Florence, Italy).
“Sex differences in mortality: the effect of fertility on the evolution of the sex ratio in post-reproductive ages.”
14. **Andrea Werdecker** (Federal Institute for Population Research, Wiesbaden/Germany)
„Why do reported diabetes mellitus morbidity and mortality vary so much within Europe?”
15. **Ronny Westerman**, Michael Mühlichen (Federal Institute for Population Research, Wiesbaden/Germany):
“Regional Variation in Avoidable Cancer Mortality in Germany: North-South Gradient or East-West Divide?”

As Discussants served:

1. **Sebastian Klüsener** (Federal Institute for Population Research, Wiesbaden/Germany)
2. **Ulrich Mueller** (Federal Institute for Population Research, Wiesbaden/Germany; Philipps-University Marburg/Germany)
3. **Kai Willführ** (Carl von Ossietzky University Oldenburg/Germany)

The After Dinner Lecture on February 11 was given by **Sarah Heinze** (Medical School, Heidelberg University): *“New Imaging Techniques in Cause-of-Death Diagnostics”*

Wiesbaden/Marburg, March 06, 2019



Ulrich Mueller