

## OMAR KARLSSON, PHD

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<https://OmarKarlsson.com>

- Ten years research experience.
- Econometrics, demographic methods, and GIS on surveys and demographic data.
- Over 30 peer-reviewed articles in medical, public health, and demography journals.
- Expert user of Stata. Experienced user of JavaScript (D3), Excel, R, and Python.
- Excellent written and verbal communication skills.

## EXPERIENCE

2022 – *present*

**Visiting Research Fellow**, Duke University Population Research Institute and Duke Global Health Institute, USA

- Managed data and conducted analyses on health trends and other indicators using various data sources, such as life tables and detailed cause-of-death data, for the third Lancet Commission on Investing in Health.
- Set up and hosted an interactive dashboard (using JavaScript D3) displaying visualizations of key metrics, trends, and projections. This allows commissioners to explore data layers and generate displays as needed.
- Managed ad-hoc data needs from commissioners requesting targeted data summaries or visualizations to aid in concept development or presentation of results to funders and stakeholders. These requests could be highly specific, requiring a quick understanding of their needs.
- Participated in meetings with commissioners.
- Led the writing and analyses for two background papers supporting the commission's work and co-authored four other studies.
- Participated in making the main report which was published in the Lancet.
- Presented results at academic conferences and seminars at Duke University.

2022 – *present*

**Postdoctoral Fellow**, Centre for Economic Demography, Lund University, Sweden

- Independently conducted research on economic demography with a focus on human development.

2019 – 2022

**Takemi Research Fellow**, Harvard TH Chan School of Public Health, USA

- Constructed and analyzed large datasets from household surveys using parallel computing. This also involved cleaning, structuring, and managing data to ensure accuracy and consistency.
- Wrote manuscripts and published findings in academic journals.
- Presented results at academic conferences and seminars within Harvard University.

2020 – 2021

**External Consultant**, UNICEF, Programme Division, Nutrition Section, USA

- Met with the UNICEF team to understand their specific goals and information needs.
- Conducted customized data analyzes to provide insights relevant to the UNICEF team's objectives.

- Translated quantitative findings into actionable recommendations to support decision-making.
- Led the writing of journal articles, reports, and presentations that made complex data accessible to a non-technical audience.
- Conducted a workshop to help the broader UNICEF staff understand the data analysis, interpretation, and application in their health initiatives.

2018 – 2019

**Researcher**, Centre for Economic Demography, Lund University, Sweden

- Contributed to research in historical demography, studying socioeconomic disparities in child mortality in 19th century Sweden.
- Prepared data from a unique historical economic and demographic database, containing all vital events and occupations within a region in southern Sweden.
- Conducted survival analyses.
- Contributed to writing of a journal article.

## EDUCATION

2014 – 2018

**PhD in Economic History**, Lund University, Sweden

2012 – 2014

**MSc in Economic Demography**, Lund University, Sweden

## SELECTED LECTURES AND SEMINARS

- 2024 Duke University Population Research Institute: Seminar Series: *Global health 2050: the path to halving premature death by mid-century*
- 2023 Korea University: International Symposium on Precision Public Health. *Differences in child mortality and morbidity across the first five years in low- and middle-income countries.*
- 2021 UNICEF: Nutrition Master Class. *To what extent is child mortality and wasting prevalence concentrated before age two? Implications for nutrition and health programs*
- 2020 Harvard Center for Population and Development Studies: Friday Luncheon Seminars. *Household technology and child health*

## SELECTED CONFERENCE PRESENTATIONS

- 2024 Consortium of Universities for Global Health 15th Annual Conference. *Life expectancy deficits by cause of death: a life table decomposition.*

- 2023 The Population Association of America 2023 Annual Meeting. *Anemia severity and school attendance among 251,401 adolescents aged 15–18 years: a nationally representative household fixed-effects study in India.*
- 2018 European Population Conference. *Influence of Disease Environment in Infancy on Childhood Health and Education in Sub-Saharan Africa.*
- 2015 The Union for African Population Studies 7<sup>th</sup> Africa Population Conference, South Africa. *Intergenerational transmission of Capabilities: Mothers and Children in sub-Saharan Africa.*

## GRANTS

- 2020 Swedish Research Council International Postdoc (three-year postdoctoral scholarship)
- 2020 Handelsbanken Wallander Scholarship (two-year postdoctoral scholarship)
- 2016 Handelsbanken Hedelius Scholarship (one-year visiting scholarship)

## JOURNAL PUBLICATIONS

Norheim OF, Chang AY, Bolongaita S, Barraza-Lloréns L, Fawole A, Gebremedhin LD, González Pier E, Jha P, Johnson E, **Karlsson O**, Kiros, M, Lewington S, Mao W, Ogbuoji O, Pate M, Sargent J, Tang X, Watkins D, Yamey G, Yip W, Jamison D & Peto R (2024). Halving premature death and improving the quality of life at all ages. *The Lancet*, online first.

**Karlsson O**, Kim R & Subramanian SV (2024). International Trends in Zinc Treatment for Diarrhea. *Pediatrics*, 154 (5): e2024066701.

Jamison DT, Summers LH, Chang AY, **Karlsson O**, Mao W, Norheim OF, Ogbuoji O, Schäferhoff M, Watkins D, Adeyi O, Alleyne G, Alwan A, Anand S, Nigatu Belachew R, Berkley S, Bertozzi S, Bolongaita S, Bundy D, ... & Yamey G (2024). Global health 2050: the road to halving premature death by mid-century. *The Lancet*, 404(10462), 1561–1614.

**Karlsson O**, Rajpal S, Johri M, Kim R & Subramanian SV (2024). Prevalence and Trends of Not Receiving a Dose of DPT-Containing Vaccine Among Children 12-35 Months: An Analysis of 81 Low- And Middle-Income Countries. *Journal of Epidemiology and Global Health*.

**Karlsson O**, Benski C Kapoor M, Kim R & Subramanian SV (2024). Association between neonatal mortality and births not weighed among 400 thousand institutional deliveries in 32 low- and middle-income countries. *Journal of Public Health*.

**Karlsson O & De Neve JW (2024).** Washing machine ownership and girls' school attendance: A cross-sectional analysis of adolescents in 19 middle-income countries. *The Journal of Economic Inequality*, 1–21.

**Karlsson O, Kim R & Subramanian SV (2024).** Prevalence of Children Aged 6 to 23 Months Who Did Not Consume Animal Milk, Formula, or Solid or Semisolid Food During the Last 24 Hours Across Low-and Middle-Income Countries. *JAMA Network Open*, 7(2), e2355465–e2355465.

De Neve JW, **Karlsson O**, Rai RK, Kumar S & Vollmer S (2024). Relationship between adolescent anemia and school attendance observed during a nationally representative survey in India. *Communications Medicine*, 4(1), 112.

**Karlsson O & Subramanian SV (2023).** Refrigerator ownership and child health and nutrition in low-and middle-income countries. *Global Food Security*, 37, 100698.

**Karlsson O, Kim R, Moloney GM, Hasman A & Subramanian SV (2023).** Patterns in child stunting by age: A cross-sectional study of 94 low-and middle-income countries. *Maternal & Child Nutrition*, e13537.

Subramanian SV, Khaikar A & **Karlsson O** (2023). Should India adopt a country-specific growth reference to measure undernutrition among its children? *The Lancet Regional Health - Southeast Asia*, 9. **[Comment]**

**Karlsson O & Dribe M (2022).** Maternal height and child health and schooling in sub-Saharan Africa: Decomposition and heterogeneity. *Social Science & Medicine*, 315, [115480].

**Karlsson O.** Scarring and selection effects on children surviving elevated rates of postneonatal mortality in sub-Saharan Africa (2022). *SSM - Population Health*, 19, 101160

**Karlsson O, Kim R, Hasman A & Subramanian SV** Age Distribution of All-Cause Mortality Among Children Younger Than 5 Years in Low- and Middle-Income Countries (2022). *JAMA Network Open*, 5(5), e2212692-e2212692.

Dribe M & **Karlsson O** (2022). Inequality in early life: Social class differences in childhood mortality in southern Sweden, 1815–1967. *Economic History Review*, 75(2), 475– 502.

**Karlsson O, Kim R, Guerrero S, Hasman A & Subramanian SV (2022).** Child wasting before and after age two years: A cross-sectional study of 94 countries. *EClinicalMedicine*, 46, 101353.

Subramanian SV, **Karlsson O & Kim R** (2022). Using height-adjusted stunting prevalence will fail disadvantaged children worldwide, authors reply. *The Lancet Global Health*, 10(5), e621. **[Correspondence]**

Subramanian SV, **Karlsson O & Kim R** (2022). Revisiting the stunting metric for monitoring and evaluating nutrition policies. *The Lancet Global Health*, 10(2), e179-e180. **[Comment]**

**Karlsson O**, Domingue BW, Kim R & Subramanian SV (2022). Estimating heritability of height without zygosity information for twins under five years in low- and middle-income countries: An application of normal finite mixture distribution models. *SSM - Population Health*, 17, 101043.

**Karlsson O**, Kim R, Hasman A & Subramanian SV (2022). Consumption of Vitamin-A-Rich Foods and Vitamin A Supplementation for Children under Two Years Old in 51 Low-and Middle-Income Countries. *Nutrients*, 14(1), 188.

**Karlsson O**, Kim R, Bogin B & Subramanian SV (2022). Maternal height-standardized prevalence of stunting in 67 low- and- middle-income countries. *Journal of Epidemiology*, 32(7), 337.

Egbewale BE, **Karlsson O** & Sudfeld CR (2022). Childhood Diarrhea Prevalence and Uptake of Oral Rehydration Solution and Zinc Treatment in Nigeria. *Children*, 9(11).

**Karlsson O**, Kim R, Sarwal R, James KS & Subramanian SV (2021). Trends in underweight, stunting, and wasting prevalence and inequality among children under three in Indian states, 1993–2016. *Scientific Reports*, 11(1), 1-11.

**Karlsson O**, Dribe M & Subramanian SV (2021). Changing speed of reduction in under-5 mortality rates over the 20th century. *Journal of Epidemiology and Community Health*, 75(1), 36-39.

Li Z, **Karlsson O**, Kim R & Subramanian SV (2021). Distribution of under-5 deaths in the neonatal, postneonatal, and childhood periods: a multicountry analysis in 64 low-and middle-income countries. *International journal for equity in health*, 20 (1), 1-11.

Thoma B, Sudharsanan N, **Karlsson O**, Joe W, Subramanian SV & De Neve JW (2021). Children's education and parental old-age health: Evidence from a population-based, nationally representative study in India. *Population Studies*, 75(1), 51-66.

**Karlsson O**, Kim R, Joe W & Subramanian SV (2020). The relationship of household assets and amenities with child health outcomes: An exploratory cross-sectional study in India 2015–2016. *SSM-Population Health*, 10, 100513.

Kitara DL & **Karlsson O** (2020). The effects of economic stress and urbanization on driving behaviours of Boda-boda drivers and accidents in Gulu, Northern Uganda: a qualitative view of drivers. *The Pan African Medical Journal*, 36.

Subramanian SV, Chatterjee P & **Karlsson O** (2020). Lessons from COVID-19 pandemic for the child survival agenda. *Journal of Global Health*, 10(2). **[Comment]**

Subramanian SV, **Karlsson O**, Zhang W & Kim R (2020). Geo-mapping of COVID-19 Risk Correlates Across Districts and Parliamentary Constituencies in India. *Harvard Data Science Review*, (Special Issue 1).

Teufel F, Geldsetzer P, Manne-Goehler J, **Karlsson O**, Koncz V, Deckert A, Theilmann M, Marcus ME, Ebert C, Seiglie JA, Agoudavi K, Andall-Brereton G, Gathecha G, Gurung MS, Guwatudde D, Houehanou C, Hwalla N, Kagaruki GB, Karki KB ... De Neve JW (2020). Analysis of Attained Height and Diabetes Among 554,122 Adults Across 25 Low- and Middle-Income Countries. *Diabetes Care*, 43(10), 2403.

De Neve JW, **Karlsson O**, Canavan CR, Chukwu A, Adu-Afarwuah S, Bukenya J, Darling AM, Harling G, Moshabela M, Killewo J ... Berhane Y (2020). Are out-of-school adolescents at higher risk of adverse health outcomes? Evidence from 9 diverse settings in sub-Saharan Africa. *Tropical Medicine & International Health*, 25(1), 70–80.

**Karlsson O** (2019). Religion and Child Health in West and Central Africa. *Population and Development Review*, 45(4), 707–738.

**Karlsson O**, De Neve JW & Subramanian SV (2019). Weakening association of parental education: Analysis of child health outcomes in 43 low- and middle-income countries. *International Journal of Epidemiology*, 48(1), 83–97.

**Karlsson O**, Kim R, Joe W & Subramanian SV (2019). Socioeconomic and gender inequalities in neonatal, postneonatal and child mortality in India: A repeated cross-sectional study, 2005–2016. *Journal of Epidemiology and Community Health*, 73(7), 660–667.

De Neve JW, **Karlsson O**, Coetzee L, Schröder H, Subramanian SV, Bärnighausen T & Vollmer S (2018). Antiretroviral therapy coverage associated with increased co-residence between older and working-age adults in Africa. *Aids*, 32(14), 2051–2057.