

## Economic processes, morbidity and mortality

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**Wednesday 3 September, 9am**

### **Too Young to Retire, Too Old to Hire? Older Women's Labour Market Re-entry**

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One in two adult women across Europe is aged 50 and over. Despite more of these 'older' women seeking, wanting, or needing employment, little is known about women's job loss and job-seeking experiences at this life stage. How do women aged 50+ experience and narrate labour market re-entry? Drawing on in-depth qualitative interviews with thirty-six women in England in their 50s and 60s transitioning from 'inactivity' or unemployment back into paid work, this study explores the institutional, structural, and personal barriers they face.

Key findings reveal participants often feel overlooked and undervalued by employers, confronting convoluted application processes, preferences for recent experience over transferable skills, and stereotypes that they are less 'malleable' than younger workers. Interactions with Job Centre services are frequently negative. Furthermore, many grapple with anxieties around health, cognitive decline, technological know-how, and career gaps – and yet those with more experience report this is sometimes seen as a 'threat' rather than an asset. Unpaid caregiving, community work, and heavy domestic loads further undermine job-search strategies.

These factors leave many older women feeling marginalised in the labour market and undervalued by employers – as well as their families – despite their considerable skills and unrealised potential. Findings highlight the need for targeted policy responses, including better access to training, career coaching, tailored job search support, more flexible working arrangements, and improved coordination across employment, health, and housing services. Altogether, the study advances understanding of how gendered ageism, cumulative disadvantage, and life course dynamics combine to shape older women's labour market re-entry.

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### **Temporal Dynamics and Industry-Specific Patterns of Chronic Disease Multimorbidity Among Middle-Aged and Older Adults in India**

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#### **Background**

The rapid aging of India's population has led to an increasing prevalence of multimorbidity or the coexistence of multiple chronic conditions. While most existing studies on chronic diseases in India focus on single conditions or rural-urban disparities, limited attention has been given to the sequence and pace of chronic disease onset, especially for occupational risks. This study aims to fulfill this lacuna by identifying chronic disease patterns among middle-aged and older adults in India and exploring how occupation types influence the temporal progression of multimorbidity.

#### **Methods**

This study utilized data from Wave 1 of the Longitudinal Ageing Study in India (LASI), a nationally representative survey conducted between April 2017 and December 2018. The survey included 47,870 individuals aged 45 and older. Latent Class Analysis (LCA) was employed to identify distinct multimorbidity patterns/clusters based on seven chronic conditions. The progression and timeline of disease combinations were assessed, with a focus on industry-specific patterns of disease acquisition.

#### **Findings**

Three latent classes of chronic disease patterns were identified: "Relatively Healthy" (76%), "Hypertension and Arthritis" (5%), and "Hypertension and Diabetes" (18%). Hypertension was found to act as a gateway condition, leading to arthritis or diabetes within three years for a significant portion of individuals. 50% workers in manufacturing, mining, and quarrying industry developed diabetes after hypertension within 1-3 years.

## Conclusion

Older individuals with hypertension, diabetes, and arthritis should be particularly provided with long-term care aimed at early diagnosis. A better understanding of these disease combinations channels the treatment process more effectively.

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## **Human populations with low survival at advanced ages and postponed fertility reduce long-term growth in high inflation environments**

**Rahul Mondal - International Institute for Population Sciences, Mumbai, José Manuel Aburto - London School of Hygiene and Tropical Medicine, Rebecca Sear - Brunel University London, Shripad Tuljapurkar - Stanford University, Udaya Shankar Mishra - International Institute for Population Sciences, Mumbai, Roberto Salguero-Gómez - University of Oxford**

Temporal variability in inflation can lead to important fluctuations in the long-term growth rate of human populations via their differential impacts on vital rates like survival and fertility. To examine these relationships, we explore whether lower survival rates at older ages (>60 years) and fertility rates at late reproductive years (>30 years) among populations exposed to higher inflation rates determine their expected lower long-term growth rate compared to lower inflation rates. To quantify the impact of variability in inflation on vital rates response, we develop a quantitative pipeline with four steps, and parameterise it with high-resolution economic and demographic data across 76 countries from 1971-2021. The four steps are (1) defining treatment groups based on levels of trend inflation; (2) constructing matrix population models for each environmental state defined on the basis of the duration of inflation, under every treatment; (3) estimating the stochastic population growth rate for each treatment by considering a Markovian environment dictated by the stationary frequency and temporal autocorrelation of the treatment; and (4) decomposing the differences in the population growth rate between treatments into contributions from environmental variability and vital rate differences between environments using a Stochastic Life Table Response Experiment. Our results support the hypothesis that the stochastic population growth rate at lower inflation levels is systematically higher than that at a higher level. The disadvantage in survival at older ages (>60 years) and fertility at ages >30 years led to a lower stochastic growth rate among populations exposed to higher inflation levels. Our framework explicitly links human population performance and the inflation environment by describing time-varying feedback between inflation, human survival, fertility, population growth, and its age structure. We discuss the potential of our approach in studying life-history strategies and population dynamics with a wide range of drivers of environmental variability.

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