# Multi-centre Analysis of the Dynamics In Migration and Health -MADIMAH Project-

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Migration, Urbanisation and Health Working Group

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Researchers in 11+ HDSS centres



## Background

- Population transitions rapid and unpredictable
- Migration and urbanisation increasingly recognised
- Changing exposures -> changing health outcomes.
- Migration process is complex
- Conventional understanding of rural-to-urban migration frequently blunt
- Comprehensive, valid data about flows are scarce
- Two way flows; circulation; impermanent forms of migration occur



## MADIMAH Project Aims

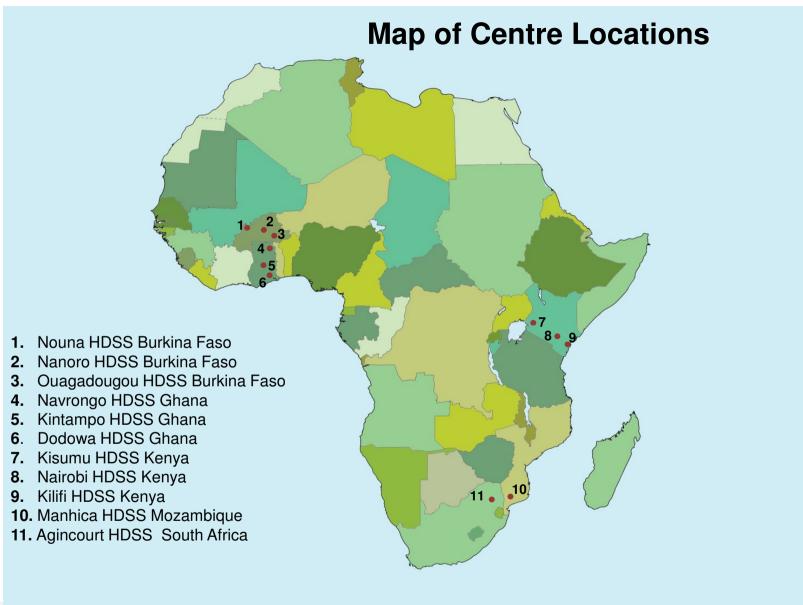
- Understand migration patterns in INDEPTH HDSS populations
- Understand what drives migration
- Understand how migration relates to mortality.
- Produce databases for longitudinal analysis
- Provide training in longitudinal analysis



#### MADIMAH method

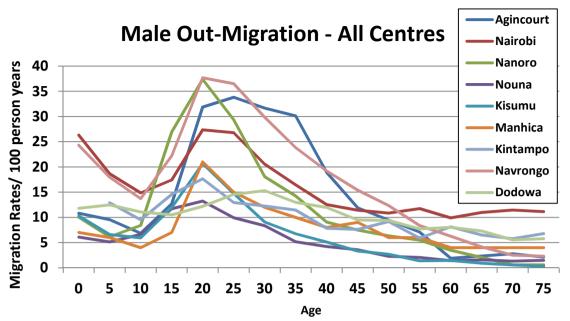
- Standardised data preparation for event history analysis in Stata
- HDSS -> Biographical file of individual events in time
- Data quality event/following-event matrix
- Time-varying covariates from HDSS
- Standardised analysis of
  - the determinants of migration
  - migration as a factor influencing mortality

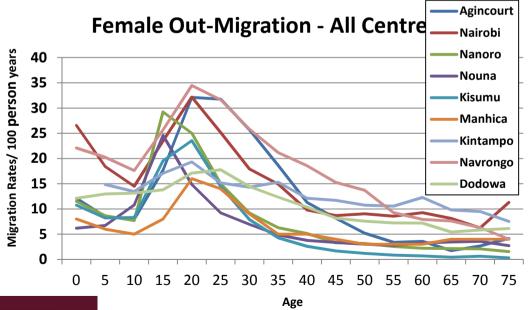








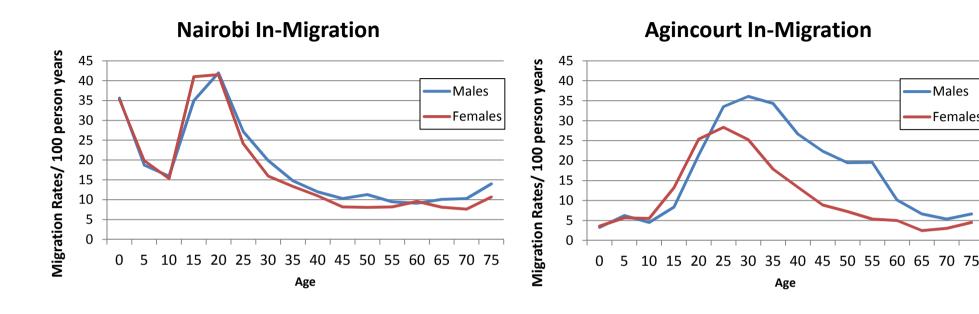


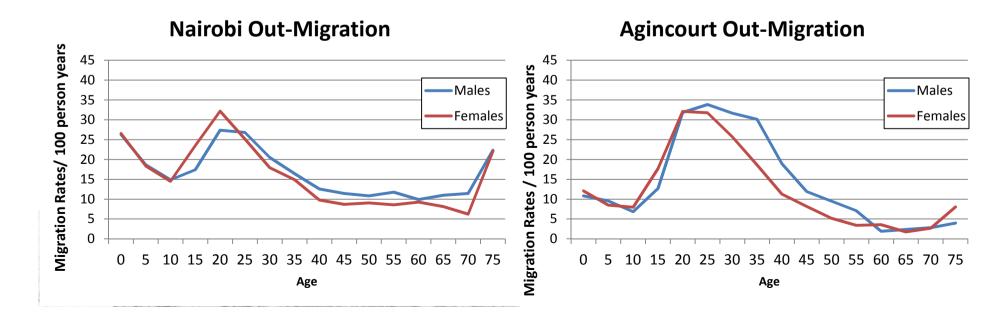


#### Age Sex Migration rates for Agincourt and Nairobi in 2010/2011

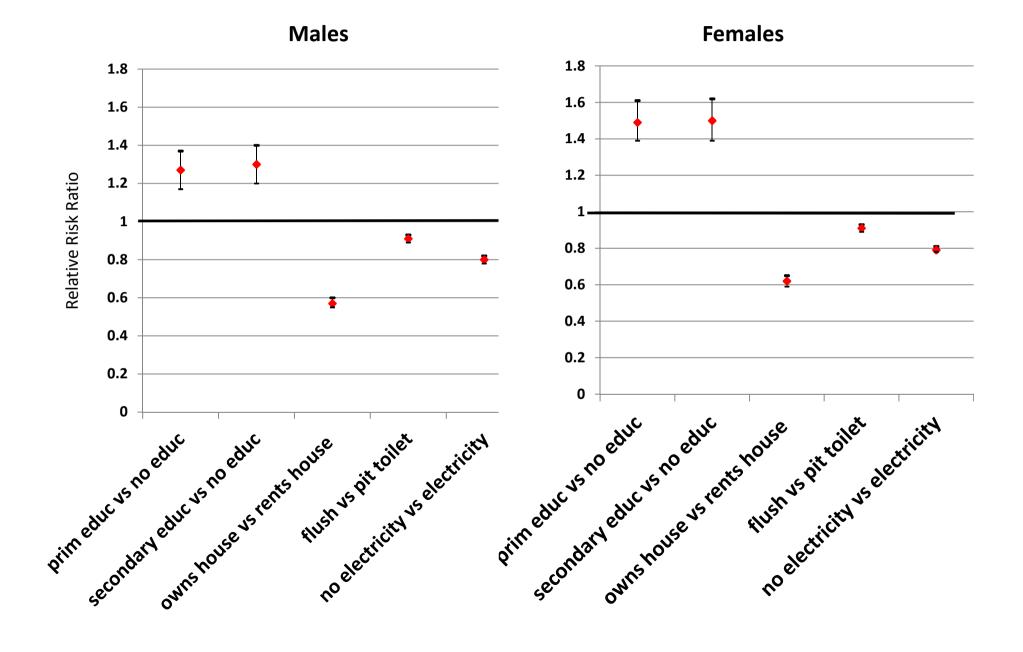
Males

**Females** 

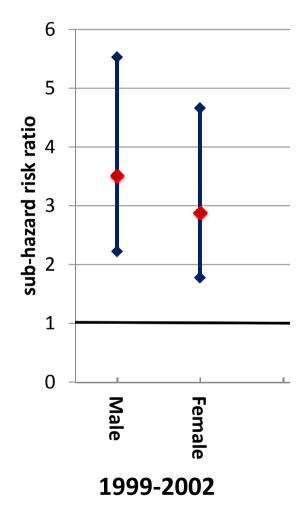




#### **Factors associated with out-migration from Nairobi HDSS**

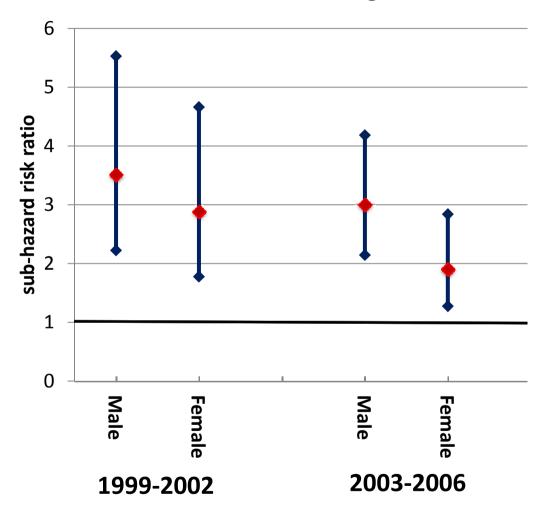


# Risk ratios for mortality from non-communicable disease for migrants vs. non-migrants, Agincourt



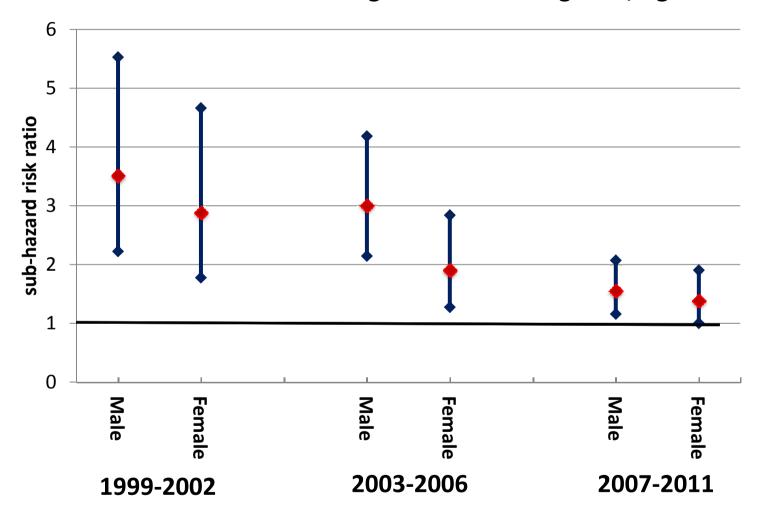


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# Working Group aspirations

- Produce evidence of the causes and consequences of migration, standardised across many settings
- Thereby improving the understanding that is currently shaped by large cross-sectional studies with limited temporal detail (or by theory)
- To influence how policy makers see migration and urbanisation in their countries



### Next steps

- Publish single centre and multi-centre studies of the dynamics and determinants of migration
- Launch MADIMAH stage 2 on the relationship between migration and mortality
  - Proposal writing is underway
  - Using the MADIMAH methods
  - All HDSS Centres are welcome
  - NB attend the WG workshop tomorrow at 17h00 room 210

