The Dynamics of Migration, Health and Livelihoods: INDEPTH Network Perspectives

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HDSS data valuable in studying migration

HDSS provide longitudinal data which makes studying migration in relation to health and livelihoods possible

- Complex relationships between migration, livelihoods and health
- Cross-sectional studies not suitable
- Need for longitudinal data
- Achieved by Health and Demographic Surveillance Systems (HDSS)
- Monitoring of migration
Through the INDEPTH Network it is possible to compare data between different HDSS sites

- Migration and Urbanisation Working Group: studying migration in relation to livelihoods and health
- Book: multi-site perspective
- Part I: studying migration within HDSS sites (value, methods, context)
- Part II: Migration and socio-economic status (3 sites)
- Part III: Migration and health (4 sites)
Studying migration and adult mortality

Do adult migrants have a lower mortality (healthy worker effect)? Or a higher mortality (returning home to die)?

- Hypothesis 1: Adult migrants experience lower mortality due to positive selection
- Hypothesis 2: Migration increases risk of contracting diseases in the destination place, resulting in higher mortality amongst returning migrants
- Growing literature on relationship between temporary migration and HIV
- Returning home to die: migrants who become seriously ill return to their rural homes to be taken care of/die
Migrants experience lower mortality rates in the younger ages and higher mortality rates in the ages 35-49 compared to non-migrants.

- Rural Manhiça HDSS (Maputo Province, Mozambique), 1998-2005

- Estimate quarterly hazard of death in adults (20-59 yrs) as a function of whether or not the person in-migrated, controlling for e.g. sex, education, duration since last in-migration, historical period (logistic regression)

- The odds of dying for migrants that only recently returned (< 3 mo) is 8.3 times higher than the odds for those that have been back for a longer time (>10 mo)
Adult mortality in South Africa

Short-term migrants experience higher mortality rates than residents and long-term returning migrants

- Rural Agincourt HDSS (South Africa), 1992-2004
- Estimate annual hazard of death of residents (20-80 years), short-term (< 5 yrs) and long-term returning migrants controlling for sex, age, historical period (logistic regression)
- The annual odds of dying for short-term returning migrants are generally 1.1 to 1.9 times higher than those of residents and long-term returning migrants
- Short-term returning migrants account for increasing proportion of HIV/TB deaths
Short-term returning migrants face a substantially higher risk of dying
Returning home to die

Higher mortality in returning migrants places higher burden on families and health care system in rural areas

- Rural areas; high levels of migration
  Similar period of time, age groups, analyses

- Overall conclusion: odds of dying for recent migrants is higher than odds for those returned longer ago/non-migrants

- Increasing number of circular migrants are becoming ill as they age in the urban areas where they work and come home to be cared for and possibly die

- This shifts the healthcare burden to their families/health care system in the rural areas
Studying migration and child mortality

Do children born in the slums to recent migrant mothers have a higher mortality than those born to long-term residents?

Do urban-rural migrant children have a higher mortality than non-migrant rural children?

• Hypothesis 1: Having a mother who is new in the slum setting increases the risk of child mortality after controlling for various confounding factors

• Hypothesis 2: Children who migrate from urban to rural setting have elevated risk of early childhood mortality compared with non-migrant rural children
Children born in the slums to recent migrant mothers had a higher mortality than those born to long-term residents

- Urban (slum) Nairobi HDSS (Kenya), 2003-2006
- Assess the effect of migration status on childhood mortality, controlling for various demographic (child, mother) and socioeconomic factors that also affect child survival (Cox proportional hazards model)
- Children born in the slums to recent migrant mothers (after Jan 2003) had higher risk of mortality than those born to women who have stayed in the slums for a longer period (Hazard Ratio=1.40)
Child mortality in Kisumu

Urban-rural migrant children have a lower mortality than non-migrant rural children

- Rural Kisumu HDSS (Nyanza Province, Kenya), 2004-2006
- Modelling the hazard of death as a function of migration, the sex and age of the child, maternal age and education, household socioeconomic status, home-based water treatment and source of income
- Urban-rural child migration was significantly associated with lower risk of death. Compared with non-migrant children, urban-rural child migrants had a 29 percent reduction in the risk of death
Effect of migration on child mortality differs

Migration from a rural area to a slum setting has a negative effect on survival, while migration from a urban to a rural setting does not

- Mortality rates: slum > rural > urban
- Similar period of time, age group, analyses
- Overall conclusions:
  - Children born in the slums to recent migrant (rural) mothers had a higher mortality than those born to long-term residents [negative effect of migration]
  - Urban-rural migrant children have a lower mortality than non-migrant rural children [no negative effect of migration]
Effect of migration on health and livelihoods

Potential negative consequences of migration for health and beneficial impacts on livelihoods

• Potential negative consequences of migration on health (adult mortality, child mortality in rural-slum migration)

• Beneficial impacts of migration on livelihoods (improved living conditions, education for the children, due to remittances)
Book presentation


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