

The Nairobi Urban Health and Demographic Surveillance System:

A platform for monitoring health outcomes

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Promoting the wellbeing of Africans through policy relevant research on population and health

Outline

- Demographic surveillance systems (DSS)
- The Nairobi Urban Health and Demographic Surveillance System (NUHDSS)
- Behavioural risk factor surveillance in NUHDSS
- Future prospects



Demographic Surveillance Systems(1)

Outline

DSS

- Defined geographical area
- Enumeration census
- Follow up – variable interval
- Core demographic events (birth, death, migration)
- Additional data on:
 - Health (morbidity, vaccination, cause of death, health care utilisation....)
 - Socio economic (marriage, education, livelihoods...)
- Excellent platform for nested studies
 - Sampling frame
 - Intermediate and final outcomes



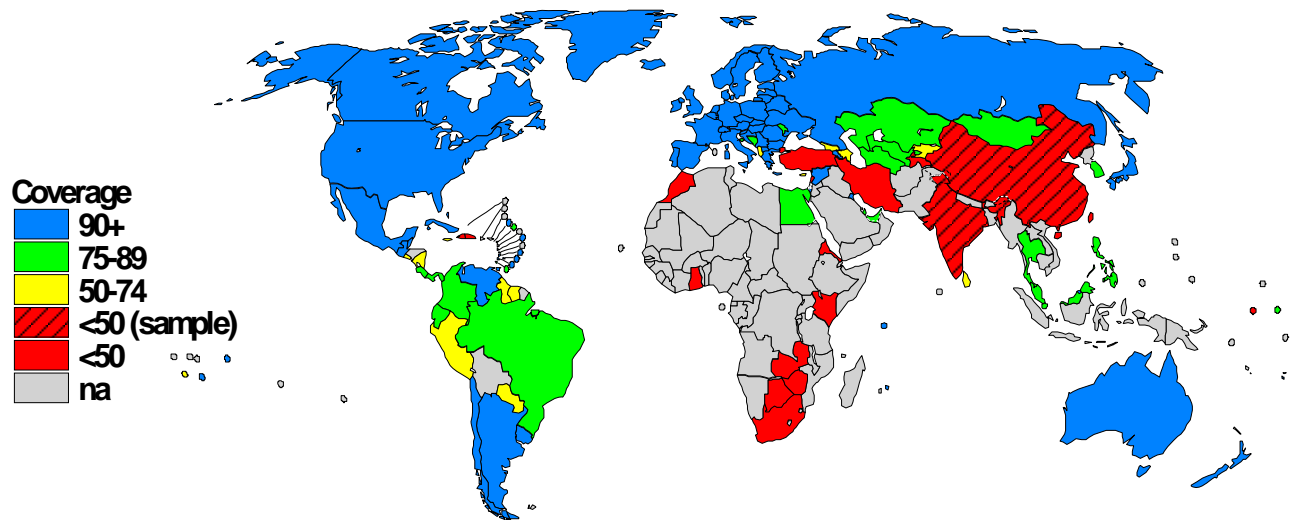
Demographic Surveillance Systems (2)

Outline

DSS

- Why DSS?

Coverage of death registration, 1995 onwards, WHO 2003



Demographic Surveillance Systems(3)

Outline

DSS

INDEPTH Network



39 sites in 19 countries
26 sites in Africa
11 sites in Asia
1 site in Oceania
1 site in Latin America

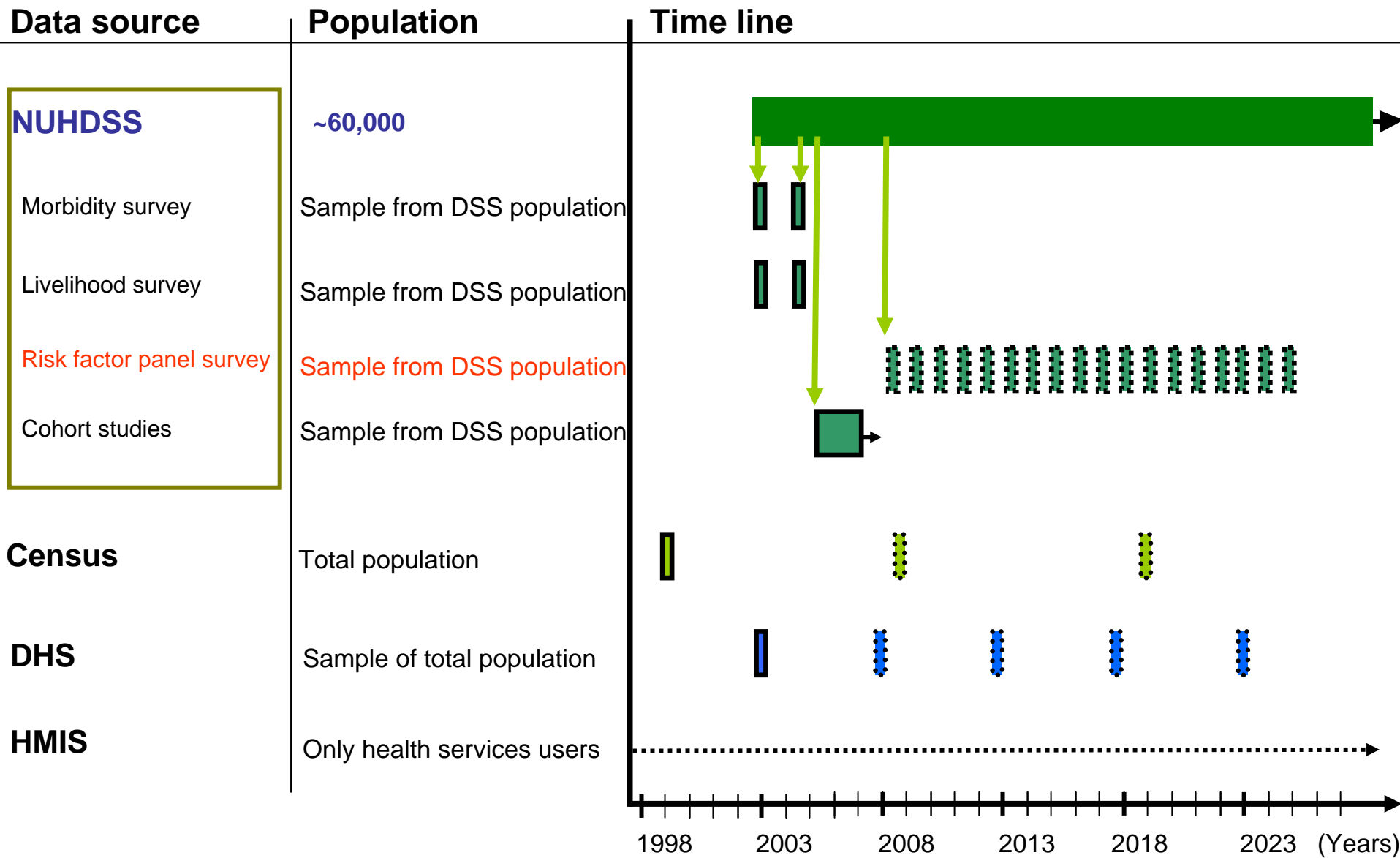
*Countries with Demographic Surveillance System (DSS)
Field Sites participating in the INDEPTH Network*

Source: www.indepth-network.org



DSS are addressing a health information gap in countries without vital registration systems and where health care utilization is low

Comparison of a DSS and other data sources – an example of the NUHDSS



The Nairobi Urban Health and Demographic Surveillance System(1)

Outline

DSS

NUHDSS

- Run by the African Population and Health Research Centre (APHRC)
- 25 International Research Staff (15 PhD. and 10 MA/MSc. holders)
 - Multi-disciplinary team (Demography, Development Economics, Epidemiology, Social Statistics, Biostatistics, Health Economics, Sociology, Socio-linguistics, Anthropology, Public Health, Education Policy/Planning)
- 11 Administration and support staff
- 46 permanent field staff and data entry clerks
- More information www.aphrc.org



The Nairobi Urban Health and Demographic Surveillance System(2)

Outline

DSS

NUHDSS

- One of three urban-based DSS sites
- Focus on urban poor – covers two slum settlements
- Baseline census in August 2003
- Follow-up since January 2003
- Updates every four months
- ~60000 people in ~22000 households
- Total area ~0.92 Km²



Nairobi Urban Health and Demographic Surveillance System (3)

Outline

DSS

NUHDSS

Some indicators:

- Mortality – 12.5% from NCD
- DALYs – 17.9% from NCD
- Morbidity – Self reported morbidity among 50+ years population:
 - Diabetes 3.4%
 - Hypertension 9.6%
 - CHD 2.6%
- Low levels of health care utilization hence estimates expected to be higher



Nairobi Urban Health and Demographic Surveillance System (4)

Outline

DSS

NUHDSS

Studies Nested on NUHDSS

- Characterization of the HIV epidemic among the urban poor
- Urbanisation, Poverty and Health Dynamics over the life course (children, adolescents, mothers, older people)
- Burden of disease studies
- Access to emergency obstetric care
- Assessment of behavioural and physiological risk factors for CVD

Etc



Assessment of behavioral risk factors for CVD

Outline

DSS

NUHDSS

Risk Factor surveillance

- Planned data collection on risk factors for CVD as part of wider study on perceived and real CVD risk
- Data on both behavioral and physiological risk factors among the 18+ years population
- Module for validation of reported behavior
- Data to be linked with existing data on contextual factors
- Data to be linked with that on wellbeing of older people (50+) which includes self-reported morbidity
- Cause-of-death data available



Behavioural risk factor surveillance in DSS sites

Outline

DSS

NUHDSS

Risk Factor surveillance

Potential:

- Longitudinal studies on trends in behavioural risk factors
- Studies linking behaviour with contextual factors
- Associations with behaviour and intermediate outcomes (morbidity) and final outcomes (mortality)
- Impact evaluation of interventions aimed at behaviour change



Future prospects

- Expansion of cross-sectional surveys to longitudinal follow-up studies or panel surveys
- Integration of simplified module on behavioral risk factor surveillance in routine DSS activities in the NUHDSS and other DSS sites
- Intervention studies for lifestyle changes



YY4 Deaths notified/recorded during regular household visits (deleted)
yyazoume; 08/11/2006



Thank you for your attention!

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