Estudo Longitudinal de Saúde do Adulto | ELSA BRASIL

Longitudinal Study of Adult Health

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New cohort studies for the investigation of chronic diseases in adults

- Why your study at this time?
- What's different?
- What can others currently planning studies learn from the experience you have gained in planning your study

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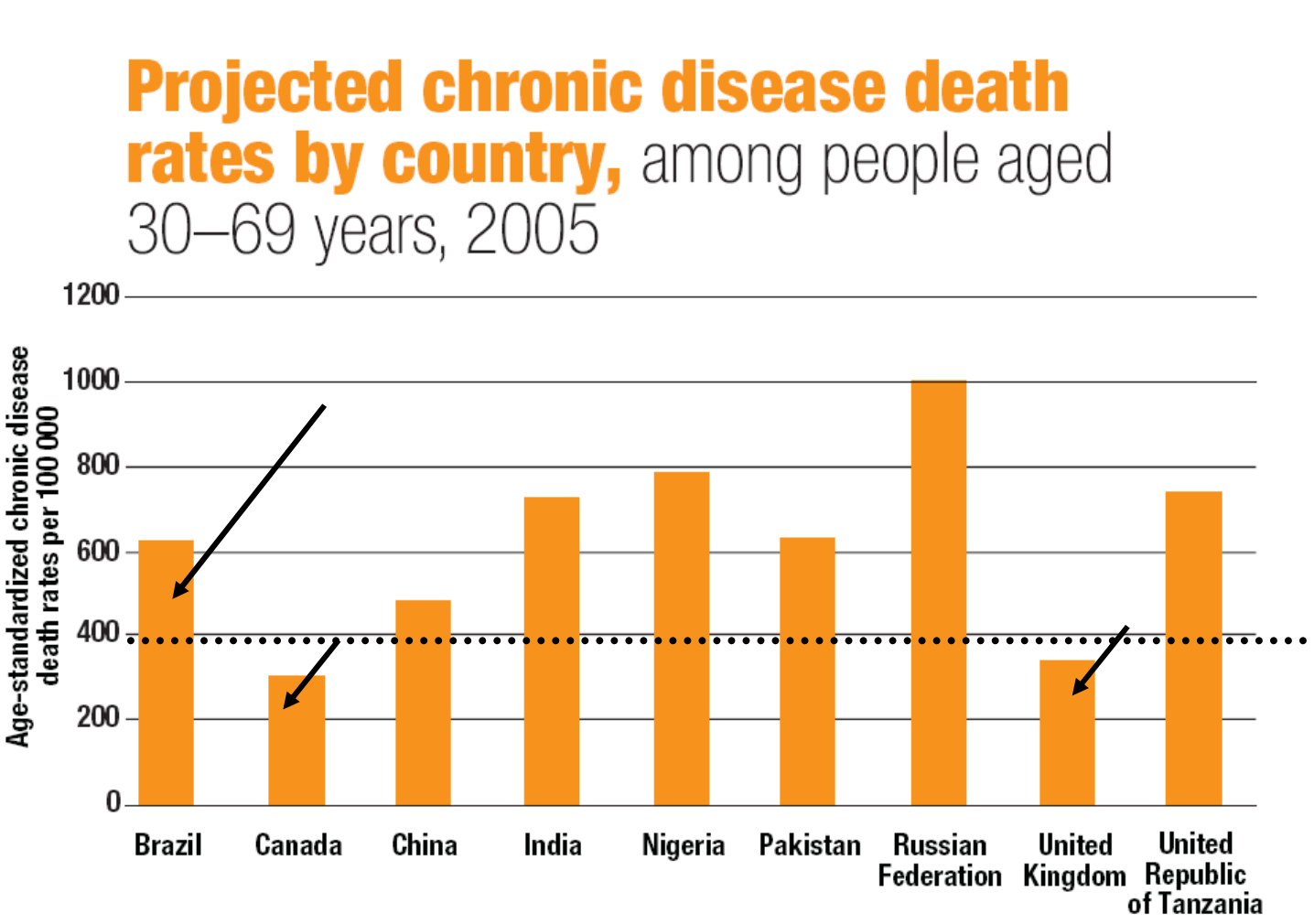
Chronic Diseases

- Impact of CD on mortality, morbidity and medical costs is rising throughout the world
- Most important causes of death and hospitalizations in Brazil
- Affect adults at younger ages than in developed countries

Mortality is much greater among the economically active in developing countries.



WHO Global Report, 2005

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Chronic Diseases in Brazil: what we know

- Mortality statistics
- Chronic disease prevalence – hospitalization and self report
- Population-based prevalence of risk factors

Chronic diseases in Brazil: what we do not know

- Incidence of chronic diseases
- How risk factors behave and interact to influence incidence of chronic disease in adult life
- How social inequalities affect risk factors and disease histories

Prospective Cohort Study

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Objectives

- To perform a comprehensive investigation on the association between biologic, behavioural, environmental, occupational, psychological and social factors and the incidence of CVD and diabetes and their complications;
- To develop causal models for the observed inter-relationships
- To describe the longitudinal changes of risk factors and their determinants.
- Identify effect modifiers for the observed associations
- Compare risk patterns and understand their social determinants across regions of Brazil.

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Secondary Objectives

- To explore associations for other relevant diseases like cancer, cognitive decline and mental disorders.
- To develop, test and validate new methods to identify and measure relevant exposures and outcomes.
- To build research capacity in chronic disease epidemiology.
- To develop capacity for handling and storing large numbers of biological samples

Design

Employees of 6
Public Universities or
Research Institutions

35-74 years

Incident Outcomes
(CVD, diabetes, others)

Baseline
2008-2009

Additional phases

Every 3 years

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Research centres: 3 regions

– SOUTHEAST	São Paulo (5,000) Minas Gerais (3,000) Rio de Janeiro (2,000) Espírito Santo (1,000)
– NORTHEAST	Bahia (2,000)
– SOUTH	Rio Grande do Sul (2,000)

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Why civil servants of large cities?

- Large cities: where most Brazilians live
- Stability / follow up needs
- Relative heterogeneity
- Facility to perform tests and exams
- Feasibility and cost

Balanced decision

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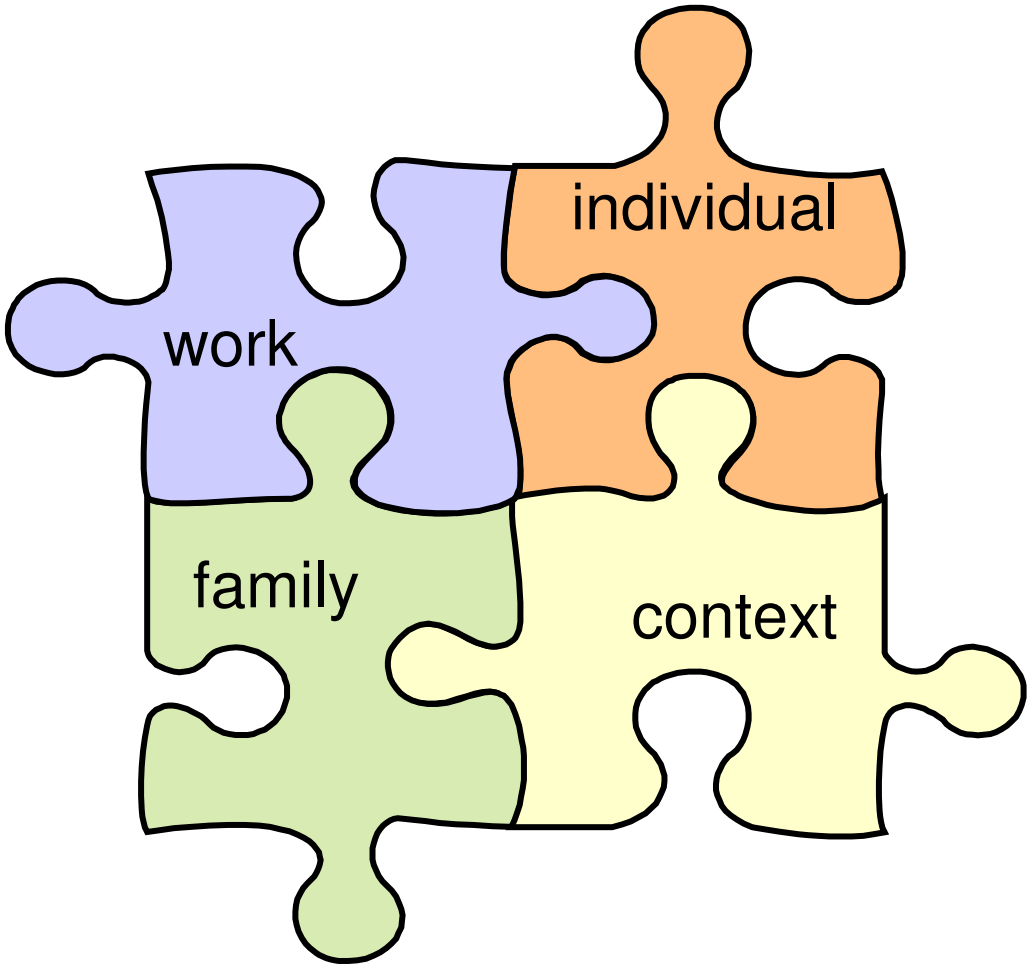
Baseline Data: Interview + Exams + GIS

scientific and social relevant, comprehensive, reliable and valid, innovative



Questionnaire

- Age, gender, race/skin colour
- Migration history, time and address of residence
- Educational e occupational history
- Family income and other measures of social status
- Characteristics of residence and family composition
- Marital and reproductive history
- Parental education and occupation

Occupational and Social factors

1. Social capital and network
2. Early socio-economic position
3. History of discrimination
4. Neighbourhood characteristics (violence, cohesion, social capital)
5. Job stress – Demand-control model

Common risk factors and disease history

- Diet, alcohol, smoking and physical activity
- History of weight
- Self perception of health
- Self reported diseases
- Family history of diseases
- Health care use
- Current and recent use of medication
- Sleep disturbances

Mental disorders and cognitive assessment

- Neuro-cognitive: verbal memory, evaluation of semantic and phonemic fluencies, delayed memory tests and trail test.

- CIS R (Revised Clinical Interview Schedule): fully structured diagnostic interview covering non-psychotic symptoms

Exams

- Anthropometry, body composition
- Blood pressure
- Ankle - brachial index
- Glucose tolerance test
- Blood drawing (fasting and post challenge)
- Overnight urine collection
- Ultrasound of carotids and liver
- Echocardiogram
- Electrocardiogram
- Retinography
- Pulse wave velocity
- Heart rate variability

Follow up and Surveillance

- Annual follow up interviews (hospital records review)
- National Health Information System (data linkage)
- Tri-annual visits

Biological samples

- Collection and storage
  - Plasma/serum (pre and post challenge)
  - Overnight urine
  - Blood cells
  - DNA

Biological bank:

6 local (-80º)

2 central (-180º)

Quality assurance and control

- Standardized procedures and manuals
- Training (retraining) and certification
- Periodic observation of procedures
- Retest random sample
- Data quality control

Incident Outcomes

- Weight gain
- Diabetes,
- Hypertension
- Dyslipidemia
- Ischemic Heart / Cerebrovascular / Peripheral Artery Diseases
- Chronic Heart Failure
- Renal failure
- Cognitive decline
- Cancer
- Episodes of common mental disorders
- Hospitalization, functional loss, death

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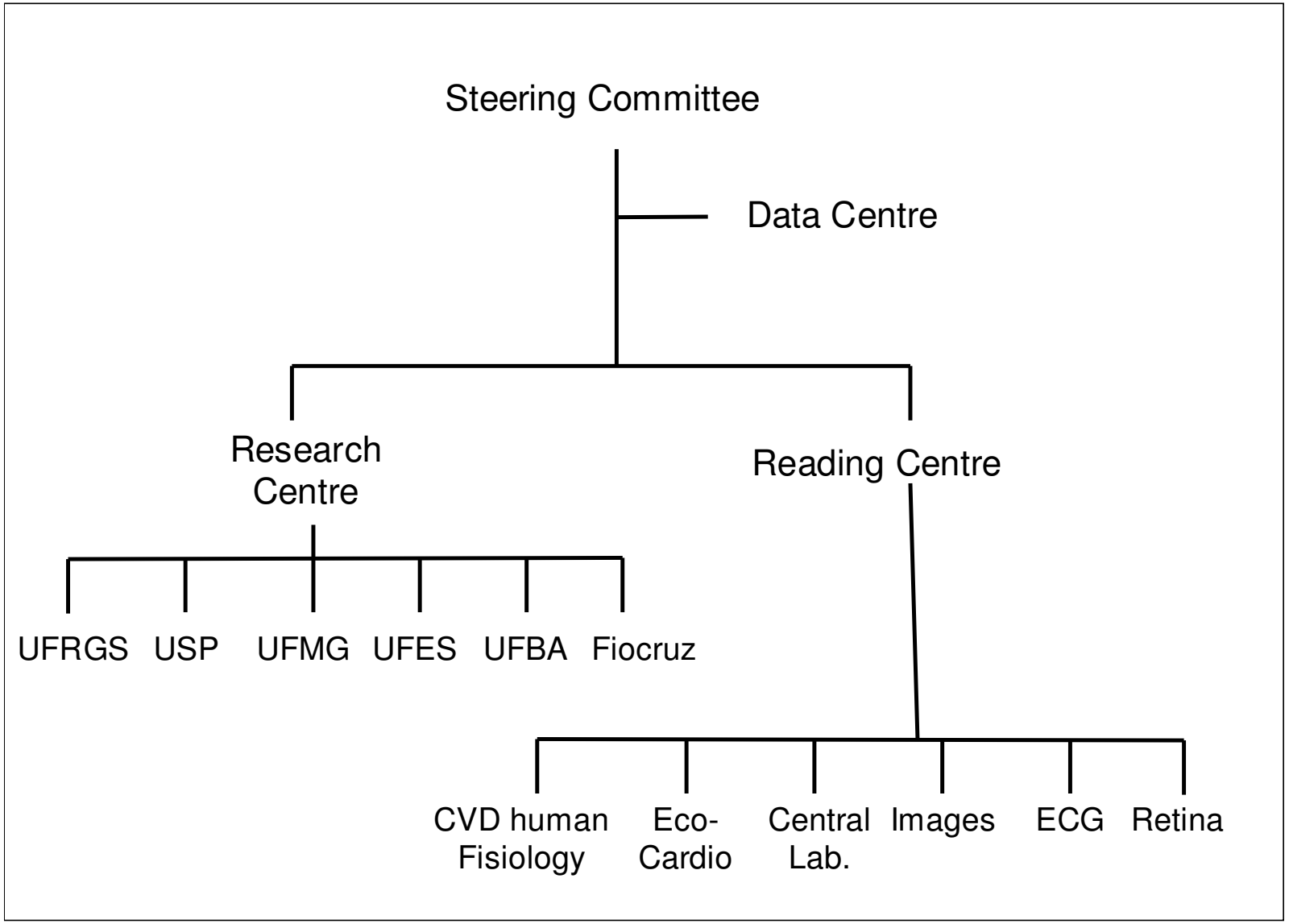
Analysis

- Cohort analysis
- Case-cohort: collect / process additional information from a subset)
- Nested case-control studies
- Validation studies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O ELSA Brasil convida à pesquisa.

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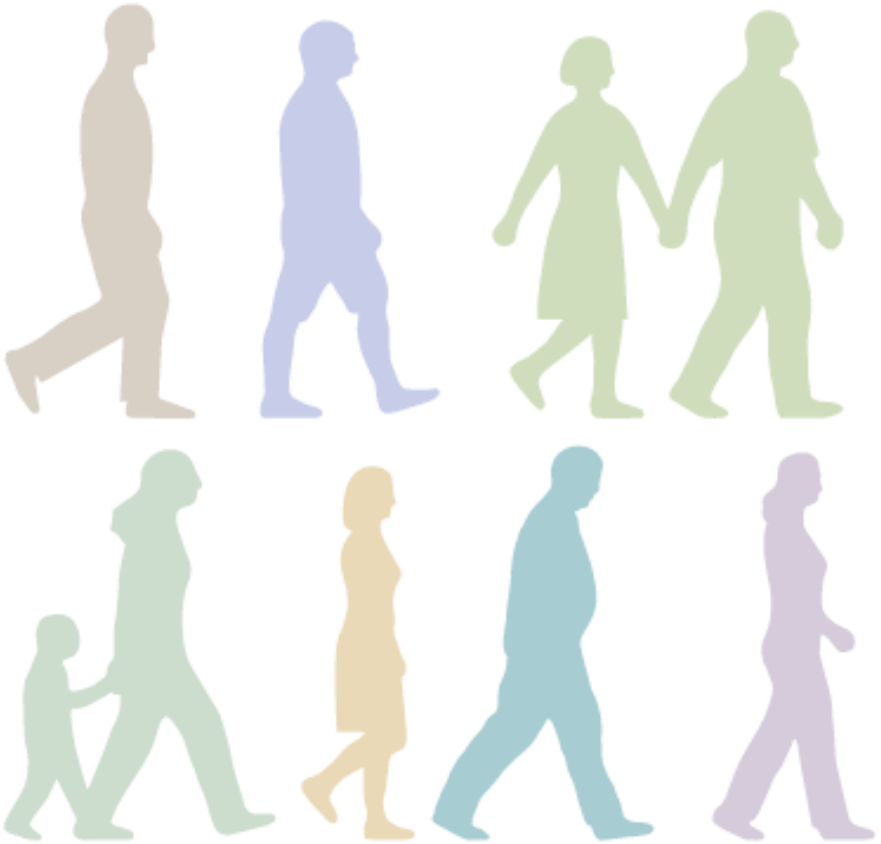

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