

University of Iceland, Icelandic International Development  
Agency (ICEIDA)



# Immunization Coverage in the Monkey Bay area, Malawi

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## Tutors:

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Services

Study conducted between 6<sup>th</sup> of June and 4<sup>th</sup> of July 2003

# Aim of the study

- To estimate immunization coverage of immunizations given in the MB area
- Sample consisted of 217 children aged 12-24 months
- Children received immunizations against
  - Tuberculosis (BCG)
  - Diphtheria, Tetanus and Pertussis (DTP)
  - Polio (OPV)
  - Measles
  - A portion of children received immunizations against Haemophilus influenzae type B and Hepatitis B along with DTP (Pentavalent vaccine)

# Monkey Bay and surroundings

- The Monkey Bay area
- Estimated population 105000 in about 97 villages
- Five health centres provide services in the area
  - Immunizations given at health centres
  - Immunizations given in outreach clinics

# Methods

- Method developed by WHO and EPI around 1978
- Developed to estimate coverage with an accuracy of  $\pm 10\%$  with a 95% confidence interval
- Suitable for estimating coverage in developing countries
- Statistical analysis with COSAS, also developed by WHO/EPI

# Methods

- Thirty clusters (villages) chosen randomly
- Seven children randomly selected
  - Aged 12-23 months
  - According to methods developed by WHO/EPI
- Immunizations registered
  - By card
  - By history
- In addition, reasons for immunization failure were registered where appropriate

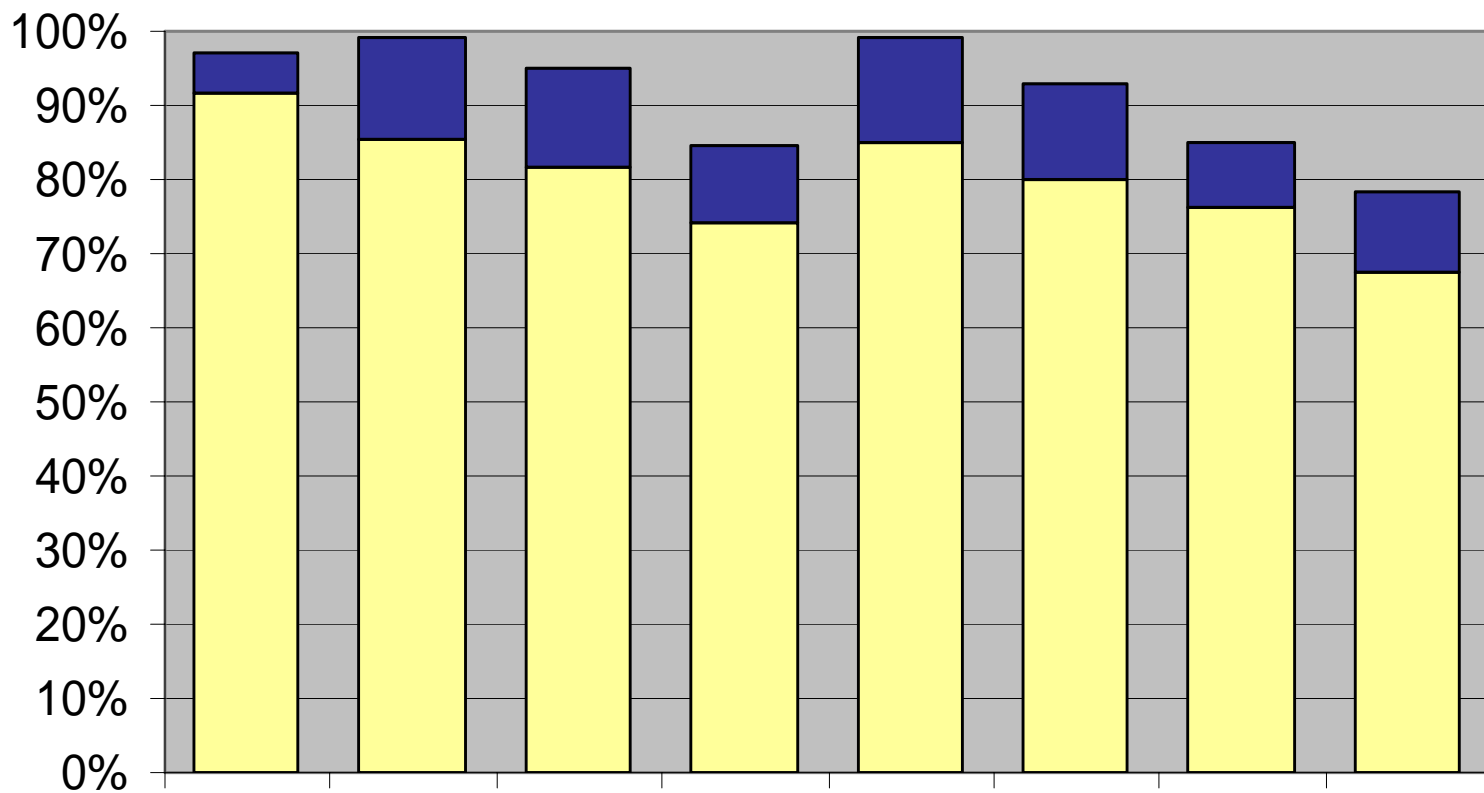


# Results

- Only 2 children of 217 did not receive any immunizations, or 0,9% -
- Mothers of 188 children retained their immunization card, or 87,4%
- Considerable proportion of children does not receive all immunizations

# Immunization Coverage

Proportion of immunized children (%)



Information from card Information from history

# Results

- Out of 217 children were 153 fully immunized, or 70,5% according to information registered by card or history
- Estimated proportion of children with all immunizations valid was 47,9%
- Estimated proportion of fully immunized children by one year of age, with a valid immunization was 33,2%

# Discussion

- Immunization coverage in the area seemed to be better than previously estimated
- Immunization coverage in the area greater than national coverage according to figures from 2002
- Most children receive the first immunizations. This indicates good public access to health services
- Too many children are not fully immunized, drop-out too high
- Children receive immunizations too late

# Discussion

- According to complaints of parents, high drop-out can be a consequence of
  - Lack of vaccine
  - Lack of transport
  - Lack of communication
    - Between health care workers and public
- Complaints by health care workers
  - Lack of vaccine
    - Power failures, fridge breakdown, lack of supply
  - Lack of transport
  - Lack of communication and cooperation
    - Between areas
  - Lack of health care workers
  - Lack of supervision

# Ways to improve coverage

- To improve transport
- Preventing vaccine shortage
- Improving cooperation between areas, health care workers and the public
- Improved education of health care workers in vaccine handling and immunization procedures
- Increase population awareness of the importance of immunizations

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