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Section D: Data Sources in Developing Countries

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Injury Surveys

- Ghana
  - Two-stage cluster sampling and household interviews
  - 21,105 interviewed living in 413 urban and rural sites
  - 1,609 injuries in preceding year

Injury Surveys

- Burden of disease from nonfatal injuries higher in urban areas (4,697 disability days/1000 person years) as compared to rural (2,671 days/1000 person years)
- In rural areas, agricultural injuries contributed the highest burden

Exploring Hospitalized Injuries

- What population is the data based upon?
- Which hospitals are included or excluded?
- What is the definition of a hospital admission?
- What injury-related data are available?
- Are denominator data included?
Hospital-based Trauma Registries

- Uganda
  - Objectives: establishment of injury surveillance system and assessing severity using Kampala Trauma Score (KTS)
  - Setting: Mulago hospital, 1,200-bed teaching referral hospital

Hospital-based Trauma Registries

Results—first 5,120 records

- 27.7% females and 71.3% males
- 7.4% younger than five years
- 3.9% older than 55 years
- 75% injuries unintentional

Kampala Trauma Score

- Contains age and anatomic data
- Ordinal scales used for simplicity
- Ranges of BP and respiratory rates used in the revised trauma score and the pediatric trauma score collapsed
- Glasgow coma scale replaced by 4-point AVPU scale
- Highly predictive for admissions or deaths

Assessment of Injury Severity

- Injury severity (ISS) assessment in South Africa
- Studied 324 children injured in RTA from January 1992 to December 1995
- Determine pattern, severity, and outcome

Assessment of Injury Severity

Results

- 2% of all attendances at ER
- Pedestrians largest group
- Head injury most common—followed by limb trauma
- 306 patients ISS = 1–25 (no mortality, significant morbidity)
- 18 patients ISS = 26–54 (61% mortality)

Injury Severity and Recall Effect

- Household survey of injury in Ghana
  - Decline in estimated rate from 27.6/100 per year for a one-month recall period, to 7.6/100 per year for a 12-month recall period
  - Decline not influenced by age, gender, rural vs. urban

Conclusions

- Shorter recall periods (one to three months) should be used to calculate overall nonfatal injury incidence rate
- Longer recall periods (12 months) can be used for more severe, less frequent injuries