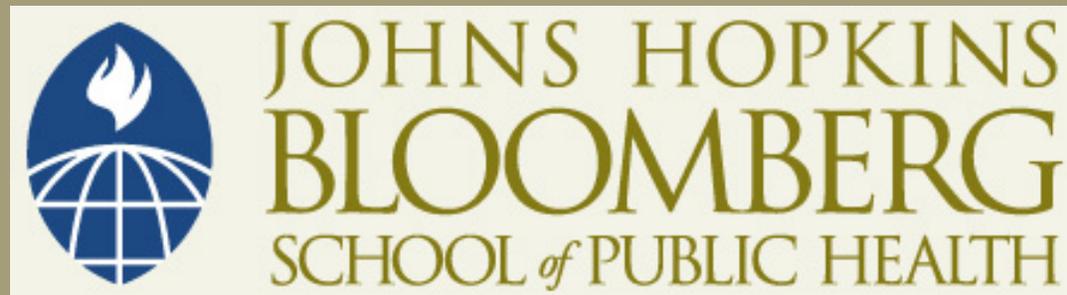


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Section D: Data Sources in Developing Countries

Adnan Hyder, MD, PhD

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

Injury Severity and Recall Effect

- 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