

Population-Based Study of Burden of
Epilepsy in Kintampo
Health Demographic Surveillance
System, Rural Ghana
Doku VCK, Weobong B, Ae-ngibise
K

Background

- Definitions of Epilepsy
- Burden of Epilepsy – Global & SSA
- Causes of Epilepsy in SSA
- Mortality in Epilepsy
- Co-morbidity
- Treatment Gap

Introduction

- Kintampo HDSS
- Wellcome Trust funded Psychosis study
2002 – 2004
- Enumeration every 6 months

Kintampo DSS

- Population ~ 160,000-**that we use 140,000 bcos the last wave results are yet to come out**
- Area ~ **7,162 km²**
- In the middle belt of Ghana: 450km interior

Epilepsy in Developing Countries

- Common
- Can be controlled
- Co-morbidity
 - Behavioural problems
 - Psychiatric diagnoses
 - Social maladjustment
 - Stigma

Study on the epidemiology of psychosis

- Psychosis screen- screening out epilepsy
- Definition of epilepsy used
- Active clinical epilepsy (ACE)
 - 2 or more epileptic seizures (tonic-clonic), at least 1 in the last year

Epidemiology of epilepsy

- Current objectives
 - Prevalence of ACE
- Future objectives
 - Incidence of ACE
 - Risk factors for ACE
 - Excess mortality due to ACE
 - Risk factors for death in people with ACE

Study designs

- Prevalence study- cross-sectional survey
- Incidence study- prospective study
- Risk factor study- case control
- Excess Mortality- monitoring death in the ACE cohort
- Risk factors for death- Verbal Autopsy questionnaire study of death in ACE persons

Eligibility

- Residence in KDSS study area
- Age 15-65 years (to be extended in next phase)

Prevalence study

- Psychosis screening instrument with questions on epilepsy- Field worker screen. Phase I
- Mental Health Team screen with detailed questions. Phase II
- Note that no clinical examination conducted in this initial study

Analysis

- Prevalence estimate:

Cases identified in Phase II

Total eligible cases in Phase I

Results

- Total Eligible = Total adult population of KDSS=69,515-this represents age15 & above
- Screened in Phase I = 102
- Screened in Phase II = 80

Result-2

- Unadjusted prevalence = $80/140,000$ (95% CI _____)

Conclusion

- Low prevalence of epilepsy in current study
- Likely to be an underestimate

The way forward

- Specific population based epidemiological study of epilepsy at KHDSS extending age of eligibility to >6 years
- Multi-centre study of the burden of epilepsy in INDEPTH sites (www.indepth-network.org)
- Strategic partnership with the INDEPTH Mental Health and Neuropsychiatry Working Group

Victordoku2003@yahoo.co.uk

www.ghana-khrc.org

Acknowledgements

- Study participants
- Kintampo Health Research Centre
- Kintampo HDSS team
- Others