

tropEd Masters Programme in International Health

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**Quantitative analysis  
of medical morbidity and mortality  
at Saint Camille Rural District Hospital,  
Nanoro, Burkina Faso**

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# **“Quantitative analysis of medical morbidity and mortality at Saint Camille Rural District Hospital, Nanoro, Burkina Faso”**

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## **ABSTRACT**

**Introduction:** scarce data about morbidity and mortality are available in Africa at rural level. Most of them deal with maternal and childhood health and do not consider related death conditions. The studies available usually concentrate on specific diseases and rarely analyze the overall medical conditions of patients.

**Objectives:** to determine mortality and morbidity in the inpatient population of the adult and paediatric medical ward at the Rural District Hospital and to identify the demographic and clinical factors associated with mortality.

**Methods:** an observational study was carried out between January 2007 and December 2007 at the Saint Camille District Hospital, Nanoro, Burkina Faso. Data have been collected retrospectively from August 2008 to mid-September 2008. The data have been input directly from each single patient chart in an Access database and then analyzed on Epiinfo support.

**Results:** data for 983 hospitalizations have been collected. The highest monthly admission incidence was in October (12.6%), the lowest in July (4.3%). The ten more common diagnosis at discharge were: anemia, severe malaria, respiratory infections, malnutrition, uncomplicated malaria, traumatological diseases, gastroenteritis, severe infection, immunodepressed status, other diseases. The overall mortality rate was 16.1%. An early mortality rate was observed: 49.2% of the deaths occurred during the first 24 hours. In the multivariate logistic regression, referred patients, dehydration, antibiotic therapy, cardiopathy and severe infection, were independently associated with mortality.

**Conclusion:** in our African rural setting non- communicable diseases are important causes of mortality in addition to infectious diseases. The identified causes of death concur in a very high early mortality. Access and referral health system improvement,

health personnel education, minimum standards of diagnosis and care are recommended to have an impact on the overall and disease-specific mortality at the Saint Camille Rural District Hospital.

Key-Words: morbidity, mortality, rural district hospital, Burkina Faso.