



# **Overview of Epidemiology**

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MBChB Level V Epidemiology,  
26 September, 2019**

# Overview

- Introduction to epidemiology:
  - Definitions, sources of data, natural history of d'se, d'se determinants, disease prevention & control
- Measures of disease frequency
  - Incidence (rate & risk), prevalence, relationship betwn incidence & prevalence, other frequency measures (case fatality rate, cause specific mortality rate, proportional morbidity and mortality)
- Measures of association
  - Incidence risk/rate ratio (relative risk), odds ratio, Attributable risk and Attributable fraction
- Study designs
  - Case control, cross sectional, cohort, Intervention/Experimental
- Sampling
  - Non-probability sampling (convenience, judgement, purposive), simple random, systematic random, stratified random, multi-stage sampling
- Screening and diagnostic tests
  - Definitions, d'se eligibility for screening, test accuracy, true & apparent prevalence, predictive values, ROC curves