

Short course: Measures in Clinical Epidemiology

Dates/time Wednesday-Friday, 6-8 November 2013, from 9.00 to 12.00

Location Conference room 1, Studenterhusfonden, Frederik Nielsens Vej 2-4, 8000 Aarhus C

Instructor

Professor John A. Baron, MD

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Short bio: <http://www.med.unc.edu/gi/faculty/John%20Baron>

Teaching objectives: To provide a conceptual in-depth review of key measures used in clinical epidemiology: their definitions, inter-relationships, interpretation and derivation.

Target audience: Persons with basic training in epidemiology and biostatistics; some experience in epidemiological research is helpful.

Course outline

The following topics will be covered in-depth:

I. Measures of outcome occurrence

Risks, incidence proportion, cumulative incidence, Kaplan-Meier statistics, censoring, and related measures; competing risks

Rates, incidence density, hazard rates and related measures

II. Measures of Association

Relative measures of association: risk ratios, odds ratios, hazard ratios; design requirements and differences in interpretation

Difference measures of association: attributable risks and related measures, NNT

III. Measures of Confounding and Interaction

Confounding relative risk, attributable fractions and related measures

IV. Measures of agreement

Discrete measurements: percent agreement, kappa statistics and related measures

Continuous measurements: absolute agreement, intraclass correlations

V. Measures of discrimination, calibration and risk prediction accuracy

ROC curves, c statistic, reclassification, calibration measures, R^2 , Brier score and related measures.

VI. Clinical scales

Disease staging, comorbidity, quality of life

Validation of clinical scales

Further information and registration:

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