



World Health Organization
Regional Office for Europe



Analysis of social determinants of health and health inequities – a multi-country event on approaches and policy

P.J. Safarik University, Srobarova 2, Kosice
Main university building, Historical hall on first floor

Košice, Slovakia 12-17 October 2009

ANNOTATED PROGRAMME AND AGENDA

AFTERNOON SESSIONS

DAY 1: Monday 12 October 2009

13.00 – 14.30

Variables

Assoc. prof. Ivan Žežula, Dr. Daniel Klein - Faculty of Sciences, P.J. Safarik University in Kosice, Slovakia

Introduction to medical data. Types of data. Notion of variables and cases. Measurement of data, uncertainty of measurement. Different types of errors in data, missing values. Types of missingness. Characteristics of data, notion of statistic.

14.30 – 15.15

Tea break devoted to reflections and discussion

Facilitated by Mrs. Christine Brown - WHO Venice Office

15.15 – 16.30

Study designs

Dr. Andrea Madarasová Gecková, Mr. Peter Kolarčík - KISH, Faculty of Medicine, P.J. Safarik University in Kosice, Slovakia

Introduction of the main types of study designs in epidemiological research (cross-sectional studies, cohort studies, case-control studies, interventional studies, ecological studies).

DAY 2: Tuesday 13 October 2009

13.00 – 14.30

Measures of effect

Assoc. prof. Ivan Žežula, Dr. Daniel Klein - Faculty of Sciences, P.J. Safarik University in Kosice, Slovakia

Different types of frequencies. Prevalence, incidence rate, risk, mortality rates. Contingency tables and measures of association. Relative risk, odds ratio. Average, median, and mode.

14.30 – 15.15

Tea break devoted to reflections and discussion

Facilitated by Mrs. Christine Brown - WHO Venice Office

15.15 – 16.30

Confounding and interactions

Assoc. prof. Ivan Žežula, Dr. Daniel Klein - Faculty of Sciences, P.J. Safarik University in Kosice, Slovakia

Type I and II errors. Confounders and Simpson's paradox. How to discover confounding. Methods which prevent or remove confounding. Interaction of effects.

DAY 3: Wednesday 14 October 2009

13.00 – 14.30

Stratified analyses

Assoc. prof. Ivan Žežula, Dr. Daniel Klein - Faculty of Sciences, P.J. Safarik University in Kosice, Slovakia

Simple stratification. Mantel-Haenszel statistic. Confounders and interactions in stratified analyses. More complex stratification.

14.30 – 15.15

Tea break devoted to reflections and discussion

Facilitated by Mrs. Christine Brown - WHO Venice Office

15.15 – 16.30

Errors and bias

Assoc. prof. Ivan Žežula, Dr. Daniel Klein - Faculty of Sciences, P.J. Safarik University in Kosice, Slovakia

Most common sources of errors in medical data. Selection bias, misclassification and information bias. Estimation of bias.

DAY 15 October 2009

- 13.00 – 14.30 **Area based analyses in health and deprivation**
Prof. dr. Sijmen A. Reijneveld - University Medical Centre Groningen, University of Groningen, The Netherlands Moyzesova 16, room D2
- 14.30 – 15.15 **Tea break devoted to reflections and discussion**
Facilitated by Mrs. Christine Brown - WHO Venice Office
- 15.15 – 16.30 **Logistic regression**
Assoc. prof. Ivan Žežula, Dr. Daniel Klein - Faculty of Sciences, P.J. Safarik University in Kosice, Slovakia
- Log-odds and logistic regression model. Test of association. Comparing of 3 or more groups. Quantitative explanatory variable.*

DAY 5: Friday 16 October 2009

- 13.00 – 14.30 **Mutiple Logistic regression, interactions**
Assoc. prof. Ivan Žežula, Dr. Daniel Klein - Faculty of Sciences, P.J. Safarik University in Kosice, Slovakia
- Logistic regression with several explanatory variables. Logistic regression and confounding. Composite effects and interactions. Hypotheses testing and model building.*
- 14.30 – 15.15 **Tea break devoted to summary, evaluation**
Facilitated by Mrs. Christine Brown - WHO Venice Office
- 15.15 – 16.00 **Closing**