# ТΙΠ

### Evaluation Methods in Public Health and Health Care

#### Overview

This course provides theory on and practice of the

- Approaches, concepts, and methods used to evaluate public health and health care interventions;
- Critical appraisal of existing evaluations;
- Planning and conduct of evaluations

### Offered By

 TUM Professorship of Public Health & Prevention (Prof. Dr. Michael Laxy)

#### Lecturers

- Prof. Dr. Michael Laxy
- Dr. Michael Hanselmann
- Dr. Anna-Janina Stephan
- Dr. Jacob Burns (contact)
- Karl Emmert-Fees









# Evaluation Methods in Public Health and Health Care

### **Learning Objectives**

- Understand, explain and apply a variety of state-of-the-art evaluation methods in the context of public health and health care intervention;
- Understand and explain different types of study designs and analytical approaches including their strengths, weaknesses, and assumptions;
- Perform the necessary analytical steps and estimations in an evaluation context and interpret graphical illustrations;

### **Learning Objectives (c'td)**

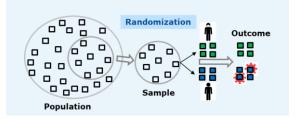
- Analyze and critically discuss scientific evaluation studies in the context of public health interventions;
- Develop evaluation/analysis designs on their own and conduct empirical analyses based on simple data sets, data set descriptions, and corresponding research questions;
- Understand how evaluation results can be critically appraised and synthesized to support policy decisions.

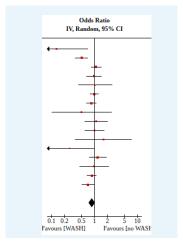


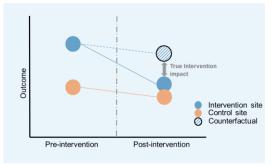
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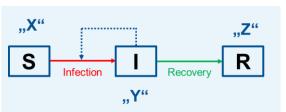
#### Structure

- Block 1: Introduction to evaluation methods and concepts
- Block 2: Experimental evaluations (RCTs)
- Block 3: Quasi-experimental evaluations
- Block 4: Non-experimental evaluations
- Block 5: Evidence synthesis
- Block 6: Model-based evaluations
- Each block conprises approx. 50%/50%
  theory and practice









TUM Master of Health Science - Prevention and Health Promotion (M.Sc.)

Course Nr.: 8100460000; TUM-online description: <a href="https://campus.tum.de/tumonline/pl/ui/\$ctx/wbLv.wbShowLVDetail?pStpSpNr=950700244">https://campus.tum.de/tumonline/pl/ui/\$ctx/wbLv.wbShowLVDetail?pStpSpNr=950700244</a>



### Evaluation Methods in Public Health and Health Care

### **Prerequisites**

Basic knowledge of

- Study designs
- Mathematics and statistics
- Use of the statistical software package R

#### **ECTS & SWS**

- 12 ECTS
- 4 SWS

### **Course Language**

English

#### **Examination Format**

- Seminar report
- Oral examination

### **Position in the Program**

- Elective area "Applied Research"
- The course takes place over two semesters:
  - 2<sup>nd</sup> Semester, Summer Term
  - 3<sup>rd</sup> Semester, Winter term

<sup>\*</sup> For those students who feel that they might have knowledge gaps in R or want to refresh their knowledge for this course, an online R self-learn module will be offered