

**Course ID:** CMEC07

## **Research methods in psychiatric epidemiology**

**Course director:** Martin Prince

**Teaching faculty:** Martin Prince and one other

**Educational Objectives:** To achieve in all students a basic understanding of the core principles underlying good research practice in psychiatric epidemiology, including; the importance of formulating a hypothesis, choosing an appropriate study design, and using valid and reliable measurement technology. In particular students should understand how chance, bias and confounding can each distort the truth, and the role of the researcher through careful design, analysis and statistical inference in clarifying the chain of causal relationships leading to disease.

### **Course description:**

**PART 1: Introduction and Overview:**

1. Basic scientific principles – inductivism, refutationism and hypothesis formulation (20 mins)
2. The role of psychiatric epidemiology – characteristics of descriptive and analytical study designs; cross sectional survey, case-control study, cohort study, randomised controlled trial; (with examples of the application of each in psychiatric epidemiology) (40 mins)
3. Measurement in Psychiatric Epidemiology (30 mins)

**PART 2: Practical session**

- Assessing causality in the context of a case-control study (30 minutes)
- Critical appraisal of a published case-control study (1 hour)

**Target audience:** Clinicians, junior research workers and research students from a variety of backgrounds – Psychiatry, Psychology, Psychiatric Nursing.

**Course level:** Basic.