Course Title/Code: **Introduction to Psychotic Disorders: Epidemiology and Aetiology (MMPH6200)**

Department: Psychiatry

Objective: Beginning with an introduction to the history of psychotic disorders, this module will describe how concepts and approaches have evolved in the past 150 years as technology and society progress, highlighting in particular important challenges in the past decades. The incidence and prevalence of psychotic disorders in various populations will be considered in light of early and late aetiological mechanisms such as season of birth effect, maternal viral infection, high paternal age, migration, urbanicity, and substance abuse. The pathways through which these risk factors may interact will be emphasized. Evidence for genetic factors will be reviewed in detail, allowing students to acquire an appreciation of gene-environment interaction in determining psychosis risk. Schizotypy and the partial expression of traits in genetically vulnerable individuals will also be considered. The potential role of stress in disease onset and relapse will be reviewed from the life-course stress-vulnerability perspective.

Content:

Concepts and classification of psychotic disorders

- Evolution of the concepts and classification of schizophrenia and other psychotic disorders
- History of study of psychotic disorders: how the understanding and approaches have evolved in the last 150 years as a result of technological and societal progress.

Epidemiological insights on psychosis

- Incidence and prevalence rates of psychotic disorders in different populations. The disease expectancy, fertility, mortality and comorbidity. Geographical and cultural variation. Associations with gender and age.
- Epidemiological methods and instruments used in the study of schizophrenia
- Case-finding, diagnosis and instruments.

Schizophrenia spectrum disorders

The partial expression of psychosis traits in genetically related individual, as well, as in schizotypal disorders.

Genetic contributions to psychotic disorders

- Familial-Genetic Risks
- Is Genetic Risk necessary and sufficient? What is the range of clinical phenotype transmitted?
- The evidence for genetic factors will be reviewed in detail, with the appreciation of the extent to which genetic factors determine the risk for psychosis. Potential mode of inheritance will be discussed. Adoption and

twin studies, Molecular Genetics, Genetic Models, Biological abnormalities in the relatives of schizophrenia will be discussed

Distal aetiological factors

- Antecedents and risk factors (I); From conception to birth
- Obstetric complications, season of birth, paternal age, maternal influenza

Proximal aetiological factors

- Epidemiological perspective on antecedents and risk factors (II): from birth to illness onset, genetic environment interaction
- Premorbid social impairment, premorbid intelligence, neurocognitive and neurophysiogocial markers, social class, migrants and ethnic minorities, urbanization, marital status, early rearing environment

Learning Outcomes: Students who completed this course are expected to:

- Acquire basic understanding of current knowledge of aetiology and epidemiology of psychotic disorders.
  - Knowledge of currently accepted causal (aetiological) factors in psychosis
  - Understand how knowledge about causal factors are derived
  - Appreciate the difference between associated factors and causative factors
- Have a basic understanding of the history of the concept of psychosis illness.
  - Development of the concepts of dementia praecox, the schizophrenias, and psychotic disorders.
  - Understand what is operational criteria and why they are required
- Aware of different classification models of psychosis: categorical and dimensional approaches
  - Appreciate the difference between categorical and dimensional approaches
  - Understand how categorical and dimensional information are handled in clinical practice and in research
  - Understand principles behind current classification for psychotic disorders in the ICD and the DSM classification systems

Prerequisite: None

Duration: 2.5 hours/week; 24 contact hours

Continuous assessment Continuous assessments 40%
Examination ratio: Written examinations 60%

Examination method and duration: Written examination / 1.5 hour