UNIVERSITÀ
DEGLI STUDI DI MILANO-BICOCCA

COURSE SYLLABUS

Processes Evaluation and Quality Control

2627-3-I0301D015-I0301D065M

Aims

Knowledge and understanding
Students will acquire fundamental knowledge of healthcare quality systems, accreditation and certification processes, the principles of Evidence-Based Medicine (EBM), and the main tools used to search for and critically appraise scientific evidence.

Applying knowledge and understanding
Students will be able to apply the principles of quality management and EBM in dental hygiene practice by interpreting scientific evidence, selecting appropriate clinical protocols, and contributing to healthcare processes according to the principles of effectiveness, safety and appropriateness.

Making judgements
Students will develop the ability to critically evaluate the quality of scientific evidence, recognize methodological limitations of research studies, interpret quality indicators, and make evidence-informed clinical decisions while considering patient characteristics and the clinical context.

Communication skills
Students will use appropriate scientific language to discuss clinical protocols, critically interpret the scientific literature, and communicate effectively within the multidisciplinary healthcare team.

Learning skills
Students will acquire the methodological tools necessary for lifelong learning through critical appraisal of scientific literature and clinical guidelines, supporting continuous professional development.

Contents

Fundamentals of Evidence-Based Medicine, critical appraisal of scientific evidence and its application to clinical decision-making in dental hygiene. Application of EBM principles to different clinical cases. Principles of quality management in healthcare and dentistry. Accreditation and certification systems. Quality management according to ISO 9001 standards. Evaluation of clinical processes, risk management and continuous quality improvement.

Detailed program

- Principles of Evidence-Based Medicine (EBM).
- Integration of scientific evidence, clinical expertise, healthcare context and patient preferences.
- The five steps of EBM: formulation of the clinical question; literature search; critical appraisal of the evidence; application of evidence to patient care; evaluation of outcomes.
- Major biomedical databases (PubMed, Cochrane Library and Embase).
- Hierarchy of scientific evidence, levels of evidence and strength of recommendations.
- Main research designs and their critical appraisal (randomized controlled trials, observational studies, systematic reviews and meta-analyses).
- Application of EBM principles to the planning of preventive and therapeutic protocols in dental hygiene through discussion of clinical cases.
- Concepts of quality in healthcare and dentistry.
- Quality assurance in healthcare services.
- Accreditation and certification: definitions, objectives and differences.
- National accreditation system (ACCREDIA) and Joint Commission.
- Certification of quality management systems.
- ISO 9000 and ISO 9001 standards.
- Quality Management Systems (QMS).
- Process management: identification, analysis and monitoring.
- Procedures, protocols and documentation.
- Quality indicators and standards.
- Clinical risk management, non-conformity analysis and continuous quality improvement.

Prerequisites

Attendance is mandatory.

Teaching form

Lectures

Textbook and teaching resource

Teaching materials provided by the lecturer during the course.
Wilkins E.M. Clinical Practice of the Dental Hygienist.

Semester

Second semester

Assessment method

Written examination consisting of multiple-choice and open-ended questions.

Office hours

Friday, 9:00 a.m.–2:00 p.m.

Sustainable Development Goals

GOOD HEALTH AND WELL-BEING