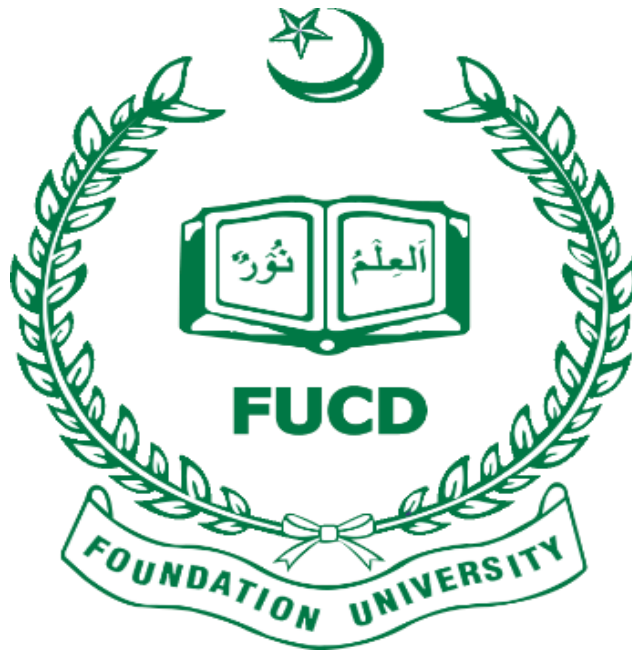


**FOUNDATION UNIVERSITY COLLEGE OF DENTISTRY
ISLAMABAD**



**STUDY GUIDE
COMMUNITY & PREVENTIVE
DENTISTRY
2ND YEAR BDS**

TABLE OF CONTENTS

S. No.	Section
1.	Introduction
2.	Mission of Department
3.	Broad Learning outcomes
4.	Teaching & Learning Methodologies
5.	Learning Resources
6.	Faculty of Department / Organogram
7.	Course Syllabus
8.	Course outline and learning objectives
9.	Assessment Structure

Introduction:

Community and preventive dentistry is based on the art and science of preventing oral diseases, promoting oral health through improving the quality of life through organised efforts of society. It introduces the concepts and principles of Dental Public Health applicable to whole communities rather than to individual patients.

This course has been designed with the needs and specifications of prospective dentists in light of the PMC guidelines. During the academic year, this course will impart knowledge, skills and competencies in the context of Public Health Dentistry to the students.

The course offers you the opportunity to receive teaching from a multidisciplinary team of lecturers and demonstrators. Large and Small Group Interactive Sessions (LGIS/SGIS) are designed and will be delivered in a way to help prepare students who wish to attempt post-graduate studies in this subject as well. The lectures will be augmented by practical work in the laboratory and field experience of outreach program in community and preventive dentistry. This will give students an opportunity to enrich their learning experience and broaden their perspectives in a real life environment.

All members of the faculty of Community and Preventive Dentistry extend their warm wishes and hope that you enjoy your time on this course and develop a keen sense of how you can contribute towards the society and the profession in future.

About the Study Guide

This handbook has been produced to give you information about the Community and Preventive dentistry course. In addition, you will receive individual timetables and list of learning resources from your faculty. This Study Guide should be read in conjunction with the Foundation University College of Dentistry Students' Handbook for a better understanding of the campus rules and regulations.

The Department of Community and Preventive Dentistry

Mission:-

The mission of department of community and preventive dentistry at FUCD&H is to enable prospective students understand the knowledge and develop competency in oral epidemiology, evidence based dentistry and population based oral health research and develop skills in understanding various research designs and evaluate the strength given by each, whilst preparing them for planning, conducting and/or reviewing scientific literature independently.

Broader Learning Outcomes:-

By the end of the academic year, students will be able to

- Demonstrate knowledge and understanding of basic concepts of community and preventive dentistry and be able to appreciate different aspects of public health and dental public health
- Understand and explain the different determinants of health, health inequalities and implications of public health for the dental profession.
- Differentiate between various epidemiologic assessment tools in the context of community related oral health problems.
- Appreciate advantages and limitations of various health education methods pertaining to prevention.
- Describe significance of the oral health diseases of public health; their etiology, natural history, epidemiological implications, assessment.
- Display succinct knowledge regarding cross-infections control protocols, occupational and patient safety.
- Understand and display the structure, components and financing of healthcare delivery systems
- Understand and interpret oral health related preventive interventions both nationally and internationally such as role of fluorides, prevention of oral cancers and others current areas of public health focus.

Teaching & Learning Strategies

There is a combination of traditional lectures (LGIS & SGIS) plus skills-focussed workshops (Practicals), and topic-based, multi-disciplinary problem-solving seminars (Tutorials). A key feature of the course team is integrated teaching of “Pre-clinical Operative Dentistry” along with Community and Preventive Dentistry. The aim is to enhance students’ understanding of the theoretical concepts of the basic science and its application on real life problems in clinical dentistry.

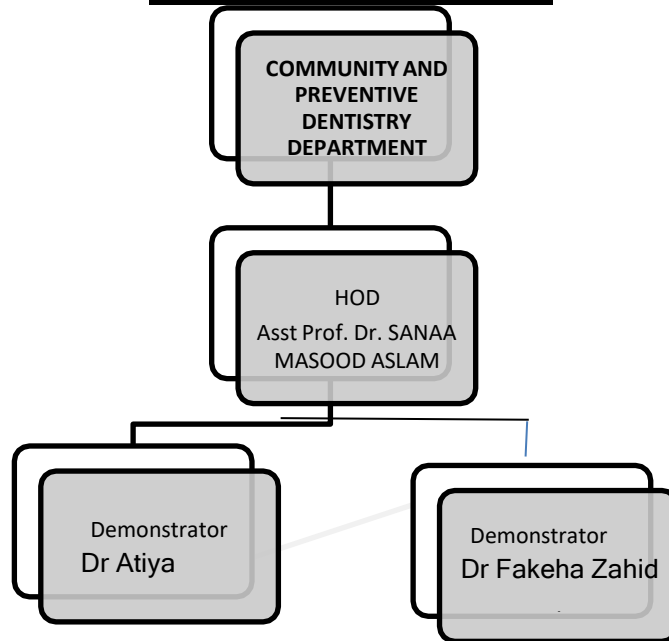
Learning resources

- Daly B, Watt RG, Batchelor P, Treasure E. Essential Dental Public Health: Oxford University Press; 2002.
- Burt BA, Eklund SA. Dentistry, Dental Practice, and the Community. Philadelphia: W.B Saunders Company; 1999.
- Nunn JH, Steele JG. The prevention of oral disease. Oxford University Press; 2003.
- Pine CM, Harris R. Community Oral Health: Quintessence Pub.; 2007.
- Ghani NG, Idris SH. Fundamentals of community & preventive dentistry. Paramount Books (Pvt) Ltd.; 2017.

Additional resource material (if any) will be provided prior to lectures.

Faculty of Department

ORGANOGRAM



Curriculum and regulations

Syllabus

Module 1: Introduction to Community and Preventive Dentistry

Aims:

- Introduce the concept of health and disease i.e. illness, sickness and wellbeing and factors influencing these states
- Introduce the concept of public health in context of oral health and disease
- Introduce the concept of health behaviours and determinants
- Introduce different health services: planning and evaluation of health services

Topics/Lectures:

- Introduction to community dentistry
- Concept of health and disease
- Changing patterns of disease
- Concept of well-being and health behaviours
- Concept of needs
- Introduction to primary healthcare approach
- Introduction to healthcare delivery system
- Determinants of health, epidemiologic triad
- Dental auxiliaries
- Planning and evaluation of dental services/oral health promotion programs
- Health indicators
- Oral health assessment

Module 2: Oral Health Education and Promotion

Aims:

- Introduce levels of prevention, principles of health promotion
- Introduce concepts and significance of sterilization/ disinfection, principles of cross infection control and occupational hazards
- Introduce the role and significance of diet and nutrition on oral health
- Introduce the concepts, principles and strategies of oral health education and promotion
- Introduction to health economics

Topics/Lectures:

- Dental health education, objectives and principles
- Methods of health education
- Introduction to oral health promotion: Ottawa Charter
- Sterilization and infection control
- Financing oral health care

Module 3. Prevention of oral diseases

Aims:

- Introduce the concepts of prevention : levels prevention, role of etiological risk factors in dental diseases, specific protection
- Introduce fluorides: types, mode of action, mode of administration, toxicity
- Introduce the concepts of water fluoridation
- Introduce the aetiology and management of dental plaque
- Introduce the concepts and principles of pit and fissure sealants and ART

Topics/Lectures

- Approaches to prevention
- Levels of prevention
- Introduction to dental plaque: methods of plaque control
- Dentifrices
- Caries activity test
- Plaque disclosing agents
- Caries classification and triads
- Reasons for decline of caries in the western world
- Fluorides
- Atraumatic restorative technique
- Pit and fissure sealants
- Prevention of caries
- Prevention of periodontal diseases
- Prevention of oral cancer and traumatic dental injuries

Module 4. Behavioural sciences. Ethics and Professionalism

Aims:

- Introduce the concepts of professionalism
- Introduce principles of bio-ethics and ethical decision making process
- Introduce misconduct, questionable conduct in research
- Introduce models of healthcare, non-pharmacological interventions in clinical practices and the difference between holistic and traditional medicine
- Introduce the concept and significance of crisis and disaster management

- Introduce psycho-social aspects of health and disease particularly in dentistry
- Introduce the concept, responses and management of stress

Topics/Lectures

- Introduction to behavioural sciences
- Healthcare models and their clinical applications
- Communication skills
- Counselling
- Informational care
- Handling difficult patients and their families
- Conflict resolution
- Introduction to crisis intervention and disaster management
- Breaking bad news
- Introduction to professionalism and ethics
- Principles of bio-ethics
- Ethical decision making process
- Ethical principles for research
- Misconduct, unethical practices in research
- Informed consent
- Stress and its management

Module 5. Epidemiology, Research Methodology and Biostatistics

Aims:

To introduce the epidemiological designs, conducting a school dental survey, tools of measurement

To introduce

Topics/Lectures:

- Introduction to oral epidemiology
- Causation, Types of Association and other terminologies
- Types of study design: Observational, Experimental, Descriptive, Analytical
- Sampling
- BIAS
- Points of Significance
- Qualitative research
- Basics in Biostatistics
- Writing a research protocol, Questionnaire designs, Normal distribution
- Handling of data sets
- Probability, Statistical Inference and Hypothesis testing
- Parametric and Non parametric tests.

Practical topics:

Community Dentistry practical & field assignments:

- A. Clinical Oral Examination
 - a. Exercise on Models and Extracted teeth
 - b. Exercise on patients in out-patients department
 - c. Examination of institutionalized population like school children
- B. Questionnaire / interview study
 - a. Designing a questionnaire
 - b. Pilot testing the questionnaire
 - c. Data coding, processing and analysis
- C. Planning and conducting a dental health education (D.H.E.) session:
 - a. Designing D.H.E. material
 - b. Planning, conducting and evaluating (D.H.E) sessions
- D. Chair side preventive dental procedures:
 - a. High fluoride gel application
 - b. Fissure sealing
 - c. Dietary counselling
 - d. Plaque disclosing
 - e. Instructions about Oral Hygiene measures
 - i. Tooth Brushing demonstration
 - ii. Inter-dental cleaning
 - iii. Chemical control of dental plaque

3.2 Operational outline of the curriculum

Module	Learning Outcomes	Training/Learning experiences			Expected minimum hours	Assessment	
		Class-room	Practical activity	Teaching/ Learning Aids			
1	Introduction to Community Dentistry and Dental Public Health + Dental health care delivery systems	<ol style="list-style-type: none"> 1. Understand various concepts of health; disease & illness and factors affecting these states 2. Describe current concepts about etiology, natural history and epidemiology of oral diseases and conditions having public health implications 3. Apply principles of assessment of disease risk and predictive tests, such as oral health assessment indices 4. Identify the role of dentists, dental auxiliaries and general health workers in oral health care 5. Learn about the principles and elements of primary oral health care 6. Define oral health needs 7. Describe various methods of financing in oral healthcare delivery system 8. Understand principles of clinical governance and quality assurance 9. Understand planning, planning cycle in public health programs 10. Learn to perform situational analysis 11. Learn to perform evaluation of public health programs 	Lectures + Tutorials	<ol style="list-style-type: none"> 1. Field visit at a local primary/secondary/tertiary oral health center 3. Field visit private dental clinic 4. Visit to the dental lab/radiography department Visit CSSD 	OHP Index templates, charts and models + Computer library	L= 20 hrs P=14hrs	<ol style="list-style-type: none"> 1. Module-end internal assessment (Each student will submit 2 field reports and 2 cases comprising of intra-oral photographs and completed DMFT and CPITN chart of that patient + (Students, in groups of 5, will give a presentation on a topic of oral healthcare delivery) 3. Final written exam + Viva

2	Oral Health Education + Promotion	<ol style="list-style-type: none"> 1. Describe health behavior and its determinates, attitudes, beliefs and values about health and illness, theories of health behavior 2. Learn about dentist - patient communication, management of stress, fear and anxiety in dentistry 3. Understand behavior management and modification techniques, counseling, motivation and compliance 	Lectures + Tutorials	Poster competition	OHP, Videos,	L= 10 hrs P=12 hrs	<ol style="list-style-type: none"> 1. Module-end internal assessment (Students, in groups of 5, will present a poster) 2. Final written exam + Viva
3	Prevention of oral and dental diseases	<ol style="list-style-type: none"> 1. Define levels of prevention and learn the application of the principles of health promotion 2. Understand the role of dental plaque in the etiology of dental diseases and methods of plaque control 3. Learn the role of diet and nutrition in oral health 4. Learn the significance of water fluoridation, fluoride supplements, professionally and self-applied topical fluorides & fissure sealants 5. Learn the significance of Infection control protocols and protection from radiation and mercury hazards in dental practice 	Lectures + Tutorials	<ol style="list-style-type: none"> 1. Brushing and inter- dental cleaning techniques 2. Atraumatic Restorative Technique (ART), topical fluoride and fissure sealant application 	OHP, OPD/Pre- clinical Operative Dentistry Dept	L= 18 hrs P=30 hrs	<ol style="list-style-type: none"> 1. Module-end internal assessment (Each student will submit a signed log book of 10 cases of ART/Fissure sealant application from the OPD) 2. Final written exam + Viva

4	Oral epidemiology, research methodology & biostatistics	<ol style="list-style-type: none"> 1. Learn definitions, uses and principles of epidemiology 2. Understand research designs; dental surveys; clinical trials; screening 3. Get an introduction to bio - statistics: Types of variables, frequency distribution, measures of central tendency and variability in data 4. Understand the methods of sampling, sampling error, probability, normal distribution 	Lecture + Tutorials	<ul style="list-style-type: none"> • Journal Club • Appraisal of literature • Designing questionnaire • SPSS- Computer Lab • Writing a research proposal 	OHP, MS Word & Power point, Endnote and SPSS software at computer library	L= 27 hrs P=30 hrs	<ol style="list-style-type: none"> 1. Module-end internal assessment (Each student will submit data presentation of 10 cases from the field visit/survey) 1. Final written exam + Viva
5	Ethics, professionalism and behavioural sciences	<ol style="list-style-type: none"> 1. Describe elements of Holistic Approach 2. Understand models of Holistic medicine. (Bio-psycho-social, Integrated and Public Health). 3. Elaborate the components of models of Holistic Medicine. 4. Co-relate the non-pharmacological interventions with clinical settings. 5. Explain the models of Breaking Bad News 6. Compare the advantages and disadvantages of each model of breaking bad news. 7. Elaborate the steps of Bio-Psycho-Social Model of breaking bad news. 8. Describe the models of doctor- patient relationship 	Lectures + Tutorials	Role plays	OHP, Videos	L= 18 hrs P=8 hrs	<ol style="list-style-type: none"> 1. Module-end internal assessment (Students, in groups of 5, will present a topic of behavioural sciences) 2. Final written exam + Viva

		9. Explain the psychological reactions to and management of doctors- patient relationship.					
--	--	--	--	--	--	--	--

Assessment Structure

Theory paper: 100 marks:

30 marks for 30 MCQ's of 1 mark each

60 marks for 10 SEQ's of 6 marks each

10 marks for Internal Assessment (10% of aggregate marks in theory exams of 1st, 2nd term and Send-up)

Viva/Practical: 100 marks:

50 marks for OSPE (10 stations of 5 marks each)

40 marks (20 marks each for internal and external examiner)

10 marks for Internal Assessment (5 marks for practical manual +

5% of aggregate marks in OSPE exam of 2nd term and Send-up)

Total: 200 marks (Theory + Viva / Practical)

FOUNDATION UNIVERSITY COLLEGE OF DENTISTRY & HOSPITAL

Defense Avenue, DHA Phase -1

Islamabad 44000, Pakistan

Website: <https://www.fui.edu.pk/> , Facebook: @fucdoofficial

Email: info@fui.edu.pk, msa_fumc@fui.edu.pk,

Contact No: +92 51 111 384 211, Radio: FM 101.8