

PROGRAM OUTCOMES

BDS COURSE

The dental graduates during training in the institutions should acquire adequate knowledge, necessary skills and such attitudes which are required for carrying out all the activities appropriate to general dental practice involving the prevention, diagnosis and treatment of anomalies and diseases of the teeth, mouth, jaws and associated tissues. The graduate should also understand the concept of community oral health education and be able to participate in the rural health care delivery programmes existing in the country.

Objectives

The objectives are dealt under three headings namely (a) knowledge and understanding (b) skills and (c) attitudes.

a. Knowledge and Understanding

The graduate should acquire the following during the period of training.

- Adequate knowledge of the scientific foundations on which dentistry is based and good understanding of various relevant scientific methods, principles of biological functions and should be able to evaluate and analyze scientifically various established facts and data.
- Adequate knowledge of the development, structure and function of the teeth, mouth and jaws and associated tissues both in health and disease and their relationship and effect on general-state of health and also the bearing on physical and social well-being of the patient.
- Adequate knowledge of clinical disciplines and methods, which provide a coherent picture of anomalies, lesions and diseases of the teeth, mouth and jaws and preventive, diagnostic and therapeutic aspects of dentistry.
- Adequate clinical experience required for general dental practice.
- Adequate knowledge of biological function and behaviour of persons in health and sickness as well as the influence of the natural and social environment on the state of health so far as it affects dentistry.

b. Skills

A graduate should be able to demonstrate the following skills necessary for practice of dentistry

- Able to diagnose and manage various common dental problems encountered in general dental practice, keeping in mind the expectations and the right of the society to receive the best possible treatment available wherever possible.
- Acquire skill to prevent and manage complications if encountered while carrying out

various dental surgical and other procedures.

- Possess skill to carry out required investigative procedures and ability to interpret laboratory findings.
- Promote oral health and help to prevent oral diseases wherever possible.
- Competent in control of pain and anxiety during dental treatment.

c. Attitudes

A graduate should develop during the training period the following attitudes.

- Willing to apply current knowledge of dentistry in the best interest of the patients and the community.
- Maintain a high standard of professional ethics and conduct and apply these in all aspects of professional life.
- Seek to improve awareness and provide possible solutions for oral health problems and needs throughout the community.
- Willingness to participate in the continuing education Programmes to update knowledge and professional skills from time to time.
- To help and to participate in the implementation of national health programmes.

MDS COURSE

Goals

The goals of postgraduate training in various specialties is to train B.D.S graduate who will, after successful completion of the course:

- Practice respective specialty efficiently and effectively, backed by scientific knowledge and skill.
- Exercise empathy and a caring attitude and maintain high ethical standards.
- Continue to evince keen interest in continuing professional education in the specialty and allied specialties irrespective of whether in teaching or practice.
- Willing to share the knowledge and skills with any learner, junior or a colleague.
- Develop the faculty for critical analysis and evaluation of various concepts and views, to adopt the most rational approach.

Objectives

The objective is to train a candidate so as to ensure higher competence in both general and special area of interest and prepare him for a career in teaching, research and specialty

practice. A candidate must achieve a high degree of clinical proficiency in the subject matter and develop competence in research and its methodology as related to the field concerned.

The above objectives are to be achieved by the time the candidate completes the course.

The objectives may be considered as under -

1. Knowledge (Cognitive domain)
2. Skills (Psycho motor domain)
3. Human values, ethical practice and communication abilities

Knowledge

- Demonstrate understanding of basic sciences relevant to specialty.
- Describe etiology, pathophysiology, principles of diagnosis and management of common problems within the specialty in adults and children.
- Identify social, economic, environmental and emotional determinants in a given case and take them into account for planning treatment.
- Recognize conditions that may be outside the area of specialty/competence and to refer them to an appropriate specialist.
- Update knowledge by self study and by attending courses, conference, seminars relevant to specialty.
- Undertake audit, use information technology and carryout research both and clinical with the aim of publishing or presenting the work at various gatherings.

Skills

- Take a proper clinical history, examine the patient, perform essential diagnostic procedures and order relevant tests and interpret them to come to a reason diagnosis about the condition.
- Acquire adequate skills and competence in performing various procedure required in the specialty.

Human values, ethical practice and communication abilities

- Adopt ethical principles in all aspects of practice.
- Professional honesty and integrity are to be fostered.
- Patient care is to be delivered irrespective of social status, caste, creed or religion of the patient.
- Develop communication skills, in particular and skill to explain various options available in management and to obtain a true informed consent from the patient
- Provide leadership and get the best out of his team in a congenial working atmosphere.
- Apply high moral and ethical standards while carrying out human or animal research.
- Be humble and accept the limitations in his knowledge and skill and to ask for help from colleagues when needed.

- Respect patient's rights and privileges including patient's right to information and right to seek a second opinion.

COURSE OUTCOMES

By the end of the course both BDS and MDS the students should be able to know the following in each department:

PERIODONTICS

BDS

Knowledge:

- To have adequate knowledge and understanding of the etiology, pathophysiology, diagnosis & treatment planning of various periodontal problems.
- To have understood the periodontal surgical principles like pre and post surgical management of periodontal diseases.
- Essential knowledge of personal hygiene and infection control, prevention of cross infection and safe disposal of hospital waste keeping in view the high prevalence of infectious disease

Skills:

- To obtain proper clinical history, examination of the patient, perform diagnostic procedures and order essential laboratory tests and interpret them and to arrive at a provisional diagnosis about the periodontal condition.
- To perform with competence various periodontal nonsurgical procedures. To treat non surgically the various periodontal diseases.

Attitude:

- Periodontal surgical care is to be delivered irrespective of the social status, caste, creed or religion of the patient.
- Willing to share the knowledge and clinical experience with professional colleagues.
- Respect patient right and privileges, including patients right to information and right to seek a second opinion
- Develop attitude to seek opinion from an allied medical and dental specialist as and when required.

Communicative Skills and Ability:

- Develop adequate communication skills particularly with the patients giving them the various options available to manage a particular periodontal problem and obtain a true

informed consent from them for the most appropriate treatment available at that point of time.

- Develop the ability to communicate with professional colleagues.
- Develop ability to teach undergraduates, present seminars and develop leadership skills

PERIODONTICS

MDS

Knowledge:

- Discuss historical perspective to advancement in the subject proper and related Topics
- Describe etiology, pathogenesis, diagnosis and management of common periodontal diseases with emphasis on Indian population
- Familiarize with the biochemical, microbiologic and immunologic genetic aspects of periodontal pathology
- Describe various preventive periodontal measures
- Describe various treatment modalities of periodontal disease from historical aspect to currently available ones
- Describe interrelationship between periodontal disease and various systemic conditions
- Describe periodontal hazards due to estrogenic causes and deleterious habits and prevention of it
- Identify rarities in periodontal disease and environmental/ Emotional determinates in a given case
- Recognize conditions that may be outside the area of his Specialty/competence and refer them to an appropriate Specialist
- Decide regarding non-surgical or surgical management of the case
- Update him by attending course, conferences and seminars relevant to periodontics or by self-learning process.
- Plan out/ carry out research activity both basic and clinical aspects with the aim of publishing his work in scientific journals
- Reach to the public to motivate and educate regarding periodontal disease, its prevention and consequences if not treated
- Plan out epidemiological survey to assess prevalence and incidence of early onset periodontitis and adult periodontitis in Indian population (Region wise)
- Shall develop knowledge, skill in the science and practice of Oral Implantology
- Shall develop teaching skill in the field of Periodontology and Oral Implantology

Skill:

- Take a proper clinical history, thorough examination 01 intra orally, extra orally, medical history evaluation, advice essential diagnostic procedures and interpret them to come to a reasonable diagnosis
- Effective motivation and education regarding periodontal disease maintenance after the treatment

- Perform both non-surgical & education regarding periodontal disease, maintenance after the treatment
- Perform both non-surgical and surgical procedures independently
- Provide Basic Life Support Service (BLS) recognizes the need for and advance life support and does the immediate need for that.

Human values, ethical practice to communication abilities:

- Adopt ethical principles in all aspects of treatment modalities, Professional honesty & integrity are to be fostered Develop, Adopt ethical principles in all aspects of treatment modalities; Professional honesty & integrity are to be fostered. Develop Communication skills to make awareness regarding periodontal disease Apply high moral and ethical standards while carrying out human or animal research, Be humble, accept the limitations in his knowledge and skill, and ask for help from colleagues when needed, Respect patients rights and privileges, including patients right to information and right to seek a second opinion.

ORAL MEDICINE AND RADIOLOGY

BDS

Knowledge:

- To have adequate knowledge and understanding of the aetiology, pathophysiology, diagnosis & treatment planning of various oral mucosal diseases.
- To have understood the principles of various radiographic techniques in oral and maxillofacial region.
- Essential knowledge of personal hygiene and infection control, prevention of cross infection and safe disposal of hospital waste keeping in view the high prevalence of infectious disease

Skills:

- To obtain proper clinical history, examination of the patient, arrive at a provisional diagnosis; perform diagnostic procedures including radiographs, interpret them and devise the treatment plan.
- To perform with competence various intraoral radiographs and interpret them.

Attitude:

- Care is to be delivered irrespective of the social status, caste, creed or religion of the patient.
- Willing to share the knowledge and clinical experience with professional colleagues.
- Respect patient right and privileges, including patients right to information and right to seek a second opinion.

ORAL MEDICINE AND RADIOLOGY

MDS

Knowledge:

Theoretical, Clinical and practical knowledge of all mucosal lesions, diagnostic procedures pertaining to them and latest information of imaging modules.

Skills:

- Diagnostic skill in recognition of oral lesions and their management
- Research skills in handling scientific problems pertaining to oral treatment
- Clinical and Didactic skills in encouraging younger doctors to attain learning objectives

Attitudes:

The positive mental attitude and the persistence of continued learning need to be inculcated

PUBLIC HEALTH DENTISTRY

BDS

Knowledge:

- To have adequate knowledge and understand the basic principles of epidemiology, environmental care, health education and public health administration at community level.
- Apply basic sciences knowledge regarding etiology, diagnosis and management of the prevention, promotion and treatment of all the oral conditions at the individual and community level.
- To have minimum knowledge about how to conduct research and Oral Health Surveys in order to identify all the oral health problems affecting the community and find solutions using multi-disciplinary approach.

Skills:

- Take case history, conduct clinical examination, indices recording to arrive at diagnosis and treatment planning.
- Plan appropriate Community Oral Health Program, conduct the program and evaluate, at the community level.
- To perform hands on procedure – pit and fissure sealants & topical fluoride application.

Values:

- Adopt ethical principles in all aspects of Community Oral Health Activities.
- Develop communication skills, in particular to explain the causes and prevention of oral diseases to the patient.
- Respect patient's rights and privileges including patients right to information and right to seek a second opinion.

PUBLIC HEALTH DENTISTRY

MDS

Knowledge:

- Apply basic sciences knowledge regarding etiology, diagnosis and management of the prevention, promotion and treatment of all the oral conditions at the individual and community level.
- Identify social, economic, environmental and emotional determinants in a given Individual patient or a community for the purpose of planning and execution of Community Oral Health Program.
- Ability to conduct Oral Health Surveys in order to identify all the oral health problems affecting the community and find solutions using multi-disciplinary approach ability to act as a consultant in community Oral Health, teach, guide and take part in research (both basic and clinical), present and publish the outcome at various scientific Conferences and journals, both national and international level skills.

Skills:

- Take history, conduct clinical examination including all diagnostic procedures to arrive at diagnosis at the individual level and conduct survey of the community at state and national level of all conditions related to oral health to arrive at community diagnosis. Plan and perform all necessary treatment, prevention and promotion of Oral health at individual and community level.
- Plan appropriate Community Oral Health Program, conduct the program and evaluate, at the community level.
- Ability to make use of knowledge of epidemiology to identify causes and appropriate preventive and control measures.
- Develop appropriate person power at various levels and the effective utilization.
- Conduct survey and use appropriate methods to impart Oral Health Education.
- Develop ways of helping the community towards easy payment plan, and followed by evaluation for their oral health care needs.
- Develop the planning, implementation, evaluation and administrative skills to carry out successful community Oral Health Programs.

Values:

- Adopt ethical principles in all aspects of Community Oral Health Activities.
- To apply ethical and moral standards while carrying out epidemiological researches.
- Develop communication skills, in particular to explain the causes and prevention of oral diseases to the patient.
- Be humble and accept the limitations in his knowledge and skill and to ask for help from colleagues when needed and promote team work approach.
- Respect patient's rights and privileges including patients right to information and right to seek a second opinion.

ORTHODONTICS

BDS

Knowledge:

- Adequate knowledge of the objectives and scope of Orthodontics and Dentofacial Orthopaedics.
- Adequate knowledge of the prenatal and postnatal growth and development of face, development of normal occlusion, cognitive and emotional development and functional development.
- Adequate knowledge of terminology and classification of malocclusion, etiology of malocclusion and diagnostic aids.
- Adequate clinical experience required for diagnosis of all types of malocclusion and ideal timing of treatment for each type of malocclusion.

Skills:

- Able to do preclinical wire bending exercises for fabrication of removable appliances.
- Able to examine, record and diagnose various common orthodontic problems encountered in general dental practice.
- Acquire skill to take very good quality impressions of the dental arches.
- Able to make the patients aware of orthodontic problems and counsel them for undergoing treatment at the right time.

Attitudes:

- Willing to apply current knowledge of orthodontics in the best interest of the patients and the community.
- Maintain a high standard of professional ethics and conduct and apply these in all aspects of professional life.
- Empathetic to the patients and communicate well.
- Seek to improve orthodontic awareness throughout the community.

ORTHODONTICS

MDS

Knowledge:

- The dynamic interaction of biologic processes and mechanical forces acting on the stomatognathic system during orthodontic treatment.
- The aetiology, pathophysiology, diagnosis and treatment planning of various common Orthodontic problems.
- Various treatment modalities in Orthodontics preventive interceptive and corrective.
- Basic sciences relevant to the practice of Orthodontics.
- interaction of social, cultural, economic, genetic and environmental factors and their relevance to management of oro - facial deformities.

- Factors affecting the long-range stability of orthodontic correction and their management.
- Personal hygiene and infection control, prevention of cross infection and safe disposal of hospital waste, keeping in view the high prevalence of Hepatitis and HIV and other highly contagious diseases.

Skills:

- To obtain proper clinical history, methodical examination of the patient, perform essential diagnostic procedures, and interpret them and arrive at a reasonable diagnosis about the Dentofacial deformities.
- To be competent to fabricate and manage the most appropriate appliance - intra or extra oral, removable or fixed, mechanical or functional, and active or passive - for the treatment of any orthodontic problem to be treated singly or as a part of multidisciplinary treatment of Orofacial deformities.

Attitude:

- Develop an attitude to adopt ethical principles in all aspects of Orthodontic practice.
- Professional honesty and integrity are to be fostered
- Treatment care is to be delivered irrespective of the social Status, cast, creed or colleagues
- Willingness to share the knowledge and clinical experience with professional colleagues
- Willingness to adopt, after a critical assessment, new methods and techniques of orthodontic management developed from time to time based on scientific research, which are in the best interest of the patient
- Respect patients' rights and privileges, including patients right to information and right to seek a second The training programme in Orthodontics is to structure and achieve the following four objectives opinion
- Develop attitude to seek opinion from allied medical and dental specialists as and when required.

Communication skills:

- Develop adequate communication skills particularly with the patients giving them various options available to manage a particular Dentofacial problem and to obtain a true informed consent from them for the most appropriate treatment available at that point of time.
- Develop the ability to communicate with professional colleagues, in Orthodontics or other specialties through various media like correspondence, Internet, e-video, conference, etc. to render the best possible treatment.

PEDODONTICS

BDS

Knowledge:

- To have adequate knowledge and understanding of the scientific and systematic procedure of history taking and examination of Orofacial region to arrive at proper diagnosis and management
- To have understood the morphology of primary teeth and basic differences in the principles of cavity preparation in primary and permanent teeth
- To have essential knowledge of the preventive (oral prophylaxis, topical fluoride application) and therapeutic measures (restoration of carious teeth, extraction of primary teeth) in caries management

Skills:

- To communicate and manage child patient
- To obtain proper clinical history, examination of the patient, perform diagnostic procedures and interpret them to arrive at a provisional diagnosis
- To prepare various cavity designs on primary and permanent teeth and restore them using different restorative materials.
- To extract primary teeth

Attitude:

- To deliver optimum treatment to pediatric patients with tender loving care irrespective of the social status, caste, creed or religion of the patient
- Willing to share the knowledge and clinical experience with professional colleagues
- Respect patient rights and privileges, including patients/ parents right to information, obtaining consent from parents for each procedure and right to seek a second opinion
- Develop attitude to seek opinion from an allied medical and dental specialists as and when required.

Communicative Skills and Ability:

- Develop adequate communication skills to manage child patient, explaining various treatment options to parents and obtain a true informed consent from them for the most appropriate treatment available at that point of time
- Develop the ability to communicate with professional colleagues
- Develop ability to present seminars and develop leadership skills.

PEDODONTICS

MDS

Knowledge:

- To have adequate knowledge of Child psychology and Behaviour management techniques

- To have knowledge of the aetiology, pathophysiology, diagnosis and treatment planning of various common problems
- Understand the principles of prevention and preventive dentistry right from birth to adolescence
- Various treatment modalities to prevent and intercept malocclusion
- To have knowledge of aberrant oral habits, diagnosis and available habit breaking treatment options

Skills:

- Obtain proper clinical history, methodological examination of the patient, perform essential diagnostic procedures and interpret them, and arrive at a reasonable diagnosis and treat appropriately.
- Be competent to treat dental diseases which are occurring in child patient.
- Manage to repair and the lost/tooth structure to maintain harmony between both hard and soft tissues of the oral cavity.
- Manage the disabled children effectively and effectively, tailored to the needs of individual requirement and conditions.

Attitudes

- Develop an attitude to adopt ethical principles in all aspects of Pedodontic practice.
- Professional honesty and integrity are to be fostered.
- Treatment care is to be delivered irrespective of the social status, cast creed, and religion of the patients.
- Willingness to share the knowledge and clinical experience with professional colleagues.
- Willingness to adopt, after a critical assessment, new methods and techniques of pedodontic management developed from time to time, based on scientific research, which are in the best interest of the child patient.
- Respect child patient's rights and privileges, including child patients right to information and right to seek a second opinion.
- Develop an attitude to seek opinion from allied dental specialities, as and when required.

Communication Skills and Ability:

- Develop adequate communication skills to manage child patient, explaining various treatment options to parents and obtain a true informed consent from them for the most appropriate treatment available at that point of time
- Develop the ability to communicate with professional colleagues
- Develop ability to teach undergraduates, present seminars and develop leadership skills.

DENTAL MATERIALS

BDS

Knowledge:

The candidate should possess basic knowledge

- on human anatomy, embryology, Physiology & Biochemistry, Bioengineering, Bio-medical and Biological Principle and application Dental material science
- Tooth and tooth surface restorations, Complete denture Prosthodontics, removable partial dentures Prosthodontics, fixed Prosthodontics and maxillofacial Prosthodontics

Skills:

- Laboratory technique management based on skills and knowledge of Dental Materials and dental equipment and instruments, management.
- Perform Laboratory procedure with understanding of biomaterials, tissue conditions related to prosthesis and have competent dexterity and skill for performing laboratory procedures in fixed, removable, implant and maxillofacial Prosthodontics.

Attitude:

- Willing to share the knowledge and laboratory experience with professional colleagues.
- Willing to adopt new methods and techniques in Dental Materials from time to time based on scientific research, which is in patient's best interest.

Communication Abilities:

- Develop communication skills, in particular, to explain materials options available
- Develop the ability to communicate with professional colleagues through various media like Internet, e-mail, videoconference, and etc.

PROSTHODONTICS

BDS

Knowledge:

The candidate should possess knowledge applied basic and systematic medical sciences.

- On human anatomy, embryology, histology, applied in general and particular to head and neck, Physiology & Biochemistry, Pathology and microbiology, Health and diseases of various systems of the body (systemic) principles in surgery and medicine, Pharmacology.
- Ability to diagnose and planned treatment for patients requiring a Prosthodontic therapy

- Ability to read and interpret a radiograph and other investigations for the purpose of diagnoses treatment plan
- Tooth and tooth surface restorations, Complete denture prosthodontics, removable partial dentures Prosthodontics, fixed prosthodontics and maxillofacial Prosthodontics.
- Ability to diagnose failed restoration and provide Prosthodontic therapy and after care.
- General health conditions and emergency as related to prosthodontics treatment,
- Identify social, cultural, economic, environmental, educational and emotional determinants of the patient and consider them in planning the treatment.
- Should have a sound knowledge for the application of pharmacology. Effects drugs on oral tissue and systems of a body and for medically compromised.

Skills:

- The candidate should be able to examine the patients requiring Prosthodontic therapy, investigate the patient systemically, analyze the investigation results, radiography, diagnose the ailment, plan a treatment, communicate it with the patient and execute it.
- The candidate should be able to restore the lost functions of the stomatognathic system namely speech, mastication etc. to provide a quality health care
- Identify target diseases and awareness amongst the population for Prosthodontic therapy.
- Perform clinical procedure with understanding of biomaterials, tissue conditions related to prosthesis and have competent dexterity and skill for performing clinical and laboratory procedures in fixed, removable and maxillofacial Prosthodontics.

Attitudes:

- Adopt ethical principles in all Prosthodontic practice. Professional honesty and integrity are to be fostered. Treatment to be delivered irrespective of social status, caste, creed or religion of patient.
- Willing to adopt new methods and techniques in prosthodontics from time to time based on scientific research, which is in patient's best interest.

Communication Abilities:

- Develop communication skills, in particular, to explain treatment option available in management.
- Should be able to communicate in simple understandable language with the patient and explain the principles of prosthodontics to the patient. He should be able to guide and counsel the patient with regard to various treatment modalities available.

PROSTHODONTICS

MDS

Knowledge:

The candidate should possess knowledge applied basic and systematic medical sciences.

- On human anatomy, embryology, histology, applied in general and particular to head and neck, Physiology & Biochemistry, Pathology and microbiology, virology, Health and diseases of various systems of the body (systemic) principles in surgery and medicine, Pharmacology, Nutrition, behavioural Science, Age changes, genetics, Immunology, Congenital defects and syndrome and Anthropology, Bioengineering, Bio-medical and Biological Principle and application Dental material science
- Ability to diagnose and planned treatment for patients requiring a Prosthodontic therapy
- Ability to read and interpret a radiograph and other investigations for the purpose of diagnoses treatment plan
- Tooth and tooth surface restorations, Complete denture prosthodontics, removable partial dentures Prosthodontics, fixed prosthodontics and maxillofacial and Craniofacial Prosthodontics, implants supported Prosthodontics, T.M.J, and occlusion, craniofacial aesthetic, and biomaterials. Craniofacial disorders - problems of psychogenic origin.
- Age changes and Prosthodontic Therapy for aged.
- Ability to diagnose failed restoration and provide Prosthodontic therapy and after care.
- Should have essential knowledge on ethics, laws and Jurisprudence and forensic odontology in Prosthodontics
- General health conditions and emergency as related to prosthodontics treatment,
- Identify social, cultural, economic, environmental, educational and emotional determinants of the patient and consider them in planning the treatment.
- Identify cases, which are outside the area of his specialty/ competence and refer them to appropriate specialists.
- Advice regarding case management involving surgical, interim treatment etc.
- Competent specialization in team management of craniofacial design.
- Should attend continuing education Programmes, seminars and conferences related to prosthodontics in thus updating himself.
- Teach and guide his / her team, colleague and other students.
- Should be able to use information technology tools and carry out research basic and clinical, with the aims of publishing his/ her work and presenting hi work at various scientific forum.
- Should have essential knowledge of personal hygiene, infection control, prevent of

cross infection and safe disposal of waste, keeping in view the risks of transfer of Hepatitis & HIV.

- Should have an ability to plan to establish Prosthodontic clinic/hospital teach; department and practice management
- Should have a sound knowledge for the application of pharmacology. Effects drugs on oral tissue and systems of a body and for medically compromised.

Skills:

- The candidate should be able to examine the patients requiring Prosthodontic therapy, investigate the patient systemically, analyse the investigation results, radiography, diagnose the ailment, plan a treatment, communicate it with the patient and execute it.
- Understand the prevalence and prevention of diseases of craniomandibular system related to Prosthetic dentistry.
- The candidate should be able to restore the lost functions of the stomatognathic system namely speech, mastication etc. to provide a quality health care for craniofacial region
- The candidate should be able to interact with other specialty including a medical specialty for a planned team management of patients for a craniofacial and oral acquired and congenital defects, Temporomandibular joint syndromes, esthetics, Implant supported Prosthetics and problems of Psychogenic origin,
- Should be able to demonstrate the clinical competence necessary to carry out appropriate treatment at higher level of knowledge, training and practice skills currently available in their specialty area.
- Identify target diseases and awareness amongst the population for Prosthodontic therapy.
- Perform clinical and Laboratory procedure with understanding of biomaterials, tissue conditions related to prosthesis and have competent dexterity and skill for performing clinical and laboratory procedures in fixed, removable, implant and maxillofacial TMJ, esthetics Prosthodontics.
- Laboratory technique management based on skills and knowledge of Dental Materials and dental equipment and instruments, management.
- To understand demographic distribution and target diseases of Cranio mandibular region related to Prosthodontic including crown & bridge and implantology.

Attitudes:

- Adopt ethical principles in all Prosthodontic practice. Professional honesty and integrity are to be fostered. Treatment to be delivered irrespective of social status, caste, creed or religion of patient.
- Willing to share the knowledge and clinical experience with professional colleagues.
- Willing to adopt new methods and techniques in prosthodontics from time to time based on scientific research, which is in patient's best interest.

- Respect patient's rights and privileges including patients right to information and right to seek second opinion.

Communication Abilities:

- Develop communication skills, in particular, to explain treatment option available in management.
- Provide leadership and get the best out of his group in a congenial working atmosphere.
- Should be able to communicate in simple understandable language with the patient and explain the principles of prosthodontics to the patient. He should be able to guide and counsel the patient with regard to various treatment modalities available.
- Develop the ability to communicate with professional colleagues through various media like Internet, e-mail, videoconference, and etc. to render the best possible treatment.

CONSERVATIVE DENTISTRY & ENDODONTICS

BDS

At the end of the session the student should be able to

Knowledge:

- To have adequate knowledge of understanding and interpreting etiology, pathophysiology, diagnosis and treatment planning of dental caries, diseases of dental pulp and its sequelae.
- Essential knowledge about composition and properties of restorative materials.
- Understand the fundamentals of tooth preparation for amalgam, composite, GIC, etc.
- Essential knowledge about rationale, instrument and technique of endodontic treatment
- Understand the principles of aesthetic dental procedures.

Skills:

- Perform diagnostic procedure of all types of carious lesions
- Demonstrate appropriate Isolation techniques
- Competent to perform class I and class II cavities and their restoration with amalgam.
- Manage Hypersensitive teeth & Cervical lesions
- Diagnose and appropriately treat pulpally involved teeth (pulp capping procedures)
- Competent to carryout small composite restorations
- Able to perform Root canal Treatment on Anterior teeth

Attitude:

- Competent in control of pain and anxiety during dental treatment
- Have empathy for patient
- Maintain high standards of professional ethics and conduct

- Knowledge about asepsis, disinfection and sterilization of instruments and clinical area with personal care

Communicative Skills and Ability:

- Develop adequate communication skills to manage patient, explaining various treatment options for the most appropriate treatment available at that point of time
- Develop the ability to communicate with professional colleagues

CONSERVATIVE DENTISTRY & ENDODONTICS

MDS

Knowledge:

At the end of 36 months of training, the candidates should be able to:

- Describe etiology, pathophysiology, periapical diagnosis and management of common restorative situations, endodontic situations that will include contemporary management of dental caries, management of trauma and pulpal pathosis including periodontal situations.
- Demonstrate understanding of basic sciences as relevant to conservative / restorative dentistry and Endodontics.
- Identify social, economic, environmental and emotional determinants in a given case or community and take them into account for planning and execution at individual and community level.
- Ability to master differential diagnosis and recognize conditions that may require multi disciplinary approach or a clinical situation outside the realm of the specialty, which he or she should be able to recognize and refer to appropriate specialist.
- Update himself by self-study and by attended basic and advanced courses, conferences, seminars, and workshops in the specialty of Conservative Dentistry-Endodontics-Dental Materials and Restorative Dentistry.
- Ability to teach, guide, colleagues and other students. Use information technology tools and carry out research both basic and clinical with the aim of his publishing his work and presenting the same at scientific platform

Skills:

- Take proper chair side history, exam the patient and perform medical and dental diagnostic procedures and order as well as perform relevant tests and interpret to them to come to a reasonable diagnosis about the dental condition in general and Conservative Dentistry - Endodontics in particular. And undertake complete patient monitoring including preoperative as well as post operative care of the patient.
- Perform all levels of restorative work and surgical and non-surgical Endodontics including endodontic endosseous implants, as well as endodontic-periodontal surgical procedures as part of multidisciplinary approach to clinical condition.

- Provide basic life saving support in emergency situations.
- Manage acute pulpal and pulpo-periodontal situations.
- Have a thorough knowledge of infection control measures in the dental clinical environment and laboratories.

Human Values, Ethical Practice and Communication Abilities:

- Adopt ethical principles in all aspects of restorative and contemporaries Endodontics including non-surgical and surgical Endodontics.
- Professional honesty and integrity should be the top priority.
- Dental care has to be provided regardless of social status, caste, creed or religion of the patient.
- Develop communication skills- in particular to explain various options available management and to obtain a true informed consent from the patient.
- Apply high moral and ethical standards while carrying on human or animal research. He /She shall not carry out any heroic procedures and must know his limitations in performing all aspects of restorative dentistry including Endodontics. Ask for help from colleagues or seniors when required without hesitation or Respect patient's rights and privileges including patients right to information.

ORAL AND MAXILLOFACIAL SURGERY

BDS

Knowledge:

- To have adequate knowledge and understanding of etiology, pathophysiology, diagnosis and treatment planning of various surgical problems.
- To have understood surgical principle like pre and post surgical management of minor surgical procedures.
- Essential knowledge of personal hygiene and infection control, prevention of cross infection and waste disposal of hospital waste keeping in view the high prevalence of infectious disease.

Skills:

- To obtained proper clinical history, examination of the patient , perform diagnostic procedure and advice essential laboratory test and interpret them to arrive at a provisional diagnosis about the pathologic condition.
- To perform with competence various minor surgical procedure (exodontia, alveoloplasty etc.)

Attitude:

- Surgical care is to be delivered irrespective of the social status, caste, creed or religion of the patient.
- Willing to share the knowledge and clinical experience with professional colleagues.
- Respect
- Respect patient's right and privileges including patient's right to information and right to seek a second opinion.
- Develop attitude to seek opinion from an allied medical and dental specialist.

Communication skill and abilities:

- Develop adequate communication skills particularly with the patients giving them the various options available to manage a particular surgical problem and obtain a true informed consent from them for the most appropriate treatment available at that point of time.
- Develop the ability to communicate with professional colleagues.
- Develop ability to teach undergraduates, present seminars and develop leadership skills.

ORAL AND MAXILLOFACIAL SURGERY

MDS

Objectives: The training program in Oral and Maxillofacial Surgery is structured to achieve the following four objectives-

- Knowledge
- Skills
- Attitude
- Communicative skills and ability

Knowledge:

- To have acquired adequate knowledge and understanding of the etiology, pathophysiology and diagnosis, treatment planning of various common oral and Maxillofacial surgical problems both minor and major in nature.
- To have understood the general surgical principles like pre and post surgical management, particularly evaluation, post surgical care, fluid and electrolyte management, blood transfusion and post surgical pain management.
- Understanding of basic sciences relevant to practice of oral and maxillofacial surgery.
- Able to identify social, cultural, economic, genetic and environmental factors and their relevance to disease process management in the oral and Maxillofacial region.
- Essential knowledge of personal hygiene and infection control, prevention of cross infection and safe disposal of hospital waste keeping in view the high prevalence of hepatitis and HIV.

Skill

- To obtain proper clinical history, methodical examination of the patient, perform essential diagnostic procedures and order relevant laboratory tests and interpret them and to arrive at a reasonable diagnosis about the surgical condition.
- To perform with competence minor oral surgical procedures and common maxillofacial surgery. To treat both surgically and medically (or by other means of the oral and Maxillofacial and the related area).
- Capable of providing care for maxillofacial surgery patients.

Attitude:

- Develop attitude to adopt ethical principles in all aspect of surgical practice, professional honesty and integrity are to be fostered. Surgical care is to be delivered irrespective of the social status, caste, creed or religion of the patient.
- Willing to share the knowledge and clinical experience with professional colleagues.
- Willing to adopt new and techniques of surgical management developed from time to time based on scientific research which are in the best interest of the patient
- Respect patient right and privileges, including patients right to information and right to seek a second opinion.
- Develop attitude to seek opinion from an allied medical and dental specialists as and when required.

Communication skills:

Develop adequate communication skills particularly with the patients giving them the various options available to manage a particular surgical problem and obtain a true informed consent from them for the most appropriate treatment available.

ORAL PATHOLOGY AND MICROBIOLOGY

BDS

Knowledge

- To have understood the fundamentals of the tooth development, physiology, Temporomandibular joint and occlusion, detailed morphology of deciduous and permanent teeth.
- To have adequate knowledge and understanding of aetiology, pathogenesis, histopathology, laboratory tests and diagnosis.
- Essential knowledge of personal hygiene and safe disposal of laboratory wastes.

Skills

- To develop skills to carve deciduous and permanent teeth.
- To interpret slides and arrive at the proper diagnosis.
- To estimate age of individual based on the dentitions for forensic studies.

Attitude

- To develop an approach towards the diagnosis of Oral and maxillofacial lesions along with general dentistry.
- To develop an interest towards research activities
- Willingness to share knowledge and clinical experience with professional colleagues.
- Develop attitude to seek opinion from an allied medical and dental specialists as and when required.
- Respect patient right and privileges, including patients right to information and right to seek a second opinion.

Communicative skills and Ability

- Develop adequate communication skills particularly with the patients.
- Develop the ability to communicate with professional colleagues.
- Develop ability to present seminars and leadership skills.