



Diploma In General & Advanced

Endoscopy Nursing

Rawalpindi Medical University

Centre for Liver and Digestive Diseases (CLD)

Holy Family Hospital Rawalpindi

Preamble

The field of nursing knowledge and its associated skills has become too vast and complex for any one person to master in full, and it must therefore be acknowledged that specialization within nursing has now become necessary in order to provide quality care and ensure the safety and well-being of patients and consumers. The development of nursing specialties is believed to be critical in stimulating the growth of nursing knowledge and expertise so that the quality of care provided to the population can be improved. The International Council of Nurses (ICN) definition, stating that specialization 'implies a level of knowledge and skill in a particular aspect of nursing which is greater than that acquired during the course of basic nursing education' acknowledges that specialization is a path in which nursing practice is deepened and refined.

The objectives of a special GI nursing training is to provide:

- o Comprehensive patient care
- o Technical assistance during diagnostic and therapeutic procedures
- o Care and Maintenance of endoscopic equipment
- o Hygiene and infection control and prevention, including reprocessing of endoscopic equipment
- o Documentation and record-keeping
- o Organization and clinical management
- o Health and safety
- o Legal and ethical aspects
- o Research
- o Providing patients and careers with information about health and disease
- o Education and training of staff
- o The job description should include a statement of lines of responsibility

To fulfill the above mentioned requirements Rawalpindi Medical University has started this new and unique course for training the endoscopy nurses. The learning objectives of this Diploma course were designed according to the guidelines of European Society of Gastroenterology and Endoscopy Nurses and Associates (ESGENA) Core Curriculum for Endoscopy Nurses. An expert committee for Diploma in endoscopy nursing was framed to develop core curriculum course modules monitoring and assessment tools for this course under the patronage of Vice Chancellor Prof. Muhammad Umar.

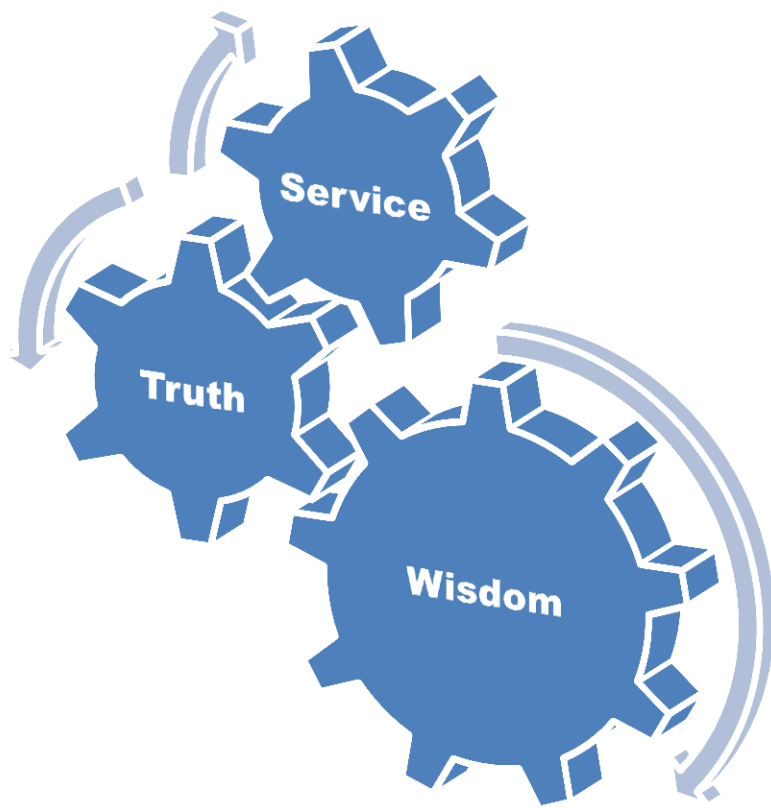
The members of this committee are as follow:

1. Prof. Hamama-tul-Bushra Khaar
2. Dr. Tanveer Hussain
3. Dr. Javeria Khan (Convener)
4. Dr. Aqsa Naseer
5. Dr. Tayyab Saeed Akhter
6. Dr. Sadia Ahmad
7. Dr. Misbah Noureen
8. Senior Nursing Instructor Miss Jacqueline

The untiring efforts of the whole team towards the commencement of this Programme at Rawalpindi Medical University are worth mentioning.

Prof. Hamama-tul-Bushra Khaar
Courses Director, Professor Emeritus
Professor of Medicine/Gastroenterology

Motto of Rawalpindi Medical University



Mission of Rawalpindi Medical University



To improve the standards of medical education of proficient professional quality with the aim of preparing healthcare professionals for practice of data-based, patient centered medicine and community based preventive care



To advance healthcare through forward looking health research leading to improved scientific knowledge and better human service



To inculcate values of mutual respect and ethical practice of medicine

Faculty



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Vice Chancellor & Chief
Consultant Gastroenterologist & Hepatologist
RMU & Allied Hospitals



Prof. Bushra Khaar

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Miss Jacqueline
Senior Nursing Instructor

Specialty Nursing Training Needs and Challenges

Over the last 30 years, endoscopy has become an essential tool for medical diagnosis and treatment. In parallel with technological developments and increasing specialization among physicians, endoscopy nursing has developed into a discipline that involves highly qualified nursing and assistance tasks alongside the Endoscopist. Endoscopy nurses work within a multidisciplinary team both in hospitals and in general practice and primary care.

The scope of endoscopy nurses' practice varies from country to country. In some countries, for example, the field of endoscopy nursing includes not only gastroenterological endoscopy, but also thoracic medicine, urology, surgery, Gynaecology, etc. In another group of countries in Europe, the focus in endoscopy nursing is on gastroenterology. Consequently, the work of the nurses concerned involves not only endoscopy, but also stoma care, percutaneous endoscopic Gastrostomy (PEG), nutrition, inflammatory bowel disease (IBD), in-patient and outpatient care in the field of gastroenterology, and other areas. In 1998, the European Society of Gastroenterology and Endoscopy Nurses and Associates (ESGENA) initiated the setting up of a European Endoscopy Nurses' Forum (EENF) in order to work towards harmonizing the training provided for endoscopy nurses throughout Europe and to promote recognition at European level for this nursing specialty.

At the first EENF meeting in May 1998, a great deal of information about the training and education provided for endoscopy nurses all over Europe was collected. Various aspects involving specialist nursing education, continuing education and short-term training needs in the field of endoscopy nursing were discussed. The data collected showed that there is wide variation in the education and training provided for endoscopy nurses in Europe. Training courses for endoscopy nursing have been established in the majority of European countries, but they vary in length, content, academic level and level of official qualification obtained. Courses lasting from one to six weeks can be described as representing continuing education, whilst courses lasting from one to two years are designed to provide post-basic nurse education. Short courses usually concentrate on gastroenterological endoscopy, while longer courses also cover endoscopy in the fields of thoracic medicine, urology and some parts of surgery, orthopedics and Gynaecology. A few courses available at university level offer combinations of all aspects of gastroenterology, with the option of obtaining a master's degree. At the end of the first EENF meeting, it was agreed that one of the group's initial aims should be to define the job of an endoscopy nurse in Europe (in the European Job Profile) as the foundation for working towards a European core curriculum for endoscopy nurse education.

Between September 1998 and October 2001, the EENF met twice a year to develop the European Job Profile for endoscopy nurses. The final version of the document was adopted in October 2002. The job profile includes recommendations on the qualifications, skills, knowledge and responsibilities of endoscopy nurses, and it is intended as a general statement that defines the profession's role and philosophy.

Aims of the Core Curriculum

- To empower nurses to:
 - Optimize patients' experiences (improving patient care, services, environment, etc.)
 - Advance evidence-based practice
 - Look at the profession critically in order to encourage research
 - Promote the professional status of endoscopy nursing
 - Promote lifelong learning through reflective practice
- To support national nursing societies and official bodies to:
 - Provide educational opportunities for staff working in gastroenterology and endoscopy nursing
 - Promote a recognized qualification in gastroenterology and endoscopy nursing
 - Promote cooperation with other relevant professional groups
 - Advance the professional status of gastroenterology and endoscopy nursing
- To implement the ENNO Framework in order to establish equivalence of training and consequently allow nurses to move freely within their profession to different countries
 (*Reference: European Society of Gastroenterology and Endoscopy Nurses and Associates (ESGENA). European job profile for endoscopy nurses – August 2004. Endoscopy 2004;36:1025–30*)

Educational Philosophy of Core Curriculum

- The Core Curriculum was developed with an awareness of the principles involved in adult education and in order to develop the required skills among practitioners involved in endoscopy nursing.
- Theory and practice are equally important in the Core Curriculum. The acquisition of skills, as described by Benner (1984) in an approach that is still accepted in nursing today, is described as a five-stage process: from novice, to advanced beginner, to competent, proficient and finally expert practitioner. The competent practitioner can be described as 'having the ability to perform actions/procedures proficiently in the workplace' (Reece and Walker, 2006). Benner (1984) expands on this by stating that the competent nurse 'has a feeling of mastery and the ability to cope with and manage the many contingencies of clinical nursing. The conscious, deliberate planning that is characteristic of this skill level helps achieve efficiency and organization. (*Reference: European Society of Gastroenterology and Endoscopy Nurses and Associates (ESGENA). European job profile for endoscopy nurses – August 2004. Endoscopy 2004;36:1025–30*)

Structure of DIPLOMA Course for General Endoscopy Training

The frame work of core curriculum gives enough flexibility to adopt the contest and length of courses according to the natural requirement. The Diploma in endoscopy nursing in RMU is structured according to the ESGENA guidelines.

Duration of Course

The course has two components. The first component is General Endoscopy Nursing for Initial six months and second component is advanced endoscopy nurses for Next six months with a minimum of 70% of the total duration being dedicated to clinical and / or practice training.

Outline of Modules

The core curriculum consists of four modules of equal length.

- a) **General endoscopy nurse comprises two modules of six months duration.**
 1. Module-I Fundamentals of Endoscopy Nursing
 2. Module-II Clinical Modules of Upper and Lower GI Endoscopy
- b) **Advanced Endoscopy nursing comprise of two modules of six months duration**
 1. Module-III Clinical Modules of ERCP/EUS
 2. Module-IV Optimizing Nursing Skills and Management

MODULE HIGHLIGHTS:

- Programme Pedagogy with blended approach and in line with global practice
- Appropriate interplay of course work, clinical work, classes, student-faculty discussions, Group discussions, Webinars, maintenance of log book
- Evaluation by self-assessment, end of module assessment and project work
- Library with latest resources
- Lectures by Guest Speakers

Content of Modules

Module-I: Fundamentals of Endoscopy Nursing

Module 1 includes the basic knowledge required for endoscopy nursing. The module contains two units:

- Unit A: an introduction to basics that serves as the foundation for the more advanced information and applications included in endoscopy nursing course.
- Unit B: an introduction to basics that serves as the foundation for the more advanced information and applications included in modules 2 and 3, adapted to specific endoscopic procedures and issues in gastroenterology.

Aims:

The aim is to provide an introduction to the principles underlying endoscopy nursing practice and to develop basic skills and knowledge and an understanding of the role of the professional nurse in providing high-quality, evidence-based and individualized care for patients undergoing endoscopic procedures.

Learning outcomes

1. Demonstrate an understanding of the history and development of endoscopy nursing and appreciate the way in which an individual develops to become a professionally accountable nurse in the context of current trends and activities in nursing.
2. Have respect for human beings and be able to act in accordance with acknowledged ethical norms and legal requirements, recognizing the way in which norms, values, cultures and attitudes influence legislation and society.
3. Demonstrate aspects of accountability towards self, patient, profession and employer.

4. Understand health and safety issues relating to the work environment.
5. Understand and be able to apply the principles of asepsis and sterilization in managing infection control in the endoscopy environment.
6. Demonstrate knowledge of the principles of safe endoscopy care for everyone in the endoscopy unit – including patients and their relatives and partners.
7. Correctly document the nursing care given, using a recognized nursing framework to assess, plan, implement and evaluate it.
8. Apply good communication skills and be able to use them to work well in a multidisciplinary team, recognizing the needs of others in the team, and to support patients' relatives and partners in the endoscopy environment.
9. Be able to use computers and appreciate the role of information science as a resource in endoscopy nursing.

Content of Module - I

1. History and development of endoscopy nursing
2. Guidelines, regulations, laws relevant to:
 - a. General nursing
 - b. Endoscopy nursing
3. Documentation in endoscopy nursing:
4. Different formats and systems
 - a. Legal regulations
5. Professional development in the context of endoscopy nursing
6. Communication skills
7. Health education and disease processes specific to conditions requiring diagnostic and therapeutic endoscopy
8. Quality process and management
9. Risk management
10. Accountability
11. Information management:
 - a. Information technology (IT)
 - b. Research/appreciation
 - c. Evidence-based practice
12. Ethics
 - a. Ethical and professional standards
13. History and development of endoscopy techniques
14. Guidelines, regulations, laws, manufacturers' instructions for each item of equipment
15. Nursing process applicable to endoscopic procedures
16. Standards of practice in endoscopy
17. Pharmacology, sedation, anaesthesiology, resuscitation
18. Emergency management
19. Handling of specimens, histology, cytology
20. Care of equipment (endoscopes and accessories); familiarity with endoscopic equipment with regard to:
 - a. Construction
 - b. Functioning – Intended usage
 - c. Potential malfunctions – Potential hazards

21. Hygiene and infection control:
 - a. Infection risks in endoscopy
 - b. Transmission of infections in endoscopy
 - c. The decontamination process with special attention to the complex construction of endoscopic equipment and the methods and agents used – Potential risks associated with the methods and agents used
 - d. Potential risks to staff and patients during decontamination/reprocessing of equipment
22. Occupational health/health and safety for patients and staff in endoscopy:
 - a. Chemicals, hazardous agents, latex, etc.
 - b. Ergonomics; lifting and positioning of the patient
 - c. Radiology
 - d. Electrotherapy and thermotherapy
 - e. Lasers
 - f. Argon plasma coagulation (APC)

Module-II, Clinical Modules with Obligatory Units

Module 2 focuses on clinical issues and contains two obligatory units concerned with procedures of the:

- Upper gastrointestinal tract
- Lower gastrointestinal tract

Aims:

The aim of the module is to enable the student to develop the knowledge, skills and attitudes that underpin safe practice in diagnostic and therapeutic upper and lower gastrointestinal endoscopy.

Learning Outcomes

1. Be able to use nursing procedures to provide safe and holistic care for patients for a range of upper and lower gastrointestinal endoscopic procedures.
2. Be able to provide effective technical assistance for a range of upper and lower gastrointestinal endoscopic procedures.
3. Be able to demonstrate safe care of endoscopic and supplemental equipment.
4. Be able to apply knowledge of anatomy, physiology and pathophysiology relevant to the diagnostic and therapeutic procedures used in upper and lower gastrointestinal endoscopy.
5. Be able to assess the risks and apply the principles of health and safety and of infection control in upper and lower gastrointestinal procedures.
6. Be able to identify potential and actual complications related to upper and lower gastrointestinal endoscopic procedures and take the appropriate action in emergency situations.
7. Be familiar with the mode of action, indications for and administration of common pharmacological agents used in upper and lower gastrointestinal diseases and during upper and lower gastrointestinal endoscopic procedures.
8. Be able to assess and monitor the patient's physiological and psychological responses before, during and after the procedure.
9. Be familiar with health education and able to use it to provide discharge advice and information to patients and carers.

10. Be able to plan the patient's discharge and communicate effectively in order to ensure safe continuity of care.

Content of Module – II

- History and development of endoscopy techniques
- Guidelines, regulations, laws, manufacturers' instructions for each item of equipment
- Background knowledge
 - Anatomy, physiology, pathophysiology
 - Indications, contraindications, potential complications
 - Comorbidities
 - Risk factors
 - Alternatives to endoscopy
- Standards of practice in endoscopy
- Procedural information and consent
- Nursing process applicable to endoscopic procedures
- Pharmacology, sedation, anaesthesiology, resuscitation
- Pain management
- Emergency management
- Handling of specimens, histology, cytology
- Care of equipment and familiarity with endoscopic equipment in relation to:
 - Construction
 - Functioning
 - Application
 - Potential malfunction
 - Potential hazards.
- Hygiene and infection control:
 - Principles of the decontamination process with special considerations
 - of the complex construction of endoscopic equipment
 - of the methods and agents used (incl. automated systems)
 - Potential risks to staff and patients during decontamination/reprocessing of equipment
- Occupational health/health and safety for patients and staff in endoscopy:
 - Chemicals, hazardous agents, latex, etc.
 - Ergonomics, lifting, positioning of patient
 - Radiology
 - Electro-thermotherapy
 - Occupational health
- Patient education, specifically adapted to special procedures
- Health education and disease processes specific to conditions requiring diagnostic and therapeutic endoscopy

Advanced Endoscopy Nursing

Module-III, ERCP / EUS Module

Learning outcomes for an ERCP / EUS

1. Be able to provide safe, holistic care for the patient for ERCP / EUS applying the nursing process
2. Be able to provide effective technical assistance during ERCP.
3. Be able to demonstrate safe care of endoscopic and supplemental equipment.
4. Be able to Apply knowledge of anatomy, physiology and pathophysiology relevant to ERCP/EUS.
5. Be able to assess risks and apply the principles of health and safety and infection control to ERCP/EUS.
6. Be able to identify potential and actual complications related to ERCP and take the appropriate action in emergency situations.
7. Be familiar with the mode of action, indications for and administration of common pharmacological agents used in biliary and pancreatic diseases during ERCP/EUS.
8. Be able to assess and monitor the patient's physiological and psychological response before, during and after the procedure.
9. Be able to Integrate knowledge of Health Education into discharge advice and information to patients and carers.
10. Be able to plan the patient's discharge and communicate effectively in order to ensure safe continuity of care.

Content of ERCP / EUS module

- History and development of endoscopy techniques
- Guidelines, regulations, laws, manufacturers' instructions for each item of equipment
- Background knowledge:
 - Anatomy, physiology, pathophysiology
 - Indications and contraindications
 - Comorbidities
 - Risk factors
 - Alternatives to endoscopy
- Standards of practice in endoscopy:
 - Procedural information and consent
 - Staffing
- Nursing process applicable to endoscopic procedures
- Pharmacology, sedation, anaesthesiology, resuscitation and pain management
- Emergency management
- Handling of specimens, histology, cytology
- Care of equipment and familiarity with endoscopic equipment in relation to:
 - Construction
 - Function
 - Application
 - Potential malfunction

- Potential hazards
- Hygiene and infection control:
 - Principles of decontamination process with special considerations
 - of the complex construction of endoscopic equipment
 - of the methods and agents used
 - Potential risks to staff and patients during decontamination / reprocessing of equipment
- Occupational health/health and safety for patients and staff in endoscopy:
 - Chemicals, hazardous agents, latex, etc.
 - Ergonomics, lifting, positioning of patient
 - Radiology – Electro-Thermotherapy,
 - Occupational health
- Patient education, specifically adapted to special procedures
- Health education and disease processes specific to conditions requiring diagnostic and therapeutic endoscopy

Module-IV, Optimizing Nursing

Module 4 takes up basic knowledge and applications from Modules 1–3 and develops advanced knowledge and application. It also introduces new and more advanced topics such as management, education, research, and ethics, etc.

Aims

The aim of the module is to enable the student to integrate the knowledge gained in the previous modules and apply it to personal professional development and enhancement of endoscopy nursing. Basic knowledge on the topics listed has already been dealt with in module 1. Advanced and procedure specific knowledge and its application are taught in this module.

Learning Outcomes

On completing the module, students should:

- Demonstrate effective interpersonal skills in dealing with all levels of staff, the patient, and the public at large.
- Be able to coordinate the workload involved in caring for a group of patients undergoing endoscopic procedures.
- Be able to analyze and critically appraise published research studies relevant to endoscopy nursing and to suggest possible applications of the findings.
- Be able to apply the teaching and learning process to training colleagues and the public at large.
- Be able to apply and participate in the quality assurance process.
- Be able to analyze an ethical dilemma in endoscopy nursing and consider the advantages and disadvantages of possible modes of action.
- Be able to use computer facilities to enhance and develop the management of the endoscopy service.
- Show evidence of professional development by initiating and managing change in practice.
- Be able to adapt practice in the light of new developments.
- Be aware of current national and international public health issues.

Content of Module

- Evidence-based practice
- Professional development in the context of endoscopy nursing:
 - Personnel development
 - Risk management
 - Accountability
- Nursing frameworks:
 - Clinical pathways
 - Nursing diagnosis, interventions and outcomes
- Communications skills
- Multidisciplinary teamwork, including staff management
- Psychology
- Quality assurance and management
- Research:
 - Application
 - Research analysis
- Ethics
 - Ethical and professional standards
- Evaluation:
 - Review of practice
 - Reflective practice
 - Problem-solving methods
- Learning methods
- Teaching and learning skills and methods
- Management issues in endoscopy, including staffing
- Emerging new developments

Assessment

The overall aim of assessment is to promote good practice in the specialist nursing field of gastroenterology and endoscopy. Assessment of learning should be continuous throughout the course, with prescribed assessments for each module.

Aims of assessment

- To stimulate an enquiring, analytical and creative approach, encouraging independent judgment and critical self-awareness.
- To encourage the skills needed for clear communication and logical argument.
- To encourage students to transfer what they have learned into actual patient care situations.

- To develop students' skills in reflecting on practice, in order to ensure that nursing practice is constantly reviewed and evaluated.
- To encourage research appreciation and the value of nursing research, and the application of theory and valid research findings in the clinical setting.

Objectives of Assessment

- To provide students with information about their educational progression and personal progress.
- To assure society that students are competent and qualified to work in endoscopy.

Assessment Methods

Student will be assessed using a variety of methods

- Case Study
- Direct observation of practice Skills (DOPs)
- Multiple choice questions (MCQ)
- Practical Examination
- Written Examination

Criteria for Failed Practice

Failed practice can mean that the student has failed in one or more of the following areas.

Clinical practice:

- Lack of compliance with national regulations.
- Wrong assessment of the patient's condition and holistic needs. The student does not gather information from available sources, does not see problems or potential risks, is not realistic in his or her assessments.
- Lacks underpinning knowledge and expected experience.
- General failure in the planning and performance of nursing care and/or technical assistance.
- Failure of or inadequate record-keeping. The student does not include important information, or includes erroneous information.
- Lack of theoretical understanding to support clinical actions.

Personal attributes:

- Lack of responsibility for personal professional development. The student does not acknowledge personal weaknesses in abilities and skills. The student does not consider how to improve problem areas or accept help or guidance.
- Lack of initiative in the learning situation.
- Functional failure in teamwork.
- Lack of ability and willingness to take on problematic tasks, difficult procedures or patients, or acute situations.
- Functional failure in new or high-pressure situations.

- Lack of ethical judgment. The student does not consider the patient's explicit wants and needs, does not preserve the patient's autonomy, undermines the trust/confidence of colleagues, or does not observe confidentiality, considerations of fairness, or the need to avoid racial discrimination.

Enrolment Criteria in Endoscopy Nursing Diploma Course (1 year)

1. Registered Nurse (General Nursing/BSN) and has a valid License from **Pakistan Nursing Council**
2. A minimum of 2 years' experience in Clinical Nursing.
3. Candidate should provide 2 years certificate of working in General nursing verified by Head of Department and Head of the institution

CERTIFICATION ELIGIBILITY REQUIREMENTS FOR ADVANCE ENDOSCOPY DIPLOMA COURSE (06-months):

1. Must have been employed in an institutional or private practice setting for a minimum of 05 years full time.
2. Each candidate is required to submit the names and contact information of 2 practitioners in the specialty (Gastroenterology), who can verify work experience and professional verification. Be sure to include a working email address as this will be the method of contact.
3. Each candidate is required to submit a copy of his/her Valid license as a registered nurse (RN) issued by Pakistan Nursing Council.
4. A formal Exam (Written /DOPS) comprising of occupational hazards, Ethics, hygiene and infection control, patient care, environmental safety, sedation pharmacology ,emergency ,GI anatomy, Basic Diagnostic and therapeutic upper and lower GI endoscopy will be conducted after fulfilling the above mentioned 3 points before giving 6 months exemption certificate for basic endoscopy. Candidates clearing the exam will be eligible to take 6 months advance GI endoscopy (ERCP and EUS) course. A brief Description of the Exam and table of specifications are enclosed herewith in Annexure A

Syllabus of DIPLOMA Course of Endoscopy Nurses

Module-I

- History of Endoscopy
- Regulations and Guideline of Fundamental of nursing.
- Communication Skills
- Health conditions and disease processes. Where endoscopy is used as diagnosis and therapeutic tool.
 - Anatomy of gastrointestinal and hepatobiliary tract.
 - Esophageal diseases, dysphagia, heart burn, CA esophagus.
 - Disease of stomach: peptic ulcer, gastric outlet obstruction, CA stomach, haematemesis/malena.
 - CA colon, Ulcerative Colitis, Crohn's Disease, Diverticular Disease, Rectal Ucler, Anal Fisher, Hemorrhoids, Per Rectal Bleeding.
- Endoscope construction and function usage potential hazard facilitation of endoscopic accessories.

- Reprocessing of endoscopes and accessories and potential risk.
- Standard of practice in endoscope
- Infection risk in endoscopy / transmission of infection in endoscopy.
- Pharmacology sedation, anaesthesiology and resuscitation (Airway management). Resuscitation equipment.
- Emergency management.
- Occupational health hazards and safety for patients and staff in endoscopy.
 - Chemicals, latex etc.
 - Lifting and positioning of patient
 - Radiology
 - Electrocautery and thermal therapy
 - Lasers
 - Argon plasma coagulation (APC)

Module-II, Upper and Lower Gastrointestinal Endoscopy

- Indication and contraindication of endoscopic procedure
- Pre procedure preparation risk factors and assessment, contraindications
- Alternative to endoscopy
- Procedural information and consent
- Pharmacology, Sedation, Anesthesia, Resuscitation.
- Pain management
- Emergency management
- Handling of specimen, histology, cytology
- Care of equipment
- Patient education to special procedures
 - Diagnostic endoscopy, screening colonoscopy
 - Upper GI hemostasis
 - Esophageal band ligation, Sclerotherapy, Fundal Varices, Glue Injection, Local Adrenaline Injection, Thermocoagulation, Haemoclip application
 - Stricture Dilatation
 - Achalasia Balloon Dilatation
 - Esophageal / Duodenal Stent Placement
 - Polypectomy
 - Colonic Stenting Placement
 - Endoscopic / Hemorrhoidal band Ligation

Module-III, ERCP / EUS

- Anatomy of Hepatobiliary System
- Duodenoscope and Echo endoscope structure and function and reprocessing
- ERCP/EUS accessories, function

- Technical assistance during ERCP.
- Indication and contraindication
- Risk assessment and principle of health, safety and infection control related to ERCP
- Complications during ERCP and management
- Indication and usage of pharmacological agents during ERCP
- Monitoring of patient during sedation and resuscitation and airway management.
- Health education regarding hepatobiliary disease like obstructive jaundice, biliary leak, pancreatitis, biliary and pancreatic stent placement, stone retrieval, stent placement, post ERCP pancreatitis.
- Patient positioning lifting, radiology, electrocautery.
- Consent, high risk consent with procedural information and alternative treatments.

Module-IV, Optimizing Nursing

- Patient documentation
- Equipment documentation: documentation and record of use, reprocessing, maintenance and traceability.
- Department documentation and departmental audit.
- Time management of allocated workload, scheduling procedures, setting clinical priorities.
- Quality control processes in endoscopy units.
- Teaching and training new staff in endoscopy unit
- Provide appropriate health and disease education to patients, their relative and families and health care providers

Lecture Topics, Module-I

- Fundamental of nursing principles Ethics and Legal issues
- Structure of Endoscopes
- Reprocessing of endoscopes
- Anatomy of gastrointestinal tract
- Sedation, pharmacology, anesthesiology, resuscitation, emergency management
- Infection risk in endoscopy and transmission of infection.
- Communication skills, health education, informed consent.
- Occupational hazards
- Workshops
 - Computer Skills
 - Communication Skills
 - BLS
 - Research Methodology
- Webinars With Guest Speakers

Lecture Topics, Module-II

- Diseases of Esophagus stomach small intestine and Colon
- Indication and Contraindications of Upper and Lower GI endoscopy
- Pre-procedural preparation, risk factors and risk assessment
- Handling of specimen, making of histopathological slides and histology, cytology specimen care during Endoscopic Procedures
- Patient Education to special procedure
- Digestive Endoscopy, Screening colonoscopy
- Upper GI Bleed and Hemostasis
- Lower GI bleed and Hemostasis
- Stricture dilatation (Esophageal, pyloric, duodenal, colonic)
- Achalasia balloon dilatation
- GI Luminal Stent placement(Esophagus,Duodenal/pyloric and colonic)
- Polypectomy
- Endoscopic haemorrhoidal band ligation

Lecture Topics, Module-III

- Anatomy of Hepatobiliary system
- Structure, function and reprocessing of duodenoscope and echo endoscope
- Indication and contraindication
- Sedation during ERCP/EUS
- Hepatobiliary Diseases

- Consent/High Risk Consent, Procedural infection and alternative method.

Lecture Topics, Module-IV

- Quality Control Process in endoscopy department
- EUS guided FNAC, FNB (Hepatopancreaticobiliary Diseases , GIST)
- Stent placement (Pancreaticobiliary, Cystogastrostomy , Endoscopic Necrosectomy)
- General Overview of therapeutic ERCP (Choledocholithiasis, Pancreaticolithiasis, Benign and malignant Pancreaticobiliary Strictures)

ANNEXURE-A

A: MCQs Based Written Exam = 100 marks

Table of specifications:

1. occupational hazards, ethics, hygiene, infection control, patient care, environmental safety and General Nursing care=20%
2. Sedation pharmacology =10%
3. Emergency=20%
4. GI anatomy= 10%
5. Basic Diagnostic and therapeutic Upper and Lower GI endoscopic Procedures= 40%.
 - A minimum of 60% passing marks are required to get Eligible.

B: OSCE AND DOPS (Direct Observation Of procedural Skills) = 100 marks

OSCE (50 marks) and 02 DOPS relating to Basic Diagnostic and Therapeutic Upper and Lower GI endoscopic procedures comprising of 50marks(25 marks for each DOPs) shall be conducted

- A minimum of 60% passing marks are required to get Eligible.

SCORE REPORT:

A minimum of 60 % passing marks are required to be declared successful. It's a must to separately pass each exam (written MCQ test and OSCE & DOPs)

All examination items are written by certified individuals with expertise in the field of gastroenterology and/or endoscopy nursing practice. The proportion of questions from each practice domain included on the examinations is based on the relative frequency and importance of each domain .