



Department of Obstetrics & Gynecology

S.No	Name of the Fellowship	Eligibility	Duration
01	Fellowship in Reproductive Medicine	MS/DNB OBGY	1 yr
02	Fellowship in Clinical Embryology & ART	MS/DNB OBGY	1 yr
03	Fellowship in Endo Gynaecology (Endoscopy)	MS/DNB OBGY	1 yr
04	Fellowship in Gynaec Endocrinology	MS/DNB OBGY, MD/DNB in Gen Med	1 yr
05	Fellowship in Menopause Disorders	MS/DNB OBGY, MD/DNB in Gen Med	1 yr
06	Fellowship in Adolescent Gynaecology	MS/DNB OBGY, MD/DNB in Gen Med, Paed	1 yr
07	Fellowship in Critical Care Obstetrics	MS/DNB OBGY, MD/DNB in Anaes, Emer Med	1 yr





Fellowship in Reproductive Medicine

Course Overview

The **Fellowship in Reproductive Medicine** is a one-year advanced program designed for healthcare professionals who wish to specialize in the diagnosis and treatment of infertility, reproductive endocrinology, and assisted reproductive technologies (ART). This fellowship program provides in-depth knowledge and hands-on experience in the management of male and female infertility, including advanced techniques such as in vitro fertilization (IVF), intracytoplasmic sperm injection (ICSI), egg freezing, and hormonal therapies. The course aims to train professionals to become proficient in reproductive medicine and enhance patient outcomes in fertility treatments.

Prerequisites

Criteria	Details
Eligibility	MBBS or equivalent degree in the medical field (Obstetrics & Gynecology, Urology, Endocrinology, or related specialties)
Duration	1 Year (Full-Time)
Mode of Study	Clinical, Theoretical, Hands-on Training
Assessment	Theory, Practical Exams, Clinical Logbook, Research Project

Course Objectives

- **Master the diagnosis and treatment of infertility** in both men and women, including hormonal and anatomical causes.
- **Develop proficiency in Assisted Reproductive Technology (ART)**, including IVF, ICSI, egg retrieval, embryo transfer, and cryopreservation techniques.
- **Understand the principles of reproductive endocrinology** and the management of disorders like polycystic ovary syndrome (PCOS), endometriosis, and male infertility.
- **Gain expertise in the use of hormonal treatments** for ovarian stimulation, ovulation induction, and luteal phase support.
- **Learn about sperm and oocyte cryopreservation** for fertility preservation in patients with cancer or other fertility preservation needs.
- **Enhance skills in patient counseling and communication**, particularly regarding fertility treatment options, success rates, and ethical considerations.
- **Engage in research** that contributes to advancements in reproductive medicine and fertility treatments.



Curriculum with Semester-wise Syllabus & Modules

Semester 1: Fundamentals of Reproductive Medicine

Module	Topics Covered
Introduction to Reproductive Medicine	History, basic principles of reproductive medicine, ethical considerations, and patient care
Male and Female Infertility	Diagnosis and management of male and female infertility, basic investigations, hormonal testing
Reproductive Endocrinology	Hormonal regulation of reproduction, hypothalamic-pituitary-ovarian axis, thyroid, adrenal, and prolactin disorders
Assisted Reproductive Technologies (ART)	Overview of IVF, ICSI, egg retrieval, embryo culture, and embryo transfer
Ovulation Induction & Ovarian Stimulation	Techniques and medications used for ovarian stimulation, GnRH agonists and antagonists, HCG administration
Semen Analysis & Cryopreservation	Sperm quality assessment, semen analysis, cryopreservation techniques for sperm
Clinical Rotations & Hands-on Training	Observation and practical experience in ART procedures, patient evaluation, and treatment planning

Semester 2: Advanced Reproductive Medicine Techniques and Research

Module	Topics Covered
Advanced ART Techniques	Techniques in ICSI, genetic screening, preimplantation genetic testing (PGT), embryo freezing
Endometrial Receptivity and Embryo Transfer	Techniques for assessing endometrial receptivity, methods for embryo transfer, managing implantation failure
Cryopreservation of Eggs and Oocytes	Techniques for egg freezing, embryo freezing, and the use of cryopreservation in fertility preservation



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Module	Topics Covered
Male Infertility Management	Advanced management strategies for male infertility, including sperm retrieval techniques (TESE, MESA)
PCOS and Endometriosis	Management of common causes of infertility, including PCOS and endometriosis, medical and surgical treatments
Ethical, Legal, and Psychological Aspects of Reproductive Medicine	Ethical challenges in ART, handling patient expectations, counseling, and the psychosocial aspects of infertility
Research Project & Case Studies	Literature review, research project development, and clinical case presentations

Program Outcomes

Sr. No.	Program Outcome	Description
1	Expertise in Diagnosis and Treatment of Infertility	Master diagnostic and therapeutic approaches to male and female infertility, including hormonal therapies and ART
2	Proficiency in Assisted Reproductive Technologies (ART)	Expertise in ART procedures like IVF, ICSI, egg retrieval, embryo transfer, and cryopreservation
3	Advanced Knowledge in Reproductive Endocrinology	Proficiency in managing reproductive endocrine disorders, including PCOS, thyroid dysfunction, and ovulatory disorders
4	Competence in Fertility Preservation Techniques	Master techniques in sperm, egg, and embryo cryopreservation, including its ethical and clinical applications
5	Patient Care and Communication Skills	Develop excellent communication skills for counseling patients on fertility treatments and outcomes
6	Engagement in Reproductive	Contribute to advancements in reproductive medicine



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Sr. No.	Program Outcome	Description
	Medicine Research	through original research and clinical case studies
7	Ethical and Legal Understanding of Reproductive Medicine	Ability to navigate the ethical, legal, and psychosocial challenges in ART procedures

Course Outcomes

Sr. No.	Course Outcome	Description
1	Mastery in Male and Female Infertility Diagnosis and Treatment	Ability to diagnose and treat both male and female infertility, including hormonal and anatomical causes
2	Proficiency in ART Techniques and Procedures	Expertise in performing ART procedures, including IVF, ICSI, and embryo transfer
3	Ability to Manage Reproductive Endocrinology Disorders	Advanced knowledge in managing reproductive endocrine disorders, including PCOS, thyroid disorders, and menstrual irregularities
4	Expertise in Fertility Preservation and Cryopreservation	Master egg, sperm, and embryo freezing techniques for fertility preservation
5	Competence in Patient Counseling and Ethical Considerations	Ability to provide compassionate counseling, address patient concerns, and navigate ethical issues in reproductive medicine
6	Proficiency in Research and Contribution to the Field of Reproductive Medicine	Conduct meaningful research, stay updated with the latest developments, and present findings in clinical and academic settings
7	Understanding the Legal and Psychosocial Aspects of Infertility	Ability to manage the legal, psychological, and social issues surrounding infertility treatment



Credits & Assessment Methods

Total Credits: 40

Component	Credits
Theory & Lectures	10
Clinical Rotations & Case Studies	10
Hands-on Training & Procedures	10
Research & Dissertation	10

Assessment Pattern

Assessment Type	Weightage
Theory Examination (MCQs, Long & Short Answer)	30%
Clinical & Practical Exam (Case-Based Discussion, OSCE)	30%
Clinical Logbook & Case Reports	20%
Research Presentation & Dissertation	20%

Exam Pattern

Theory Examination:

- Section A (MCQs – 30 Marks)
- Section B (Short Answer Questions – 30 Marks)
- Section C (Long Answer Questions – 40 Marks)



Practical Examination:

Component	Details	Marks
Assisted Reproductive Technologies	Performing IVF, ICSI, embryo transfer, semen analysis, and hormonal evaluations	50
Cryopreservation Techniques	Demonstrating egg, sperm, and embryo freezing techniques	50
OSCE (Objective Structured Clinical Exam)	Simulated ART clinical scenarios and patient counseling	40

Viva Voce (Oral Examination):

Component	Details	Marks
Case Presentations	Discussion on clinical cases and ART procedures	50
Recent Advances in Reproductive Medicine	Discussion on new techniques, technologies, and research findings	20
Ethical & Legal Aspects of Reproductive Medicine	Ethical, psychological, and legal considerations in ART	30

Research/Dissertation Submission:

Component	Marks
Originality & Scientific Merit	30
Methodology & Data Analysis	30
Presentation & Discussion	20
Conclusion & Clinical Relevance	20



Final Weightage & Passing Criteria

Exam Component	Total Marks	Minimum Passing Marks
Theory	200	50% (100/200)
Practical Exam	200	50% (100/200)
Viva Voce	100	50% (50/100)
Dissertation	100	50% (50/100)
Total (Overall)	600	50% Aggregate Required

Recommended Books & E-Resources

Textbooks:

- Clinical Reproductive Medicine – **Dr. A. K. Thakur**
- Essentials of Human Reproductive Medicine – **Dr. Rajesh K. Soni**
- Infertility: Diagnosis and Treatment – **Dr. J. S. Chakravarty**
- Principles of Assisted Reproductive Technologies – **Dr. S. R. Seshadri**

Journals & E-Resources:

- Human Reproduction Journal – <https://academic.oup.com/humrep>
- Fertility and Sterility – <https://www.fertstert.org/>
- American Society for Reproductive Medicine (ASRM) – <https://www.asrm.org/>
- International Journal of Reproductive Medicine – <https://www.ijrm.ir/>



Fellowship in Clinical Embryology & ART

Course Overview

The **Fellowship in Clinical Embryology & Assisted Reproductive Technology (ART)** is a one-year advanced program designed for healthcare professionals who want to specialize in the field of clinical embryology and ART. The course focuses on the scientific and practical aspects of assisted reproductive technologies, including the manipulation of gametes, in vitro fertilization (IVF), embryo culture, cryopreservation, and embryo transfer techniques. The fellowship provides a comprehensive understanding of human reproduction, embryo development, and the latest advancements in ART, along with hands-on training to enhance technical skills required in the field.

Prerequisites

Criteria	Details
Eligibility	MBBS, BDS, or equivalent degree in the medical or allied health fields (such as nursing or laboratory sciences) with prior experience in reproductive medicine
Duration	1 Year (Full-Time)
Mode of Study	Clinical, Theoretical, Hands-on Training
Assessment	Theory, Practical Exams, Clinical Logbook, Research Project

Course Objectives

- **Master the ART techniques** including IVF, ICSI, embryo culture, and embryo transfer.
- **Understand embryology fundamentals**, including gamete biology, fertilization, and early embryo development.
- **Gain proficiency in laboratory techniques** used in ART, including semen analysis, sperm preparation, cryopreservation, and embryo biopsy.
- **Learn about endometrial preparation** and its role in embryo implantation and successful pregnancy outcomes.
- **Develop expertise in managing ART cycles**, from ovarian stimulation to embryo transfer and pregnancy monitoring.
- **Enhance understanding of genetic screening techniques**, including preimplantation genetic testing (PGT) for monogenic disorders, aneuploidy, and chromosomal abnormalities.
- **Learn ethical, legal, and psychological aspects** related to ART, including counseling and handling patient expectations.
- **Conduct research** to improve ART techniques and contribute to the growing field of reproductive medicine.



Curriculum with Semester-wise Syllabus & Modules

Semester 1: Fundamentals of Clinical Embryology & ART

Module	Topics Covered
Introduction to Clinical Embryology	Overview of embryology, stages of embryo development, fertilization processes
Gamete Biology	Structure, function, and maturation of sperm and oocytes, gamete transport and storage
Semen Analysis and Sperm Preparation	Techniques for sperm evaluation, semen processing, sperm selection for IVF/ICSI
Oocyte Retrieval & Embryo Culture	Techniques for oocyte retrieval, culture media, embryo development, and monitoring
Ovarian Stimulation & Hormonal Therapy	Use of gonadotropins, GnRH analogs, ovarian monitoring, and cycle management for ART
Cryopreservation Techniques	Sperm, egg, and embryo freezing techniques, cryoprotectants, thawing protocols
Clinical Rotations & Hands-on Training	Observation and practice in laboratory settings, embryo culture, embryo transfer, and semen preparation

Semester 2: Advanced Clinical Embryology Techniques & Research

Module	Topics Covered
Embryo Transfer & Endometrial Preparation	Embryo transfer techniques, endometrial receptivity, and preparing the uterus for implantation
Preimplantation Genetic Testing (PGT)	Techniques for genetic screening of embryos, PGT-A (aneuploidy), PGT-M (monogenic disorders), and PGT-SR (structural rearrangements)
Stem Cell Therapy & Regenerative Medicine	Role of stem cells in reproductive medicine, potential applications in ART



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Module	Topics Covered
Ethical and Legal Considerations in ART	Ethical challenges in ART, patient consent, and legal issues in gamete donation and surrogacy
Psychological Aspects of ART	Psychological counseling for ART patients, dealing with failure, and managing stress
Research Project & Case Studies	Research methodology, literature review, data analysis, and clinical case presentations

Program Outcomes

Sr. No.	Program Outcome	Description
1	Expertise in ART Laboratory Techniques	Master laboratory techniques for gamete handling, IVF, ICSI, embryo culture, and cryopreservation
2	Proficiency in Genetic Screening and Embryo Biopsy	Develop skills in preimplantation genetic testing, embryo biopsy, and genetic counseling
3	Competence in Ovarian Stimulation & Endometrial Preparation	Expertise in managing ovarian stimulation protocols, hormonal therapy, and preparing the endometrium for embryo implantation
4	Advanced Knowledge in Embryo Transfer and Cryopreservation	Master techniques for embryo transfer, cryopreservation of oocytes, sperm, and embryos, and thawing procedures
5	Understanding of Ethical, Legal, and Psychological Aspects of ART	Ability to navigate ethical, legal, and psychological issues involved in ART treatments
6	Engagement in Research and Development in ART	Contribute to advancements in ART through research, case studies, and innovative techniques
7	Patient Care and Counseling Skills	Develop communication skills for counseling patients, managing expectations, and addressing emotional needs



Course Outcomes

Sr. No.	Course Outcome	Description
1	Mastery in Embryology Techniques	Ability to perform advanced embryology techniques, including oocyte retrieval, embryo culture, and ICSI
2	Proficiency in ART and IVF Procedures	Master all ART procedures, including IVF, embryo transfer, and semen analysis
3	Expertise in Preimplantation Genetic Testing (PGT)	Ability to conduct genetic screening and counseling, including PGT-A, PGT-M, and PGT-SR
4	Advanced Knowledge in Cryopreservation Techniques	Proficiency in sperm, egg, and embryo cryopreservation and thawing techniques
5	Understanding of Endometrial Receptivity and Embryo Transfer Protocols	Ability to manage endometrial preparation and perform successful embryo transfers
6	Research Competence in ART Techniques and Protocols	Conduct research on ART techniques, improve laboratory practices, and contribute to scientific literature
7	Patient Counseling and Ethical Practice in ART	Ability to handle patient expectations, provide ethical guidance, and offer psychological support during ART procedures



Credits & Assessment Methods

Total Credits: 40

Component	Credits
Theory & Lectures	10
Clinical Rotations & Case Studies	10
Hands-on Training & Procedures	10
Research & Dissertation	10

Assessment Pattern

Assessment Type	Weightage
Theory Examination (MCQs, Long & Short Answer)	30%
Clinical & Practical Exam (Case-Based Discussion, OSCE)	30%
Clinical Logbook & Case Reports	20%
Research Presentation & Dissertation	20%

Exam Pattern

Theory Examination:

- Section A (MCQs – 30 Marks)
- Section B (Short Answer Questions – 30 Marks)
- Section C (Long Answer Questions – 40 Marks)



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Practical Examination:

Component	Details	Marks
Embryo Culture & IVF Procedures	Performing IVF, ICSI, embryo culture, embryo transfer	50
Cryopreservation & Sperm Preparation	Performing semen analysis, sperm freezing, and embryo freezing	50
OSCE (Objective Structured Clinical Exam)	Simulated clinical scenarios involving embryo transfer and genetic testing	40

Viva Voce (Oral Examination):

Component	Details	Marks
Case Presentations	Discussion of ART case management, patient communication, and treatment planning	50
Recent Advances in ART	Discussion on emerging technologies and techniques in ART	20
Ethical and Legal Aspects of ART	Discussion on ethical issues in ART, such as gamete donation, surrogacy, and genetic screening	30

Research/Dissertation Submission:

Component	Marks
Originality & Scientific Merit	30
Methodology & Data Analysis	30
Presentation & Discussion	20
Conclusion & Clinical Relevance	20



Final Weightage & Passing Criteria

Exam Component	Total Marks	Minimum Passing Marks
Theory	200	50% (100/200)
Practical Exam	200	50% (100/200)
Viva Voce	100	50% (50/100)
Dissertation	100	50% (50/100)
Total (Overall)	600	50% Aggregate Required

Recommended Books & E-Resources

Textbooks:

- Clinical Embryology: An Introduction – **Dr. R. S. P. Mathur**
- Human Embryology and Developmental Biology – **Dr. B. D. Singh**
- Textbook of Assisted Reproductive Technology – **Dr. J. S. Gergely**
- Embryo Culture: Fundamentals and Practices – **Dr. T. A. Menon**

Journals & E-Resources:

- Journal of Assisted Reproductive Technologies – <https://journals.lww.com/jart>
- Human Reproduction Journal – <https://academic.oup.com/humrep>
- American Society for Reproductive Medicine (ASRM) – <https://www.asrm.org/>
- Fertility and Sterility – <https://www.fertstert.org/>



Fellowship in Endo Gynaecology (Endoscopy)

Course Overview

The **Fellowship in Endo Gynaecology (Endoscopy)** is a one-year specialized program designed for healthcare professionals who wish to specialize in advanced gynecological endoscopic procedures. This fellowship offers in-depth training in the latest minimally invasive surgical techniques, including diagnostic laparoscopy, hysteroscopy, and advanced endoscopic surgeries for various gynecological conditions such as fibroids, endometriosis, pelvic organ prolapse, and infertility. The course combines theoretical learning with hands-on practical training, providing participants with the skills to perform and manage endoscopic procedures safely and effectively.

Prerequisites

Criteria	Details
Eligibility	MBBS, MS (Obstetrics & Gynecology), or equivalent qualification in gynecology
Duration	1 Year (Full-Time)
Mode of Study	Clinical, Theoretical, Hands-on Training
Assessment	Theory, Practical Exams, Clinical Logbook, Research Project

Course Objectives

- **Master endoscopic procedures** for diagnosis and treatment of gynecological disorders.
- **Learn laparoscopy techniques**, including diagnostic laparoscopy, adhesiolysis, ovarian cystectomy, and tubal surgeries.
- **Gain proficiency in hysteroscopic procedures**, such as the management of fibroids, endometrial polyps, and intrauterine adhesions.
- **Develop skills in advanced minimally invasive gynecological surgeries** for conditions like endometriosis, pelvic organ prolapse, and uterine anomalies.
- **Enhance knowledge of fertility-preserving surgeries** through laparoscopy and hysteroscopy for patients with infertility.
- **Develop expertise in the use of modern technology**, such as 3D laparoscopy, robotic-assisted surgery, and high-definition imaging in gynecological endoscopy.
- **Understand patient care and postoperative management** in minimally invasive surgery, including pain management and complication handling.
- **Engage in research** related to gynecological endoscopic techniques, improving patient outcomes and advancing the field.



Curriculum with Semester-wise Syllabus & Modules

Semester 1: Fundamentals of Endo Gynaecology (Endoscopy)

Module	Topics Covered
Introduction to Endoscopic Surgery	History, evolution, and principles of endoscopic surgery in gynecology
Basic Laparoscopic Techniques	Instruments used in laparoscopy, principles of camera handling, and basic procedures (diagnostic laparoscopy, adhesiolysis)
Hysteroscopy	Techniques in diagnostic hysteroscopy, uterine cavity assessment, hysteroscopic sterilization, and basic resecting procedures
Gynecological Anatomy & Endoscopic Approaches	Detailed anatomy for laparoscopy and hysteroscopy, patient positioning, and port placement
Endoscopic Management of Benign Gynecological Conditions	Surgical treatment of fibroids, endometrial polyps, ovarian cysts, and ectopic pregnancies
Clinical Rotations & Hands-on Training	Observation and practical training in performing diagnostic and operative laparoscopies and hysteroscopies

Semester 2: Advanced Endoscopic Techniques and Research

Module	Topics Covered
Advanced Laparoscopic Surgery	Ovarian cystectomy, myomectomy, pelvic floor reconstruction, tubal surgery, and endometriosis surgery
Advanced Hysteroscopy	Hysteroscopic myomectomy, treatment of uterine septum, intrauterine adhesions, and cervical procedures
Fertility-preserving Endoscopic Surgeries	Laparoscopic and hysteroscopic techniques for preserving fertility in patients with endometriosis, fibroids, and tubal disorders



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Module	Topics Covered
Robotic-assisted Surgery	Introduction to robotic systems in gynecology, robotic laparoscopy, and benefits of robotic-assisted procedures
3D Laparoscopy and High Definition Imaging	Advancements in laparoscopic surgery, using 3D imaging and HD cameras for precision and better visualization
Postoperative Care and Complication Management	Postoperative management, complications in endoscopic surgery, and patient recovery
Research Project & Case Studies	Literature review, clinical case presentations, and preparation of research dissertation

Program Outcomes

Sr. No.	Program Outcome	Description
1	Expertise in Laparoscopic Techniques	Master basic and advanced laparoscopic procedures, including diagnostic laparoscopy, adhesiolysis, and cystectomy
2	Advanced Knowledge in Hysteroscopy Techniques	Proficiency in performing diagnostic and operative hysteroscopy, including the treatment of uterine abnormalities
3	Competence in Fertility-preserving Surgeries	Develop skills in laparoscopic and hysteroscopic fertility-preserving surgeries for endometriosis, fibroids, and tubal disorders
4	Proficiency in Managing Complications in Endoscopic Surgeries	Ability to handle complications arising from laparoscopic and hysteroscopic surgeries, ensuring patient safety
5	Understanding of Robotic Surgery in Gynecology	Familiarity with robotic surgery technology and its application in gynecological endoscopic procedures
6	Engagement in Research in Endoscopic Gynecology	Conduct research on new techniques, technologies, and outcomes in endoscopic gynecology



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Sr. No.	Program Outcome	Description
7	Postoperative Management & Patient Care Skills	Ability to manage postoperative care and handle patient recovery and complications in endoscopic surgeries

Course Outcomes

Sr. No.	Course Outcome	Description
1	Mastery in Endoscopic Diagnosis and Treatment of Gynecological Conditions	Ability to perform diagnostic and therapeutic laparoscopy and hysteroscopy with precision
2	Expertise in Minimally Invasive Gynecological Surgery	Proficiency in advanced laparoscopic and hysteroscopic surgeries, including fertility-preserving procedures
3	Competence in Robotic Surgery for Gynecological Disorders	Understanding and applying robotic-assisted surgical techniques in gynecology
4	Proficiency in Managing Postoperative Recovery	Master postoperative care strategies to ensure optimal recovery and minimize complications
5	Effective Consultation and Patient Counseling	Ability to provide comprehensive preoperative counseling, manage patient expectations, and offer emotional support
6	Ability to Conduct Research in Endoscopic Surgery	Conduct research studies and clinical trials, analyzing new technologies and techniques in gynecological endoscopy



Credits & Assessment Methods

Total Credits: 40

Component	Credits
Theory & Lectures	10
Clinical Rotations & Case Studies	10
Hands-on Training & Procedures	10
Research & Dissertation	10

Assessment Pattern

Assessment Type	Weightage
Theory Examination (MCQs, Long & Short Answer)	30%
Clinical & Practical Exam (Case-Based Discussion, OSCE)	30%
Clinical Logbook & Case Reports	20%
Research Presentation & Dissertation	20%

Exam Pattern

Theory Examination:

- Section A (MCQs – 30 Marks)
- Section B (Short Answer Questions – 30 Marks)
- Section C (Long Answer Questions – 40 Marks)



Practical Examination:

Component	Details	Marks
Laparoscopic Surgery	Performing laparoscopic procedures like cystectomy, adhesiolysis, and myomectomy	50
Hysteroscopic Surgery	Performing hysteroscopic surgeries such as myomectomy and septoplasty	50
OSCE (Objective Structured Clinical Exam)	Simulated clinical scenarios in endoscopic gynecology	40

Viva Voce (Oral Examination):

Component	Details	Marks
Case Presentations	Discussion of complex gynecological cases involving laparoscopic and hysteroscopic surgery	50
Recent Advances in Endoscopic Surgery	Discussion on new technologies and techniques in endoscopy	20
Ethical & Legal Aspects in Endoscopic Surgery	Ethical considerations in gynecological surgery and patient consent	30

Research/Dissertation Submission:

Component	Marks
Originality & Scientific Merit	30
Methodology & Data Analysis	30
Presentation & Discussion	20
Conclusion & Clinical Relevance	20



Final Weightage & Passing Criteria

Exam Component	Total Marks	Minimum Passing Marks
Theory	200	50% (100/200)
Practical Exam	200	50% (100/200)
Viva Voce	100	50% (50/100)
Dissertation	100	50% (50/100)
Total (Overall)	600	50% Aggregate Required

Recommended Books & E-Resources

Textbooks:

- **Endoscopic Surgery in Gynecology** – Dr. A. R. R. Patel
- **Laparoscopic Gynecological Surgery: Techniques and Procedures** – Dr. A. G. Pal
- **Hysteroscopy: A Practical Guide** – Dr. M. B. Shah
- **Minimally Invasive Gynecologic Surgery** – Dr. L. N. Prasad

Journals & E-Resources:

- **Journal of Minimally Invasive Gynecology** – <https://www.jmig.org/>
- **The American Journal of Obstetrics and Gynecology** – <https://www.ajog.org/>
- **International Journal of Gynecological Endoscopy** – <https://journals.sagepub.com/home/ige>
- **European Society for Gynaecological Endoscopy** – <https://www.esge.org/>



Fellowship in Gynaecological Endocrinology

Course Overview

The **Fellowship in Gynaecological Endocrinology** is a one-year advanced program designed for healthcare professionals specializing in obstetrics and gynecology. This fellowship provides in-depth knowledge and clinical expertise in the hormonal and metabolic aspects of women's health. The program focuses on diagnosing and managing endocrine disorders related to menstruation, fertility, menopause, polycystic ovary syndrome (PCOS), thyroid disorders, and more. Participants will gain the expertise to approach these disorders holistically, including the latest treatment protocols, diagnostic technologies, and evidence-based practices for women's endocrinological health.

Prerequisites

Criteria	Details
Eligibility	MBBS, MD (Obstetrics & Gynecology) or equivalent qualification in gynecology
Duration	1 Year (Full-Time)
Mode of Study	Clinical, Theoretical, Hands-on Training
Assessment	Theory, Practical Exams, Clinical Logbook, Research Project

Course Objectives

- **Master the diagnosis and management** of common and rare endocrine disorders affecting women, such as PCOS, thyroid disorders, and menopause.
- **Understand the hormonal regulation of the menstrual cycle** and the pathophysiology of menstrual disorders.
- **Gain expertise in fertility-related endocrinology**, including the treatment of infertility, ovulation disorders, and assisted reproductive technologies (ART).
- **Learn the principles of menopausal health**, including hormone replacement therapy (HRT), management of perimenopausal and postmenopausal symptoms, and osteoporosis prevention.
- **Develop proficiency in managing polycystic ovary syndrome (PCOS)**, including medical and surgical treatments.
- **Gain insight into metabolic disorders** related to gynecological endocrine health, such as obesity, metabolic syndrome, and insulin resistance.
- **Engage in research and contribute** to advancing knowledge in gynecological endocrinology.



Curriculum with Semester-wise Syllabus & Modules

Semester 1: Fundamentals of Gynaecological Endocrinology

Module	Topics Covered
Introduction to Gynaecological Endocrinology	Basics of endocrinology, hormonal regulation of the female reproductive system, and endocrine system interaction
Menstrual Disorders	Menstrual cycle physiology, primary and secondary amenorrhea, oligomenorrhea, and dysmenorrhea
Thyroid Disorders in Women	Diagnosis and management of hypothyroidism, hyperthyroidism, and thyroid autoimmunity in women
Polycystic Ovary Syndrome (PCOS)	Pathophysiology, diagnosis, and treatment options, including pharmacological management and surgical interventions
Hormonal Evaluation and Tests	Understanding endocrine profiles, laboratory tests for ovarian reserve, thyroid function tests, and pituitary function tests
Clinical Rotations & Hands-on Training	Practical experience in diagnosing and managing endocrine disorders, including hormone replacement therapy (HRT)

Semester 2: Advanced Gynaecological Endocrinology and Research

Module	Topics Covered
Endocrinology of Infertility	Ovulation disorders, male and female infertility, role of endocrine factors in fertility
Menopause and Perimenopause	Clinical features, hormonal changes, management of menopause with HRT, non-hormonal treatments, and prevention of osteoporosis
Adrenal Disorders in Women	Understanding adrenal insufficiency, hyperandrogenism, and management of adrenal disorders in the context of gynecology
Metabolic Disorders and Endocrine Health	Metabolic syndrome, obesity, insulin resistance, and the interplay between endocrine and metabolic health in women



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Module	Topics Covered
Endocrine Disorders and Cancer Risk	The role of hormonal imbalances in the development of gynecological cancers, including breast and ovarian cancers
Research Project & Case Studies	Literature review, case study analysis, and preparation of research dissertation

Program Outcomes

Sr. No.	Program Outcome	Description
1	Expertise in Menstrual and Reproductive Endocrinology	Master the management of menstrual disorders, ovulatory dysfunction, and reproductive health
2	Advanced Knowledge in Thyroid Disorders	Proficiency in diagnosing and treating thyroid dysfunctions in women, including hypo and hyperthyroidism
3	Expertise in Managing PCOS	Ability to diagnose and manage PCOS, including medical, pharmacological, and surgical interventions
4	Proficiency in Menopausal Health Management	Ability to manage menopausal transitions, hormonal therapy, and prevention of related conditions
5	Understanding Metabolic and Endocrine Interactions	Ability to address metabolic issues such as insulin resistance, obesity, and metabolic syndrome in gynecological practice
6	Competence in Fertility and Infertility Endocrinology	Deep understanding of hormonal factors in fertility, including ART and ovulation induction
7	Engagement in Endocrinological Research	Contribute to research, improving diagnostic and therapeutic strategies in gynecological endocrinology



Course Outcomes

Sr. No.	Course Outcome	Description
1	Mastery in Endocrinology of Menstrual Disorders	Ability to diagnose and treat various menstrual disorders, including amenorrhea and dysmenorrhea
2	Expertise in Thyroid Dysfunction and Reproductive Health	Proficiency in managing thyroid disorders affecting fertility and reproductive outcomes
3	Proficiency in Managing PCOS and Infertility	Expertise in addressing the complex hormonal imbalances of PCOS, including fertility treatments
4	Mastery in Menopause and Hormone Replacement Therapy	Proficiency in managing menopause-related issues, including HRT and symptom management
5	Ability to Handle Metabolic and Endocrine Interactions in Women	Understanding the relationship between hormonal health and metabolic disorders like insulin resistance
6	Fertility Endocrinology Expertise	Expertise in fertility endocrinology, including ovulation induction, ART, and related hormonal interventions
7	Research Competency in Gynaecological Endocrinology	Ability to engage in research that contributes to the advancement of the field of gynaecological endocrinology

Credits & Assessment Methods

Total Credits: 40

Component	Credits
Theory & Lectures	10
Clinical Rotations & Case Studies	10
Hands-on Training & Procedures	10



Component	Credits
Research & Dissertation	10

Assessment Pattern

Assessment Type	Weightage
Theory Examination (MCQs, Long & Short Answer)	30%
Clinical & Practical Exam (Case-Based Discussion, OSCE)	30%
Clinical Logbook & Case Reports	20%
Research Presentation & Dissertation	20%

Exam Pattern

Theory Examination:

- Section A (MCQs – 30 Marks)
- Section B (Short Answer Questions – 30 Marks)
- Section C (Long Answer Questions – 40 Marks)

Practical Examination:

Component	Details	Marks
Case-based Clinical Examination	Presentation of endocrine disorders and their management	50
Hormonal Test Interpretation	Interpretation of various hormonal profiles and treatment recommendations	50
OSCE (Objective Structured Clinical Exam)	Clinical examination, simulated cases, and decision-making	40



Viva Voce (Oral Examination):

Component	Details	Marks
Case Presentations	Discussion on clinical cases involving gynecological endocrinology	50
Recent Advances in Endocrinology	Discussion on current trends and research in the field of gynecological endocrinology	20
Ethical & Legal Aspects	Ethical considerations, patient confidentiality, and informed consent in endocrinology practices	30

Research/Dissertation Submission:

Component	Marks
Originality & Scientific Merit	30
Methodology & Data Analysis	30
Presentation & Discussion	20
Conclusion & Clinical Relevance	20

Final Weightage & Passing Criteria

Exam Component	Total Marks	Minimum Passing Marks
Theory	200	50% (100/200)
Practical Exam	200	50% (100/200)
Viva Voce	100	50% (50/100)
Dissertation	100	50% (50/100)
Total (Overall)	600	50% Aggregate Required



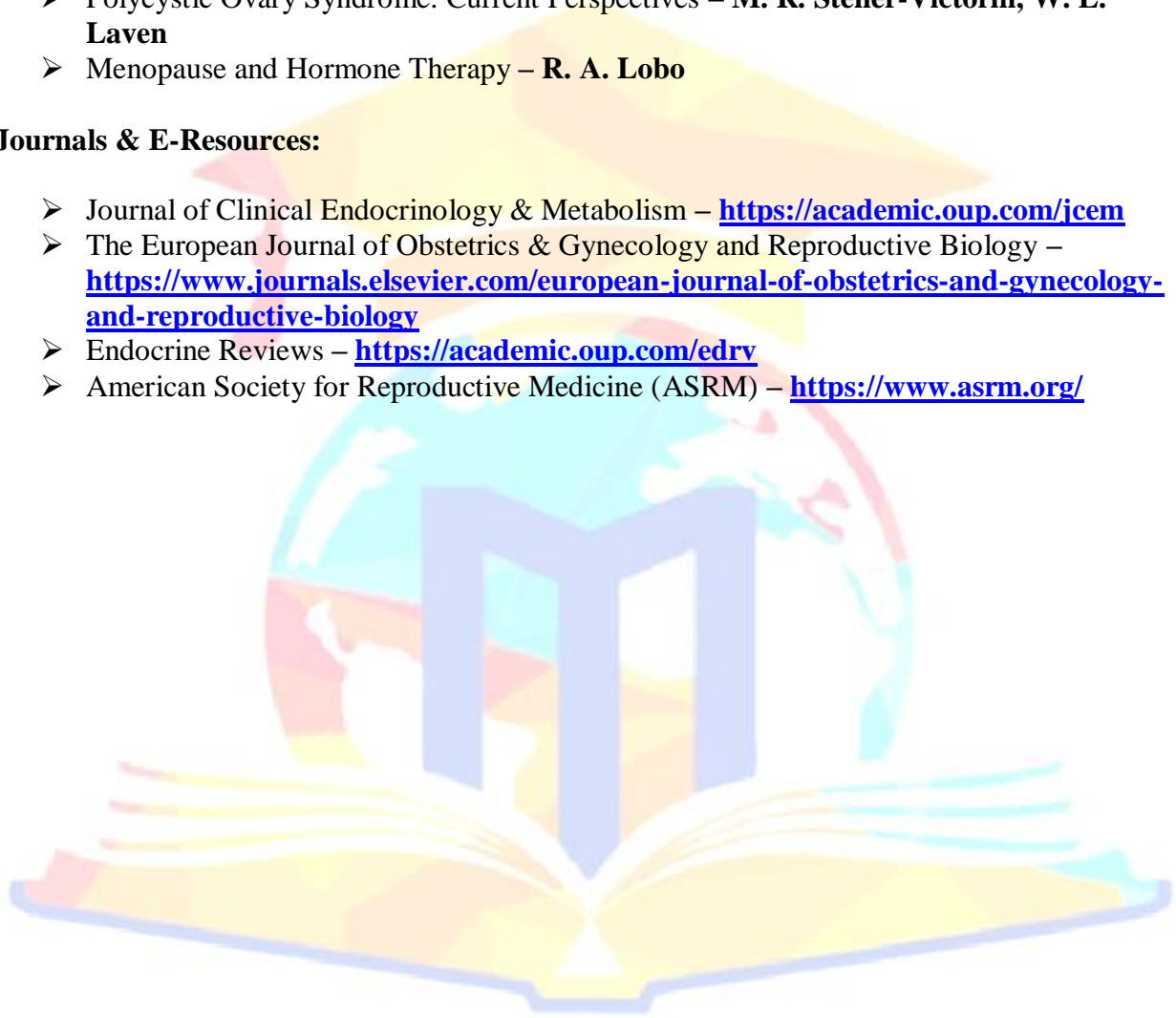
Recommended Books & E-Resources

Textbooks:

- Gynecological Endocrinology – **Robert A. Norman, Susan R. Hillier**
- Endocrine and Reproductive Physiology: A Clinical Perspective – **E. Y. T. Shiu, R. K. L. Tan**
- Polycystic Ovary Syndrome: Current Perspectives – **M. R. Stener-Victorin, W. L. Laven**
- Menopause and Hormone Therapy – **R. A. Lobo**

Journals & E-Resources:

- Journal of Clinical Endocrinology & Metabolism – <https://academic.oup.com/jcem>
- The European Journal of Obstetrics & Gynecology and Reproductive Biology – <https://www.journals.elsevier.com/european-journal-of-obstetrics-and-gynecology-and-reproductive-biology>
- Endocrine Reviews – <https://academic.oup.com/edrv>
- American Society for Reproductive Medicine (ASRM) – <https://www.asrm.org/>





Fellowship in Menopause Disorders

Course Overview

The **Fellowship in Menopause Disorders** is a comprehensive, one-year advanced program designed for healthcare professionals, particularly those specializing in obstetrics and gynecology, to gain expertise in the diagnosis, management, and treatment of menopause-related disorders. This fellowship focuses on the hormonal changes and clinical manifestations associated with menopause, providing participants with in-depth knowledge of therapeutic strategies such as hormone replacement therapy (HRT), lifestyle management, osteoporosis prevention, and mental health support during menopause. The program combines theoretical learning, clinical rotations, and hands-on experience to ensure proficiency in managing complex menopausal health issues.

Prerequisites

Criteria	Details
Eligibility	MBBS, MD (Obstetrics & Gynecology) or equivalent qualification in gynecology
Duration	1 Year (Full-Time)
Mode of Study	Clinical, Theoretical, Hands-on Training
Assessment	Theory, Practical Exams, Clinical Logbook, Research Project

Course Objectives

- **Understand the physiological changes during menopause**, including hormonal fluctuations and their impact on health.
- **Gain expertise in the diagnosis and management of menopausal symptoms**, such as hot flashes, vaginal dryness, sleep disturbances, and mood changes.
- **Learn the indications and protocols for hormone replacement therapy (HRT)** and non-hormonal treatments.
- **Develop proficiency in osteoporosis prevention and treatment**, including understanding bone health during menopause.
- **Explore the psychological aspects of menopause**, including the management of anxiety, depression, and cognitive decline.
- **Understand the role of lifestyle modifications** such as diet, exercise, and stress management in managing menopausal symptoms.
- **Engage in research** on menopause-related disorders to contribute to the advancement of evidence-based care in this field.



Curriculum with Semester-wise Syllabus & Modules

Semester 1: Fundamentals of Menopause and Hormonal Changes

Module	Topics Covered
Introduction to Menopause	Definition, physiological changes, and the stages of menopause (perimenopause, menopause, postmenopause)
Hormonal Changes and Their Impact	Changes in estrogen, progesterone, and other hormones during menopause
Menopausal Symptoms	Clinical manifestations including hot flashes, night sweats, vaginal dryness, urinary issues, and sleep disturbances
Diagnostic Approaches	Blood tests, clinical evaluation, and imaging to diagnose menopause and related disorders
Hormone Replacement Therapy (HRT)	Types of HRT, indications, contraindications, and administration methods
Clinical Rotations & Hands-on Training	Observation and hands-on experience in diagnosing and managing menopause disorders, including HRT administration

Semester 2: Advanced Management and Research in Menopause Disorders

Module	Topics Covered
Non-Hormonal Treatments for Menopause	Non-hormonal medications, herbal treatments, and alternative therapies for symptom management
Osteoporosis and Bone Health	Pathophysiology of osteoporosis, prevention strategies, and management options during menopause
Mental Health and Cognitive Changes	Managing anxiety, depression, and cognitive decline in menopausal women
Lifestyle and Dietary Management	Role of diet, exercise, and lifestyle modifications in managing menopausal health
Cardiovascular Health in	Understanding the impact of menopause on cardiovascular risk



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Module	Topics Covered
Menopause	and prevention strategies
Research Project & Case Studies	Literature review, case study analysis, and preparation of a research dissertation

Program Outcomes

Sr. No.	Program Outcome	Description
1	Expertise in Menopausal Symptom Management	Master the management of common and severe menopausal symptoms, including hot flashes, vaginal dryness, and sleep disturbances
2	Proficiency in Hormone Replacement Therapy (HRT)	Ability to administer and monitor hormone replacement therapy, understanding its indications, risks, and benefits
3	Advanced Knowledge in Non-Hormonal Treatment Approaches	Understanding the alternatives to HRT, including medications and lifestyle changes
4	Expertise in Bone Health and Osteoporosis Management	Ability to prevent and manage osteoporosis and other bone-related issues during menopause
5	Competence in Psychological Support for Menopausal Women	Ability to address mental health challenges related to menopause, including depression and anxiety
6	Holistic Approach to Menopausal Care	Mastering lifestyle interventions, such as exercise and dietary changes, to alleviate menopausal symptoms
7	Engagement in Menopause-Related Research	Conducting research that enhances knowledge of menopause and its management



Course Outcomes

Sr. No.	Course Outcome	Description
1	Mastery in Diagnosis and Management of Menopausal Symptoms	Ability to accurately diagnose and treat menopausal symptoms, including hormone therapy and alternative treatments
2	Expertise in HRT and Alternative Therapies	Proficiency in choosing and administering hormone therapy and understanding non-hormonal alternatives
3	Proficiency in Osteoporosis Prevention and Treatment	Ability to assess bone health, manage osteoporosis risk, and initiate treatment during menopause
4	Mental Health Management in Menopause	Expertise in managing psychological symptoms of menopause, including anxiety, depression, and cognitive impairment
5	Competence in Lifestyle Modifications for Menopausal Health	Ability to guide patients in adopting exercise routines, dietary modifications, and stress reduction techniques
6	Research Competency in Menopause Disorders	Ability to contribute to research focused on improving menopause-related healthcare practices

Credits & Assessment Methods

Total Credits: 40

Component	Credits
Theory & Lectures	10
Clinical Rotations & Case Studies	10
Hands-on Training & Procedures	10
Research & Dissertation	10



Assessment Pattern

Assessment Type	Weightage
Theory Examination (MCQs, Long & Short Answer)	30%
Clinical & Practical Exam (Case-Based Discussion, OSCE)	30%
Clinical Logbook & Case Reports	20%
Research Presentation & Dissertation	20%

Exam Pattern

Theory Examination:

- **Section A (MCQs – 30 Marks)**
- **Section B (Short Answer Questions – 30 Marks)**
- **Section C (Long Answer Questions – 40 Marks)**

Practical Examination:

Component	Details	Marks
Case-based Clinical Examination	Diagnosis and management of menopausal disorders	50
Hormone Therapy Administration	Practical demonstration of HRT administration	50
OSCE (Objective Structured Clinical Exam)	Clinical examination and skill demonstration	40



Viva Voce (Oral Examination):

Component	Details	Marks
Case Presentations	Discussion on clinical cases involving menopausal disorders	50
Recent Advances in Menopause Management	Discussion on the latest research and treatment options	20
Ethical & Legal Aspects	Ethical considerations and patient care in menopausal practices	30

Research/Dissertation Submission:

Component	Marks
Originality & Scientific Merit	30
Methodology & Data Analysis	30
Presentation & Discussion	20
Conclusion & Clinical Relevance	20

Final Weightage & Passing Criteria

Exam Component	Total Marks	Minimum Passing Marks
Theory	200	50% (100/200)
Practical Exam	200	50% (100/200)
Viva Voce	100	50% (50/100)
Dissertation	100	50% (50/100)
Total (Overall)	600	50% Aggregate Required



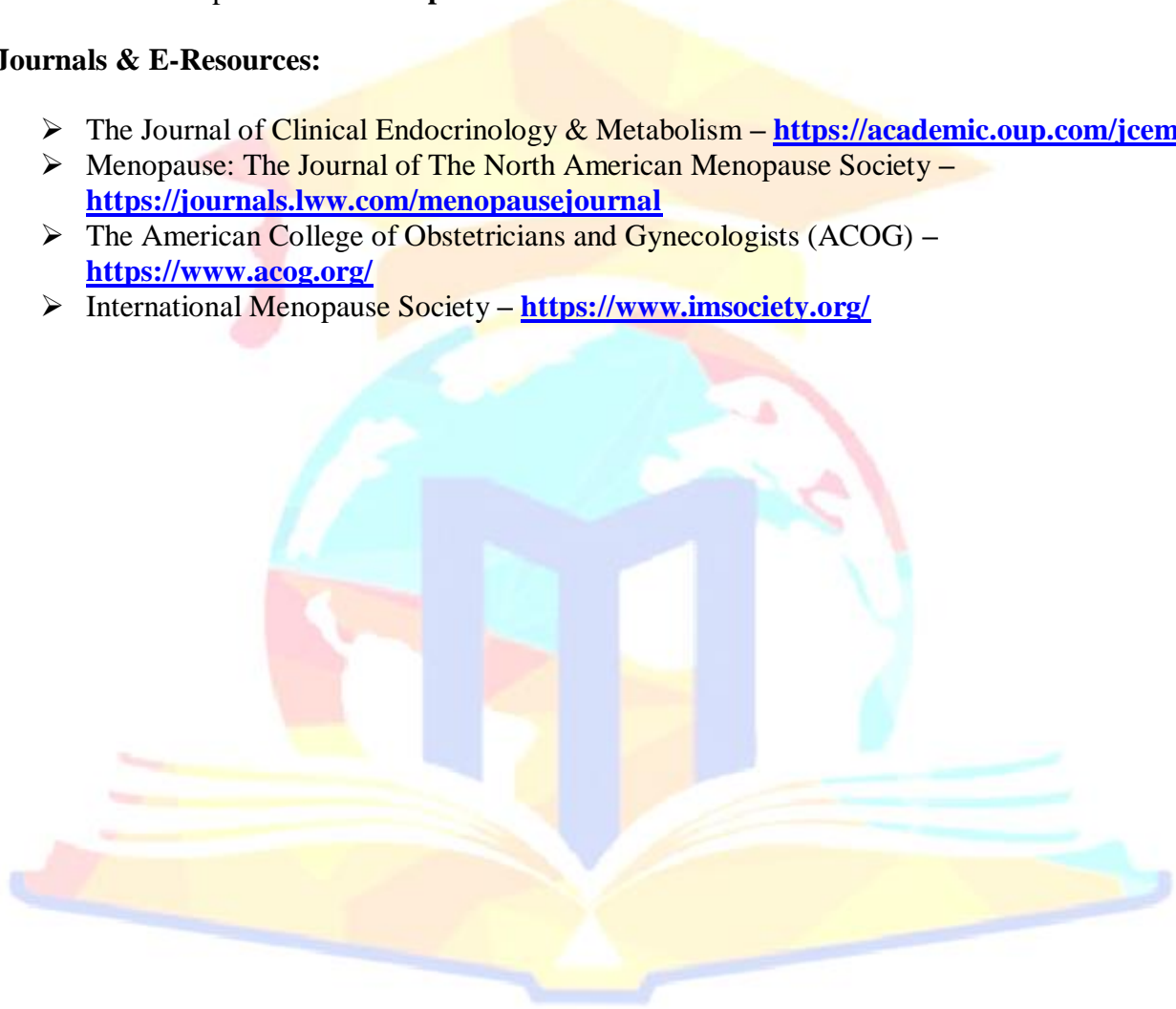
Recommended Books & E-Resources

Textbooks:

- Menopause: A Comprehensive Guide – **Susan R. Hillier, Mark L. S. Ginsburg**
- Menopause and Women's Health – **K. L. Hargrove**
- Hormone Replacement Therapy: A Clinical Guide – **John E. Morris**
- The Menopause Book – **Stephen M. S. Johnson**

Journals & E-Resources:

- The Journal of Clinical Endocrinology & Metabolism – <https://academic.oup.com/jcem>
- Menopause: The Journal of The North American Menopause Society – <https://journals.lww.com/menopausejournal>
- The American College of Obstetricians and Gynecologists (ACOG) – <https://www.acog.org/>
- International Menopause Society – <https://www.imsociety.org/>





Fellowship in Adolescent Gynaecology

Course Overview

The **Fellowship in Adolescent Gynaecology** is a one-year advanced program designed for healthcare professionals, especially those in obstetrics and gynecology, who wish to specialize in the unique medical, psychological, and social needs of adolescent females. This fellowship provides an in-depth understanding of the physiological and psychological changes that occur during adolescence and equips participants with the skills to manage common gynaecological conditions in this age group, including menstrual disorders, contraception, sexually transmitted infections (STIs), and sexual health. The program combines theoretical education, hands-on training, and clinical exposure to ensure expertise in adolescent gynaecology.

Prerequisites

Criteria	Details
Eligibility	MBBS, MD (Obstetrics & Gynecology) or equivalent qualification in gynecology
Duration	1 Year (Full-Time)
Mode of Study	Clinical, Theoretical, Hands-on Training
Assessment	Theory, Practical Exams, Clinical Logbook, Research Project

Course Objectives

- **Understand the physiological changes** during adolescence, focusing on puberty, menstrual health, and reproductive system development.
- **Diagnose and manage common gynaecological conditions** in adolescents, including menstrual disorders, polycystic ovary syndrome (PCOS), and endometriosis.
- **Gain expertise in contraceptive methods**, addressing the needs and concerns of adolescent patients.
- **Develop skills in managing sexual health**, including prevention and treatment of sexually transmitted infections (STIs) and counseling on sexual health.
- **Understand the psychological and social aspects** of adolescence and how they affect reproductive health and patient communication.
- **Learn the principles of adolescent healthcare**, including confidentiality, consent, and creating a non-judgmental and supportive environment.
- **Conduct research in adolescent gynaecology**, contributing to the development of new methodologies and improving treatment outcomes for this population.



Curriculum with Semester-wise Syllabus & Modules

Semester 1: Fundamentals of Adolescent Gynaecology and Developmental Physiology

Module	Topics Covered
Introduction to Adolescent Gynaecology	Overview of adolescent health, reproductive system development, and unique challenges
Physiological Changes in Adolescence	Puberty, hormonal changes, and the development of the female reproductive system
Menstrual Health and Disorders	Normal and abnormal menstruation, causes of menstrual irregularities, and management of dysmenorrhea, amenorrhea, and menorrhagia
Contraception for Adolescents	Types of contraceptives, indications, contraindications, and adolescent counseling
Psychological Aspects of Adolescence	Mental health, body image, and the role of counseling in adolescent reproductive health
Clinical Rotations & Hands-on Training	Observation and hands-on experience in managing adolescent gynaecological conditions

Semester 2: Advanced Management and Research in Adolescent Gynaecology

Module	Topics Covered
Polycystic Ovary Syndrome (PCOS)	Diagnosis, treatment, and long-term management of PCOS in adolescents
Endometriosis in Adolescence	Early signs, diagnosis, and treatment options for adolescent endometriosis
Sexually Transmitted Infections (STIs)	Diagnosis, prevention, and management of STIs in adolescent females
Sexual Health and Counseling	Sexual health education, counseling techniques, and handling sexual abuse cases



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Module	Topics Covered
Reproductive Health in Special Populations	Addressing the needs of adolescents with disabilities or chronic health conditions
Research Project & Case Studies	Literature review, case presentations, and preparation of a research dissertation

Program Outcomes

Sr. No.	Program Outcome	Description
1	Expertise in Adolescent Gynaecological Disorders	Master the management of common and complex gynaecological conditions specific to adolescence
2	Proficiency in Menstrual Health and Disorders	Ability to diagnose and treat menstrual disorders like dysmenorrhea, amenorrhea, and PCOS
3	Advanced Knowledge of Contraceptive Methods	Expertise in providing contraceptive counseling and selecting the best methods for adolescent patients
4	Competence in Managing Sexual Health and STIs	Master the diagnosis, prevention, and treatment of STIs and provide sexual health education
5	Understanding the Psychological Aspects of Adolescent Health	Ability to provide psychological support to adolescents and navigate mental health concerns
6	Adolescent Healthcare in Special Populations	Ability to manage gynaecological health in adolescents with unique needs (e.g., disabilities, chronic illness)
7	Engagement in Adolescent Gynaecology Research	Contribute to research and evidence-based advancements in adolescent gynaecology



Course Outcomes

Sr. No.	Course Outcome	Description
1	Mastery in Diagnosis and Management of Adolescent Menstrual Disorders	Ability to accurately diagnose and manage common menstrual disorders in adolescents
2	Proficiency in Contraceptive Counseling and Management	Expertise in selecting and prescribing contraceptives for adolescents based on individual needs
3	Competence in Managing Endometriosis and PCOS	Ability to diagnose and manage adolescent endometriosis and polycystic ovary syndrome (PCOS)
4	Expertise in Sexual Health Counseling	Proficiency in counseling adolescents on sexual health, STI prevention, and relationship education
5	Advanced Knowledge in Adolescent Reproductive Health	Understanding of reproductive health challenges in adolescents, including hormonal imbalance and sexual function
6	Research Competency in Adolescent Gynaecology	Ability to conduct and present research on adolescent gynaecological health and treatment methods

Credits & Assessment Methods

Total Credits: 40

Component	Credits
Theory & Lectures	10
Clinical Rotations & Case Studies	10
Hands-on Training & Procedures	10
Research & Dissertation	10



Assessment Pattern

Assessment Type	Weightage
Theory Examination (MCQs, Long & Short Answer)	30%
Clinical & Practical Exam (Case-Based Discussion, OSCE)	30%
Clinical Logbook & Case Reports	20%
Research Presentation & Dissertation	20%

Exam Pattern

Theory Examination:

- Section A (MCQs – 30 Marks)
- Section B (Short Answer Questions – 30 Marks)
- Section C (Long Answer Questions – 40 Marks)

Practical Examination:

Component	Details	Marks
Case-based Clinical Examination	Diagnosis and management of adolescent gynaecological conditions	50
Contraceptive Counseling	Demonstrating counseling techniques for contraceptive options	50
OSCE (Objective Structured Clinical Exam)	Clinical examination and skill demonstration	40



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Viva Voce (Oral Examination):

Component	Details	Marks
Case Presentations	Discussion on adolescent gynaecological cases and management strategies	50
Recent Advances in Adolescent Gynaecology	Discussion on the latest research and treatment options	20
Ethical & Legal Aspects	Ethical considerations in treating adolescent patients	30

Research/Dissertation Submission:

Component	Marks
Originality & Scientific Merit	30
Methodology & Data Analysis	30
Presentation & Discussion	20
Conclusion & Clinical Relevance	20

Final Weightage & Passing Criteria

Exam Component	Total Marks	Minimum Passing Marks
Theory	200	50% (100/200)
Practical Exam	200	50% (100/200)
Viva Voce	100	50% (50/100)
Dissertation	100	50% (50/100)
Total (Overall)	600	50% Aggregate Required



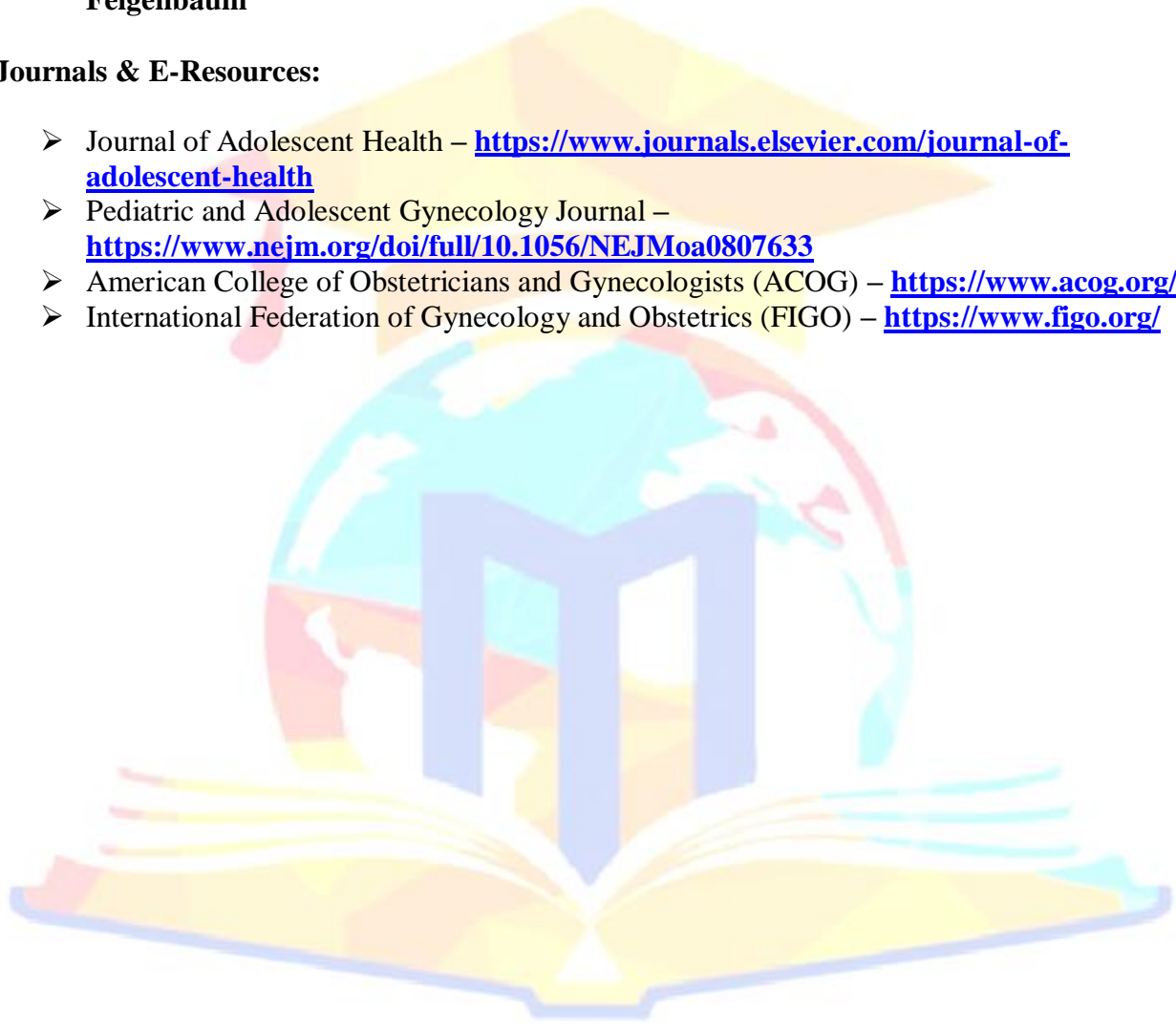
Recommended Books & E-Resources

Textbooks:

- Adolescent Gynecology: A Comprehensive Guide – **Alice M. Lee, Martha B. Johnson**
- Menstrual and Gynaecological Disorders in Adolescence – **Rachel M. Lister**
- Contraception and Sexual Health in Adolescents – **Diane S. Williams, Sarah G. Parks**
- Pediatric and Adolescent Gynecology: A Guide for Clinicians – **Deborah A. Feigenbaum**

Journals & E-Resources:

- Journal of Adolescent Health – <https://www.journals.elsevier.com/journal-of-adolescent-health>
- Pediatric and Adolescent Gynecology Journal – <https://www.nejm.org/doi/full/10.1056/NEJMoa0807633>
- American College of Obstetricians and Gynecologists (ACOG) – <https://www.acog.org/>
- International Federation of Gynecology and Obstetrics (FIGO) – <https://www.igo.org/>





Fellowship in Critical Care Obstetrics

Course Overview

The **Fellowship in Critical Care Obstetrics** is a one-year specialized training program designed for obstetricians, gynecologists, and intensivists to provide in-depth knowledge and hands-on experience in managing critically ill pregnant women. This fellowship focuses on understanding obstetric emergencies, high-risk pregnancies, and maternal intensive care, equipping healthcare professionals with the skills required to handle life-threatening situations during pregnancy, labor, and postpartum. The course combines theoretical knowledge with clinical exposure to ensure the fellows are well-prepared to manage critical obstetric conditions and provide optimal care in an intensive care unit (ICU) setting.

Prerequisites

Criteria	Details
Eligibility	MD/MS in Obstetrics and Gynecology or equivalent qualification in Obstetrics or Medicine
Duration	1 Year (Full-Time)
Mode of Study	Clinical, Theoretical, Hands-on Training
Assessment	Theory, Practical Exams, Clinical Logbook, Research Project

Course Objectives

- **Master the management of obstetric emergencies**, including eclampsia, pre-eclampsia, obstetric hemorrhage, and sepsis.
- **Develop expertise in maternal intensive care**, including ventilation, hemodynamic monitoring, and support for organ dysfunction during pregnancy.
- **Understand and manage critical complications** associated with high-risk pregnancies, including cardiac conditions, respiratory failure, and acute renal failure in pregnant women.
- **Learn to assess and manage maternal and fetal wellbeing** in intensive care settings.
- **Gain proficiency in multi-disciplinary teamwork** and communication with intensivists, neonatologists, and other specialists.
- **Develop skills in managing maternal and fetal resuscitation** during obstetric emergencies.
- **Conduct research on critical care obstetrics** to improve patient outcomes in high-risk pregnancies.



Curriculum with Semester-wise Syllabus & Modules

Semester 1: Foundations of Critical Care Obstetrics

Module	Topics Covered
Introduction to Critical Care Obstetrics	Overview of critical care concepts in obstetrics, importance of early recognition and intervention in obstetric emergencies
Physiology of Pregnancy and Critical Illness	Understanding the physiological changes in pregnancy, critical care implications for pregnant women
Obstetric Emergencies and Resuscitation	Management of obstetric emergencies, including hemorrhage, pre-eclampsia/eclampsia, and maternal resuscitation protocols
Ventilatory Support in Pregnancy	Principles of mechanical ventilation, non-invasive ventilation, and oxygen therapy in pregnant patients
Monitoring and Hemodynamic Support	Use of invasive monitoring techniques (e.g., central venous pressure, arterial lines), hemodynamic support, and fluid management in critically ill pregnant patients
Clinical Rotations & Hands-on Training	Observation and hands-on experience in managing critically ill obstetric patients, including in the ICU setting

Semester 2: Advanced Critical Care Obstetrics

Module	Topics Covered
Obstetric Hemorrhage and Coagulation Disorders	Management of antepartum and postpartum hemorrhage, blood product management, and coagulation abnormalities in pregnancy
Sepsis and Infection in Pregnancy	Diagnosis, management, and prevention of infections, including sepsis, urinary tract infections, and chorioamnionitis in pregnancy
Acute Respiratory Failure in Pregnancy	Management of ARDS, pulmonary edema, and other respiratory conditions in pregnant women
Acute Kidney Injury and Renal Support	Managing acute renal failure and dialysis considerations in pregnant women



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Module	Topics Covered
Cardiac and Endocrine Complications in Pregnancy	Management of cardiac conditions (e.g., heart failure, myocardial infarction) and endocrine disorders (e.g., thyroid dysfunction) during pregnancy
Postpartum Care in Critical Care Obstetrics	Monitoring and managing postpartum complications such as hemorrhage, infection, and organ dysfunction in the postpartum period
Research Project & Case Studies	Literature review, case presentations, and preparation of a research dissertation in critical care obstetrics

Program Outcomes

Sr. No.	Program Outcome	Description
1	Expertise in Managing Obstetric Emergencies	Ability to manage obstetric emergencies such as pre-eclampsia, eclampsia, hemorrhage, and sepsis
2	Advanced Knowledge of Maternal Intensive Care	Proficiency in using mechanical ventilation, hemodynamic monitoring, and organ support techniques in critically ill pregnant women
3	Proficiency in Resuscitation Techniques	Mastery in maternal and fetal resuscitation, including advanced cardiovascular life support (ACLS) and neonatal resuscitation
4	Expertise in Managing High-Risk Pregnancies	Ability to manage complex pregnancies with comorbidities such as cardiac or renal failure, diabetes, and hypertension
5	Multi-Disciplinary Collaboration and Teamwork	Ability to work effectively in a team with intensivists, neonatologists, and other specialists in high-risk maternal care
6	Contribution to Research and Advancements in Critical Care Obstetrics	Engage in research that advances clinical outcomes and optimizes care in obstetric critical care settings



Course Outcomes

Sr. No.	Course Outcome	Description
1	Mastery in Obstetric Emergency Management	Ability to recognize and effectively manage obstetric emergencies such as hemorrhage, hypertensive disorders, and sepsis
2	Advanced Critical Care Management	Ability to manage critically ill pregnant women, including respiratory failure, renal failure, and hemodynamic instability
3	Proficiency in Maternal and Fetal Resuscitation	Ability to perform and manage resuscitation protocols for both mothers and infants in obstetric emergencies
4	Expertise in Multi-Disciplinary Teamwork and Communication	Ability to coordinate care and communicate effectively with other healthcare professionals, including intensivists and neonatologists
5	Research Competency in Critical Care Obstetrics	Ability to conduct research in critical care obstetrics to improve patient outcomes and clinical practices

Credits & Assessment Methods

Total Credits: 40

Component	Credits
Theory & Lectures	10
Clinical Rotations & Case Studies	10
Hands-on Training & Procedures	10
Research & Dissertation	10



Assessment Pattern

Assessment Type	Weightage
Theory Examination (MCQs, Long & Short Answer)	30%
Clinical & Practical Exam (Case-Based Discussion, OSCE)	30%
Clinical Logbook & Case Reports	20%
Research Presentation & Dissertation	20%

Exam Pattern

Theory Examination:

- Section A (MCQs – 30 Marks)
- Section B (Short Answer Questions – 30 Marks)
- Section C (Long Answer Questions – 40 Marks)

Practical Examination:

Component	Details	Marks
Obstetric Emergency Management	Managing cases of obstetric hemorrhage, eclampsia, and pre-eclampsia	50
Maternal Resuscitation	Managing maternal respiratory failure, sepsis, and other critical conditions	50
OSCE (Objective Structured Clinical Exam)	Clinical examination, decision-making, and skill demonstration in critical care obstetrics	40



Viva Voce (Oral Examination):

Component	Details	Marks
Case Presentations	Discussion on case management and clinical decisions	50
Recent Advances in Critical Care Obstetrics	Discussion on the latest research and treatment protocols	20
Ethical & Legal Aspects	Ethical considerations in obstetric critical care	30

Research/Dissertation Submission:

Component	Marks
Originality & Scientific Merit	30
Methodology & Data Analysis	30
Presentation & Discussion	20
Conclusion & Clinical Relevance	20

Final Weightage & Passing Criteria

Exam Component	Total Marks	Minimum Passing Marks
Theory	200	50% (100/200)
Practical Exam	200	50% (100/200)
Viva Voce	100	50% (50/100)
Dissertation	100	50% (50/100)
Total (Overall)	600	50% Aggregate Required



Recommended Books & E-Resources

Textbooks:

- Critical Care Obstetrics – **Robert K. Stoelting, Robert L. Smith**
- Obstetric Anesthesia and Critical Care – **Michael S. J. Ellis, R. K. Sharma**
- Obstetric Emergencies: A Practical Guide – **David G. G. Moodie**
- The Handbook of Obstetric Critical Care – **Roger G. Lewis, Andrew E. McGrath**

Journals & E-Resources:

- Journal of Obstetric, Gynecologic & Neonatal Nursing (JOGNN) – <https://www.jognn.org/>
- Critical Care Medicine Journal – <https://journals.lww.com/ccmjournal/>
- Society of Obstetric Anesthesia and Perinatology (SOAP) – <https://soap.org/>
- American College of Obstetricians and Gynecologists (ACOG) – <https://www.acog.org/>

