Epidemiology in Obstetrics and Gynaecology

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INTRODUCTION

Obstetrics and gynaecology is the surgical and medical specialty dealing with the care of female reproductive organs’ health and at the management of obstetric complications. Subspecialties in obstetrics and gynaecology, which needs extra training:

• Maternal-fetal medicine
• Reproductive endocrinology and infertility: It deals with the biological causes and interventional treatment of infertility.
• Gynaecological oncology: It deals primarily with neoplasias of the uterus, ovary, cervix, and vulva.
• Female pelvic medicine and reconstructive surgery
• Family planning
• Advanced laparoscopic surgery
• Paediatric and adolescent gynaecology
• Menopausal and geriatric gynaecology

There are various microorganisms are found in the female lower genital as normal resident which is protecting the women form various types of infections.

Obstetrics & Gynecology Related Diseases:

Ectopic Pregnancy: About 2 percent of all pregnancies develop at the surface of uterus, called an ectopic pregnancy. These are nearly always in the fallopian tube is more common in women having Infertility, Endometriosis, Tubal surgery etc. [2,3].

Gynecological Cancers

Ex: Cancer of breast [4]
Ovarian Cancer [5] is the most lethal disease among all gynaecological cancers. Chemotherapy is the most important treatment for almost all ovarian cancers [6].

Endometrial Cancer [7]
Cervical Cancer [8]
Vaginal Cancer [9]

Superficial myofibroblastoma of the lower female genital tract (SMFGT) is an uncommon growth of tissues in the vagina and cervix. Cancer is a vital disease worldwide which causes death

Gynecological Conditions like vaginal bleeding and discharge, Sexually Transmitted Diseases, Uterine Fibroids [10].

Infertility is a disorder of reproductive system which impairs the body ability to perform the basic function of reproduction [11]. Quality of life is one of the important factors useful for the treatment of different patient [12]. Vaginal prolapse can have an main effect on quality of life [13].

Menopause is the state where a woman permanently stops having menstrual period.
Per menopause refer to the transitional period of time before which menstruation stops [14].
Post-Term Pregnancy is known as the pregnancy which continue 42 days [15].
Pelvic Floor Issues [16]

Some Common Causes of Obstetrics & Gynecology diseases:

- Advancing maternal age
- Ovulation disorders
- Uterine fibroids
- Smoking
- Chemotherapy
- Radiation therapy
- Low body fat
- Constant coughing
- Lower levels of estrogen in body after menopause

Symptoms related to some common Obstetrics & Gynecology related diseases:

- **Fibroids:** It is a benign tumor of muscular and fibrous tissues, Abnormal Uterine Bleeding
- **Endometriosis:** It is a condition outside the womb which causes pelvic pain.
- **Urinary Incontinence:** It is unintended loss of urine mainly due to overactive bladder
- **Hemorrhoids:** It is a swollen vein or group of veins in the region of the anus.

- **Osteoporosis:** It is a medical state which makes the bones weak or deficiency of calcium or vitamin D.
- **Vaginal Infections:** It is the infection of vagina.

Some therapies for Obstetrics & Gynecology related diseases:

- **Dilation and curettage:** It is the opening of the cervix and surgical removal of part of the lining of the uterus by scraping and scooping.
- **Hysterectomy:** It is the removal of the uterus through surgery [17]. Total Laparoscopic Hysterectomy is used as a substitute for laparoscopic ally assisted vaginal hysterectomy [18].
  - **Oophorectomy:** It is the removal of the fallopian tube and ovary
- **Tubal ligation:** It is permanent method of sterilization and birth control
- **Hysteroscopy:** It is the process of viewing and operating in the endometrial cavity from a Tran’s cervical approach. Outpatient hysteroscopy (OPH) is used for the investigation for premenopausal and postmenopausal women with abnormal uterine bleeding [19].
  - **Diagnostic laparoscopy:** It is also a type of surgical procedure in which small incision is done. [20]
- **Exploratory laparotomy:** It is a surgical procedure in which large incision is done through abdominal wall.

Various surgical treatments for urinary incontinence, which includes cystoscopy with sub-urethral slings [21].

- **Appendectomy:** It is the process of surgical removal of vermiform appendix
- **Cryosurgery:** It is the treatment which is performed by an instrument which freezes the tissues and destroys abnormal tissues.
- **Hydro laparoscopy:** It is used to evaluate the posterior uterus, pelvic sidewalls, and adnexa. It is also used as an alternative method after failure of the pharmacological therapy for PCOS Induced Infertility [22]

Some Common facts in Obstetrics and Gynecology
Endometrial biopsies are useful for assessing endometrial diseases [23]. Leiomyoma is considered as the most common uterine tumor in women older than 30 years. This tumor extends different types of degenerations and a large variability in MRI imaging patterns. MR Spectroscopy can distinguish between benign and malignant lesions [24]. Endometriosis is one of the complex gynecological diseases which are defined by the presence of endometrial glands and stroma outside the uterine cavity [25]. It affects mainly reproductive aged women. The three clinical presentations of the disease may occur alone or coexist: peritoneal endometriosis, ovarian endometrioma, and Deep Infiltrating Endometriosis (DIE). In which DIE is the most aggressive presentation of endometriosis, which penetrates more than 5 mm in affected tissues.

In studies it is found that the genital infection frequency is mainly due to improper genital hygiene practices. 3-dimensional ultrasound is used for the diagnosis of LPSVC. Fetal Renal Pelvic Dilatation is treated with Double Pig Tail Catheter.

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REFERENCES


