

**Student's Study Guide**  
**of**  
**Obstetrics & Gynecology Department**  
**CMH Lahore Medical College**  
**2023**

**Dear students, this study guide is to be used as an adjunct to the curriculum of the National University of Medical Sciences (NUMS) which is available at college website.**

**In this study guide, we will guide you how to learn Obstetrics and Gynecology effectively. We have compiled learning and assessment tips for some of the cases you will commonly encounter while on rotation in the department.**

**Teaching Hours:**

<b>YEAR</b>	<b>CONTACT HOURS</b>
<b>V</b>	<b>200</b>
<b>IV</b>	<b>65</b>
<b>III</b>	<b>35</b>

## Assessment & Feedback;

### a. Theory

- Periodical class tests
- Midterm Exams: a theory exam would be held from the syllabus covered during this period
- Send up Exams: a theory exam would be held from the syllabus

### b. Practical

- Clinical Log Book: Each student would complete his log book and get it countersigned from HOD at the end of each rotation. Log book is maintained during the rotation
- End of Rotation Exams: At the end of each clinical rotation, a clinical ward test would be held
- Send Up Exams: OSPE

**c. Internal assessment.** There will be 10% internal assessment for session

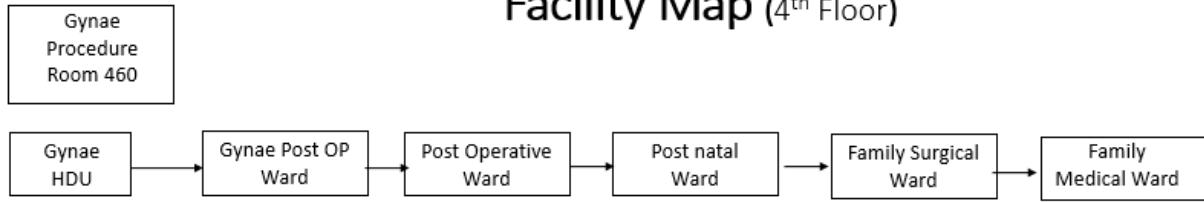
**d. Professional exam.** Professional exam of Obs & Gynae will be held in final year. There will be 200

marks theory paper and 200 marks of practical. Student has to pass theory and practical separately with minimum 50 % marks. However, in clinical subjects, student should pass in clinical exams / OSCE (with 50% marks) and unobserved stations (with 50% marks) separately

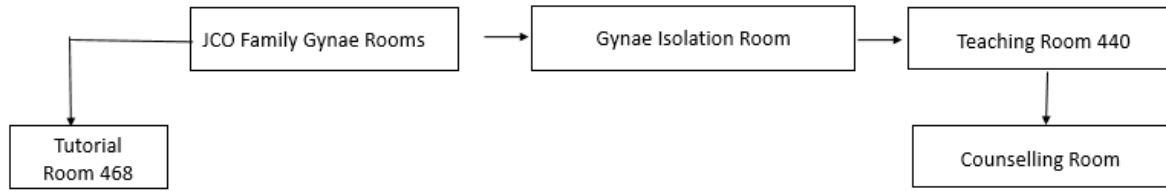
## Facility Map

Ground Floor	OPD / OPD Tutorial Room 59
4 <sup>th</sup> Floor	Gynae Ward / Gynae Tutorial Room 468 / Gynae Procedure Room 460
5 <sup>th</sup> Floor	Maternity Ward / Labour Room Maternity Tutorial Room 582
6 <sup>th</sup> Floor	Operation Theatre

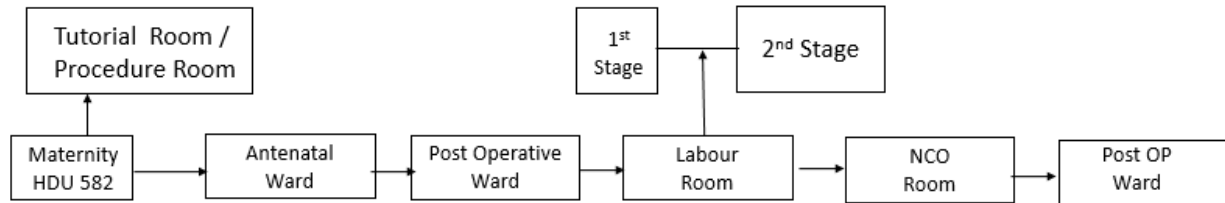
## Facility Map (4<sup>th</sup> Floor)



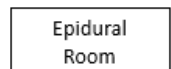
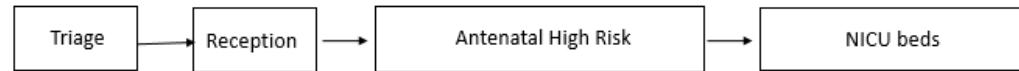
## Corridor



## Facility Map (5<sup>th</sup> Floor)



## Corridor



**Topics: Gynecology:**

1. Abnormal uterine bleeding
2. Heavy menstrual bleeding
3. Amenorrhea
4. Post coital bleeding /Cervical cancer
5. Post menopausal bleeding/ Endometrial Carcinoma
6. Pelvic mass
7. Menopause & Osteoporosis
8. Adolescent gynecology
9. Subfertility
10. Uterovaginal prolapse
11. Urinary incontinence
12. Domestic violence
13. Vaginal discharge
14. Gynecological procedures
15. Contraception
16. Bleeding and pain in early & late pregnancy

**Topics:**

**Obstetrics:**

1. Medical disorders in pregnancy (Cardiac, Respiratory, Renal, Liver, Thyroid, Epilepsy)
2. Anemia in pregnancy
3. hyperglycemia in pregnancy
4. Hypertensive disorders in pregnancy
5. Fetal growth abnormalities
6. multiple pregnancy
7. Liquor abnormalities
8. Fetal monitoring
9. Preterm labour
10. Infections in pregnancy
11. Postdate pregnancy
12. Labour ward rotation
13. Obstetric procedures
14. Puerperium
15. Bleeding and pain in late pregnancy(placenta Previa & abruption)

## **1-Abnormal uterine bleeding**

In Gynae OPDs, you will frequently encounter women with abnormal pattern of uterine bleeding. Some may be having continuous bleeding; others may complain of intermenstrual bleeding while there will be some (especially those at extremes of reproductive age) complaining of 'anovulatory' pattern of bleeding. These are quite bothersome complaints for women and they affect their quality of life adversely. You will learn in OPDs how to elucidate the diagnosis from their history, examination and investigations. You will also learn about the different hormonal and non-hormonal medication used to treat these problems.

**Suggestion:** -Revise the normal menstrual cycle to understand the pathology better

Read about Tranexamic acid, mefenamic acid, norethisterone, oral contraceptive pills and levonorgestrel Intra uterine system from text books

### **Learning objectives:**

You are expected to achieve following learning objectives

- 1-Describe pattern of abnormal uterine bleeding
- 2- List the cause of abnormal uterine bleeding using the PALM-COIEN classification
- 3- Investigate abnormal uterine bleeding
- 4-Outline the management plan
- 5-Maintain follow up of the patient to see the effect of treatment

### **How to achieve the Learning objective?**

You are going to learn this topic best by going to Gynae OPD. Be well prepared before going.

Here are a few suggestions to gain maximum learning:

**a-Think about your differential diagnosis** and make a list

- 1-
- 2-
- 3-
- 4-
- 5-
- 6-



**b-Go through the topics in your list from Gynaecology by ten** teachers before going to OPD and note down relevant points in history, examination and investigations (For additional evidence-based learning, use NICE Green top guidelines, RCOG guidelines or ACOG guidelines).

**In OPD, you are expected to acquire following skills:**

A-Take a detailed menstrual history & note in your structured history notebooks

B-Assist/ perform:

- 1- Speculum examination and Bimanual examination
- 2- Pap smear
- 3- Pipelle endometrial biopsy  
(Note: We have models for practicing these skills in skill lab at CMH LMC)
- 4- Observe ultrasound of case of abnormal uterine bleeding

C- Communicate with the patient with explanation of the condition, treatment options and complications.

**Formative assessment:**

You will undergo 2 minutes mini CEX during your posting at GOPD You will also undergo for DOPS for Pipelle sampling and pap smear Your facilitator will discuss the history investigations planned and management options with you and guide you further

**Summative Assessment:**

This topic is assessed as SAQ, MCQ, OSPE and as a long case. so you need to have a strong theoretical knowledge of the subject as well as practical skills described above

## **2-Heavy menstrual bleeding (HMB)**

It is a common and frequently encountered problem in Gynecology clinics. You will see many patients in various age groups presenting with this problem. We will give you a theoretical knowledge of the subject through lectures and we will assist you in learning the topic while you are on clinical rotation

**Suggestion** Revise the normal menstrual cycle to understand the pathology better

### **Learning objectives:**

You are expected to achieve following learning objectives:

- 1-Differentiate between heavy menstrual bleeding and abnormal uterine bleeding using clinical data PMAC
- 2-List the causes of heavy menstrual bleeding according to age group
- 3-Investigate HMB
- 4-Outline the management plan
- 5-Formulate a flow diagram for the treatment of heavy menstrual bleeding.

### **How to achieve the Learning objective?**

You are going to learn this topic best by going to **Gynae OPD**. Be well prepared before going.

Here are a few suggestions to gain maximum learning:

**a-Think about your differential diagnosis** and make a list

- 1-
- 2-
- 3-
- 4-
- 5-
- 6-

**b-Go through the topics in your list from Gynecology by ten teachers** before going to OPD and note down relevant points in history, examination and investigations. ( For additional evidence based learning , use NICE Green top guidelines , RCOG guidelines or ACOG guidelines).

### **In OPD, you are expected to acquire following skills:**

A- Take a detailed menstrual history & note in your structured history notebooks

B- Assist/ perform:

5- Speculum examination and Bimanual examination

6- Pap smear

7- Pipelle endometrial biopsy

(Note: We have models for practicing these skills in skill lab at CMH LMC)

8- Observe ultrasound of case of HMB

C- Counsel patient about diagnosis, treatment options and complications.

**Formative assessment:**

You will undergo 10- 20 minutes mini CEX during your posting at

GOPD DOPS

Your facilitator will discuss the history, investigations planned and management options with you and guide you further

**Summative Assessment:**

This topic is assessed as SAQ, MCQ and as a long case. So, you need to have a strong theoretical knowledge of the subject as well as practical skills described above

### **3-Amenorrhea**

It is a common and frequently encountered problem in Gynecology clinics. You will see many patients in various age groups presenting with this problem. We will give you a theoretical knowledge of the subject through lectures and we will assist you in learning the topic while you are on clinical rotation

#### **Learning objectives:**

You are expected to achieve following learning objectives:

1. Describe the features of normal menstrual cycle and the ovarian and endometrial changes that accompany them
2. Describe normal change of puberty Differentiate between primary and secondary amenorrhea
3. Describe a scheme for classifying the causes of amenorrhea based on the primary site of problem
4. Discuss appropriate investigations to reach a diagnosis of primary or secondary amenorrhea
5. Outline a management plan for the patient depending upon the cause

#### **How to achieve the Learning objective:**

You are going to learn this topic best by going to **Gynae OPD** on Wednesday. Here are a few suggestions to gain maximum learning:

#### **a-Think about your differential diagnosis and**

make a list

- 1-
- 2-
- 3-

**b-Go through the topics in your list from Gynecology by ten teachers** before going to OPD and note down relevant points in history , examination and investigations.( For additional evidence based learning use NICE guidelines, Green top guidelines , RCOG guidelines or ACOG guidelines).

#### **In OPD, you are expected to acquire following skills:**

A-Take a detailed relevant history of a woman complaining of amenorrhea & note in your structured history notebooks

B- Differentiate between primary and secondary amenorrhea

C-Assist/ perform:

- Identification of secondary sexual characteristics
- Tanner staging of breast and pubic/axillary hair development

Speculum examination and Bimanual examination

D- Communicate with the patient with explanation of the condition, treatment options and complications.

**Formative assessment:**

You will undergo 20 minutes mini CEX during your posting at GOPD DOPS

Your facilitator will discuss the history, investigations planned and management options with you and guide you further

**Summative assessment:**

This topic is assessed as SAQ, MCQ and as a long case. So you need to have a strong theoretical knowledge of the subject as well as practical skills described above

## **4-Cervical carcinoma**

This is one of the malignant tumors of gynecology common in developed countries and one of the tumors with good screening and preventive strategies. You will get theoretical knowledge of it by lectures and further will assist you about preventive methods and management in clinical ward rotation

### **Suggestion:**

Revise the normal anatomy of cervix and the transformation zone

### **Learning Outcomes:**

At the end of Clinical ward rotation, students will be able to

1. Enlist risk factors for cervical carcinoma
2. Describe the screening method of cervical carcinoma
3. Enlist preventive strategies of cervical carcinoma
4. Describe FIGO staging of cervical cancer?
5. Outline management of cervical carcinoma according to staging.

### **How to achieve learning outcomes?**

First get theoretical knowledge of subject from Gynecology by Ten Teachers 20<sup>th</sup> edition and look for normal images of normal cervix on Internet.

**In OPD**, take detailed history to identify risk factors, symptoms .

Make differential diagnosis

1.....

2.....

3.....

Interpretation of investigations

Staging of cervical carcinoma

Outline the management plan according to stage

Counsel every patient to enter into cervical screening program and explain benefits to enter into cervical screening program.

### **Skill in**

1. Speculum examination for visualization of cervix. We have models of various cervical conditions in our skill lab to facilitate your learning
2. Assist and perform Pap smear in OPD
3. Perform liquid cytology using Cytobrush

## **Counselling**

1. Explain the significance of pap smear result and appropriate management.
2. Explain the patient about prevention with HPV Vaccine with when and how to administer, its availability in our country with its rate of prevention

### **Formative Assessment:**

You will undergo 20 minutes mini CEX during your rotation in OPD.

DOPS: Pap smear

Your facilitator will discuss the history, investigations and management options and will guide you further.

### **Summative Assessment**

Knowledge by MCQS and SAQS

Skill by OSPE and Long Case

## **5-Post menopausal bleeding**

It is a less common yet a serious complaint encountered in Gynaecology clinics. The reason to investigate it seriously is that it can be a presentation of Endometrial cancer. There would be less cases presenting with this problem, yet the principles of evaluation are same with the target to exclude malignancy and provide cause directed treatment.

We will give you a theoretical knowledge of the subject through lectures and we will assist you in learning the topic while you are on clinical rotation

**Suggestion:** Revise the risk factors of common Gynecologic malignancies.

### **Learning objectives:**

You are expected to achieve following learning objectives:

1. Propose the Differential diagnosis of post-menopausal bleeding (PMB).
2. Investigate PMB
3. Outline the management plan
4. Formulate a flow diagram for the treatment of post-menopausal bleeding.
5. Formulate a flow diagram for the stage-wise management of endometrial cancer.

### **How to achieve the Learning objective?**

You are going to learn this topic best in **Gynae OPD**. Be well prepared before going.

Here are a few suggestions to gain maximum learning:

**a-Think about your differential diagnosis** and make a

list

1-

2-

3-

4-

**b-Go through the topics in your list from Gynecology by ten teachers** before going to OPD and note down relevant points in history, examination and investigations. (For additional evidence-based learning, use NICE Green top guidelines, RCOG guidelines or ACOG guidelines).

**In OPD, you are expected to acquire following skills:**

A-Take a detailed Gynecologic history & note in your structured history notebooks

B-Assist/ perform:



- Speculum examination and Bimanual examination
- Pipelle endometrial biopsy  
(Note: We have models for practicing these skills in skill lab at CMH LMC)
- Observe ultrasound of case of PMB

C- Counsel patient about the diagnosis, treatment options and complications.

**Formative assessment:**

You will undergo 2 minutes mini CEX during your posting at GOPD

DOPS: Pipelle sampling

Your facilitator will discuss the history, investigations planned and management options with you and guide you further

**Summative Assessment:**

This topic is assessed as SAQ, MCQ and as a long case. So, you need to have a strong theoretical knowledge of the subject as well as practical skills described above

## **6-Pelvic mass (ovarian tumor)**

It is less common, yet important problem in Gynecology clinics. You will see patients in various age groups presenting with this problem. We will give you a theoretical knowledge of the subject through lectures and we will assist you in learning the topic while you are on clinical rotation

### **Suggestion:**

- Revise the normal menstrual and ovarian cycles
- Revise ovarian histology to understand the origin of different ovarian masses.
- Revise pelvic anatomy to understand the origin of various adnexal masses.

### **Learning objectives:**

You are expected to achieve following learning objectives:

1. Provide a differential diagnosis of Adnexal masses.
2. Enlist types of ovarian tumors.
3. Enlist appropriate tumor markers relevant to age groups or presentation.
4. Enlist appropriate tumor markers for different ovarian tumors.
5. Outline the management plan for a given patient with adnexal mass.
6. Formulate a flow diagram for the management of adnexal masses in:
  - a. young adolescent
  - b. Reproductive age women
  - c. Postmenopausal women.

### **How to achieve the Learning objective?**

You are going to learn this topic best in **Gynae OPD**. Be well prepared before going.

Here are a few suggestions to gain maximum learning:

**a-Think about your differential diagnosis** and make a

list

1-

2-

3-

4-

5-

6-

**b-Go through the topics in your list from Gynecology by ten teachers, RCOG green top guidelines flow charts** before going to OPD and note down relevant points in history, examination and investigations. ( For additional evidence based learning , use NICE guidelines , RCOG guidelines or ACOG guidelines).

**In OPD, you are expected to acquire following skills:**

A-Take a detailed menstrual history & note in your structured history notebooks

B-Assist/ perform:

- 1- Speculum examination
- 2- Bimanual examination
- 3- Pipelle endometrial biopsy

(Note: We have models for practicing these skills in skill lab at CMH LMC)

4- Observe ultrasound of case of adnexal mass

5- Suggest further Management plan

C- Communicate with the patient with explanation of the condition, treatment options and complications.

**Formative assessment:**

You will undergo 2 minutes mini CEX during your posting at GOPD

DOPS

Your facilitator will discuss the history, investigations planned and management options with you and guide you further

**Summative Assessment:**

This topic is assessed as SAQ, MCQ and as a long case. So, you need to have a strong theoretical knowledge of the subject as well as practical skills described above

## **7-Menopause and Osteoporosis:**

It is a common and frequently encountered problem in gynecology clinics. You will see many patients late 40s and early 50s age groups presenting with this problem. Additionally, a few may present with premature menopause at a much younger age. We will give you a theoretical knowledge of the subject through lectures and we will assist you in learning the topic while you are on clinical rotation.

### **Suggestion:**

- Revise the normal menstrual cycle to understand the pathophysiology better.
- Revise the reproductive physiology.
- Revise the Hypothalamic-pituitary-ovarian axis and function of different female hormones in various body systems.

### **Learning objectives:**

You are expected to achieve following learning objectives:

1. Differentiate between oligomenorrhea and menopause.
2. Define menopause.
3. Define premature menopause.
4. Enlist perimenopausal symptoms.
5. Investigate premature/ age-appropriate menopause.
6. Outline the management plan for different menopausal symptoms.
7. Outline management plan of premature menopause at different age-groups.
8. Formulate a flow diagram for the treatment of menopausal symptoms.

### **How to achieve the Learning objective:**

You are going to learn this topic best by going to our **Gynae OPD**, and by find through guidelines of British Menopausal Society (BMS). Be well prepared before going.

Here are a few suggestions to gain maximum learning:

**a-Think about different menopausal symptoms** and make a

list

- 1-
- 2-
- 3-
- 4-
- 5-
- 6-

**b-Think about the menopausal complications and make a list.**

**Go through the topics in your list from Gynaecology by ten teachers, BMS guidelines** before going to OPD and note down relevant points in history, examination and investigations (For additional evidence-based learning, use NICE guidelines, RCOG guidelines).

**In OPD, you are expected to acquire following skills:**

A-Take a detailed menopausal history & note in your structured history notebooks

B-Assist/ perform:

12-BMI calculation.

13-Speculum examination and comment on vulvovaginal health.

14-Pap smear

(Note: We have models for practicing these skills in skill lab at CMH LMC) 15-  
Observe ultrasound of case of ovarian failure.

C- Communicate with the patient with explanation of the condition, treatment options and complications.

**Formative assessment:**

You will undergo 2 minutes mini CEX during your posting at GOPD

DOPS

Your facilitator will discuss the history, investigations planned and management options with you and guide you further

**Summative Assessment:**

This topic is assessed as SAQ, MCQ and as a long case. So, you need to have a strong theoretical knowledge of the subject as well as practical skills described above

## **8-Adolescent Gynecology**

Adolescent Gynecology is a vast set of complaints, very important in gynecology clinics. The importance lies in the fact that the patients are in dependent age-group, at borders of pediatrics and adolescents, sometimes not mature enough to understand the pathology and take their own responsibility. There would be less cases presenting with problems in this age group, yet the common problems are menstrual irregularities, precocious puberty, delayed puberty and disorders of primary amenorrhea. We will give you a theoretical knowledge of the subject through lectures and we will assist you in learning the topic while you are on clinical rotation

**Suggestion:** Revise the hormonal physiology and process of menarche.

### **Learning objectives:**

You are expected to achieve following learning objectives:

1. Propose the Differential diagnosis of primary amenorrhea.
2. Investigate Primary amenorrhea
3. Outline the management plan
4. Formulate a flow diagram for the causes of primary amenorrhea.
5. Formulate flow diagram for the management of precocious puberty and precocious pseudo-puberty.

### **How to achieve the Learning objective?**

You are going to learn this topic best by going to our **Gynae OPD**. Be well prepared before going.

Here are a few suggestions to gain maximum learning:

**a-Think about your differential diagnosis** and make a

list

- 1-
- 2-
- 3-
- 4-

**b-G o through the topics in your list from Gynaecology by ten** teachers before going to OPD and note down relevant points in history, examination and investigations.

**In OPD, you are expected to acquire following skills:**

A-Take a detailed Gynecologic history & note in your structured history notebooks

B-Assist/ perform:

- Height assessment and charting
- BMI
- GPE with focus on tanner staging
- USG for primary amenorrhea

C- Communicate with the patient and her parents with explanation of the condition, treatment options and complications.

**Formative assessment:**

You will undergo 2 minutes mini CEX during your posting at GOPD

DOPS

Your facilitator will discuss the history, investigations planned and management options with you and guide you further

**Summative Assessment:**

This topic is assessed as SAQ, MCQ and as a long case. So, you need to have a strong theoretical knowledge of the subject as well as practical skills described above

## **9-SUBFERTILITY**

The prevalence of infertility in Pakistan is reported as 22%, with primary infertility accounting for 4% of the total cases.

Male infertility is solely responsible for 20-30 percent of infertility cases

Revise the normal menstrual cycle for better learning.

### **Learning objectives:**

You are expected to achieve following learning objectives:

1. Understand definition and causes of subfertility
2. Take a history from a couple presenting with subfertility and perform relevant examination
3. Enlist the investigations relevant to subfertility and justify them
4. Formulate a treatment plan for the infertile couple

### **How to achieve the Learning objectives?**

You are going to learn this topic best by going to our **Gynae**

**OPD.**

### **Instructional strategies:**

Interactive lectures, SGD, Case presentation/OPD, Self-directed Learning

### **In OPD, you are expected to acquire following skills:**

A-Take a detailed history & interpret reports of previous investigations and treatments, if any

B-Assist/ perform:

1. General physical examination
2. Abdominal examination
3. Speculum examination and Bimanual examination
4. Pap smear

C- Communicate with the patient with explanation of the condition, further investigations, treatment options and pros and cons of treatments keeping in view a sensitive and sympathetic approach.

### **Formative Assessment:**

2 minutes mini CEX in OPD

DOPS

Your facilitator will discuss the history, investigations planned and management options with you and guide you further

### **Summative Assessment:**

SAQ, MCQ, OSCE, Long case.



## **10-UV PROLAPSE**

Uterovaginal prolapse is not life threatening but it causes troublesome symptoms.

Revise the anatomy of supporting ligaments and fascia of the female pelvic organs for better learning.

### **Learning objectives:**

You are expected to achieve following learning objectives:

1. Identify the risk factors and causes of uterovaginal prolapse
2. Understand the concept of POP-Q classification
3. Take a history from a patient presenting with uterovaginal prolapse and perform relevant examination
4. Appreciate the relationships between anatomical prolapse and functional symptoms including urinary, bowel and sexual dysfunction
5. Enlist relevant investigations and justify them
6. Formulate a treatment plan

### **How to achieve the Learning objectives?**

You are going to learn this topic best by going to our **Gynae OPD** and Gynae ward.

### **Instructional strategies:**

Interactive lectures, SGD, Case presentation/OPD, Self-directed Learning

### **In OPD/ward, you are expected to acquire following skills:**

A-Take a detailed history identifying risk factors and causes of uterovaginal prolapse

B-Assist/ perform:

1. General physical examination
2. Speculum examination and Bimanual examination
3. Pap smear
4. Perform specific examination of prolapse including examination in Sim's position

C- Communicate with the patient with explanation of the condition, further investigations, treatment options explaining potential side effects and complications

### **Formative assessment:**

2 minutes mini CEX in OPD/ward

DOPS

Your facilitator will discuss the history, investigations planned and management options with you and guide you further

### **Summative Assessment**

SAQ, MCQ, OSCE, Long case.

## **11-URINARY INCONTINENCE**

Urinary incontinence is not life threatening but loss of urinary control can affect the social, psychological, domestic, occupational, physical, and the sexual aspects of patients' lives.

Revise the normal mechanism of continence for better learning in OPD.

### **Learning objectives:**

You are expected to achieve following learning objectives:

1. Identify the risk factors and causes of urinary incontinence
2. Classify urinary incontinence and differentiate between detrusor instability and urodynamic stress incontinence
3. Take detailed history from a patient presenting with urinary incontinence and perform relevant examination
4. Critically appraise the role of urodynamic investigations for the diagnosis of cause of urinary incontinence
5. Formulate a treatment plan

### **How to achieve the Learning objectives?**

You are going to learn this topic best by going to our **Gynae OPD. Instructional strategies:**

Interactive lectures, SGD, Self-directed Learning **In OPD/ward, you are expected to acquire**

### **following skills:**

A-Take a detailed history identifying risk factors and causes of urinary incontinence

B-Assist/ perform:

1. General physical examination
2. Abdominal examination
3. Speculum examination and Bimanual examination

C- Communicate with the patient with explanation of the condition, further investigations (bladder diary) and treatment options explaining potential side effects and complications

### **Formative assessment:**

2 minutes mini CEX in OPD/ward

DOPS

Your facilitator will discuss the history, investigations planned and management options with you and guide you further

**Summative Assessment:** SAQ,

MCQ, OSCE, Long case.

## 12-Vaginal discharge

Evaluating and treating vaginal discharges requires sound theoretical knowledge so that you can take proper history, identify risk factors and carry out appropriate investigations

**Suggestion:** Go through the table in your Gynaecology text books and review the type of vaginal discharges and their appearances

### **Learning objectives:**

You are expected to achieve following learning objectives:

- 1-Differentiate physiological vaginal discharge from lower genital tract infections
- 2-Provisionally diagnose type of vaginal discharge based on history and appearance of discharge
- 3-Prescribe appropriate treatment to patient
- 4-Identify those at risk of sexually transmitted infection

### **How to achieve the Learning objective?**

You are going to learn this topic best by going to our GOPD. Be well prepared before going.

### **You are expected to acquire following skills:**

A-Take a detailed history of vaginal discharge & note in your structured history

notebooks B-Assist/ perform:

1. Speculum examination
2. High vaginal swab
3. Interpretation of microscopy and culture report

C- Counsel patient about type of discharge, its likely cause, treatment and follow up

### **Formative assessment:**

You will undergo 2 minutes mini CEX during your posting at GOPD

Your facilitator will discuss the history, investigations planned and management options with you and guide you further

### **Summative Assessment:**

This topic is assessed as SAQ, MCQ and OSPE. So, you need to have a strong theoretical knowledge of the subject as well as practical skills described above

## **13-Gynecological procedures**

Gynecology is a surgical specialty and the principles of good surgical practice should be known to you. We will give you a theoretical knowledge of the subject through lectures and we will assist you in learning the topic while you are on clinical rotation

### **Learning objectives:**

You are expected to achieve following learning objectives:

1. Know the key points of surgical anatomy applied to gynecology
2. Understand the purpose of careful pre assessment and postoperative care
3. Discuss how to minimize surgical risk during and immediately after surgery
4. Recognize the importance of fully informed consent
5. Understand the common gynecological procedures and their risks

### **How to achieve the learning objective?**

You are going to learn this topic best by going to our **Gynae OPD** and visiting the operation theatre to watch the procedures going on. Be well prepared before going.

Here are a few suggestions to gain maximum learning:

**a-Go through the topics in your list from Gynecology by ten** teachers before going to OPD and operation theatre and note down relevant points. For additional evidence-based learning you can watch videos of the gynecological procedures from authentic websites available on the internet

### **In OPD, you are expected to acquire following skills:**

A-Counsel a patient regarding the procedure, its complications and postoperative care. B- Take fully informed consent from the patient

C-Assist/ perform:

1. Speculum examination and Bimanual examination
2. Pap smear
3. Pipelle endometrial biopsy
4. Manual vacuum aspiration
5. (Note: We have models for practicing these skills in skill lab at CMH LMC)
6. Insertion of IUCD

### **In operation theatre, you are expected to acquire following skills:**

Observe/Assist:

1. Common incisions used in gynecological procedures( Pfannenstiel, midline incision)
2. Different suture materials used
3. Diagnostic D & C
4. Hysteroscopy
5. Laparoscopy
6. Abdominal hysterectomy
7. Vaginal hysterectomy

**Formative assessment:**

DOPS

**Summative assessment:**

This topic is assessed as SAQ, MCQ and OSPE. So, you need to have a strong theoretical knowledge of the subject as well as practical skills described above

## **14-Contraception**

Birth control and birth spacing are one of the most important aspects of the maternal healthcare. It is your responsibility as a doctor to guide women about suitable contraceptive options for her.

We have a family planning center in our Gynecology OPD building. You should visit it and see how different methods are being prescribed to patients

**Suggestion:** Download the WHO MEC app in your smart phone. It will help you in selecting safe contraceptives for different patients

### **Learning objectives:**

You are expected to achieve following learning objectives:

- 1-Explain different methods of contraceptives and their mechanism of action
- 2-Select appropriate contraceptive for patient using WHO MEC criteria
- 3-Enlist dosage and side effects of different contraceptive options

### **How to achieve the Learning objective?**

You are going to understand this topic, apply your knowledge and practice your contraceptive counseling and prescribing skills in our GOPD, postnatal wards and the family planning center in GOPD. Be well prepared before going.

Here are a few suggestions to gain maximum learning:

### **You are expected to acquire following skills:**

- A-Take a detailed history and understand contraceptive needs of couple B-Assist/ perform:  
IUCD insertion and perform it on model C- Use of WHO MEC Wheel

### **Formative assessment:**

You will undergo 2 minutes mini CEX during your posting at

GOPD DOPS: IUCD insertion on model

Your facilitator will discuss contraceptive counseling and methods in detail with you

### **Summative Assessment:**

This topic is assessed as SAQ, MCQ and OSPE. So, you need to have a strong theoretical knowledge of the subject as well as practical skills described above

## **15-Vaginal bleeding/abdominal pain in early pregnancy**

It is a common and frequently encountered problem in Gynaecology clinics. You will see many patients in various age groups presenting with this problem. We will give you a theoretical knowledge of the subject through lectures and we will assist you in learning the topic while you are on clinical rotation

### **Learning objectives:**

You are expected to achieve following learning objectives:

1. Know about implantation and establishment of pregnancy
2. Obtain detailed knowledge of clinical presentation and management of miscarriage and ectopic pregnancy
3. Discuss about less common early pregnancy conditions including recurrent miscarriages, gestational trophoblastic disease and hyperemesis gravidarum
4. Counsel a patient regarding follow up for gestational trophoblastic disease

### **How to achieve the Learning objective?**

You are going to learn this topic best by going to our **Gynae OPD**. Be well prepared before going. Here are a few suggestions to gain maximum learning:

**a-Think about your differential diagnosis** and make a list

- 1-
- 2-
- 3-

**b-Go through the topics in your list from Gynecology by ten teachers** before going to OPD and note down relevant points in history, examination and investigations. (For additional evidence-based learning use NICE guidelines, Green top guidelines, RCOG guidelines or ACOG guidelines).

### **In OPD, you are expected to acquire following skills:**

A-Take a detailed relevant history of a woman complaining of vaginal bleeding and/or abdominal pain in early pregnancy & note in your structured history notebooks

B- Differentiate between different types of miscarriages on basis of examination and ultrasound findings C-Assist/ perform:

1. Speculum examination and Bimanual examination
2. Observe ultrasound findings in early pregnancy

C- Communicate with the patient with explanation of the condition, treatment options and complications.

D- Identify a patient at high risk for ectopic or molar pregnancy and suggest suitable investigations

### **Formative assessment:**

You will undergo 2 minutes mini CEX during your posting at GOPD DOPS

Your facilitator will discuss the history, investigations planned and management options with you and guide you further

**Summative assessment:**

This topic is assessed as SAQ, MCQ, OSPE and as a long case. So, you need to have a strong theoretical knowledge of the subject as well as practical skills described above



# OBSTETRICS

## 1. Medical disorders in pregnancy

It is a common and frequently encountered problem in obstetrics clinics. You will see many patients in various age groups presenting with this problem. We will give you a theoretical knowledge of the subject through lectures and we will assist you in learning the topic while you are on clinical rotation

### **Suggestion:**

Revise the physiological changes occurring in pregnancy to understand the pathology better

### **Learning objectives:**

You are expected to achieve following learning objectives:

- 6- Know effects of common medical disorders on maternal and fetal outcome
- 7- Know effects of pregnancy on common medical disorders
- 8- Take history to find out the cause and severity of various medical disorders in pregnancy
- 9- Perform relevant examination and pick up signs of medical disorders
- 10- Investigate various medical disorders in pregnancy
- 11- Interpretation of investigations
- 12- Outline the management plan according to the disease
- 13- Counsel a pregnant patient about a medical disorder in pregnancy

### **How to achieve the Learning objective:**

You are going to learn this topic best by going to our **Maternity OPD**. Be well prepared before going.

**Go through the topics in your list from Obstetrics by ten** teachers before going to OPD and note down relevant points in history, examination and investigations.

(For additional evidence-based learning, use NICE Green top guidelines, RCOG guidelines or ACOG guidelines).

### **In OPD, you are expected to acquire following skills:**

A- Take a detailed history and identify the maternal and fetal complications & note it in your structured history notebooks

B- Assist/ perform:

1. General physical examination including measurement of B.P. and examination of thyroid gland where required
2. Obstetric examination
3. Urine dipstick test for proteinuria
4. Elicit ankle jerk and clonus
  
5. Check random blood sugar with glucometer

C- Communicate with the patient with explanation of the condition, treatment options and complications.

**Formative assessment:**

You will undergo 10-20 minutes mini CEX during your posting at GOPD

Your facilitator will discuss the history, investigations planned and management options with you and guide you further

**Summative Assessment:**

This topic is assessed as SAQ, MCQ and as a long case. So you need to have a strong theoretical knowledge of the subject as well as practical skills described above

## 2. Anemia in pregnancy

It is a common and frequently encountered problem in obstetric clinics. We will give you a theoretical knowledge of the subject through lectures and we will assist you in learning the topic while you are on clinical rotation

**Suggestion:** Revise the classification of anemia to understand the pathology better

**Learning objectives:**

You are expected to achieve following learning objectives:

1. Know effects of anemia on maternal and fetal outcome
2. Know effects of pregnancy on anemia
3. Take history to find out the cause and severity of anemia in pregnancy
4. Perform relevant examination and pick up signs of anemia
5. Investigate anemia in pregnancy
6. Interpret the patterns of abnormality found on full blood count that are indicative of iron deficiency anemia, beta thalassemia minor, vit. B12 or folic acid deficiency anemia
7. Outline the management plan

**How to achieve the learning objective?**

You are going to learn this topic best by going to our **Maternity OPD**. Be well prepared before going. Here are a few suggestions to gain maximum learning:

**Go through the topics in your list from Obstetrics by ten teachers** before going to OPD and note down relevant points in history, examination and investigations.

(For additional evidence-based learning use NICE guidelines, Green top guidelines, RCOG guidelines or ACOG guidelines).

**In OPD, you are expected to acquire following skills:**

A-Take a detailed history about anemia & note in your structured history notebooks B-Assist/ perform:

1. General physical examination
2. Obstetric examination

B- Communicate with the patient with explanation of the condition, treatment options and complications.

**Formative assessment:**

You will undergo 10 - 20 minutes mini CEX during your posting at Obstetrics OPD

Your facilitator will discuss the history, investigations planned and management options with you and guide you further

**Summative Assessment:**

This topic is assessed as SAQ, MCQ and as a long case/ OSPE. So you need to have a strong theoretical knowledge of the subject as well as practical skills described above

**3. Hyperglycemia in pregnancy**

Diabetes is one of the three disease (others being anemia and gestational hypertension/ pre-eclampsia) which are common in Pakistani women in pregnancy. Uncontrolled diabetes can have serious impact on the Feto-maternal wellbeing. A good obstetrician must be able to screen a pregnant patient for diabetes, guide her about diet and exercise to maintain blood sugar levels, select safe medications for her and maintain follow up to help her have a safe delivery of a healthy baby.

**Suggestion:** Go through the chapter on Diabetes in pregnancy from your textbooks before coming to OPD

Read about low glycemic index food from the internet and make a meal plan for a patient

**Learning objectives:**

You are expected to achieve following learning objectives:

- 1- Screen patient for diabetes in pregnancy
- 2- Explain the oral glucose tolerance test and its interpretation to the patient
- 3- Plan investigations for women with diabetes
- 4- Outline the management plan
- 5- Counsel women regarding blood sugar control, diet and exercise 6- Maintain follow up of patient

**How to achieve the Learning objective?**

You will frequently encounter pregnant women with diabetes in maternity ward as well as OPDs.

Maternity ward provides the best learning opportunity as you can follow the patient during admission and learn about investigations, treatments and their effect on pregnancy

**Here are a few suggestions to gain maximum learning:**

**a-**Bring your examination kit with you in maternity ward

**b-**Build good rapport with your patient, guide her about diet and exercise

**c-**Ask the nursing staff to show you how to check blood sugar levels using glucometer. Learn to do this yourself.

**d-**Watch how insulin is stored and how it is injected. In wards, you will get opportunity to see different insulin preparations. Learn how to inject insulin subcutaneously

**e-**Present your case during ward rounds and make notes of areas you need to work on

**Skills you need to achieve in maternity ward:**

- 1-Calculate Body mass index (BMI) of your patient
- 2-Check blood sugar level with glucometer
- 3-Prepare and inject subcutaneous dose of insulin
- 4-Determine symphysis fundal height, lie, presentation of fetus and assess liquor volume
- 5-Interpret oral glucose tolerance test report
- 6-Interpret obstetric ultrasound report
- 7-Perform and comment on CTG
- 8-Monitor labour using Partograph
- 9-Perform maneuvers for shoulder dystocia on mannequin

**Formative assessment:**

You will be expected to present your case during ward round

Your facilitator will discuss the history, investigations planned and management options with you and guide you further

**Summative Assessment:**

This topic is assessed as SAQ, MCQ, OSPE and as a long case. You are expected to be competent in screening patient for diabetes, doing examination and in interpreting investigation. You are also expected to have a sound theoretical knowledge of management of the condition in pregnancy

#### **4. Hypertensive disorders in pregnancy**

It is the common medical disorder we will encounter in pregnant patients in Obstetric OPD and emergency ward. Learning of this topic already we have started from third year and fourth year to get theoretical knowledge of it through lectures which continuous in final year. We will assist you in depth learning of knowledge and skill in clinical rotation in maternity ward by teaching ward rounds, Case presentation and Case based discussion and eclampsia drills.

**Suggestion:**

Revise and refresh your knowledge of normal physiological changes in pregnancy and pathophysiology of hypertension in pregnancy

**Learning Outcomes:**

1. Categorize a hypertensive patient in pregnancy according to standard classification
2. Identify women at risk of hypertensive disorders of pregnancy and how and when to start prophylactic treatment.
3. Differentiate between gestational hypertension, pre-eclampsia and eclampsia.
4. Diagnosis and identify fetal and maternal complications of gestational hypertension, pre-eclampsia and eclampsia

5. Investigate gestational hypertension and pre-eclampsia.
6. Treatment of gestational hypertension and critically appraise the drugs used in the
7. Management of pre-eclampsia.
8. Emergency management of pre-eclampsia and eclampsia

### **How to achieve learning outcomes?**

You will learn this topic in Maternity OPD and in wards.

Come in OPD well prepared by getting knowledge by reading your textbook Obstetric by Ten Teachers 20<sup>th</sup> edition and NICE guidelines on management of hypertensive disorders of pregnancy. In OPD, take history try to identify women at high risk of hypertension in pregnancy. Ask about symptoms of hypertension and get detailed history and note on your history book.

Make differential diagnosis

1...

2...

3....

Make a provisional diagnosis

See what medications are giving to these patients

Make Follow up plan keeping in mind its maternal and fetal complications

Make plan of delivery

Postpartum plan

Plan for next delivery prophylactic management

### **You are required to learn following Skills**

1. Measure B.P using mercury sphygmomanometer
2. How to perform urine dip stick test and its interpretation?
3. Perform abdominal examination for fetal assessment
4. Assist and how to check patellar reflexes and clonus
5. How to check pedal edema?
6. Observe ultrasound of the patient and umbilical artery Doppler waveforms
7. How to perform cardiotocography for fetal assessment.
8. Interpret following investigations
  - Renal function tests
  - Liver function tests
  - Coagulation tests
9. **Counselling** of patient regarding maternal and fetal complications of pre-eclampsia and eclampsia
10. Analyze the ethical issues relevant to delivery of a baby for maternal versus fetal safety

### **Formative Assessment:**

You will be assessed in OPD by 10 to 20 minutes exercise Mini CEX

Clinical Case Presentation

Case Based Discussion

Skill drills of management of eclampsia

### **Summative Assessment**

Knowledge by MCQ and SAQs

Skill and Attitude by long case and OSPE

## 5. Fetal growth abnormalities

Sometimes you encounter pregnant women with babies who are either small for expected gestational age or large for expected gestational age. These fetal growth abnormalities may be simply due to mistaken date of last menstrual period leading to wrong calculation of gestation or these may actually represent babies with underlying problems. Your job as an Obstetrician is to identify which babies are having underlying pathological problem, investigate them further and monitor their pregnancies to ensure best possible fetal outcome

### **Suggestion:**

Learn to calculate gestational age correctly with menstrual calendar, dating scan as well as second trimester scan

In IVF, Date of embryo transfer is used to calculate EDD

Follow these guidelines for calculating gestational age from ultrasound:

1. Crown rump length (CRL) of 10 mm (7 weeks)
2. When CRL > 84 mm, use Bi parietal diameter (BPD) or head circumference (HC)
3. Second trimester = Multiple parameters are superior to single parameter

### **Learning objectives:**

You are expected to achieve following learning objectives:

1. Determine gestational age accurately
2. Identify fetus which is large or small for gestational age
3. Enlist causes for small and large for gestational age babies
4. Enlist investigations to confirm growth abnormalities and for elucidating underlying cause
5. Manage a case of small for gestational age pregnancy based on Doppler of umbilical artery and biophysical profile
6. Manage a case of large for gestational age pregnancy

### **How to achieve the Learning objective?**

You are going to learn this topic best by going to OPDs as well as maternity ward. Be well prepared before going.

### **Here are a few suggestions to gain maximum learning:**

**a-**Interpret ultrasounds of all obstetric patients you encounter to see if growth is appropriate for gestation

**b-**Use flow charts in NICE guidelines to formulate evidence-based treatment for the small for gestational age fetuses

### **You are expected to acquire following skills:**

- A. Take a detailed history to elucidate cause for growth abnormalities
- B. Assist/ perform cardiotocography and interpret it
- C. Communicate with the patient with explanation of the condition, management and neonatal problems
- D. Monitor labour and maintain partograph
- E. Demonstrate shoulder dystocia for large for dates baby on mannequin

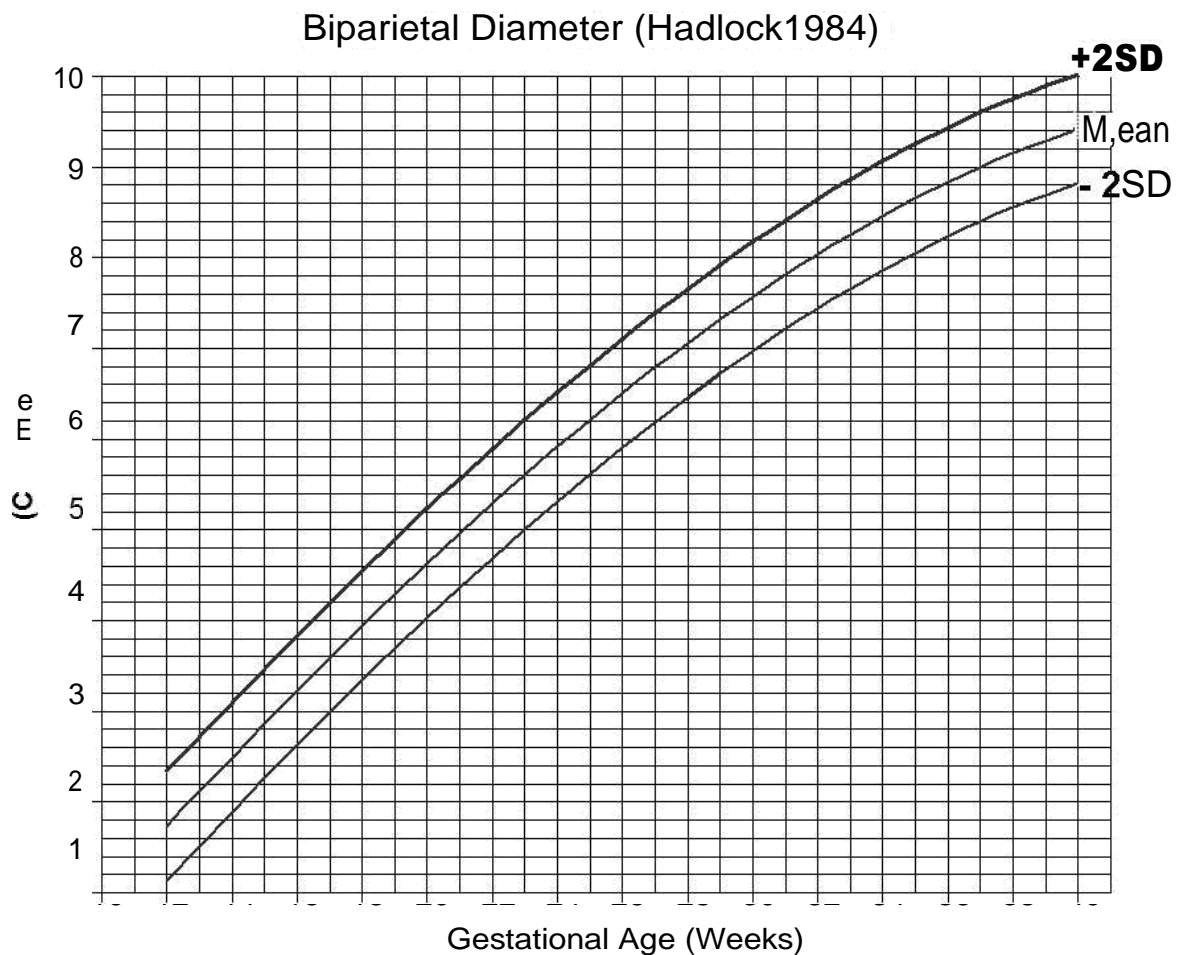
### Formative assessment:

You will be expected to present the case on your maternity ward rotations and show how you interpreted growth of the fetus for gestation.

Your facilitator will discuss the history, investigations planned and management options with you and guide you further

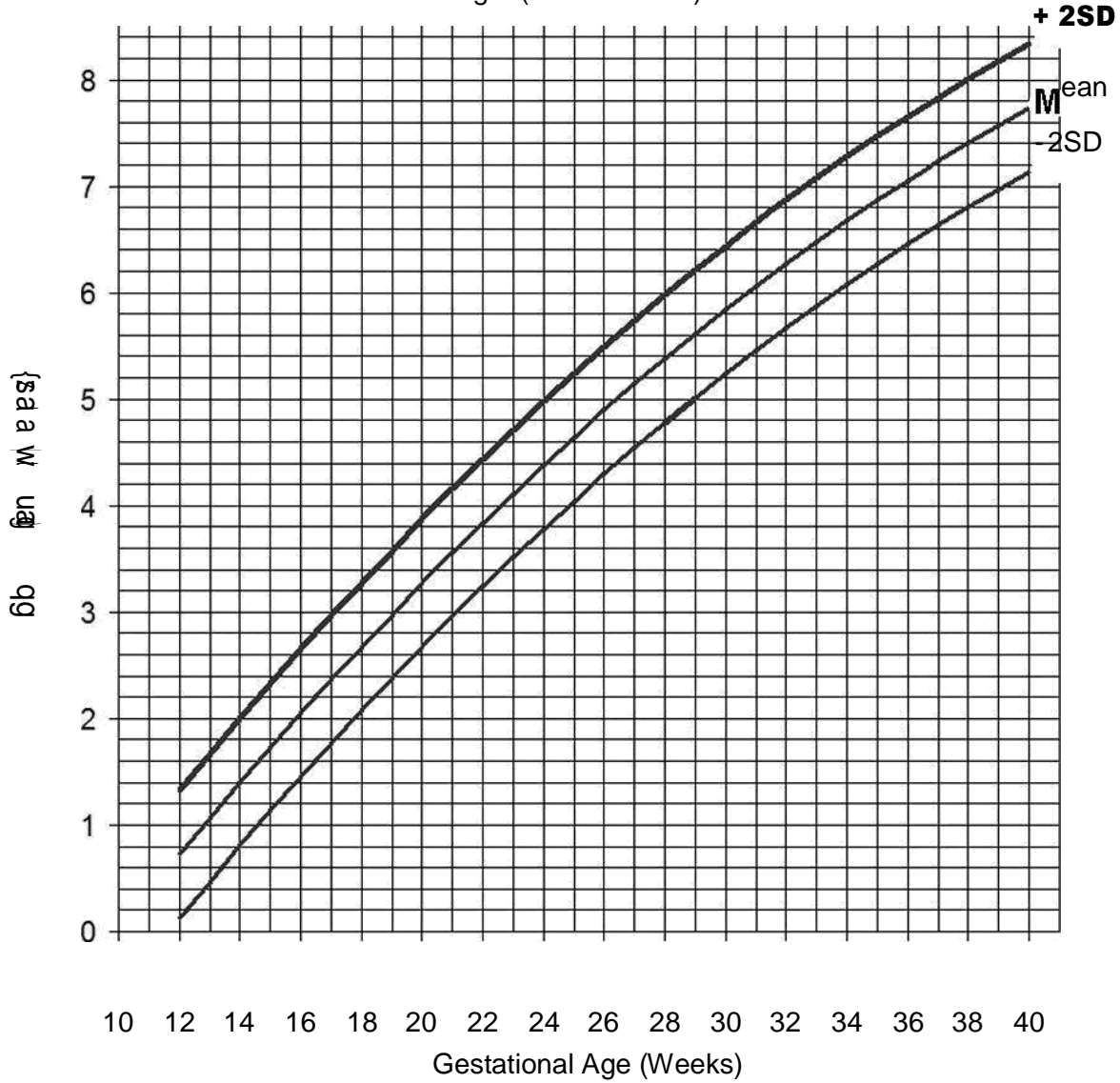
### Summative Assessment:

1. This topic is assessed as SAQ, MCQ and as a long case/ OSPE.
2. You need to be competent in history taking, examination and interpretation of investigations.
3. We have given expected fetal growth charts based on bi parietal diameter, femur length, abdominal circumference and the expected fetal weight at different gestations. Use these charts with ultrasound of fetus to assess if the growth is appropriate for gestation
4. You should have a strong theoretical knowledge of cause and management of both small and large for dates babies.

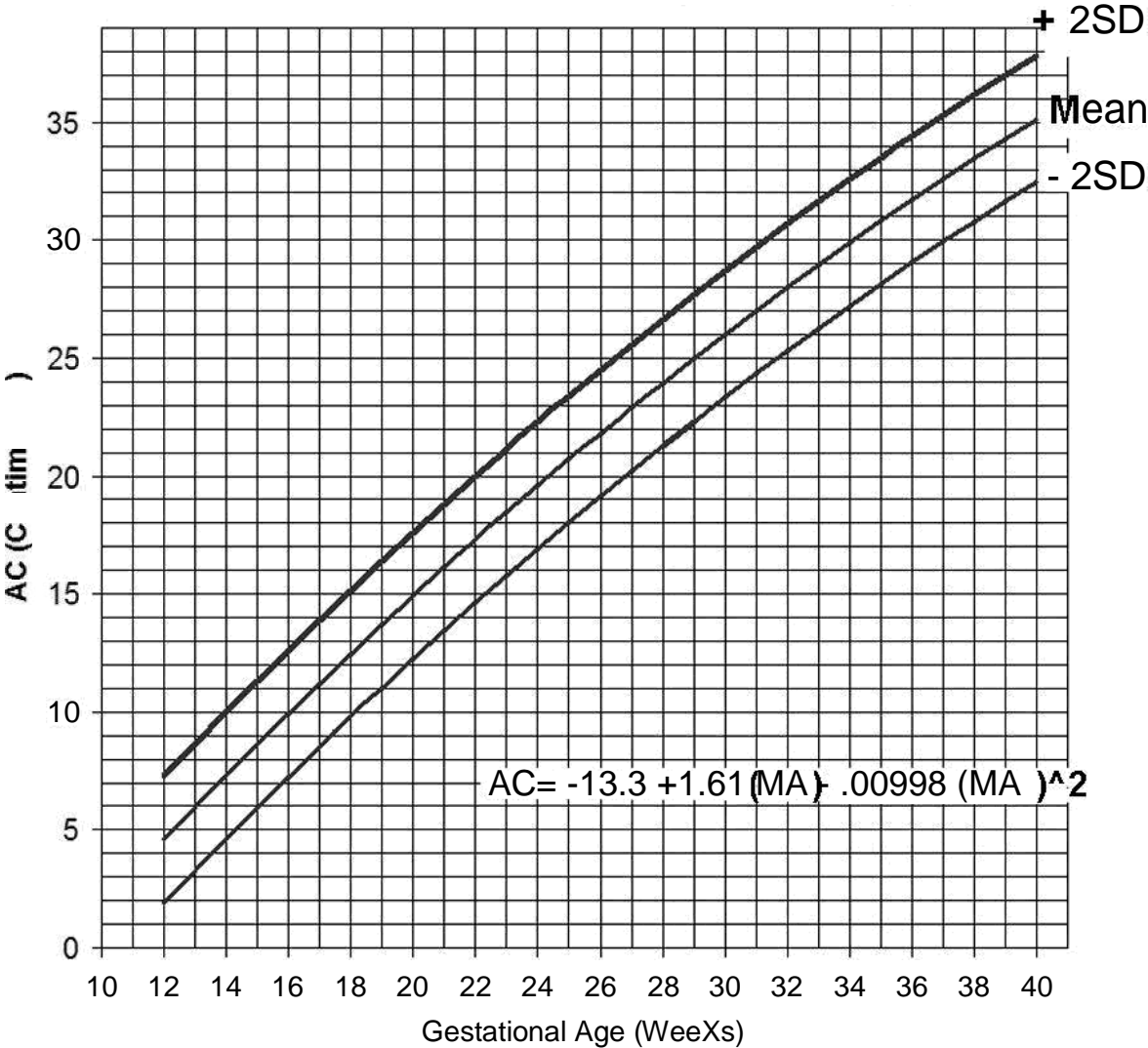




Femur Length (Hadlock1984)



Abdominal Circumference (Hadlock1984)



### Estimated Fetal Weight (Hadlock 1991)



Web reference for the graphs :

<http://perinatology.com/calculators/Estimation%20of%20Fetal%20Weight%20and%20Age.htm>

## 6 MULTIPLE PREGNANCY

Multiple pregnancies now constitute approximately 3% of live births. Complications and maternal risks in multiple pregnancies are higher than for singleton pregnancies.

### **Learning objectives:**

You are expected to achieve following learning objectives:

1. Understand classification of multiple pregnancies
2. Identify risk factors for multiple pregnancies and why prevalence is increasing
3. understand the increased complications that occur in multiple pregnancies
4. Perform clinical examination and interpret ultrasound findings in patients with multiple pregnancies
5. Formulate a management plan for antenatal care and delivery of women with multiple pregnancies

### **How to achieve the Learning objectives?**

You are going to learn this topic best by attending antenatal clinics on Monday and Thursday. Detailed history taking, clinical examination and case discussions will also be carried out on admitted patients in maternity ward.

### **Instructional strategies:**

Interactive lectures, SGD, Case presentation/OPD, Self-directed Learning

### **In OPD and ward, you are expected to acquire following skills:**

A-Take a detailed history & note in your structured history notebooks

B-Assist/ perform:

1. General physical examination
2. Obstetrical abdominal examination
3. Observe obstetrical ultrasound

C- Counsel patient about condition, treatment options and complications.

### **Formative assessment:**

10-20 minutes mini CEX in OPD and wards

Your facilitator will discuss the history, investigations planned and management options with you and guide you further

### **Summative Assessment:**

SAQ, MCQ, OSCE, Long case.

## 7 LIQUOR ABNORMALITIES

Amniotic fluid serves a vital function in protecting the developing baby from pressure or trauma. Too little (Oligohydramnios) or excess (polyhydramnios) of amniotic fluid leads to multiple complications.

Revise the production and functions of amniotic fluid for better learning.

### **Learning objectives:**

You are expected to achieve following learning objectives:

1. Understand physiology of amniotic fluid
2. Identify causes for liquor abnormalities
3. Enlist complications that occur in pregnancies with liquor abnormalities
4. Diagnose a case with liquor abnormalities on the basis of history, clinical examination and ultrasound findings
5. Formulate a management plan for antenatal care and delivery of women with liquor abnormalities

### **How to achieve the Learning objectives?**

You are going to learn this topic best by attending antenatal clinics on. Detailed history taking, clinical examination and case discussions will also be carried out on admitted patients in maternity ward.

### **Instructional strategies:**

Interactive lectures, SGD, Case presentation/OPD, Self-directed Learning

### **In OPD and ward, you are expected to acquire following skills:**

A-Take a detailed history & note in your structured history notebooks

B-Assist/ perform:

1. General physical examination
2. Obstetrical abdominal examination
3. Observe obstetrical ultrasound

C- Counsel patient about diagnosis, treatment options and complications.

D- Counsel a patient of polyhydramnios regarding her discomfort with empathy

### **Formative assessment:**

10 to 20 minutes mini CEX in OPD and wards

Your facilitator will discuss the history, investigations planned and management options with you and guide you further

**Summative Assessment:** SAQ, MCQ, OSCE, Long case.

## 8 FETAL MONITORING

### **Learning objectives:**

You are expected to achieve following learning objectives:

1. Enlist the various methods (FKC charting, CTG, USG, Doppler) of antepartum and intrapartum fetal monitoring
2. Understand the principles and benefits of various methods of fetal monitoring
3. Enlist the uses of ultrasound in antepartum fetal monitoring
4. Perform and interpret normal and abnormal CTG
5. Interpret Biophysical profile
6. Interpret Doppler ultrasound in monitoring and guiding the management of high-risk pregnancies

### **How to achieve the Learning objectives?**

You are going to learn this topic best by attending maternity and labor wards.

### **Instructional strategies:**

Interactive lectures, SGD, Case presentation, Self-directed Learning

### **In maternity and labor ward, you are expected to acquire following skills:**

A- Review the ultrasound reports

B-Assist/ perform:

1. General physical examination
2. Obstetrical abdominal examination
3. CTG

C- Counsel patient about need for fetal monitoring and effectiveness of different methodologies

D- Complete a partograph of laboring patient in labor ward

### **Formative assessment:**

2 minutes mini CEX in OPD and wards DOPS

Your facilitator will discuss the indications, interpretation and management options with you and guide you further

### **Summative Assessment:**

SAQ, MCQ, OSCE

## 9. Pre-Term labour

This is common problem you will encounter in OPD and Emergency ward in pregnant patients and its timely management will reduce the incidence of preterm birth which is perinatal health problem worldwide. We will give you a theoretical knowledge of the subject through lectures and we will assist you in learning the topic while you are in clinical ward rotation.

**Suggestion:** Revise the normal physiology of labour at term to understand the risk and pathophysiology of preterm labour.

### Learning Objective:

1. What is preterm labour and to differentiate between suspected, diagnosed and established preterm labour
2. Identify risk factors for preterm labour
3. Enlist causes of preterm labour
4. Clinical assessment of preterm labour
5. How to investigate to reach diagnosis
6. Outline management plan

### How to achieve the Learning Objectives?

You are going to learn this topic best by seeing patients in Obstetric OPD and in clinical wards during your clinical rotation of maternity ward.

Few suggestions for you to gain your interest and to get maximum learning.

Before coming to ward, get your knowledge by reading topic from Obstetrics by Ten Teachers 20<sup>th</sup> edition and NICE Guidelines on preterm labour. In OPD

1. Take detailed history of the patient and note in history book given. Identify risk factors in patient
2. Do your clinical assessment

3. Make differential diagnosis
  - a.....
  - b.....
  - c.....
4. Interpretation of investigations (Dating Scan, ultrasound assessment of cervical length, fetal fibronectin testing)

#### **Assist/Perform**

1. Abdominal examination for uterine contractions for diagnosis of labour
2. Speculum examination (note: We have models for practicing this skill in skill lab at CMH LMC)
3. Digital Vaginal examination
4. Observe ultrasound and cervical length assessment
5. Magnesium sulphate administration with monitoring
6. Oral administration of Nifedipine with blood pressure monitoring
7. **Communicate** with neonatologist and patient with explanation of in utero transfer and need for NICU
8. Counselling about health problems for premature neonates

#### **Formative Assessment**

You will undergo 2 minutes mini CEX during your rotation in OPD.

Your facilitator will discuss the history, investigations and management options

#### **Summative Assessment**

Knowledge by MCQS and SAQS

Skill by OSPE and Long Case



## **10- Infections in Pregnancy:**

Viral and bacterial infections are very common in pregnancy and can have significant consequences for both the pregnant mother and her infant. You will get theoretical knowledge of the commonly encountered and important infections, both bacterial and viral, that affect pregnancy.

### **Suggestion:**

Come with well-prepared knowledge of epidemiology of these infections in addition to the screening and diagnostic test used in routine practice

### **Learning Outcomes:**

At the end of Clinical ward rotation, students will be able to

1. Enlist infections causing congenital abnormalities
2. What are the screening methods for these infections?
3. Which investigations are included in routine pregnancy screening?
4. What are principles of their management?
5. What are the consequences of perinatal infections on the developing fetus?

### **How to achieve learning outcomes?**

First get theoretical knowledge of subject from Gynecology by Ten Teachers 20<sup>th</sup> edition and look for images of infections on Internet.

**In OPD**, take detailed history to identify risk factors, clinical features.

Make differential diagnosis

1.....

2.....

3.....

You will learn about Interpretation of investigations (Screening methods) and their management

**Skill:** How to take high vaginal swabs

### **Counselling**

1. Explain the risk of congenital anomalies with infections
2. Explain the consequences of perinatal infections on the developing fetus

### **Formative Assessment:**

You will undergo 2 minutes mini CEX during your rotation in OPD.

Your facilitator will discuss the history, investigations and management options

### **Summative Assessment**

Knowledge by MCQS and SAQS

Skill by OSPE and Long Case



**You are expected to acquire following skills:**

A-Take a detailed menstrual history & note in your structured history notebooks

B-Perform obstetric examination

C-Perform a pelvic examination and determine Bishop score

(Note: We have models for practicing these skills in skill lab at CMH LMC) D-Describe induction of labour process

E-Counsel the patient about postdates pregnancy and induction of labour

**Formative assessment:**

You will present your patient's case including Partograph during ward rotation. It should be maintained in your structured history notebooks.

Your facilitator will discuss management options with you and guide you further

**Summative Assessment:**

This topic is assessed as SAQ, MCQ and as a long case. So, you need to have a strong theoretical knowledge of the subject as well as practical skills described above

**12- The Labour Ward**

We are sure you are looking forward to this part of Obs & Gynae rotation with great excitement. Most students are very excited to observe delivery of a baby. If you are proactive and willing to learn, you will gain a lot from this rotation

**Suggestion:**

- 1- Review the three stages of labour from text books
- 2-Bring your Pantographs (they are attached at end of your history notebooks)
- 3-Wear your white overalls and closed shoes. Girls should tie hair
- 4-Follow your facilitator's guidance as ethics are most important in labour ward
- 5-You must follow the case you are monitoring till delivery so that you know how labour progresses, how it may deviate from normal and how decisions are made for fetomaternal safety

**Learning objectives:**

You are expected to achieve following learning objectives:

- 1-Diagnose labour with history and examination
- 2-Perform fetal and maternal monitoring in labour
- 3-Maintain and interpret Labour care guide.
- 4-Perform normal vaginal delivery under supervision
- 5-Explain steps of neonatal care of healthy new born

## **How to achieve the Learning objective?**

Please ensure you do not miss the ward rotations. You should try to stay in labour ward with the duty registrars on 24 hours' duty in order to gain maximum exposure to patients and have a good opportunity to assist and perform delivery

## **You are expected to acquire following skills:**

A-Take a detailed menstrual history & note in your structured history notebooks

B-Assist/ perform:

- 1-Perform and interpret CTG
- 2-Monitor labour
- 3-Make and interpret Labour care Guide.
- 4-Explain mechanism of normal labour using mannequin in skill lab at CMHLMC
- 5-Perform normal vaginal delivery under supervision
- 6-Assist/perform under supervision episiotomy and its repair
- 7-Assist mother in initiation of breast feeding

C- Counsel patients about postpartum care including breastfeeding and lactation

### **Formative assessment:**

Your Labour care Guide will be reviewed by your facilitator in one-on-one sessions

DOPS: Conduct of normal vaginal delivery, CTG, Episiotomy, Postpartum counseling for breastfeeding

### **Summative Assessment:**

This topic is assessed as SAQ, MCQ and as an OSPE station.

## **13.Obstetric procedures**

**In your Obstetric ward rotations. We will ensure you have ample opportunity to learn about the common obstetric procedures. Your facilitator can help you practice these procedures in skill lab on mannequin. Be proactive!**

Obstetric procedure list for undergraduates:

1. Episiotomy and its repair
2. Assisted vaginal delivery (AVD), both Forceps and vacuum
3. Caesarean section

### **Learning objectives:**

You are expected to achieve following learning objectives:

1. Enlist indications for these procedures
2. Describe the steps of these procedures
3. Enlist their complications

## How to achieve the Learning objective?

**Episiotomy** is best learned in the labour wards. Try to observe and assist as many deliveries as possible and see how episiotomy is performed and how it is repaired. Develop a sound knowledge of the procedure. You are expected to perform and repair episiotomy under supervision.

**For AVD**, you may get a chance to observe in labour wards. Your facilitator will teach you how to perform these on mannequin. Practice this procedure many times as its part of your assessment and an important obstetric skill

## Acronyms

### **Vacuum**

#### **delivery:**

Memorize the following acronym **ABCDEFGHIJ** to learn about Vacuum delivery steps:

**A=** Address the patient and discuss the risks and benefits of operative vaginal delivery.

Assistants should be on hand for delivery and for neonatal resuscitation

Analgesics should be administered, if needed.

**B=**Bladder should be emptied to avoid risk of injury.

**C=**Cervix should be completely dilated.

**D=**Determine position of the fetal head. Consider shoulder dystocia (HELPERR mnemonic)

**E=**Equipment should be checked to ensure adequate suction.

**F=**Flexion point. This is where center of cup should be

**G=**Gentle traction at right angles to the plane of the cup during the contraction

**H=**Halt traction when there are three disengagements of the vacuum (or “pop-offs”), more than 20 minutes have elapsed, or three consecutive pulls result in no progress or delivery.

**I=**Incision for episiotomy when perineum distends

**J=**Jaw is visible then remove vacuum cup

### **Forceps delivery**

Memorize the following acronym **ABCDEFGHIJ** to learn about Forceps delivery steps:

**A=** Address the patient and discuss the risks and benefits of operative vaginal delivery.

Assistants should be on hand for delivery and for neonatal resuscitation

Analgesics should be administered, if needed.

**B=**Bladder should be emptied to avoid risk of injury.

**C**=Cervix should be completely dilated.

**D**=Determine position of the fetal head. Consider shoulder dystocia (HELPERR mnemonic)

**E**=Equipment should be checked to ensure adequate suction.

**F**=Forceps ready. Left blade, left hand, left side of patient

Right blade, right hand, right side of patient

Think about **Position for Safety**:

**P**osterior fontanelle midway between shanks and 1 cm above plane of shanks

**F**enestration should not admit more than tip of finger

**S**utures (lambdoid) should be above and equidistant from upper surface of each blade

**G**=Gentle traction (Pajot maneuver)

**H**=Handle elevated to follow J shaped pelvic curve

**I**=Incision for episiotomy when perineum distends

**J**=Jaw is visible then remove forceps

### **Caesarean section:**

You will observe caesarean section when you are on your operation theatre rotation. You can shadow our trainees and observe how C sections are performed. Your theoretical knowledge should be very good about the procedure before going to OT. Make yourself familiar with the instruments used in C section. You will get a chance to assist C sections. Be proactive! The more you take interest, the more you will learn

### **Formative assessment:**

You will undergo DOPS when you scrub up in the OTs and as you assist the C sections. This will help your facilitator give you formative feedback and identify areas where you do well and where you need to do better.

The ward assessment will include assessment of your knowledge about instruments used in C section as well as the steps of C section

### **Summative Assessment:**

These topics are assessed as OSPE interactive stations. So you need to have a strong theoretical as well as practical skills to pass the exam

## 14.Puerperium

This is very important time for mother and should be addressed to promote breast feeding in our country. This time is almost ignored by doctors and paramedical staff with feeling that patient has been delivered safely with healthy baby. You will start management of these patients in post-natal ward and then you will interact these patients in Gynaecology OPD for follow up.

You will get theoretical knowledge of subject through lectures and will assist you in clinical ward rotation in maternity ward and OPD.

Suggestions:

Come well prepared in ward with baseline knowledge of puerperium, normal physiological changes occurring in puerperium

Learning Outcomes:

At the end of clinical rotation, student should be able to

- a-Describe what are normal physiological changes of puerperium
- b-Enlist the complications of puerperium
- c-Define lactational amenorrhoea
- d-Explain medical and psychiatric disorders of puerperium
- e- Describe puerperal pyrexia, postpartum pyrexia
- f-Compare the benefits of breast feeding and bottle feeding
- g-Manage postpartum amenorrhoea, lactational problems, medical and psychiatric disorders, puerperal pyrexia, postpartum pyrexia on the basis of its etiology

### How to achieve learning Outcomes?

You will get knowledge of subject from text book Obstetrics by Ten Teachers 20th edition.

In post-natal ward round, get history of patients of patient and identify risk factors for any complication of puerperium

Learn to make **discharge Performa** which should include encouragement of breast feeding, Contraception plan and counsel about symptoms of postpartum depression.

Follow up after 6 weeks to confirm contraception, breast feeding and to identify any risk of postpartum depression.

Skills in OPD and Postnatal ward:

- 1.Counsel a woman on exclusive breast feeding.
- 2-Counsel a woman regarding postpartum contraception
- 3-Prepare discharge/ follow up proforma of patient

### Formative Assessment:

You will be assessed in postnatal wards by 2 minutes exercise Mini CEX and your counselling skills will be checked (breastfeeding, contraception, maternal supplement)

### Summative assessment:

Skill by OSPE (Counselling on breastfeeding)  
Knowledge by MCQS and SAQS