



MCAI | Maternal & Childhealth
Advocacy International

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Objective Structured Clinical Examination (OSCE) in Obstetric Anatomy, and Basic Skills for Liberian Obstetric Clinicians in training

Background

Assessment of the Obstetric Clinicians will be by the OSCE method. This is an acronym for Objective Structured Clinical Examination, an assessment method that is based on objective testing and direct observation of student performance during planned clinical encounters (also called interactions or test stations). Studies have demonstrated that the OSCE is an effective tool for evaluating areas most critical to performance of health care professionals: the ability to obtain information from a patient, establish rapport and communicate, and interpret data and solve problems. The OSCE includes several "stations" in which examinees are expected to perform specific clinical tasks or answer questions within a specified time period (15 min for this examination). To complete the examination, students rotate through a series of 5 stations.

For this examination, the OSCE stations are based on the examiners questioning the students on both anatomical and clinical aspects of the scenario and marking them against an agreed criteria using a scoring sheet. Evaluation criteria are based on course objectives and student learning activities.

Format

The sessions are 15 minutes each. The candidates will know what they will be examined on prior the OSCE. The examiner will record the score; the pass mark is 40%. There are 5 x 15 minutes station, each covering a different area of obstetric practice. Scoring for each point:

- Full mark = answered correctly;
- Part mark = performed inadequately and/or partly incorrect;
- 0 = Incorrect /unsafe practice

Areas

Surgical Equipment and Practice

Assessment of the candidate's knowledge of:

- Putting on gown and gloves
- Surgical equipment
- Principles of swab count

Equipment

- Caesarean section tray, gloves and gown.

Instructions to the candidate

This station assesses your knowledge of the kit used to carry out a caesarean section (CS). You will also be asked to talk through some of the equipment used during the procedure. You will be expected to put on gown and gloves in front of the examiners and discuss the concept of a 'swab count'. The examiners will ask you a series of questions.

Opening and Closing the Abdomen

Assessment of the candidate's knowledge of:

- Abdominal wall anatomy.
- Knowledge of kit needed to open and close the anterior abdominal wall (sutures, blades).
- Ability to demonstrate use of sutures and skin closure including knot tying.

Equipment

- Sutures, scalpel, fake skin (eg leather, animal).

Instructions to the candidate

This station aims to assess your knowledge of the anterior abdominal wall. You will be asked to talk through some of the anatomical layers that are opened and closed during the procedure. You will be expected to demonstrate how to use the scalpel, sutures, closure of the layers on fake skin and knot tying.

Uterus

Areas to examine

- Anatomy - assessment of the candidate's knowledge on anatomy of the uterus.
- Clinical aspects – assessment of the uterine aspects of caesarean section including lower segment incision and surgical repair.

Equipment

- Non labelled diagram of the front and back of the uterus, tubes and ovaries (pregnant and non pregnant).

Instructions to the candidate

This station assesses your knowledge of the anatomy of the uterus. You will be given a picture of a uterus and asked to describe the key features. You will also be asked to talk through some of the surgical anatomy identified at a caesarean section.

Bony Pelvis

Areas to examine

- Anatomy - assessment of the candidate's knowledge on anatomy of the bony pelvis.
- Clinical aspects – understanding the context of the bony pelvis in relation to normal and abnormal assessment of fetal descent

Equipment

- Bony pelvis

Instructions to the candidate

This station aims to assess your anatomical knowledge of the bony pelvis anatomy. You will also be asked to talk through some major landmarks using a plastic pelvis. The examiners will ask you a series of questions relating to fetal descent through the pelvis and how you would assess this applying knowledge of the pelvic anatomy.

Vulva and Vagina

Areas to examine

- Assessment of the candidate's knowledge of the vulva and vagina.
- Clinical assessment – outline vaginal examination finding in relation to labour (cervical dilatation, station, effacement, descent of the presenting part, caput succedaneum, moulding and position)

Equipment

- Unlabelled picture of the vulva. Pelvic manikin

Instructions to the candidate

This station aims to assess your anatomical knowledge of the vulva and vagina. Based on this knowledge you will be asked to describe the method of assessing foetal progress during labour on vaginal examination. You will be asked to demonstrate a repair of episiotomy and discuss the different anatomical structures that require repair.

David Nunns, Consultant Gynaecologist

Jenny Bailey (MMed Sci/Clin Ed, BN, DANS, RM RGN), Midwife teacher.


Maureen Raynor, Midwife teacher

2013

Johan Creemers Consultant Gynaecologist

2014

OSCE in Obstetric Anatomy for Liberian Obstetric Clinicians.	Max Score	Mark awarded
Surgical Equipment and Practice		
Able to name all the instruments used during a CS and comment on each instruments use, advantages and disadvantages. Examples include;	5	5
- Retractor		
- Clamps (large and small)		
- Scissors (suture and cutting)		
- Use of diathermy		
Ability to put on a surgical gown and sterile gloves correctly	2	2
Carry out a simulated swab, instrument and needle count	2	1
Discuss documentation in the notes following a CS	2	2
Demonstrates ability to handle instruments	2	2
Demonstrate skin antiseptic skin preparation prior to surgery	2	2
Understand what to do in the event of a missing swab	2	1
Understands the importance of communication skills with other members of the team	3	2
Subtotal	20	17
Opening and closing the abdomen		
Outlines the different anatomical layers of the anterior abdominal wall	6	6
<i>There are 6 different layers</i>		
<i>1-skin (epidermis + dermis)</i>		
<i>2-subcutaneous layer</i>		
<i>3-fascia</i>		
<i>4-rectus muscle separation</i>		
<i>5-peritoneum lining the inside of the abdomen</i>		
<i>6-bladder flap</i>		
Discusses the difference between the midline and transverse incisions	2	1
Discuss documentation in the notes following a CS	2	2
Demonstrate mock closure of the skin. Assess ability to hold needle holder, needle, tissue handling and knot tying.	5	4
Discuss different types of sutures available at a CS	2	2
Discuss method of controlling haemorrhage	4	1
Outlines the surgical steps of abdominal entry at CS detailing anatomical landmarks	6	5
Subtotal	27	21
Uterus		
ANATOMICAL DESCRIPTION		
External uterine anatomy – front/back, fundus, cervix, round ligaments, etc	7	6
Internal uterine anatomy – myometrium and endometrium	2	2
Blood supply to the uterus	4	0
Understands relationship to other organs in the pelvic e.g. bladder, bowel	5	4
Understands the anatomical differences between the pregnant and non-pregnant uterus – lower segment development	3	1
CAESAREAN SECTION ASPECTS		
Outlines the surgical steps of uterine entry at CS detailing anatomical landmarks	6	6
Outlines the technique of surgical repair of the uterus following delivery of the baby discussing anatomical landmarks	6	6
Subtotal	33	25

Bony Pelvis		
ANATOMICAL DESCRIPTION		
Outlines the major anatomical landmarks of the pelvis (inlet, outlet, ischial spines, rami, coccyx, etc)	5	5
Understands relationship of the bony pelvis to main organs in the pelvis eg bladder, bowel		
Pelvic floor muscles	2	0
bowel	2	2
bladder	2	2
uterus	2	2
OBSTETRIC ASPECTS		
Outlines the normal fetal passage through the pelvis and relationship to the bony pelvis	5	5
Demonstrates understanding of the importance of the bony pelvis in context of vaginal assessment of the presenting part (discussion of ischial spines)	2	1
Subtotal	20	17
Vulva and Vagina		
ANATOMICAL DESCRIPTION		
Vulva (use picture)	4	4
Vagina	2	2
Understands changes in pregnancy	4	2
Cervix – normal an changes in labour	4	4
VAGINAL EXAMINATION		
Asepsis understood	2	2
Patient considerations – counselling	2	2
Understands method of assessment of progress in labour (Bishop’s score)	5	4
EPISIOTOMY		
Indication and when to perform	1	1
How to perform (angle)	1	1
Methods of repair	4	3
Knowledge of anatomical areas to be repaired	4	3
Complications	3	2
How to counsel the patient	2	2
Documentation in notes	2	2
Subtotal	40	34
Total	140	114
Result %		81
Passed / failed		Passed
Examinator comments		
Place, date: C.B. Dunbar Maternity Hospital, Gbarnga, Liberia. 20 January 2014		Signature
Candidate: Hannah Gibson		
Examinator 1: Elizabeth McMillan, Consultant gynaecologist, United Kingdom		
Examinator 2: Johan Creemers, Consultant Gynaecoogist, The Netherlands		