

B2A Training Programme



Oral Urgent Treatment

Training Manual

2019

Introduction

This training manual is to guide you through the 9 days of training. It will help you to understand how the Clinical Officers (CO) progress, as well as highlighting the Learning Objectives to be taught each day. There are also some top tips from our experienced trainers on how to teach these key skills.

As a training organisation we want the best possible education for our trainees and ensure that they are able to meet the goals of Bridge2Aid (B2A) and the Tanzanian Government in providing Oral Urgent Treatment (OUT) and Oral Health Education & Promotion to their communities. To do this we want to teach to a high standard and deliver training in as consistent a way as possible.

During the training you will be a role model for the COs as you go from teacher to coach to mentor as the CO progresses.

Each CO will have a Learning Objectives document for you to sign daily. Any objective that hasn't been met can be highlighted for review the following day in the box provided.

They will have already completed the Day One Theory Training when you meet them. The COs move towards independent practice throughout the 9 days, as you transfer skills through demonstration and other training methods.

Each CO will learn in a different way, and at a different rate, so we want to be flexible in the way we teach and have an awareness of each trainee's needs.

In the Training Manual you will find:

1. **Bridge2Aid Guidelines for Clinical Practice on Dental Training Programme (DTP).** This highlights the ways in which we ask you to standardise your clinical practice and training. The reason we ask you to follow these Guidelines is to make it easier for the CO to learn.

2. **Daily Training Guide.** This includes a summary of the theory training given each day, the key focus and skills to be taught (Learning Objectives) as well as the tips for training. Your Site Clinical Lead (SCL) will use this at the beginning of each day to focus the training. We also use seminars, which may to be given by any of the UK team to support the theory training. (See Appendix 1 Page 21)

3. **Appendices**
 - **Appendix 1** - Seminars
 - **Appendix 2** – Training Box – list of available training materials
 - **Appendix 3** – Bridge2Aid Acronyms
 - **Appendix 4** – Medical History and its relevance in Tanzania

Bridge2Aid Guidelines for Clinical Practice on DTP

1. **Go through the Learning Objectives Document for the Day with your Clinical Officer**
2. **Wash your hands** at the beginning and end of each session, and use alcohol rub between patients
3. **Greeting Patients**
 - a. Call your patient by number, and be sure their number is crossed off the list. Be sure to check with CO, SCL or Site administrator if you have any questions on this process as it is vital to the smooth running of the clinic
 - b. Ask your CO to introduce both of you to the patient. All patients will be treated with respect, and every effort will be made to maintain confidentiality
 - c. The training dentist fills out paperwork for CO initially, but later in the Programme give the CO the experience of completing their own patient records
4. **History**
 - a. History of presenting complaint – the *minimum* information should be:
 - i) What? - Pain; swelling; loose tooth/teeth; bleeding etc.
 - ii) Where? - Which quadrant (Q1; Q2; Q3; Q4; Q5; Q6; Q7; Q8)
 - iii) How long?
 - b. MH – laminated sheets on clip boards
5. **Exam:** can be done from in front or behind the patient
 - a. Set up tray for your patient with a mirror and probe
 - b. CO puts on PPE: Essential – masks and gloves
Desirable - White coats or scrubs or apron, closed-toed shoes; glasses;

If the CO is not suitably dressed, inform the SCL who will ask the DDO to intervene if needed
 - c. Ask the CO to explain to the patient that we are going to look at the whole mouth, not just the tooth that is causing pain
 - d. EO – visual exam, check for symmetry, palpate lymph nodes
 - e. IO – soft tissues & tongue, use fingers;
 - f. IO - teeth and periodontal tissues – use mirror; start Q1 and go clockwise Q2, Q3, Q4
 - g. Use FDI notation
 - h. For children you *may* need to go straight to the presenting problem
6. **Diagnosis and Treatment Plan**
 - a. Diagnosis - keep it simple, usually caries; abscess; retained root etc. Usually the patient can identify the tooth causing pain, but please teach your CO how to percuss teeth, to aid diagnosis
 - b. Tooth un-restorable - XLA
 - c. Tooth restorable – explain treatment options and offer referral for fillings if appropriate and available, ensure the patient consents for the proposed treatment plan

- d. Your SCL will confer with the District Dental Officer (DDO) and let you know if scaling and dentures are also treatment options in that region. Any other pathology, please inform the SCL who will liaise with the DDO

7. Local Anaesthetic

Pre-prepared syringes of 2.5mls of Lignocaine are available, with & without adrenaline
Use appropriately based on a patient's Medical History

Maximum Dose: 1) Adults 8-10mls
 2) Children 4-5mls

If your patient requires more anaesthesia please discuss with the Site Clinical Lead

Demonstrate as below:

- a. Check that the needle has been tightened onto the syringe
- b. Infiltration: retract soft tissues with mirror; inject with bevel close to the apex of the tooth (approximately 45 degree angle) - buccal 2mls; palatal 0.5mls;
- c. IDB: palpate external oblique ridge with the thumb (demonstrate technique) and keep thumb there, approach from the pre-molars on the opposite side, insert needle to bone, retract slightly, move syringe across the midline until parallel to the occlusal plane, insert the needle approximately 1 cm and aspirate. Deposit almost 2mls, keep injecting as you retract your needle to anaesthetize the lingual nerve as well (2mls in total).

When giving LA please use your dominant hand only, don't use a left and right hand technique.

- d. Long buccal: retract soft tissues with mirror, infiltrate remaining 0.5mls next to tooth to be extracted, with bevel facing the bone
- e. Palatal: 1cm from the gingival margin, in deeper tissue if possible. Rotate the needle slightly as it is inserted, with the bevel towards the palate, which is helpful to pierce the tissues & prevent splash back. If you do have a Sharps injury please notify SCL immediately
- f. ALL syringes, including partially used ones, complete with needles, should be placed immediately after use into the Sharps bin. NEVER re-sheath needles. NEVER put a syringe back on the tray. If you do have a Sharps injury please notify SCL immediately
- g. Explain to patient what LA feels like, give cautionary advice such as not to bite the lip
In their own clinics the COs will be seeing one patient at a time, which is best clinical practice. However on a busy DTP clinic it is often necessary to numb more than one patient at a time.

8. Admin

- a. Remove gloves and place in clinical waste
- b. Write up Patient Record Card, as per example. These cards will be left at the health centre
- c. Write patient's number on tray liner
- d. Write tooth to be extracted on tray liner (e.g. EXT 16 or EXT 45) to avoid confusion with patient number
- e. Put tray under the table on the black box (these store instruments, stoves, sharps bins etc.)
- f. Get patient to wait (on 'anaesthetic' bench - when available)

9. Reflection on procedure so far

- a. **WWW** - What went well
- b. **EBI** – Even Better If - what could be done differently, by CO and Trainer
- c. Take opportunity to teach – as needed

10. Get next patient in and repeat the process to this point

11. Get your first patient's tray

- a. Get the CO to choose appropriate instruments for the extraction, forceps and elevator and also to place gauze and bite pack as required on the tray
- b. Put the chair in the appropriate position
- c. Call the first patient back in
- d. Don't rush – **it is the Trainer's responsibility to double check the patient's number and tooth to be extracted**
- e. Place PPE

12. Check for anaesthesia:

- a. Ask first if patient **feels** numb, remembering this will be a new sensation / experience for most patients
- b. Check IDB has worked by **touching** the lip. If lip is not numb give another IDB before testing with a probe
- c. **Then** use probe – pushing very firmly down the periodontal ligament, **once** buccally and **once** palatally / lingually and check that the tooth is no longer TTP (if it was TTP originally)
- d. Explain to CO need for good anaesthesia - for patient's comfort, acceptance of future treatment and operator's reputation

13. Positioning, supporting alveolar bone and keeping soft tissues out of the way

- a. Q1 and Q2, in front of patient - index finger and thumb on either side of tooth to be extracted (right & left handed operators)
- b. Q3 Right handed operator, in front of patient - left index finger and middle finger on either side of the tooth to be extracted and thumb supporting the jaw
Q3 Left handed operator, behind patient - right index finger and thumb on either side of the tooth to be extracted – other 3 fingers supporting the jaw
- c. Q4 Right handed operator, behind patient - left index finger and thumb on either side of the tooth to be extracted – other 3 fingers supporting the jaw
Q4 Left handed operator, in front of patient - right index finger and middle finger on either side of the tooth to be extracted and thumb supporting the jaw
NB: watch out for fingers in the eyes and soft tissue damage e.g. pinching lower lip

14. Extraction

- a. Explain to patient that they will feel a lot of pressure, but if they feel pain to raise their hand
- b. If more than one tooth is to be extracted, prioritize the most severe problem
- c. Usually, to aid visibility, take lowers out before uppers and posteriors before anteriors. Don't be too prescriptive as there are a number of exceptions, single standing molars, canines, upper 8s etc.
- d. For paediatric extractions you may find using a mouth prop beneficial

15. Elevation

- a. Ensure good finger protection when using a Couplands elevator. Use gauze to help protect from needle stick injury and aid visibility. Protect the finger or thumb you are most likely to "hit" if you slip with the Couplands. This is the most common cause of injury so please be careful and adhere to the Guidelines. If you do have a Sharps injury please notify SCL immediately
- b. Make sure concave surface of the Couplands is **towards** the tooth being extracted
- c. Use apical pressure and rotation to loosen tooth
- d. Rest elevator on the tooth to be extracted – not on adjacent tooth
- e. Support the alveolar bone as described in section 13

16. Forceps

- a. Holding forceps – do demo as grip changes from placement to extraction?
- b. Placing forceps – watch mucosa especially lingually or palatally
- c. Position forceps as far apically down the tooth as possible
- d. Maintain constant apical pressure through the long axis when moving the tooth
- e. Uppers – buccally and palatally – move more buccally
- f. lowers – buccally and lingually, molars figure of 8 (or small circles)
- g. Gently rotate upper incisors and canines
- h. Extract all teeth buccally - to avoid excessive palatal and lingual pressure

17. Cross Infection

The OH Team will teach the COs about cross infection and sterilization, but please maintain high standards at your table. Have a pair of clean tweezers in the gauze container in case you need more instruments or gauze. If you use the tweezers, with dirty gloves, the tweezers are contaminated and need to be placed on the dirty tray. Remember you are leading by example

18. Complete Extraction

- a. If the tooth has **not** been removed (by either the CO or the Trainer) after **15 minutes** refer to SCL so you can continue training. The SCL may offer advice, take over the treatment or transfer the patient to the DDO to finish the extraction. There are additional instruments available which you may use on rare occasion. Please do so **ONLY** in consultation with the SCL. Your focus is on teaching and a CO will learn very little watching you removing a difficult tooth

- b. When tooth is extracted check roots and socket. Show patient the tooth
- c. Debride only if necessary, and then compress the socket. Check for excessive bleeding and place pack correctly, asking patient to bite down on the pack. If you have done multiple extractions, and you feel it's appropriate, please place a suture, as many of our patients will have a long walk home. Remember to liaise with the SCL to maximize this learning opportunity
- d. Put disposables from dirty tray and the extracted teeth into clinical waste
- e. Place tray on the floor in designated area for collection by nursing staff
- f. Remove gloves and place in clinical waste

19. Post operatively

- a. Give post op instructions – laminate on clip board. Post op instructions need to be clear and understandable. Remember most of your patients will never have had LA or had teeth removed previously
- b. Give OHE – laminate on clip board.
- c. Give toothbrush and toothpaste when possible
- d. Direct patient to wait in appropriate area for 30 minutes and then dispose of their pack in the box provided. If there is any concern about bleeding at this stage the Site Administrator will bring the patient back to the chair to be reassessed
- e. When treatment is complete please take the sticker with the patient number on it and dispose in waste to prevent it being handed on to another patient. The patient can then leave
- f. Complete Record Card, Daily Record Sheet and Record of Extraction

20. Reflection

- a. **WWW** - What went well
- b. **EBI** – Even Better If - what could be done differently
- c. Take opportunity to teach - as needed
- d. At the end of each day discuss and fill in the COs Learning Objectives

21. Limitations for COs, and when to refer to DDO

- a. Refer failed extractions
- b. Refer other dental disease for treatment where this is available e.g. fillings, scaling, dentures
- c. Refer all wisdom teeth, unless FULLY erupted
- d. Refer all impacted teeth e.g. 3's and 5's
- e. Refer all facial fractures
- f. Refer all severe abscesses & cellulitis (need urgent referral to District Dental Officer (DO NOT attempt to incise until discussion with DDO)
- g. Refer all tumours
- h. Refer patients with complicated medical histories
- i. Refer all speckled leukoplakia or erythroplakia that will not rub off
- j. Refer any unexplained paraesthesia

22. Antibiotic Use

Bridge2Aid recommend the use of antibiotics for:-

Systemic involvement

OR

Inadequate anaesthesia

Discuss individual cases with the SCL who will liaise with the DDO. If a swelling is life threatening IV antibiotics can be arranged, and the XLA done as soon as access to the tooth is possible

As long as there are no contraindications the normal antibiotic regime is:

Amoxicillin 500mg t.d.s. for 5 days

Metronidazole 400mg t.d.s. for 5 days

Please ask CO to check that the patient can afford the prescription charge, if not refer to SCL

23. Dry Socket Management

- a. Give Local Anaesthetic as needed
- b. Irrigate with saline, hydrogen peroxide or bottled water, and if necessary debride the socket
- c. Prescribe Paracetamol 1000mg tds
- d. If there is systemic involvement such as fever, severe swelling, trismus, prescribe Metronidazole 400mgs t.d.s (warn re alcohol)
- e. Advise the patient to rinse **gently** with warm salt water mouthwash
- f. If the patient is unable to afford the prescription charge please inform the SCL

24. Sharps Injury Management

- a. If you have a needlestick, elevator, bite or splash back injury ask your CO to keep the patient in the chair, and report the incident **IMMEDIATELY** to the SCL
- b. The SCL will then implement the B2A Policy

25. Management of a collapsed patient

- a. Inform the SCL who will ask the DDO to assist
- b. Lie the patient on the floor, support their head and raise their legs. Local material (kangas) can be used for a screen, pillow, to put over patients legs to maintain patient's dignity etc. These are available in Admin Box. Give glucose or soda. Bridge2Aid supply sodas, which can be poured into a cup.
- c. If the patient doesn't recover quickly the SCL will consult with the DDO, and/or the CO in charge of the clinic and allow the DDO and local staff to continue caring for the patient whilst you return to training

Daily Training Guide

This part of the manual aims to guide you through each day in a simple and focused way

Theory training

This shows you what the COs have been taught by the DDO at the beginning of each day so you can include it in your teaching and training throughout the day and have a better awareness of what they should know and understand.

Learning Objectives

These link to the Clinical Officer's Learning Objectives Document, and are what you will be focusing on with your Clinical Officer for that day

Top Teaching Tips

These are suggestions from previous experienced trainers on DTP

Seminars

These can be delivered by the UK training team each day to support the theory already given by the DDO. These seminars often have a more practical focus. Seminars are undertaken as the need arises, at the discretion of the SCL, based on time available, the COs needs and patient numbers

Day 1

TODAY THE COs WILL TAKE A PRE-COURSE WRITTEN EXAMINATION

The COs will then receive a full day of theory training from their District Dental Officer (DDO). This is an intensive day for them as they are introduced to the training programme and begin to discover the new world of dental terminology!

You will either be in orientation on this day or travelling to your location.

Please use this day to read this document and begin to prepare for the practical training ahead of you. You only need to be one day ahead of the CO!

THEORY TRAINING

ANATOMY

- Anatomy of the oral cavity
- Tooth anatomy and structure of individual teeth
- Types of teeth and numbering of teeth
- Permanent and primary teeth

INITIAL WELCOME AND ASSESSMENT OF PATIENTS

- Importance of receiving the patients into the chair
- Medical History
- Clinical History
- Positioning a patient
- Record Keeping
- Organisation and setting up of clinic

HEALTH AND DISEASE

- Health and disease related to oral cavity
- Recognition of decayed teeth
- Types of decay
- When to treat and why
- Consequences of tooth removal
- Demonstration of plaque and calculus

TOOTH EXTRACTION

- Reasons for extraction
- Indications for tooth extractions
- Contra-indications for teeth extractions
- Extraction of upper and lower teeth
- Types of instruments used for extraction
- Instrument selection

Day 2

Today your CO will watch everything you do and learn from you, it's all about observation and demonstration. Your CO will NOT take out any teeth or give any local anaesthetic today but they will watch you do it. They need to carry out the key skills listed below with your support and direction. Please be a good role model today for the B2A Clinical Guidelines as your Trainee will be watching your every move.

Sutures:

By the end of the Programme we would like each CO to have had the opportunity to place at least one suture. As the need for suturing could occur at any time please inform the SCL if an opportunity arises. We may demonstrate suturing (simple interrupted or horizontal mattress) to more than one CO at a time. Once a CO has seen the procedure they can then place a suture for the next patient who needs one. If you are not happy to suture don't worry about it, the SCL will arrange an alternative solution.

Pathology:

Similarly, if you see any unusual pathology, please let the SCL know asap, so they can help you manage the patient's needs as effectively as possible, in consultation with the DDO.

Resources:

Please familiarize yourself today with the resources in the B2A Training Box. They are there to help you with teaching. We have models; laminates; manuals; skull; flip charts; seminar folder; suture pads; etc.

Break down the training to small achievable goal:

Every patient is a learning opportunity for the CO. Set simple goals and encourage the CO when they achieve them. Encourage, encourage, encourage – even when you need to correct. Ask open questions to ensure that CO understands the learning objective and has a chance to demonstrate their knowledge and understanding.

THEORY TRAINING

REVIEW OF DAY 1 TEACHING

- Highlight terminology and anatomy

CROSS INFECTION & SAFETY

- Infection risks
- Cross contamination
- Safety awareness
- Sharps disposal
- Management of sharps injuries (Tz policy)

HEALTHY TEETH

- The importance of healthy teeth
- Prevalence of periodontal disease and dental caries amongst Tanzanians
- Prevention of periodontal disease and dental caries
- Aetiology of periodontal disease and dental caries, including the role of sugar and plaque
- Importance of Oral health education
- Role of CO in oral health promotion
- Understanding of efficacy and availability of Mswaki

LEARNING OBJECTIVES

1. Take medical history of patient
2. Take clinical history of patient
3. Observe and then carry out an intra oral clinical examination
4. Begin to identify teeth types, incisors, canines, premolars & molars both in maxilla & mandible
5. Observe diagnostic skills
6. Explain the treatment to the patient
7. Obtain patient's consent
8. Observe the administration of local anaesthetic
9. Explain the effects of local anaesthetic to the patient
10. Observe the forceps to be used for extraction
11. Observe the process of extraction
12. Demonstrate correct stance and hand position for extractions
13. Give post extraction instructions to patient
14. Give Oral Health Education with advice from trainer
15. Observe appropriate cross infection control
16. Observe sharps safety

TIPS FOR TEACHING

Medical History, Post Op Instructions & Oral Health Education

Use the laminated sheets on your clip board, if unsure check with Swahili speaker

Oral examination

Start exam using fingers – gently! Progress to using mirror, which needs to be held correctly both for retraction and vision. The COs may find this a difficult skill, so try to be *specific* about what you are demonstrating. Once the CO is competent at this then progress to using a probe, again held correctly. The probe is mainly used to test for anaesthesia, remove debris, count teeth, and to confirm the presence of caries. Watch that your CO is not causing pain or damage by rough handling of the probe



Identifying teeth

Use teaching aids and tooth models. Use FDI notation

Teaching trainee to support alveolar bone

Allow trainee to get their hands inside the mouth before you take the tooth out

SEMINAR

Medical & Clinical History

Aim: To help the Trainee understand the Relevance of MH, and identify the symptom and location of the dental problem (See Seminar on Medical & Clinical History & Appendix 4)

Day 3

TODAY THE SCL AND/OR THE DDO WILL UNDERTAKE AN INITIAL ASSESSMENT OF THE CO

Today your CO will be starting to give Local Anaesthetic under your close supervision and this is the key focus for the day. They may do simple extractions of periodontally involved teeth or teeth you have loosened for them. Begin to discuss with your CO examples of complications post extraction.

Ensure today you talk through each extraction and begin to introduce them to the different techniques and instruments being used as tomorrow this will be more of their focus.

Your trainee will continue to watch your every move and today you need to actively teach the process of cross infection control at your work station.

The Oral Health Team will begin their Cross Infection Control, Sterilisation and Oral Health Education sessions today. This means your CO may be away from the table for some time, please check with the SCL to see what you can do to help.

THEORY TRAINING

LOCAL ANAESTHETIC

- Types of anaesthetic
- Infiltration
- Nerve block
- Testing for effective anaesthesia
- Information for patients

COMPLICATIONS OF EXTRACTIONS AND POST EXTRACTION CARE

- Post extraction care
- Bleeding
- Broken Roots
- Advice to patients
- Pain relief
- Explanation to patient

LEARNING OBJECTIVES

17. *Discuss the importance of healthy teeth*
18. *Describe how to clean and organise the clinical area*
19. *Demonstrate a good understanding of cross infection control and discuss importance*
20. *Demonstrate and discuss the risk and need for awareness of Sharps Safety*
21. *Record clinical findings on the patient's card*
22. *Recognise signs and symptoms of dental caries*
23. *Administer infiltration and block anaesthesia with practical and verbal assistance from trainer*
24. *Check for anaesthesia using a probe, pressing firmly down on the periodontal ligament*
25. *Describe the complications of tooth extraction*
26. *Discuss importance of post-extraction care*

TOP TEACHING TIPS

LOCAL ANAESTHETIC

Use skull to demonstrate, make sure CO injects into soft tissue, especially for the long buccal

Check for Anaesthesia

Make sure the CO is not punching holes in the mucosa (See B2A Guidelines Page 4)

Cross Infection Control

Use tweezers for consumables, set example of good practice from the beginning. Good use of PPE

Identification of Teeth

This is difficult for the COs to learn (how long did it take you at Dental School?). Use the skulls/ models/teeth available in the Teaching Supplies Box and extracted teeth. This is invaluable early on. Using extracted teeth is helpful for confirming the number of roots, letting your CO decide if they've all been extracted, and identifying caries

SEMINAR

Extraction Technique (1) PowerPoint

Aim: *To reinforce where and how to stand for extractions and how to support alveolar bone in each quadrant*

Day 4

The main focus for today is extractions with your assistance, your trainee will continue with LA techniques as well as taking teeth out with your assistance. They will be keen to get going now!

You will need to work with them on identifying the correct forceps for extraction and assisting them to identify the right teeth to extract.

If your trainee is progressing well you can allow them to begin using elevators with your assistance. By now we would expect them to have a better understanding of the oral cavity and teeth types.

Now the trainee is the one taking more teeth out and you will need to help them refine their position and stance for extractions

THEORY TRAINING

TREATMENT LIMITATIONS FOR CLINICAL OFFICERS – WHEN TO REFER

Refer failed extractions

Refer other dental disease for ongoing treatment e.g. caries for fillings when possible

Refer all wisdom teeth, unless FULLY erupted

Refer all impacted teeth e.g. 3's and 5's

Refer all facial fractures

Refer all severe abscesses & cellulitis (need urgent referral to District Dental Officer (DO NOT attempt to incise until discussion with DDO)

Refer all tumours

Refer patients with complicated medical histories

Refer all speckled leukoplakia or erythroplakia that will not rub off

Refer any unexplained paraesthesia

LEARNING OBJECTIVES

27. Recognise the signs and symptoms of periodontal disease

28. Identify which teeth need to be extracted and explain decision

29. Identify forceps required for extraction

30. Extract a fully erupted permanent tooth with practical and/or verbal assistance from trainer

31. Use correct positioning and stance for extractions in the different quadrants

32. Observe the use of elevators to extract a retained root

33. Control Bleeding by using gauze pack

34. Demonstrate good understanding and discuss the anatomy of the oral cavity, deciduous teeth and permanent teeth

TOP TEACHING TIPS

Diagnosis

Get trainee to ask patient which tooth is painful. Teach TTP

Forceps identification

This is a difficult skill for beginners, so try using the skull and models. Get them to pick their own forceps as early as possible. Try putting forceps on your tray with uppers vertically and lowers horizontally to help visual learners. You can even put just one set of instruments out on the table rather than the full set as this is less overwhelming to the trainee.

Holding forceps

Get trainee to practice picking up cotton products from table to acquire dexterity with forceps.

Stance & pressure recognition

Demonstrate pushing over your trainee and balance – ask SCL for a demonstration

Get trainee to hold patients head whilst you take out upper tooth so they can feel pressure.

Use the nurses whilst holding heads and ask for feedback on the pressure being delivered by trainee.

Bring in Swahili speaker if still not pushing continually to help with explanation

SEMINAR

Local Anaesthetic

Aim: *To help Trainees refine their LA technique*

Day 5

Trainees should now be progressing so they are doing all local anaesthetics, and can carry out extractions with less intervention from the trainer. Your focus needs to be assisting them with consistency and working as a team preparing the trainee to be more independent the following day.

All Trainees should now be using elevators safely

THEORY TRAINING

- Dental Abscess
- Acute oral infections
- Acute pericoronitis
- Maxillofacial trauma
- Dry Socket
- Use of Antibiotics
- Jaw dislocation

LEARNING OBJECTIVES

35. *Administer anaesthetic with no physical or verbal assistance*
36. *Be able to consistently diagnose and identify which tooth is causing the problem, and record on patient's notes*
37. *Remove broken or retained roots with physical and/or verbal assistance*
38. *Recognise a tooth indicated for extraction due to periodontal disease*
39. *Extract deciduous and permanent teeth with verbal assistance only, if appropriate*
40. *Demonstrate good and safe technique when using elevators*
41. *Recognise and describe the management of a dental abscess*
42. *Discuss treatment limitations for COs and when to refer*

TOP TEACHING TIPS

Trainee limitations:

Please refer to B2A Guidelines Page 8 to ensure you are aware of these.

Use of Elevators:

Use gauze with elevators to guard against needlestick injury and to dry area. The most common cause of needlestick is due to incorrect use of Couplands elevator

Retained Roots:

Ask 3 Questions

1. Can I see it? If not make sure you can by removing debris and drying
2. Can I feel it? Do I know the part of the tooth the elevator is touching? Do I have a good elevation point?
3. Can I move it? Only try to move it once you have visual access

Seminar

Extraction Technique 2

Aim: *To help trainees to identify forceps, position them correctly, and apply **constant apical pressure**. They should be standing in the right place and supporting the alveolar bone*

Day 6

Your Trainees should now be working much more independently and you should be stepping back from hands on clinical activity and moving into more of a coaching role. The Trainee should be taking the patient from start to finish with your verbal assistance only. We would encourage you to only intervene at this point if really necessary, for example if they pick up the wrong forceps let them try to see if it works, or they correct themselves. Only intervene if patient safety is compromised!

THEORY TRAINING

MEDICAL PROBLEMS RELATING TO DENTISTRY

- Diabetes
- Anaemia
- Clotting disorders
- High blood pressure
- HIV
- TB

MEDICAL EMERGENCIES

- Faints
- Dealing with a collapsed patient

LEARNING OBJECTIVES

43. Discuss how to manage complications of tooth extraction
44. Extract teeth with verbal assistance only, where appropriate
45. Recognise and discuss the management of:
dislocated jaw; pericoronitis; fractured jaw
46. Discuss the use of antibiotics (B2A Guidelines Page 9)
47. Discuss management of dry socket (B2Aid Guidelines Page 9)

TOP TEACHING TIPS

Shift from demonstration to asking open ended questions and being more of a coach, allowing the CO to make safe mistakes e.g. standing in front of the patient instead of behind for a lower extraction. After each patient review what has gone well and what could have been done better and plan for next patient.

SEMINAR

Post-Operative Complications

Aim: *To ensure that the Trainees know, and can treat, the common post-operative complications (Broken Roots; Bleeding; Pain; Dry socket)*

Day 7

TODAY THE CLINICAL OFFICERS WILL TAKE THEIR FINAL WRITTEN EXAM AND THE SCL/DDO WILL UNDERTAKE A CLINICAL ASSESSMENT (using the same COA Form used on Day 3)

At the daily debrief a preliminary decision will be made about the COs competence to pass the course, and any weaknesses can be addressed on Day 8

Today you should be working alongside your trainee as a mentor and the majority of your intervention should be verbal, there will still be some assistance given but this should be very limited and will highlight the need for referral of that patient.

The CO knowing when to refer is a crucial objective.

If possible, and if you have not done this already, today is a good time to **demonstrate control of bleeding, using sutures.**

LEARNING OBJECTIVES

48. Control bleeding by suturing, or if not possible demonstrate suturing technique on suture pad
49. Safely manage and treat several patients with no physical or verbal assistance
50. Demonstrate or explain how to deal with a collapsed patient (B2A Guidelines Page 9)
51. Discuss how medical problems relate to dental extractions (Appendix 3:MH)

TOP TEACHING TIPS

Hopefully by now every CO will have seen a suture placed, but if not demonstrate on the suture pad in the training box – or get a friend to do it!

If the opportunity arises let the CO place a suture

CROSS INFECTION, STERILIZATION AND ORAL HEALTH

LEARNING OBJECTIVES – if not already completed

52. Describe the aetiology of periodontal disease and dental caries, including the role of sugar and plaque
53. Discuss the prevention of periodontal disease and caries
54. Discuss the role of the CO in promoting oral health in their health facility, and to the wider community
55. Discuss the use and value of a Mswaki as an alternative to a toothbrush
56. Deliver an oral health presentation
57. Demonstrate an understanding of the clinical environment, how to set up the clinic and equipment
58. Demonstrate a thorough knowledge of:
 - a. Cross infection control
 - b. Sterilization
 - c. Care and storage of instruments

Day 8

Today is the opportunity for the trainee to work independently (if they have demonstrated competency) and for you to be on the side lines observing and providing any advice for refining skills and techniques.

We will be working on any weaknesses that were identified on the Day 7 written exam and clinical assessment.

Day 8 is when the final decision is made to pass or defer the trainee.

There is no formal theory training on this day, but there is the option to deliver seminars. This will depend on several factors and the SCL will decide if seminars are beneficial and possible within the structure of the day.

LEARNING OBJECTIVES

59. Safely manage several patients independently

60. Refer patients when appropriate

Day 9

Today the trainees will have finished their formal assessments and the decision to pass or defer will have been made. This session is an opportunity for the trainee to experience what it will be like in their own clinic, by working their own chair, but with the reassurance of having the training team around.

After lunch there will be a small ceremony where each trainee will receive a certificate for attending the training. The COs who are successful usually receive their Basic Dental Kit at this time, but if not they will get directly from their DDO at a later date.

SEMINARS

Seminars have been developed to complement the COs Theory Training and Clinical Training. They may be available electronically or there are hard copies in the Training Box. By Day 7 you will have delivered some of these seminars, but not all of them. Please use them to help your CO if they have any difficulties or gaps in their knowledge. Involve the SCL and your fellow trainers as some subjects may be better delivered to the whole group, and others to just one or two COs at a time.

Seminar Topics

Cross Infection Control
Deciduous teeth
Extraction complications
Extraction Technique (1) – stance, positioning, pressure
Extraction Technique (2) – identification of forceps, positioning of forceps, elevators
HIV oral manifestations
Local Anaesthetic
Medical and Clinical History
Oral Anatomy
Oral Pathology & Special Problems
Periodontal Disease and Caries
Referrals

Appendix 1

Training Box Contents

- Seminar Folder
- Skull
- Teeth Model and Toothbrush
- SUNNYMEDE TRUST Oral Health Manual and additional laminates for teaching
- Laminated teaching prompts and guides including pictures and explanations
 - Oral Manifestations of HIV teaching laminates.
 - Perio teaching laminates
 - Deciduous and Permanent teeth laminate (OPG)
- Flip chart paper and/or White Board Roll and Marker Pens
- Suture pads and sutures for demonstration

Appendix 2

BRIDGE2AID ACRONYMS

B2A	Bridge2Aid	MH	Medical History
DTP	Dental Training Programme	EO	Extra Oral
SCL	Site Clinical Lead	IO	Intra Oral
ASCL	Assistant Site Clinical Lead	LA	Local Anaesthetic
SA	Site Administrator	EXT	Extraction
M&E	Monitoring and Evaluation	IDB	Inferior Dental Block
CO	Clinical Officer	TTP	Tender to Percussion
DDO	District Dental Officer	OH(E)	Oral Health (Education)
RDO	Regional Dental Officer		
PPE	Personal Protective Equipment		

Appendix 3

Medical History- and its relevance for teaching in Tanzania.

QUESTION	IMPLICATION / CONSIDERATIONS AND TEACHING POINTS
1. Are you taking any medicines/pills/creams? If so what are they?	The answer is very rarely yes, but there <i>may</i> be patients on medication. Find out what the medication is, if possible, & proceed accordingly
2. Do you suffer from HIV or AIDS?	Cross infection/infection/consider antibiotics
3. Do you suffer from any heart disease, high or low blood pressure?	The Clinical Officer in charge of the Health Centre can check BP on the clinic if concerned
4. Do you bleed for a long time after a tooth has been removed or if you cut your finger	Be sure to check patient for haemostasis before they leave the clinic if there is a history of bleeding. If necessary place a suture
5. Do you have any allergies including antibiotics or local anaesthetic?	If yes then ensure Clinical Officer asks more questions about the severity of the reaction
6. Have you every suffered from Hepatitis?	Cross infection considerations
7. Do you ever suffer from fainting or fits?	Consider asking the patient when they last ate or drank if prone to faints
8. Have you ever suffered from TB or chronic cough?	Check that patient has started treatment/cross infection/consider antibiotics
9. Do you ever get breathless/chest pains	FYI – involve DDO. What else might this be signs of asthma? Heart problems? etc.
10. Have you ever had surgery in the past?	If yes – any ill effects, did they recover ok?
11. Do you have diabetes? (this may well be described as 'having sugar')	Can ask health centre to check blood sugar on clinic/give soda/consider antibiotics Check when patient last ate and how long they have travelled
12. Have you ever received dental treatment?	FYI and if so what was the experience like?
13. Are you anaemic?	Haemostasis/possible suture/if severe involve DDO and CO from clinic
14. Are you pregnant?	Which trimester? May decide not to use antibiotics if first trimester.