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25



IMMEDIATE
CARE TRAUMA

CURRICULUM

Professional Skill Development Centre
University of Health Sciences Lahore

Immediate Care Trauma Curriculum

(2025)



UNIVERSITY OF HEALTH SCIENCES LAHORE

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List Of Contributors

| CURRICULUM STEERING COMMITTEE | | |
|-------------------------------|--------------------------------------------------------------------------------------------------------------|-----------------|
| 1 | Prof. Dr. Ahsan Waheed Rathore Vice Chancellor, University of Health Sciences, Lahore | (Patron) |
| 2 | Prof. Dr. Nadia Naseem Pro-Vice Chancellor, UHS | (Patron) |
| 3 | Prof. Dr. Sarah Ghafoor Professor of Oral Biology, UHS | |
| 4 | Prof Ajmal Farooq Professor of Surgery & Ex principal, Nawaz Sharif Medical college Gujrat | |
| 5 | Dr. Mir Waheed Medical Director- Head Emergency Medicine, Maroof International Hospital, Islamabad | |
| 6 | Dr Asif Mesam Master Trainer-National Ambulance Service College Dublin, Ireland | |
| 7 | Prof. Sumera Ehsan HoD Department of Medical Education- UHS | |
| 8 | Dr. Lamia Yusuf Assistant Professor, Department of Medical Education- UHS | |
| 9 | Mr. Mubashar Arshad (Technical support) | |
| 10 | Luqman (Technical support) | |

List of Abbreviations

| Abbreviations | Subject |
|---------------|-------------------------------------------------------|
| ABCDE | Airway, Breathing, Circulation, Disability , exposure |
| SBAR | Situation, Background, Assessment, Recommendation |

Course Rationale and Overview

Trauma is a leading cause of death and disability worldwide. Early, systematic trauma management can significantly reduce this morbidity and mortality. This trauma care training introduces essential trauma principles to medical students with limited prior experience, preparing them to face emergencies effectively from the field to the emergency care department. This curriculum emphasizes a hands-on approach to life-threatening injuries and teamwork, following the standard **ABCDE** primary survey sequence (“treat first what kills first”). Participants will engage in short lectures, skills practice, and realistic simulations to build confidence in managing trauma scenarios from initial response through resuscitation.

Course Outcomes

By the end of this course, participants will be able to:

- Describe the principles of trauma response and the "golden hour"
- Apply triage and pre-hospital Principles.
- Work effectively in a trauma team.
- Integrate knowledge and self-reflect.
- Perform primary trauma (ABCDE) care safely and effectively.
- Recognize and manage immediately life-threatening conditions (e.g. Airway obstruction, pneumothorax, external bleeding).
- Apply key first-response interventions: airway maneuvers, breathing control, haemorrhage control, and spinal precautions.
- Assist with safe patient transfer and communication with trauma teams.

Course Duration & Audience

The course duration is five hours, and the target audience is undergraduate medical, nursing and allied health sciences students in the clinical year.

Course Structure: The training consists of five modules, each addressing a phase of trauma care:

1. Module 1 – introduction to trauma systems and first response
2. Module 2 – The ABCDE Primary Survey
3. Module 3 – secondary survey and LOG rolling
4. Module 4 – simulation scenarios and team response
5. Module 5 Communication and handovers

Curriculum modules

Module 1: Introduction to Trauma systems and first response

By the end of module 1, participants will be able to recognize:

- Global and national burden of trauma
- The golden hour and trimodal death distribution
- Scene safety and personal protection
- Roles in a trauma team

Method: Interactive lecture

Module 2: The ADCDE Primary Survey

By the end of module 2, participants will be able to demonstrate :

A- Airway with C-spine control

- Assess responsiveness
- Chin lift/jaw thrust
- Oropharyngeal airway insertion
- C-spine immobilization

B-Breathing

- Inspection and palpation of the chest
- Recognition of tension pneumothorax/flail chest
- Oxygen delivery (mask/BVM)

C-Circulation and hemorrhage control

- External bleeding control (pressure, elevation, tourniquet)
- Signs of shock
- Positioning and fluid resuscitation concepts

D-Disability (Neurological status)

- AVPU/GCS assessment
- Pupil reaction
- Early recognition of brain injury

E - Exposure and Environment

- Complete exposure to identify injuries
 - Prevent hypothermia
- Method: Skills stations with mannequins or peers (rotating groups, 4-6 per group)

Table 1 ABCDE PRIMARY SURVEY CHECK LIST

| Step(Primary Survey) | Assessment | Immediate Interventions |
|-------------------------------------|--------------------------------------------------------------------------------------------------------------------------------------------------------------------|-----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| A – Airway (with C-spine) | Check responsiveness. Look In mouth for obstructions; listen for Airway noises. Protect cervical spine | Jaw-thrust manoeuvre; suction as needed. Insert OPA/NPA for support. If needed (and able), Prepare for intubation. Apply C-collar once Airway is managed. |
| B – Breathing | Inspect chest rise and work of breathing. Listen to breath sounds bilaterally. Look for injuries (wounds, bruising, Instability). | Give high-flow O ₂ . Assist respirations with BVM if inadequate. Seal open chest wound. Perform needle decompression for tension Pneumothorax. Support flail chest (Manual or ventilator). |
| C – Circulation | Check central and peripheral Pulses, skin color/temp, cap refill. Identify external bleeding. Note mental status (often first sign of shock is Confusion/anxiety). | Control hemorrhage: direct pressure or Tourniquet. Establish 2 large IV lines; Begin fluid resuscitation (warm IV fluids). Consider elevating legs (Trendelenburg) if Hypotensive. Prepare blood transfusion If major hemorrhage. |

| | | |
|---------------------------------------|---------------------------------------------------------------------------------------------------------|----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| D – Disability (Neuro) | Assess consciousness (AVPU/GCS) Check pupils. Quick motor/sensory Test of Limbs if possible. | Protect airway if unconscious. Treat Reversible causes (e.g. give glucose hypoglycemia). Elevate head 30°, if head injury (if no shock) Prepare for urgent Head CT after stabilization |
| E – Exposure (undress examine) | Fully expose patient to survey for Injuries head-to-toe. Don't forget to log-roll and Inspect the back. | Prevent hypothermia: use warm blankets, w Fluids. Cover patient after exam. Splint fractures found. Prepare for secondary survey Once stable. |

Module 3: Secondary Survey and Log-Rolling

By the end of module 3, participants will be able to demonstrate

- Head-to-toe assessment
- Log-rolling with C-spine protection
- Limb splinting basics
- Documentation of findings

Method: Demonstration + guided practice

Module 4: Simulation Scenarios & Team Response

By the end of module 4, participants will be able to know

- Simulated trauma cases: RTA, fall, blast injury, etc.
- Triage, ABCDE, and interventions
- Roles of leader, scribe and communicator

Method: Simulation + debriefing

Debrief format: What went well - What could be improved - Key learning points

Module 5: Communication and Handover

By the end of module 5, participants will be able to know

- Use of SBAR tool (Situation, Background, Assessment, Recommendation)
- Team communication in high-stress settings
- Ethical and emotional aspects of trauma care

Method: Role-play + peer feedback

Session Planner

| Module | methods | Time |
|--------------------------------------------------------------|----------------------|------------|
| Pretest | MCQS | 20 minutes |
| Module 1 – introduction to trauma systems and first response | Interactive lecture/ | 30 minutes |

| | | |
|---------------------------------------------------|--------------------------------------------|------------|
| Module 2 – The ABCDE Primary Survey | Skills stations with mannequins or peers (| 60minutes |
| Module 3 – secondary survey and LOG rolling | Demonstration + guided practice | 60 minutes |
| Break | | 10 minutes |
| Module 4 – simulation scenarios and team response | Simulation + debriefing | 60 minutes |
| Module 5: Communication and handovers | : Role-play + peer feedback | 30 minutes |
| Post test | MCQS | 20 minutes |
| Feed Back | Feedback forms | 10minutes |

Assessment Plan

Formative Assessment

- Direct observation with feedback during skills stations
- Peer assessment checklists for ABCDE performance

Summative Assessment

- OSCE-style skills test: Airway management, hemorrhage control, log-roll
- Short MCQ quiz: 20 questions on core concepts pretest and post test

Assessment policy

Passing marks will be 70% for posttest on Skills stations. Students from 69% -60% will be given a chance to reappear for posttest and skill test on the same day .Less than 60% will reappear with next batch .All courses held at different institution will be monitored for quality assurance.

Essential Materials and Resources

- Mannequins (adult or pediatric)
- PPE (gloves, masks, eye protection)
- Oropharyngeal airways, oxygen masks, BVMs
- Bandages, tourniquets, IV equipment (for demonstration)
- Spinal boards and cervical collars
- Printed flowcharts, SBAR cards, and ABCDE wall charts

Recommended Faculty

- Emergency physician, trauma surgeon, or anaesthe
- Clinical skills instructors or trained residents
- Simulation facilitators

References

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