IMPAC Guide

World Health Organization unicef UNFPA

Integrated Management of Pregnancy and Childbirth



Pregnancy, Childbirth, Postpartum and Newborn Care:

A guide for essential practice

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Section 1: Clinical Principles

1.1 General care principles

Introduction

Obstetric triage aims at **rapidly assessing and prioritizing pregnant individuals** when they present for care, based on the urgency or acuity of their medical needs. It is a critical component of maternal health care.

In resource constrained environments where health care resources may be limited, obstetric triage plays a crucial role in optimizing the allocation of available resources ensuring that the most urgent cases receive timely care. By efficiently identifying high risk pregnancies or those women requiring immediate care, obstetric triage helps to reduce maternal and neonatal morbidity and mortality.

In many areas of the world, Labour and Delivery Units serve as first-contact emergency units for women with acute obstetric or postpartum complaints. In other locations, all acute or unscheduled visits to the hospital come through the general emergency unit including obstetric or postpartum complaints. It is therefore important to have a harmonised approach to obstetric triage across all locations in the hospital where obstetric and postpartum emergencies may present.

Pregnant patients are unique in that they are two patients rather than one. In addition, the physiologic changes of pregnancy affect every organ system. When these individuals arrive in Labour and Delivery or in the emergency unit, they should be met by a nurse or midwife, experienced in triage, who will then determine **what care is needed and how quickly additional help is required.** This does not require a complex exam and is based on the chief complaint or presenting syndrome (altered mental status or shock, for example).

Definitions

Triage: The process of sorting patients into different priorities based upon the time sensitivity of their illness or injury.

Acuity: A measure of the severity of illness when the patient presents for care combined with the time sensitivity of the problem.

Acuity based triage: The action of rapidly sorting and prioritizing patients based on determining who has the most pressing health care needs and should be assessed and managed first.

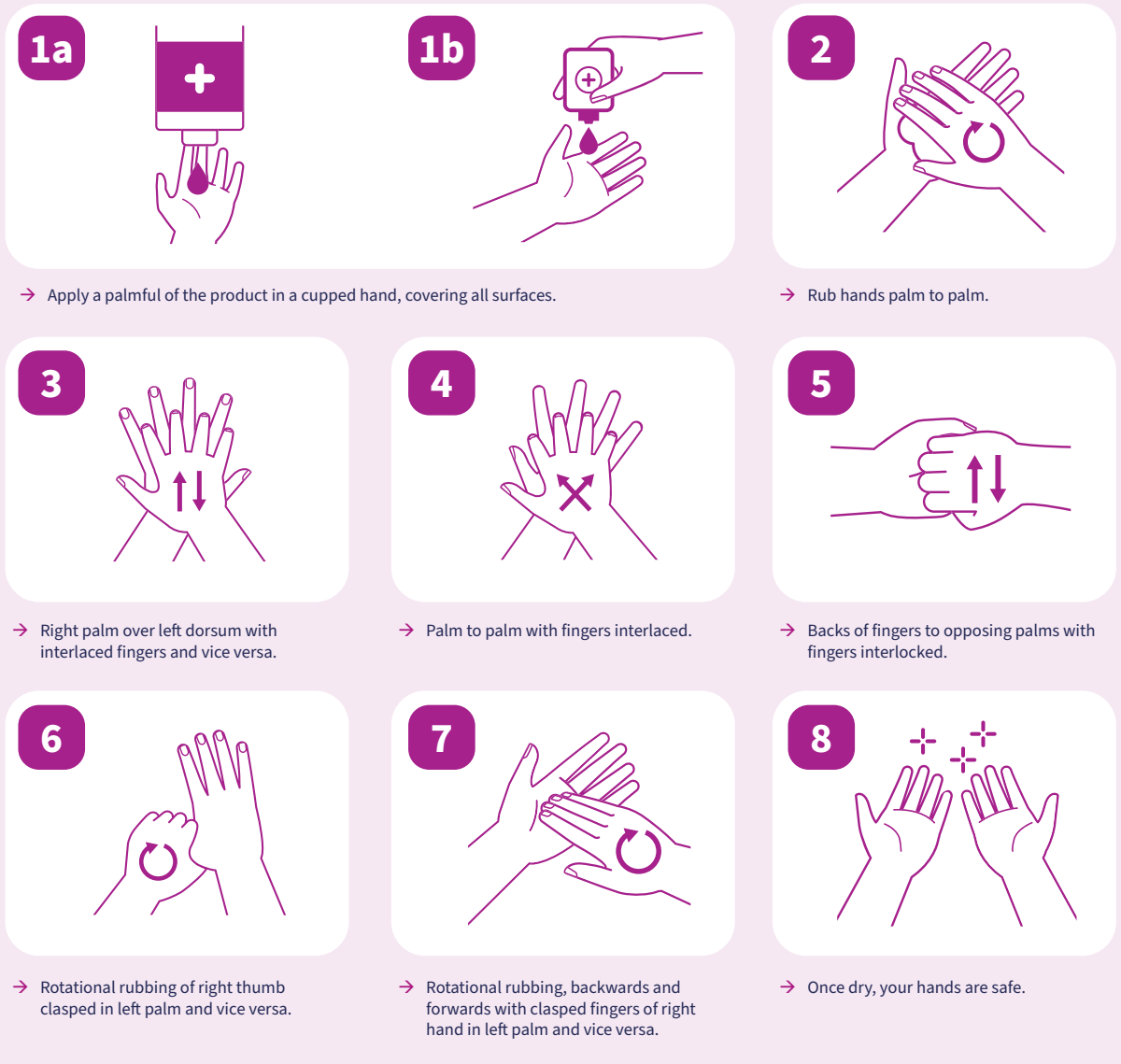
Destination Triage: A prehospital function whereby ambulance providers determine the most appropriate health facility for a patient based on their presentation.

Assessment and communication with both the patient and her companions as well as with other care providers is critical. To facilitate effective communication, standardised validated triage tools can help with a shared understanding of patient acuity.

In collaboration with the International Committee of the Red Cross (ICRC) and Medecins Sans Frontieres (MSF) , WHO has developed the Interagency Integrated Triage Tool for individuals 12 years and older which includes acute obstetric and postpartum patients. In addition, there are several tools that have been developed for Obstetric Triage including the Obstetric Triage Acuity Scale (OTAS), Maternal Fetal Medicine Triage Index (MFTI), the Birmingham Specific Obstetric Triage System (BSOTS) and most recently the Gothenberg Obstetric Triage System. No single Obstetric Triage system has been globally endorsed however emergency units and Labour and Delivery Units may wish to augment their triage protocols to include more detail regarding Obstetric triage.

Rub hands for hand hygiene. Wash hands when visibly soiled.

Duration of the entire proceedure: 20-30 seconds



1a → Apply a palmful of the product in a cupped hand, covering all surfaces.

2 → Rub hands palm to palm.

3 → Right palm over left dorsum with interlaced fingers and vice versa.

4 → Palm to palm with fingers interlaced.

5 → Backs of fingers to opposing palms with fingers interlocked.

6 → Rotational rubbing of right thumb clasped in left palm and vice versa.

7 → Rotational rubbing, backwards and forwards with clasped fingers of right hand in left palm and vice versa.

8 → Once dry, your hands are safe.

This triage tool was developed by the WHO, in collaboration with ICRC and MSF, to provide a set of protocols for routine facility-based triage. It allows for the immediate triage of a patient into red, yellow or green, depending on acuity. A second version exists for children aged up to 12 years. This tool flags all infants less than 8 days of age as RED requiring immediate triage. The Essential Newborn Care program, developed by the WHO provides an immediate action plan from birth to 60 minutes of age. (see neonatal triage section)

The IITT is used to rapidly assign a priority:

Red (Immediate)

Yellow (Urgent)

Green (Delayed)

based on a rapid assessment at the time of presentation. Once a colour has been assigned, triage is complete. For obstetrical patients the IITT tool should be used but in conjunction with obstetrical modifiers that may adjust the priority assigned by the IITT. For best outcomes for patients, triage should be linked closely to intervention and facilities may wish to assign actions to different priority groups.

The first step is to determine if the patient has any **Red** signs, necessitating immediate attention. (see chart to the right).

A **Red** sign is when the patient:

- Is unresponsive,
- Has any compromised airway and breathing or circulation
- Is bleeding heavily
- Is convulsing,
- Has an altered mental status,
- Is hypothermic or has a fever

"Other" **Red** signs include the following. If the patient is pregnant or postpartum, these signs will apply to them as well.

- Trauma,
- Poisoning,
- Acute chest
- Abdominal pain.

In addition, there are **Red** signs specific to pregnancy and the puerperium which include:

- Heavy bleeding
- Several abdominal pain
- Seizures or altered mental status
- Severe headache
- Visual changes
- SBP>=160 or DBP>= 110
- Active labour
- Trauma



Section 2: Routine Care

2.1 Antenatal care

Clinical situation

Woman seeking health care when she is pregnant.

Positive pregnancy experience

Reviews have shown that what women want and expect from ANC is to have a "positive pregnancy experience". Evidence shows that women from high-, medium- and low-resource settings value having a positive pregnancy experience, the components of which include

- the provision of effective clinical practices (interventions and tests, including nutritional supplements),
- relevant and timely information (including dietary and nutritional advice) and
- psychosocial and emotional support, by knowledgeable, supportive and respectful health-care practitioners, to optimize maternal and newborn health.

WHO defines positive pregnancy experience as:

- maintaining physical and sociocultural normality
- maintaining a healthy pregnancy for mother and baby (including preventing and treating risks, illness and death)
- having an effective transition to positive labour and birth, and
- achieving positive motherhood (including maternal self-esteem, competence and autonomy)

The healthcare worker providing antenatal care must therefore make all efforts to provide such a positive pregnancy experience.

Who model of antenatal care

The 2016 WHO ANC model recommends a minimum of eight ANC contacts. More antenatal contacts may be needed when complications arise or are suspected in the woman or the fetus. The schedule of ANC contacts is given below.

2016 WHO ANC model	
First trimester	
Contact 1	Up to 12 weeks
Second trimester	
Contact 2	20 weeks
Contact 3	26 weeks
Second trimester	
Contact 4	30 weeks
Contact 5	34 weeks
Contact 6	36 weeks
Contact 7	38 weeks
Contact 8	40 weeks
Return for delivery at 41 weeks if not given birth	

Rapid assessment and immediate management

Always perform a rapid assessment and manage any problems as detailed in this section. If the woman has no emergency or priority signs and has come for antenatal care, use subsequent sections for further care.

Perform a rapid physical evaluation of the woman's general condition, level of consciousness, presence of anxiety and/or confusion, blood loss, colour, temperature. (see box)

- Remember ABCDE (airway, breathing, circulation, Disability, Exposure)
- The aim of the ABCDE approach is to provide life saving treatment and begin the initial triage process. (assessment and treatment) This is a standarized approach to all emergencies.

Recommendation

WHO recommends that each pregnant woman carries her own case notes during pregnancy to improve continuity, quality of care and her pregnancy experience.

Initial 1st line management: ABCDE Approach

Remember: Always check for signs of trauma, and if present, maintain spinal precautions.

ABCDE Approach

For major external hemorrhage, control bleeding first!

A – Airway
Check for and correct any obstruction to movement of air into the lungs. Provide cervical spine immobilization if needed (trauma only).

B – Breathing
Ensure adequate movement of air into the lungs. Provide oxygen if needed.

C – Circulation
Evaluate whether there is adequate perfusion to deliver oxygen to the tissues; check for signs of life-threatening bleeding.

D – Disability
Assess and protect brain and spine functions. Provide glucose if needed.

E – Exposure
Identify all injuries and any environmental threats and avoid hypothermia.

Remember:

- Ask for help early.
- Identify life-threatening conditions and address them immediately before moving on to the next step.
- Gather a SAMPLE history immediately following the ABCDE approach.
- Perform a secondary exam and consider disposition.
- The ABCDE approach should be repeated whenever a patient's condition changes.
- If you have intervened in any of the ABCDE categories, monitor closely and consider HANDOVER/TRANSFER to a higher level of care.
- Use the **WHO Medical or Trauma Resuscitation Algorithm** to guide ABCDE management.

Patient disposition (Admission, Discharge or Referral)

Admit
- Critical Care Unit
- Operating theatre
- Ward

OPD

Discharge

Transfer/Refer

1. Assess risk and benefit of referral.
2. Notify receiving facility of referral. Write name of notified health worker and receiving unit on referral form.
3. Notify Emergency Medical Services (EMS; ambulance team) and provide details of case e.g. oxygen, IV fluids, medications necessary during transport.
4. EMS number to call: _____
5. Perform the pre-transport checklist.
6. Do formal hand over of patient and accompanying documentation to ambulance team.

- Prior caesarean section, forceps, or vacuum
- Prior third- or fourth-degree tear
- Heavy bleeding during or after delivery
- Convulsions
- Stillbirth or newborn death within first 24 hours of life. Any newborn death within the first 28 days.

- Do you have any other diseases such as diabetes, chronic hypertension, kidney, autoimmune disease? Are you on any medication?
- Do you use tobacco, alcohol, or any drugs? Are you exposed to other people's tobacco smoke at home?
- Are you related to your partner (consanguinity)?
- Ask for symptoms that may suggest anaemia.
  - Do you tire easily?
  - Are you breathless (short of breath) during routine household work?
- Check for risk factors for pre-eclampsia
  - previous pre-eclampsia with severe features,
  - diabetes,
  - chronic hypertension,
  - obesity,
  - renal disease,
  - autoimmune disease and
  - multiple pregnancies.

Examples

Some examples of conditions during pregnancy that may indicate underlying IPV

- Traumatic injury, particularly if repeated and with vague or implausible explanations
- Intrusive partner or husband present at consultations
- Adverse reproductive outcomes, including multiple unintended pregnancies and/or terminations, delay in seeking ANC, adverse birth outcomes
- Repeated STIs
- Unexplained or repeated genitourinary symptoms
- Symptoms of depression and anxiety
- Alcohol and other substance use
- Self-harm, suicidality, symptoms of depression and anxiety

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