



**សន្និសីទស្តីពីបច្ចុប្បន្នភាពរបស់សមាគមធូបកម្ពុជាលើកទី៤**  
The 4<sup>st</sup> Cambodia Midwife Update Symposium

**រួមគ្នាថែទាំសុខភាពមាតា និងទារកជុំវិញកំណើត**  
Together, Caring for Maternal and Perinatal Health

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# Ensuring Patient Safety in Midwifery Practice

For Mothers & Neonates

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A Comprehensive Guide for Clinical Midwifery Professionals

Evidence-Based Standards | Safe Practice | Quality Care

# Presentation Overview

20 slides covering essential safety domains in midwifery practice

**01** Introduction & Safety Framework

**02** Risk Assessment in Maternal Care

**03** Safe Intrapartum Care

**04** Postpartum Maternal Safety

**05** Neonatal Immediate Care

**06** Neonatal Resuscitation

**07** Infection Prevention & Control

**08** Medication Safety

**09** Hemorrhage Management

**10** Pre-eclampsia / Eclampsia

**11** Safe Transfer & Referral

**12** Documentation & Communication

**13** Interprofessional Collaboration

**14** Patient Education & Consent

**15** Emergency Preparedness

**16** Mental Health Safety

**17** Nutritional & Supportive Care

**18** Quality Improvement

**19** Ethical & Legal Considerations

**20** Key Takeaways & Conclusion

# Introduction to Patient Safety in Midwifery

Why safety is the cornerstone of quality midwifery practice

800

women die daily  
from preventable  
childbirth causes

WHO Global Report 2023

2.5M  
neonatal deaths  
annually worldwide

## Patient Safety Defined

A framework of organized activities that reduces harmful events caused by medical care.

## Midwifery Scope

Encompasses antenatal, intrapartum, postnatal care, and newborn care up to 28 days.

## Global Mandate

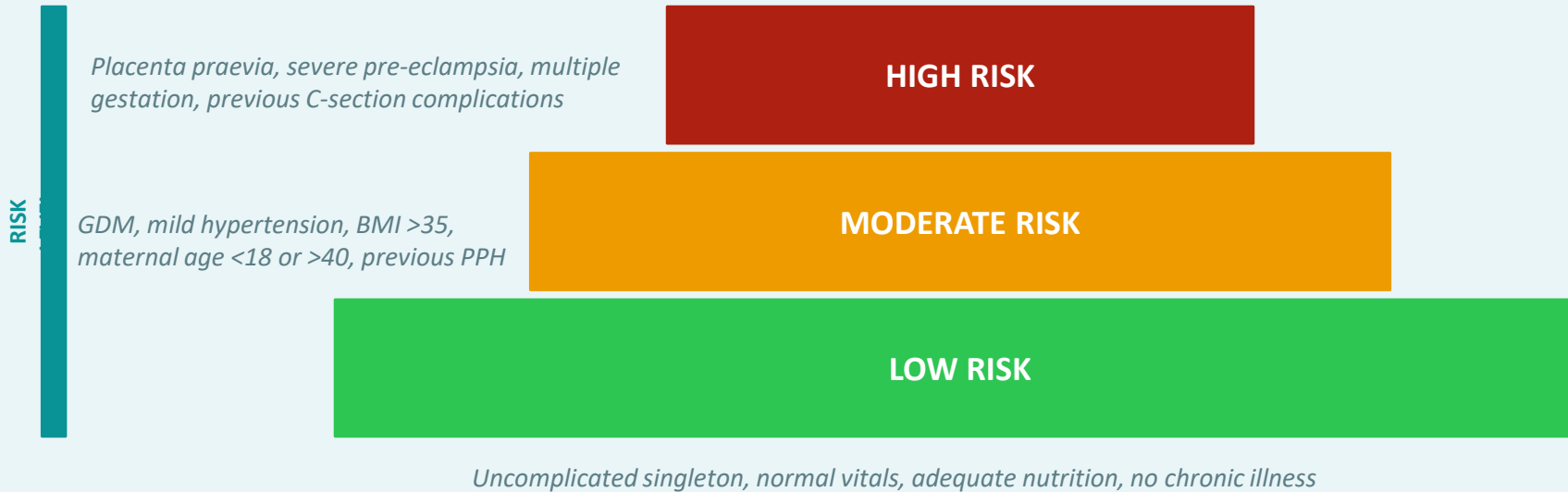
WHO, ICM, and national bodies mandate evidence-based safe practices for every birth.

## Safety Culture

Proactive identification of risk, open communication, and continuous improvement.

# Risk Assessment in Maternal Care

Identifying and stratifying risk from first contact through delivery



Key Tools: MEOWS Chart | Waterlow Score | Edinburgh Postnatal Depression Scale | Kleihauer-Betke Test

# Safe Intrapartum Care

Evidence-based practices during active labour and delivery

01

## Continuous Fetal Monitoring

CTG for high-risk; intermittent auscultation for low-risk. Document findings every 15–30 min. Escalate decelerations promptly.

02

## Active Labour Management

WHO partograph use reduces prolonged labour. Augmentation only when clinically indicated with senior review.

03

## Infection Control During Delivery

Sterile technique for all invasive procedures. Prophylactic antibiotics for GBS-positive mothers.

04

## Pain Management Safety

Epidural requires anaesthetic consent, monitoring of maternal BP, and continuous FHR assessment.

05

## Active Management of Third Stage

Oxytocin 10 IU IM within 1 min of birth. Controlled cord traction. Assess uterine tone.

06

## Perineal Care & Repair

Structured assessment of tears (Grade I–IV). Aseptic repair with appropriate suturing technique.

# Postpartum Maternal Safety

Critical observations and care in the immediate and extended postnatal period

## 0–2 Hours

Recovery Phase

## 2–24 Hours

Early Postnatal

## Day 2–7

Community Care

## Day 7–28

Extended Review

### Vital Signs Monitoring

BP, pulse, temp, RR every 15 min for first 2 hours post-delivery, then hourly until stable. Alert if: systolic >160 or <90 mmHg.

### Lochia Observation

Normal flow: rubra (0–4 days) → serosa (4–10 days) → alba (10–28 days). Report offensive odour or excessive loss.

### Thromboembolic Risk

Mobilisation within 6 hours. LMWH prophylaxis for at-risk women. TED stockings as appropriate.

### Uterine Assessment

Uterine fundal height and tone assessment every 15 min. Bimanual compression for uterine atony.

### Wound & Perineal Care

Daily assessment for signs of infection: erythema, swelling, dehiscence. Adequate analgesia and hygiene.

### Mental Health Screening

Edinburgh Postnatal Depression Scale (EPDS) at 10–14 days and 6 weeks. Refer score  $\geq 10$  for review.

# Neonatal Safety – Immediate Care at Birth

Systematic assessment and stabilisation of the newborn in the first hours of life

## APGAR Score Assessment

Criterion	0	1	2
Appearance	Blue/pale	Blue extremities	Pink all over
Pulse	Absent	< 100 bpm	> 100 bpm
Grimace	No response	Grimace	Cry/cough
Activity	Limp	Some flexion	Active motion
Respiration	Absent	Weak/irregular	Strong cry

Score: 7–10 = Normal | 4–6 = Moderate concern | 0–3 = Immediate resuscitation required

### Thermoregulation

Dry immediately, skin-to-skin contact, warm room (25°C+), delay bath 24 hours.

### Cord Care

Clamp at 1–3 min (delayed clamping). Clean, dry cord care. Check for 2 arteries, 1 vein.

### Vitamin K & Eye Care

Vitamin K 1 mg IM within 4 hours. Erythromycin eye drops in endemic areas.

### Early Breastfeeding

Initiate within 1 hour of birth. Support latch. Assess feeding every 3–4 hours.

# Neonatal Resuscitation

Structured response to the compromised newborn – NRP/ILCOR guidelines

## KEY REMINDERS

- Golden Minute: Complete initial steps and assess within 60 seconds
- Call for help immediately if HR < 100 bpm
- Ensure bag-mask seal and adequate chest rise
- 2-thumb technique for chest compressions (3:1 ratio)
- SpO<sub>2</sub> targets: 1 min = 60%, 5 min = 85%, 10 min = 95%
- Warm environment throughout resuscitation
- Document time of events meticulously

## Birth

Term? Tone? Breathing?

## Initial Steps

Warm, dry, stimulate  
Position airway, suction if needed

## Evaluate

Breathing? HR > 100 bpm?

## PPV / SpO<sub>2</sub> Monitoring

Positive Pressure Ventilation  
HR < 60: CPR + intubation

## Medications

Epinephrine 0.01–0.03 mg/kg IV  
Volume expansion if needed

# Infection Prevention & Control

Standard and transmission-based precautions in midwifery settings

Before  
patient contact

After body  
fluid risk

## 5 Moments for Hand Hygiene

After contact  
with surroundings

### IPC Best Practices

- Use surgical hand scrub before invasive procedures
- PPE: gloves, apron, eye protection for all deliveries
- Aseptic Non-Touch Technique (ANTT) for catheterisation, IV access
- Neonatal cord and eye care: prevent omphalitis and conjunctivitis
- Screen for GBS, HIV, Hepatitis B at booking; act on results
- Environmental cleaning between patients; safe sharps disposal

# Medication Safety in Midwifery

Preventing medication errors in antenatal, intrapartum, and postnatal care

## The 10 Rights of Medication Administration

Right Patient	Right Drug	Right Dose	Right Route	Right Time
Right Documentation	Right Reason	Right Response	Right Education	Right to Refuse

### ⚠ High-Alert Drugs

Oxytocin, Magnesium Sulfate, Methotrexate, Insulin – require double checking by two midwives.

### ⚠ MgSO<sub>4</sub> Protocol

Antidote (calcium gluconate) must be at bedside. Monitor patellar reflexes and respiratory rate hourly.

### ⚠ Oxytocin Safety

Never administer as IV bolus. Infusion must be on a syringe driver with maternal/fetal monitoring.

### ⚠ Opioid Safety

Document all controlled drugs. Naloxone available for neonatal respiratory depression.

# Postpartum Hemorrhage – Prevention & Management

PPH is the leading cause of maternal mortality; early recognition saves lives

PPH = Blood loss  $\geq$  500ml after vaginal birth or  $\geq$  1000ml after C-section | Minor: 500–1000ml | Major:  $>$ 1000ml | Massive:  $>$ 2000ml

## TONE

Uterine atony (70%)  
Bimanual massage  
Oxytocin, Ergometrine  
Misoprostol

## TISSUE

Retained placenta  
Manual removal  
Curettage if needed

## TRAUMA

Lacerations/tears  
Surgical repair  
Vaginal/uterine packing

## THROMBIN

Coagulopathy  
FFP, Platelets  
Cryoprecipitate  
Tranexamic acid

### CALL FOR HELP

Obstetric emergency call.  
Senior midwife + obstetrician +  
anaesthetist + theatre team.

### IV ACCESS & FLUIDS

2 large-bore IV cannulae. Blood  
samples: FBC, clotting, G&S.  
Hartmann's / O-negative blood.

### MEASURE & DOCUMENT

Calibrated drapes. Time blood  
loss volume. Observations every  
5 min. SBAR communication.

### ESCALATE CARE

Surgical options: B-Lynch  
suture, uterine artery ligation,  
hysterectomy as last resort.

# Pre-eclampsia & Eclampsia Management

Hypertensive disorders affect 5–8% of pregnancies; require prompt intervention

## Recognition

- BP  $\geq$ 140/90 mmHg on 2 occasions
- Proteinuria  $\geq$ 300 mg/24h
- Severe features: BP  $\geq$ 160/110
- Headache, visual disturbance
- Epigastric pain, vomiting
- Oedema (rapidly developing)
- HELLP syndrome warning signs

## Assessment

- Hourly BP monitoring
- Urinalysis every 4 hours
- Blood: FBC, LFT, U&E, clotting
- Fluid balance: strict I&O
- Fetal wellbeing: CTG, USS
- Symptom review every shift
- Level of consciousness

## Management

- Antihypertensives: Labetalol / Nifedipine
- MgSO<sub>4</sub> for seizure prophylaxis
- Eclampsia: ABC, MgSO<sub>4</sub>, recovery
- Fluid restriction: 80–100 ml/hr
- Timing of delivery depends on severity
- Postpartum: BP monitoring 48 hrs
- Inform patient of recurrence risk

⚡ Eclampsia: Place in recovery position • Call emergency team • MgSO<sub>4</sub>, 4g IV over 5–10 min • Airway management • Deliver after stabilisation

# Safe Transfer & Referral

Structured communication and care continuity during emergency and elective transfer

## SBAR Communication Tool for Referral

**S**

### Situation

Patient name, age, gestation  
Presenting problem  
Current clinical concern

**B**

### Background

Obstetric & medical history  
Medications & allergies  
Antenatal care summary

**A**

### Assessment

Current vital signs  
Fetal wellbeing (CTG/FHR)  
Your clinical impression

**R**

### Recommendation

Action required  
Level of urgency  
Expected time of arrival

## Transfer Checklist

- Informed consent obtained
- Receiving unit contacted & accepts
- Transfer record completed
- Partogram / notes copied
- Medications packed + given
- IV access patent and secured
- Qualified escort accompanies
- Appropriate transport arranged
- Family/partner informed
- Handover at receiving unit

# Documentation & Communication

Accurate, timely documentation is a legal and clinical safety requirement

## Contemporaneous

Record events as they happen. Time-stamp all entries. Never back-fill notes hours later.

## Legible & Signed

Sign every entry with full name, designation, and date. Countersign verbal orders.

## Complete Handover

Use structured handover: SBAR. Include all outstanding tasks and risks.

## Accurate & Factual

Document what was observed, not what was assumed. Avoid jargon or abbreviations.

## Confidential

Access records on a need-to-know basis only.

## Incident Reporting

Report near-misses and adverse events via local risk management system within 24 hrs.

*"If it wasn't documented, it wasn't done."* — Nursing & Midwifery Council Principle

# Interprofessional Collaboration & Teamwork

Effective teams save lives – communication failures prevent

Obstetric  
Nurse

Midwife

Obstetrician

Mother  
&  
Neonate

Neonatologist

Social Worker  
/ Counsellor

## TeamSTEPPS Strategies

- Huddles & briefings before each shift
- Call-out & check-back technique
- CUS words: Concerned, Uncomfortable, STOP
- Closed-loop communication
- Two-challenge rule for safety concerns
- Structured debriefs after emergencies

# Patient Education & Informed Consent

Empowering mothers through knowledge is central to safe, woman-centred care

## 4 Elements of Valid Informed Consent

### Disclosure

All material risks, benefits, and alternatives must be explained in plain language.

### Capacity

Assess mental capacity at each encounter. Document capacity assessment.

### Voluntariness

Consent must be free from coercion. Respect refusal of treatment.

### Specificity

Consent is procedure-specific. Verbal consent documented; written for invasive procedures.

*Use teach-back method to confirm understanding. Provide written information in patient's language.*

## Key Education Topics

- Signs of labour & when to attend hospital
- Danger signs: reduced fetal movement, bleeding
- Breastfeeding initiation and positioning
- Cord care and jaundice recognition
- Postpartum contraception options
- Mental health: baby blues vs depression
- Immunisation schedule for mother & baby
- Safe sleep: back to sleep, clear cot
- When to re-attend: warning signs postnatal

# Emergency Preparedness in Midwifery

Readiness drills and protocols for obstetric emergencies

## RED Major PPH

- Massive transfusion protocol
- Call emergency team
- Cellsaver if available
- Surgical intervention

## BLUE Maternal Collapse

- ALS algorithm
- Call crash team
- Perimortem C-section at 4 min if no ROSC
- Lateral tilt if >20 weeks

## GREEN Cord Prolapse

- Knee-chest position
- Manual elevation of presenting part
- Emergency C-section
- Bladder filling if delay

## AMBER Shoulder Dystocia

- Call for help – note time
- McRoberts manoeuvre
- Suprapubic pressure
- Rubin II, Woods screw
- All-fours / Gaskin

## PURPLE Eclampsia

- Position, ABC
- MgSO<sub>4</sub> 4g IV bolus
- AntiHTN if BP ≥160
- Delivery plan after stabilisation

## TEAL Neonatal Compromise

- Summon neonatal team
- NRP protocol
- Document APGAR
- Transfer to NICU if indicated

# Perinatal Mental Health Safety

Mental illness is the leading indirect cause of maternal death in high-income countries

<b>Baby Blues</b> Onset: Days 2–5 Prevalence: 50–80%	Tearfulness, mood swings, mild anxiety; self-limiting	Reassurance, rest, support; resolves by day 10
<b>Postnatal Depression</b> Onset: 2–8 weeks Prevalence: 10–15%	Low mood, tearfulness, poor bonding, loss of interest, anxiety	EPDS screening; CBT, antidepressants, peer support
<b>Postnatal Psychosis</b> Onset: 24–72 hours Prevalence: 1–2 / 1000	Confusion, hallucinations, delusions, rapid mood changes	Psychiatric emergency – inpatient admission
<b>Perinatal Anxiety</b> Onset: Anytime Prevalence: 15–20%	Excessive worry, panic attacks, tokophobia, OCD	CBT, mindfulness; pharmacotherapy if severe

*Refer any concerns to perinatal mental health team. All mothers to be screened using EPDS at booking, 28 weeks, and 6 weeks postnatal.*

# Quality Improvement & Safety Monitoring

Continuous improvement systems to sustain high standards of midwifery care

## PDSA Quality Improvement Cycle

<b>P</b>	<b>Problem</b> Identify the problem. Set measurable objectives. Predict outcomes. Assign team roles.
<b>D</b>	<b>Driven</b> Implement the change on a small scale. Collect data. Document unexpected observations.
<b>I</b>	<b>Iterative</b> Analyse results vs predictions. Identify what worked and what didn't.
<b>A</b>	<b>Adaptation</b> Adopt, adapt, or abandon the change. Scale up successful interventions.

## Key Safety KPIs to Monitor

<b>PPH Rate</b>	> 500ml: target <10%
<b>C-Section Rate</b>	WHO target: 10–15%
<b>APGAR &lt; 7 at 5 min</b>	Benchmark < 2%
<b>Maternal Mortality</b>	Per 100,000 live births
<b>Neonatal Mortality</b>	Per 1,000 live births
<b>Infection Rate</b>	SSI: < 2% post C-section
<b>Medication Errors</b>	Track & trend monthly
<b>Patient Satisfaction</b>	Minimum 85% positive
<b>Incident Reports</b>	All near-misses reviewed

# Key Takeaways & Conclusion

**01** Patient safety is non-negotiable – every birth, every mother, every neonate deserves safe, evidence-based care.

**02** Risk stratification early and often prevents the majority of adverse maternal and neonatal outcomes.

**03** Structured protocols (SBAR, APGAR, 10 Rights, PDSA) reduce variation and errors across settings.

**04** Teamwork, clear communication, and psychological safety are as important as clinical skills.

**05** Every incident – including near-misses – is a learning opportunity to improve systems and culture.

**06** Continuous professional development, simulation drills, and reflective practice underpin safe midwifery.

*"The care of the mother and baby is not just a duty — it is the highest calling of our profession."*

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*All guidelines should be applied in conjunction with local protocols and national standards. Evidence reviewed as of 2024.*