Safety in Maternity Care

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Acknowledgement
The penguin illustrations and many teamwork concepts taught in this chapter are derived from the Team Strategies and Tools to Enhance Performance and Patient Safety (TeamSTEPPS®) program.

Objectives
• Discuss need for a patient safety focus in maternity care
• Review maternity care team personnel
• Cite evidence that team training improves outcomes
• Demonstrate teamwork tools that improve safety
• Discuss risk management issues in obstetrics and possible solutions (the Five Cs)

Keys to successful landing of US Airways Flight 1549 on Hudson River in 2009
• Preflight training and drills: everyone knew their role
• Communication: existed between pilot, crew members, passengers, ground control and rescuers
• Everyone contributed
• Result: All 155 aboard survived!
ALSO and Errors

- ALSO involves utilizing a standardized approach to emergency situations
- Knowledge of content, practice of manual skills, and use of mnemonics reduces propensity for errors

Safety Statistics

- Poorly managed births contribute to the estimated 289,000 maternal mortalities worldwide each year
- Medical errors are the third leading cause of death in the United States after heart disease and cancer!
- Between 210,000 and 400,000 US non-pregnant patients die annually due to medical errors

Institute of Medicine Report

- Seven percent of hospital patients experience a serious medication error
- More Americans die of medical errors than of breast cancer, AIDS, or motor vehicle accidents
- Costs associated with medical errors are $8 to $29 billion annually

The Joint Commission (TJC)

- From 2004 to 2014 in the US, communication failures were a root cause in:
  - 48% of maternal sentinel events
  - 70% of perinatal sentinel events

“A Team of Experts Does Not Make an Expert Team!”

- Most maternity care units involve so many clinicians that a patient care team rarely involves the exact same people on any given day
- A maternity care unit with 81 obstetricians, 50 registered nurses, 16 anesthesiologists, 12 neonatal nurse practitioners, 14 surgical technologists, and 35 nurse anesthetists, could result in 381 million possible teams!

Practice Is Key

- US Airways pilots and flight attendants who were on the plane that landed on the Hudson River are an example of a high-functioning team that had practiced what to do in an emergency
- Patient outcomes improve when team members work together in an environment where practicing team training is considered a high priority
Teamwork Improves Outcomes

- Weighted Adverse Outcome Score (WAOS) and Maternal Severity Index (MSI) improved 50% following implementation of team training in the maternity care unit at Beth Israel Deaconess Medical Center
- Fairview Health System in Minneapolis has found improved obstetrical outcomes with in situ team training

Please Use CUS Words But Only When Appropriate!

The Maternity Care Team

- The pregnant woman
- Her family and support network
- The health care team
  - Birth attendant
  - Consultants
  - Nursing personnel
  - Doula

The Pregnant Woman

- Clinician strategies
  - Listen, encourage mutual trust
  - Anticipate potential problems
  - Discuss options, develop an acceptable birth plan
  - Allow woman to have a sense of control
  - Assess for entrenched health beliefs, expectations and concerns

Family and Support Network

- Provider Strategies:
  - Develop relationship with partner and family prior to intrapartum period
  - Assess cultural norms and expectations
  - Assess family dynamics
  - Encourage attendance at childbirth classes
  - Acknowledge anger and anxiety
The Health Care Team

- A well-functioning team improves patient satisfaction
  - Good communication
  - Birth attendant readily available
  - Consultant willing to assist in a timely manner
  - Team member contributions are respected and encouraged
- Practices simulations together as a team in preparation for obstetrical emergencies

Characteristics of Highly Effective Teams

- Shared mental models
- Clear roles and responsibilities
- Clear, valued, and shared vision
- Manage performance outcomes
- Strong team leadership
- Regular practice of debriefing and feedback
- Strong sense of collective trust and confidence
- Cooperate and coordinate
- Optimize resources

Options When Patient and Clinician Disagree

- Document the conflict
  - Note patient’s understanding of implications and refusal to follow recommended care plan
- Document limitations imposed upon provider as a result of disagreement with recommended plan
- Timely transfer

Conflict Resolution

- Impediments to team function
  - Personality conflicts
  - Competitive pressures
  - Fixed beliefs about abilities or roles
  - Biases regarding management
  - Inadequate resources

Approach to Conflict

- Separate the people from the problem
  - Hard on the problem, soft on the people
- Focus on interests, not positions
  - Focus on concerns, desired outcomes
- Invent options for mutual gain
  - Brainstorming to yield “win-win”
- Insist on use of objective criteria
  - Provides basis for further improvement

Teamwork Tools

- Situational awareness
- Standardized language
- Closed-loop communication
- Shared mental model
Situational Awareness: Labor and Delivery Examples

- During labor and delivery, focusing on a fetal monitoring pattern might distract the team from recognizing worsening blood pressure levels and other symptoms prior to an eclamptic seizure.
- Focusing on difficult family dynamics might result in failure to prepare for a shoulder dystocia, despite a large estimated fetal weight and a prolonged second stage of labor.

How Many Times Does the Team in Black Shirts Pass the Basketball?

Situational Awareness

In many groups, 50% do not see the gorilla in the basketball video because they are focusing on counting the passes!

Standardized Language

- Call-out
- SBAR
- Handoff

Call-Out

- Quickly inform all team members simultaneously when a new critical event arises.
- For example:
  - When dealing with postpartum hemorrhage, a “call-out” of the history of high blood pressure alerts the managing provider that methylergonovine is contraindicated.

SBAR

- Situation
- Background
- Assessment
- Recommendation

- Standard format for communicating critical information
- Use of SBAR in one institution resulted in a decreased rate of adverse events from 89.9/1,000 patient days to 39.96/1,000 patient days.
Handoff

- Miscommunication in the transfer of care from one provider, care team, or facility to another can result in life-threatening errors.
- Effective patient handoffs should include interactive communication (that includes the patient), limited number of interactions, a process for verification, and an opportunity to review relevant historical data.

Closed-Loop Communication (Check Back)

Example:
- A doctor orders 10 units of pitocin IM after delivery of the anterior shoulder.
- The nurse should repeat back that the physician would like 10 units of pitocin IM after delivery of the anterior shoulder, as confirmation that the message was clearly understood.

What Do You See?

Shared Mental Model

Patient safety is compromised when all clinicians are not on the same page.

- Situational awareness, standardized language, and closed-loop communication will allow a team to have a shared mental model.
- ALSO mnemonics help create a shared mental model.

Briefings, Huddles and Debriefings

- Briefings are team meetings before patient care to review patient status and plan of care.
- Huddles are meetings of patient care teams during the course of care when situations arise.
- Debriefings occur after patient care and should comprise of discussions of what went well AND what did not go well.

Sample Debriefing Questions

1. What went well and why?
2. What could have gone better and why?
3. What would you do different next time?
Purpose of Debriefing

- Improves medical management
- Encourages teamwork
- Identifies systems issues

Fatigue

- Can affect patient safety factors including memory, speed and mood
- Adults with less than 5 hours of sleep per night have trouble with short-term memory, retention, and concentration
- Federal Railroad Administration data indicates that fatigue is a contributing cause in approximately 29% of train crashes
- Purpose of resident work hour rules

Ways to Decrease Drug Errors

- Electronic health records help with legibility and catching drug-drug interactions
- Implement rule of, “Always lead, never follow” by placing a zero before numbers that are less than one, and not placing a zero after a decimal point
- Regularly utilize closed-loop communication

Common Malpractice Allegations

- Negligent antepartum care
- Inadequate or negligent genetic counseling
- Negligent management of complications
- Negligent monitoring of the fetus during labor
- Improper use of induction/augmentation medications
- Improper diagnosis or management of labor
- Negligent management of delivery complications
- Improper timing of cesarean delivery

Five C’s of Risk Management

- Compassion: patients need to feel cared for and respected
- Communication: with patients and with healthcare team
- Competence: know our own limitations
- Charting: if it was not charted = it was not done!
- Confession: open disclosure

Simulated Learning

- Can take place in a simulation lab, or “in situ” on maternity care units
- Allows multidisciplinary and inter-professional teams to practice managing emergencies when patient lives are not at risk
- Video recording to use in debriefing is very helpful
Summary

• A team of experts does not necessarily make an expert team
• Excellent teamwork skills will include: situational awareness, standardized language, closed-loop communication, and a shared mental model
• Application of the Five C’s will reduce the risk of malpractice litigation
• Incorporating teamwork skills and ALSO mnemonics during training and subsequent practice can lead to improved patient care and ultimately improved patient outcomes