Simulation

Turning A Team of EXPERTS
Into an EXPERT TEAM!

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*Note: Number of pregnancy-related deaths per 100,000 live births per year.*
Contributors to Maternal M&M from Obstetrical Hemorrhage

- DELAY IN DIAGNOSIS
- DELAY IN BLOOD TRANSFUSION
- DELAY IN RETURN TO THE OR
Contributors to Maternal M&M from Obstetrical Hemorrhage

- COMMUNICATION ERRORS
- DEVIATION FROM ESTABLISHED GUIDELINES
- LACK OF COORDINATION BETWEEN DEPARTMENTS
Communication Breakdowns are frequently the root cause of undesirable outcomes.


Root Causes of Sentinel Events (All categories; 1995-2004)

Team Training with Simulation has Proven Results

ED Observed Errors

Length of ICU Stay After Team Training

OR Teamwork Climate and Postoperative Sepsis Rates

L&D Adverse Outcomes

(Morey, 2002), Dynamics Research Corporation
Health Services Research

(Mann, 2002), Beth Israel Deaconess Medical Center
Contemporary OB/GYN

(Pronovost, 2003), Johns Hopkins
Journal of Critical Care Medicine

(Sexton, 2006), Johns Hopkins
Journal of Critical Care Medicine
Medical Simulation

PATIENT CARE SCENARIOS WHICH ALLOW MULTIDISCIPLINARY TEAMS OF HEALTHCARE PROFESSIONALS TO PRACTICE EVIDENCE BASED CARE GUIDELINES, IMPROVING COMPETENCE AND CONFIDENCE, AS WELL AS TEAM COMMUNICATION IN DELIVERING HIGH-QUALITY PATIENT CARE.

NO THREATS TO PATIENT SAFETY

REALISTIC SITUATIONS

DEBRIEFING ASSISTS THE TEAM IN COMMUNICATION SKILLS, DECISION MAKING, PROTOCOLS, TEAMWORK AND OTHER VARIABLES

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Goals of Simulation

• Enable the healthcare team to train for high risk events that are relatively rare.

• Enhance and promote patient safety and quality healthcare by improving teamwork and communication.

• Enhance clinical competence by providing individuals with opportunities for repetition, pattern recognition and faster decision making so when faced with a real situation habit takes over.

• One person is not responsible, THE TEAM IS!
Simulation
General Goals

• Effective communication with patient
• Closed-loop team communication
• Focused patient assessment
• Ability to develop an appropriate differential diagnosis
• Ability to develop an appropriate management plan
Post Partum Hemorrhage
Specific Goals

- Recognition of deteriorating vital signs
- Objective evaluation of blood loss
- Acquisition of appropriate lab tests
- Appropriate use of uterotonic medications
- Establishment of 2 IV's and fluid resuscitation
- Institution of the Massive Transfusion Protocol
- Appropriate use of uterine tamponade balloon or B-lynch suture
- Timely return to the OR
Questions for Su-Yen and her Team
Postpartum Hemorrhage Simulation Agenda

- Welcome
- Pretest review
- CMQCC toolkit and guidelines
- Introduction to simulation
- Goals
- Familiarization with the simulators
- Familiarization with the Bakri balloon
- Scenario/debrief x2
- Objective evaluation
The Experience

• Mistakes will happen
• Keep as close to reality as possible
• Our own MDs involved
• The environment is key
• Experiential Learning
References

• Morey 2002, Dynamics research corporation. Health services research.
• Mann, 2002. Beth Israel Deaconness Medical Center. Contemporary ObGyn.
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