Let's Talk: Post Critical Incident Debriefing Project

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Background

- **Structured debriefings after critical events rarely occur in a level IV Neonatal Intensive Care Unit (NICU)**
- Lack of structured debriefing
  - Negatively impacts provider physical and emotional health and patient outcomes
  - Leads to unconstructive feedback and unidentified areas for team and patient outcome improvement
- Clinical team *debriefing sessions* after a life-threatening emergencies lead to improved:
  - Team and individual learning opportunities
  - Patient focused resuscitation outcomes
  - Team communication
- *Standardized Debriefing tools*
  - Provide a structured method of debriefing
  - Improve communication among team members
  - Improve quality of patient safety and care

Objectives

Short Term Goals

- Implement a structured post critical incident debriefing process, using the TeamSTEPPS Debriefing Tool following 100% of high-risk deliveries in infants 22-32 week gestation and emergency/resuscitation codes in the NICU.
- Enhance positive team communication during debriefings.

Long Term Goal

- Adoption and dissemination of the TeamSTEPPS Debriefing Tool following 100% of emergency deliveries and critical events in the NICU.

Implementation Methods

- Collaborated with management of 52-bed, Level IV NICU in an academic medical center in the Mid-Atlantic region to implement structured TeamSTEPPS Debriefing Tool
- Developed data collection tools to document QI project progress
- Created/revised educational materials for multidisciplinary NICU staff
- Trained champions/facilitators via in-person and online (to increase staff training) PowerPoints
- Designed self learning binder to enhance training of NICU's multidisciplinary staff
- Exercised debriefing tool during code/delivery simulations to get staff accustomed to debriefing following code/delivery situations
- Produced reminder cards to facilitate debriefing after 22-32 week deliveries and resuscitation/emergency events
- Established plan to communicate debriefing findings with management and staff
- Role modeled safe environment for structured debriefing

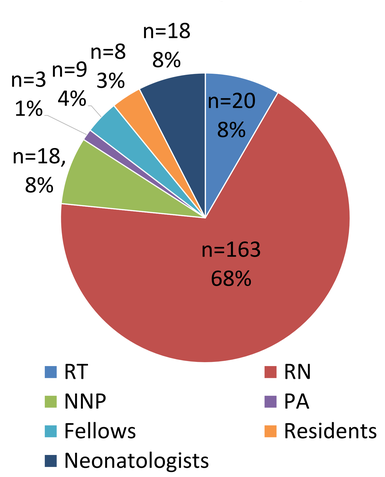
Figures

TeamSTEPPS Debriefing Tool Core Components

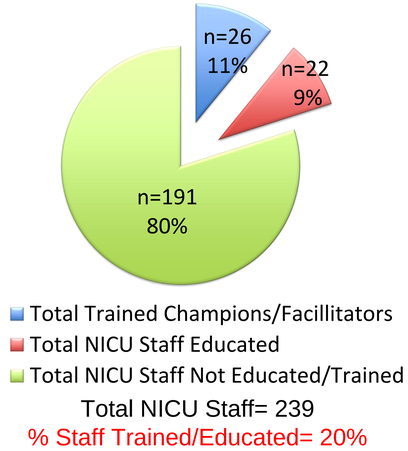
- **Was communication clear throughout the event?** (Closed loop communication, orders clearly understood, appropriate tone used amongst team members, etc.)**: Yes or No**
- **Were roles and responsibilities understood? Yes or No**
- **Was the workload distribution clear? Was the team members present sufficient?** (Too many, too few, key personnel missing, etc.) **Yes or No**
- **Was situation awareness maintained?** (Team members aware of their surroundings and the needs of the NICU team during the critical incident) **Yes or No**
- **Did the team ask for or offer assistance? Yes or No**
- **Were errors made or avoided, and/or any other issues?** (Process, medication, equipment, etc.) **Yes or No**
- **What went well? What did not go well?** (Allow members to openly discuss team problems or individual. *Respond using good judgment statements.)
- **What should change?**

Results

NICU Staff (n=239)

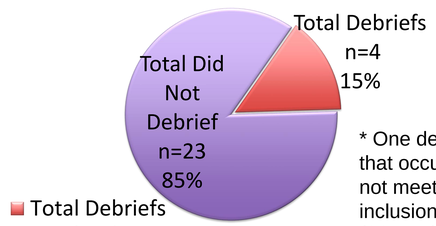


NICU Staff Trained/Educated



Total NICU Staff= 239
% Staff Trained/Educated= 20%

Total 22-32 Week Deliveries and Emergency Resuscitation Codes (n=27*)



* One debrief that occurred did not meet the inclusion criteria (36 weeks)

➢7 completed tools

REFLECT Post Debriefing Evaluation Tool

➢100% replied yes to all questions.

Discussion

- Formally training facilitators and educating staff in debriefing process increased post critical incident debriefs from 1% to 15% in the NICU.
- Structured TeamSTEPPS tool lead to focused and positive communication during debriefings.
- Similar to the literature, structured debriefings demonstrated improved team cohesiveness, communication, organization, role delineation, AND decreased patient stabilization time.
- REFLECT evaluation tool indicated staff agreed the debriefings were focused, encouraged participation, and communication was effective.

Limitations: Large unit (n=239), high acuity, and limited time resulted in 20% of staff completing training and limited the number of structured debriefings (n=4, 15%) following critical events.

Conclusions

- Implementation of a structured debriefing tool is feasible in a high acuity NICU.
- Increased nursing and provider staff engagement, and ongoing training would enhance debriefing facilitation.
- Large number of personnel and high patient acuity may have contributed to low number of debriefings.

Future considerations:

- Piloting in a smaller unit or level NICU
- Expanding to all emergent deliveries regardless of gestational age
- Facilitating collaborative debriefs between OB and NICU teams following maternal/neonatal emergencies

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