Teamwork and Safety Climate of Perinatal Caregivers

Wendy C. Budin, PhD, RN-BC, FAAN; Marge Lilienthal, MS, RN, NEA-BC; Flavia Contratti, MA, RN-BC, LCCE

NYU Langone Medical Center

Background

As a result of the Institute of Medicine's landmark findings on patient safety problems in U.S. hospitals (IOM, 1999), many organizations have implemented strategies to improve teamwork to ultimately improve patient safety. Patient safety climate which encompasses staffing, team respect, comfort with reporting errors, and other important factors such as fostering appropriate feedback and open receptive communication, is one important factor in improving the care that women receive in perinatal units.

Purpose

To describe variations in perinatal caregiver perceptions of teamwork and safety climate prior to a 6-month Crew Resource Management (CRM) training program at a large urban academic medical center and to compare responses between nurses and physicians.

Definitions

Teamwork climate: perceived quality of collaboration between personnel (example items…)

- Disagreements in this clinical area are resolved appropriately
- Our physicians and and nurses work together as a well-coordinated team

Safety climate: Perceptions of a strong and proactive organizational commitment to safety (example items…)

- I would feel perfectly safe being treated here as a patient
- Personnel frequently disregard rules or guidelines

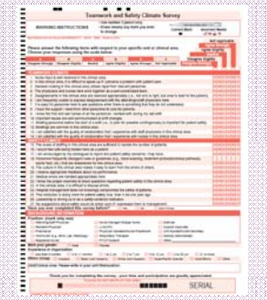
Sample

All nurses and physicians that work a minimum of 50% of full time hours in the perinatal units at a large urban academic medical center in the northeast were invited to participate. Survey responses were received from 70 nurses and 88 physicians.

The Labor & Delivery unit performs approximately 4600 deliveries per year. There are 3 triage beds, 10 LDRs, 3 ORs, a 3-bed PACU and 4 antepartum beds. 92% of the hospital nursing staff is Baccalaureate prepared.

Method

Prior to the initiation of the CRM training program, the Teamwork and Safety Climate Survey (Sexton, et al., 2006) was administered to eligible perinatal care providers.



This 27-item tool allows participants to respond to statements using a 5- point Likert scale. Demographic information was also assessed.

Results

Physicians perceived teamwork climate to be more positive (3.82, SD=.699) than nurses (3.2, SD = .665) (t = -2.01, p = .05) however there were no significant differences in perceptions of safety climate.

	Group	N	Mean	Std. Deviation	Std. Error Mean
Teamwork_Climate	Physician	88	3.8277	.69959	.07458
	Nurse	70	3.2095	.66527	.07951
Safety_Climate	Physician	88	3.4478	.77321	.08242
	Nurse	70	3.3646	.67337	.08048

	t-test for Equality of Means						
						95% Confidence Interval of the Difference	
	t	df	Sig. (2-tailed)	Mean Difference	Std. Error Difference	Lower	Upper
Teamwork_Climate	5.638	156	.000	.61811	.10965	.40153	.83471
Safety_Climate	.711	156	.478	.08316	.11703	-.14801	.31432

	Range	Mean	SD
Teamwork Climate	1.6 - 5	3.4	.87
Nurses	1.6 – 4.3	3.2	.66
Physicians	2 - 5	3.8	.69
Safety Climate	1.3 – 5	3.4	.73
Nurses	1.5 – 4.8	3.3	.67
Physicians	1.3 – 5.0	3.4	.77

	N	Percent
Gender		
Male	34	19.0%
Female	145	81.0%
Ethnic Group		
Hispanic	9	5.8%
Black	25	16.0%
White	92	59.0%
Asian	20	12.8%
Multi-ethnic	2	1.3%
Other	8	5.1%

Implications

Findings support the need for training to enhance perinatal caregivers attitudes towards team work and safety.

Change Strategies

- Crew Resource Management concepts were introduced to all members of the interdisciplinary healthcare team.
- A four -hour mandatory program was taught by nurse-physician teams to groups of not more than 20 individuals.
- Materials werer presented using a variety of methods including lecture, role-playing exercises, discussion and film clips.
- Content included safety principles, collaboration, communication tools such as SBAR, CUS, and DESC script to promote mutual respect and situational awareness.
- Four new, large display screens were purchased so that all patient EFM strips and the "white board" information (HIPPA compliant) can be seen at the nursing station.
- These were used for twice daily Team Meetings comprised of all nurses, physicians, and ancillary staff.
- The purpose of meetings was to review every patient's status, plan of care, presence of appropriate personnel, environmental constraints, i.e. bed availability in NICU, Mother Baby Unit, and to give the opportunity for cross-monitoring to ensure optimal patient safety.

Conclusions

We are striving to achieve an enhanced perception of teamwork and mutual support amongst team members.

Data support the need to strengthen teamwork between physicians and nurses. While perception of the safety climate did not differ significantly between the two groups, it warrants attention and these scores could be improved.

Recently completed resurvey upon completion of training and implementation of Crew Resource Management behaviors to see if these strategies enhanced teamwork and safety climate. Data are being analyzed.

References

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