

Using simulation as a method to improve pediatric nurses skills in assisting circumcision procedure.

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Introduction

Due to many reasons related to cost effectiveness, increase waiting time, operational issues and insurance coverage, the circumcision procedure was moved from Day Surgery to Pediatric Unit. Although pediatric nurses deals with children, however none of the staff have experience in assisting in circumcision procedure. Literature review shows many benefits of using simulation in improving staff knowledge, skills, attitude, satisfaction, self-confidence and patient safety.

Purpose

The purpose of this presentation is to share results of study on using Low-Fidelity simulation as a way to improve pediatric skills in assisting circumcision

Method

Descriptive design used, the study was conducted in pediatric unit in one government hospital in UAE. A convenient sample included pediatric nurses, physicians and managers. Several meeting were conducted to arrange the project commencement, consumable resources and staff scheduling were arranged. Instructional material, video and competencies were sent to staff, and 8 hours Low-Fidelity Simulation was used to assess staff knowledge, skill and attitude. After simulation, pediatric staff were supervised by Operating Theatre nurse for two procedures and later on pediatric staff were conducting the procedure alone. Feedback collected from nurses, manager and doctors by using open ended questions.

Result

The following themes were generated from open ended questions,



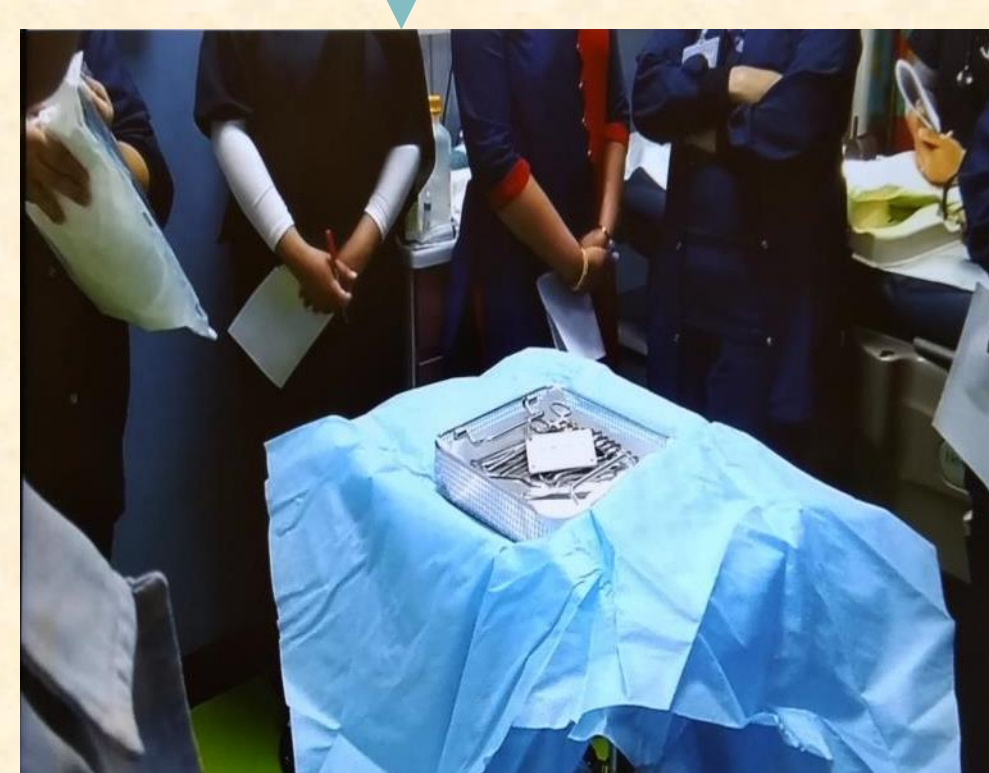
nurses' feedback before simulation: overwhelmed, physician refusal and fear. After simulation: confident, have enough time to practice, physician approval

Nurse Manager Feedback: before simulation: overtime concern and resources issues. After simulation: satisfied



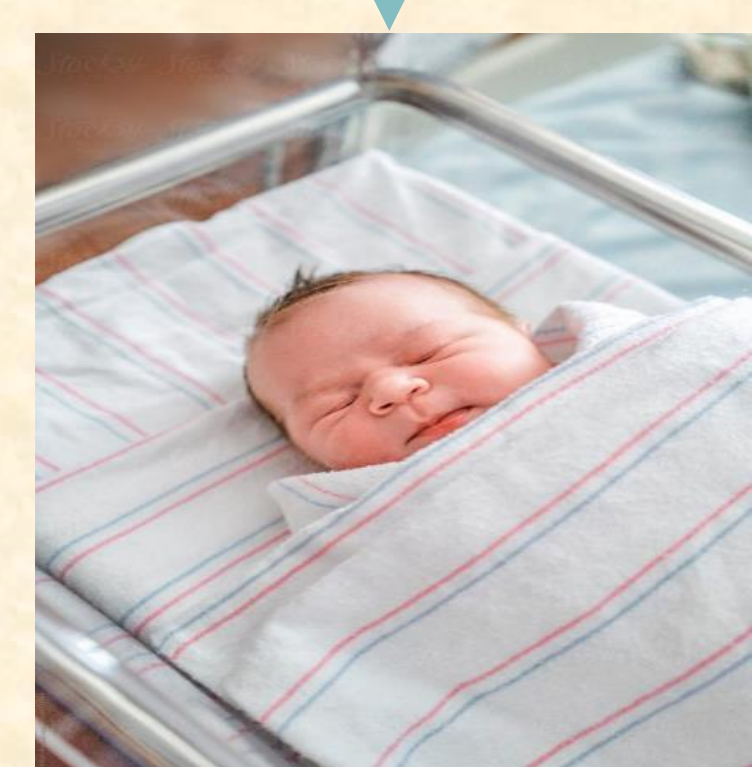
Physicians' feedback: before simulation: Hesitancy and time consuming. After simulation: satisfied and procedure managed on time.

Starts procedure



COMPETENCY ASSESSMENT TOOL: CIRCUMCISION (Non-OR Setting)		
This competency certifies that: Has been validated in:	Badge No. _____	
COMPETENCY AREAS	Met	Comment
PRE-REQUISITE SKILLS/Knowledge		
• Discuss the equipment, method used and special considerations related to circumcision procedure.		
• List out the contraindications of the procedure (e.g. infectious, respiratory distress, hypothermia, abnormalities of gastrointestinal tract, bleeding disorder etc.)		
• *Mention the importance of aseptic technique & maintaining a sterile field.		
• *Ability to operate the electrocautery (diathermy) machine by: <ul style="list-style-type: none"> • Checking the machine and accessories for visible damage of assistance. • Setting the bipolar function within safe range and/or according to surgeon's preference. • Moving & positioning the electrocautery machine & foot pedal accordingly. 		
PREPARATION/Attitude/ Circulating Nurse		
• *Perform hand hygiene.		
• *Confirm patient's identity using at least two patient identifiers with the parents or guardians (address their concerns if there is any and reinforce the surgeon's explanation of the procedure).		
• *Verify surgeon's order for Circumcision on the patient's MAR.		
• *Conduct a pre-procedure verification of the patient by ensuring that the informed consent for surgery has been obtained, attached to the patient's identifiers & available in the patient's file. <ul style="list-style-type: none"> • Notify the surgeon of any conditions that may contraindicate the procedure. 		
• Transport patient to Treatment Procedure Area via cot appropriately.		

After procedure, goes back to family



Conclusion

Simulation helped in moving circumcision procedure from day surgery to pediatric unit. The process was successful in pediatric unit although there was many concerns at the beginning of the project from multidisciplinary team, however, after use of simulation, staff, physicians and manager were satisfied. The project has resulted in creation of training plan with competencies and list of resources outside the day surgery unit.

THINGS NEEDED TO PREPARE FOR CIRCUMCISION	
1. Circumcision set	
2. 018 blunt needle	
3. 021 needle	
4. Tuberculin syringe	
5. Betadine	
6. Gauze 10x10	
7. Gauze swab Raytec	
8. Drapes Aperture or Spill Drapes	
9. Lidocaine 1% injection (Plain)	
10. Lidocaine 1% gel	
11. Normal Saline	
12. Prep set	
13. Sterile gloves for nurse/doctor	
14. Monocryl 4/0 (sterilized applicator)	
15. Bacigras 5x5 (if with sutures)	
16. Underpads	
17. Drape	
18. Pleabed different sizes	(be available on bedside)

CIRCUMSTRANTS FOR RESTRAINING THE BABY
BIPOLAR CAUTERY MACHINE- ERBE (settings 10watts) to get from OT every Thursday

list of resources

References

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