UTILIZING DISTRACTION THERAPY AND PARENTAL PRESENCE TO DECREASE FEAR AND ANXIETY IN PEDIATRIC SURGICAL PATIENTS AND THEIR FAMILIES

PRESENTED BY: MAXINE FEARRINGTON, RN-BC, MS
STUDY DESIGN: MARYJANE SAGE, MS, RN, CNOR
BACKGROUND

• >5 million children (0-16 yo) have surgery each year (Caldwell & Ray, 2017)
• Approx. 50% experience behavioral stress and anxiety (He et al, 2015)
• Pre-procedure anxiety associated with poor post-procedure outcomes
  • Behavioral disturbances
  • Bed wetting
  • Eating disorders
  • Separation anxiety
• Current trends include distraction and play therapies, preoperative tours patient/family
PURPOSE

The purpose of this study was to discover if distraction techniques and parental presence decrease fear and anxiety in the pediatric surgical patient and their family.

Research question: “Does offering an evidence-based pre-operative, intra-operative, and post-operative program decrease fear and anxiety in the pediatric surgical patient and their family compared to the current practice where children are separated from their patient(s) and not offered distraction?”
METHOD

Intended design
- Randomized controlled trial
  - Intervention = even days of month
  - Control = odd days of the month
- Intervention – tablet (distraction) and parental presence in OR according to FAS score
  - Parent given disposable “bunny suit”, shoe and head covers, allowed in OR until induction
- Control – usual care (no distraction/parental presence)
- Target sample size = 50 per group

Actual design
- Quasi-experimental
  - Those who consented = intervention
  - Those who decline/not approached = control
- Intervention – tablet (distraction) and parental presence in OR for all, regardless of score
  - Parent given disposable “bunny suit”, shoe and head covers, allowed in OR until induction
- Control – usual care (no parental presence) – some received distraction tool
- Actual sample size = 37 (I) and 20 (C)
MEASUREMENT TOOLS

• Anxiety Rating Scale/Faces Anxiety Scale (0-10)
  • 1-3 = Distraction tool
  • 4-7 = Distraction and medication
  • 8-10 = Medication only – Consult with anesthesia

• Stratified by age
  • 5-8 = Group A
  • 9-12 = Group B
Anxiety Rating Scale

Balanced mood
Slight fear and worry
Mild fear and worry
Moderate worry, physical agitation
Strong agitation, pacing, can’t sit still
Out-of-control behavior, self-harm

0 1 2 3 4 5 6 7 8 9 10

1-3 Distraction Tool
4-7 Distraction + Medication
7-10 Medication only Consult
**Please circle correlating FAS number**

**Place patient sticker on this form**

Distraction tool will be in the form of a child friendly tablet for children to watch a cartoon or play an age appropriate game.

Group A = Children ages 5 – 8

Group B = Children ages 9 - 12

Date ______________________

Group A or B ______________________
Postoperative Parental Survey Tool

Created by Mary Jane Sage

1. Rate your satisfaction with your child's care today.

   Poor   1   2   3   4   5   6   7   8   9   10 Exceptional

2. Was your child anxious on arrival?
   - Yes
   - No

3. Were you anxious on arrival?
   - Yes
   - No

4. Did your child choose a distraction tool?
   - Yes
   - No

5. Did you accompany your child to the operating room?
   - Yes
   - No
6. Did you accompany your child to the recovery room?
   - Yes
   - No

7. Do you feel your child was less fearful and anxious after using distraction?
   - Yes
   - No
   - N/A

8. Do you feel you were less anxious after accompanying your child to the operating room and/or the recovery room?
   - Yes
   - No
   - N/A
RESULTS

• Total participants = Intervention-37, Control-20 (Did not reach goal of 50 per group)
• Age range = no difference between groups (Fisher exact=1)
• FAS Pre- versus Post- scores – Wilcoxon test
  • Pre-operative FAS = p=0.88 (groups were similar at baseline)
  • Two-sided (looks at difference between groups) p=0.073
  • One-sided p=0.038
Pre-operative FAS scores

FAS Score Pre-op: Control
freq

FAS Score Pre-op: Intervention
freq
Post-operative FAS scores

FAS Score Post-op: Control

FAS Score Post-op: Intervention
RESULTS

- Parental Survey Results
  - Satisfaction score = 9(1) 10(34)
  - Child anxious on arrival = N(6) Y(29)
  - Parent anxious on arrival = N(11) Y(24)
  - Used distraction tool = N(1) Y(34)
  - Parent accompany child to OR = Y(35)
  - Parent accompany child to PACU = N(5) Y(30)
  - Child less anxious after surgery = N/A (1) N(3) Y(31)
  - Parent less anxious after surgery = N(1) Y(34)
DISCUSSION

• We did not reach our target goal of 50 per group, study not properly powered to detect statistical significance
• Although we did not achieve statistical significance, clinical implications were encouraging
• Randomization did not occur; with limited demographics collected, both groups resembled each other (age)
• Results from survey were very positive
LIMITATIONS

• Study prematurely halted – lost support from anesthesia for parental presence in the OR
• Small sample size, intervention greater than control
• Limited demographics collected
REFERENCES
