

Pilot Preoperative Education Video for Pediatric Patients

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ABSTRACT

BACKGROUND

Anesthetic induction can cause fear and anxiety in pediatric patients. This can increase anxiety resulting in complications. A preoperative education video can help prepare a child for anesthetic induction. (Baghele et al., 2019; Caumo et al., 2020; Delaney et al., 2015; Fortier et al., 2009, Fronk & Billock, 2020; McEwen et al., 2007; Newell et al., 2020; Rice et al., 2008; Taha & El-Sayed, 2021)

OBJECTIVE

This project aimed to create a pilot preoperative education video to assess the feasibility of creating and implementing a professional video.

METHODS

A video was recorded using an iPad showing a child's experience through perioperative events such as the day surgery room, pre-holding room, the operating room, and the post-anesthesia care unit. A voice-over was used to explain each step. The video was shown to small groups of pediatric patients, parents, and staff. Data were collected utilizing Likert scale surveys and analyzed using descriptive statistics. Narrative comments were evaluated for themes.

RESULTS

Staff had positive reactions to the video, perceived it as accurate, informative, and appropriate for pediatric patients at this institution. Parents found the video the be easy to understand and helpful in preparing them for their child's surgery. Children found the video easy to understand.

CONCLUSIONS

According to positive feedback from staff and parents, it was found that a professional video is not only feasible, but necessary.

OBJECTIVES

The overall purpose of this project was to develop a pilot anesthesia educational video for parents and/or guardians and their children.

RESEARCH QUESTION

- Does parental and staff feedback (P) about a pilot education video (I) support the development of a professional pediatric patient educational video (O) at a Midwestern hospital?

METHODS

DESIGN

- Pilot video was filmed using an iPad and volunteer actors.

SETTING

- Midwestern-tertiary care hospital – perioperative areas

- Scenes included in the video were the entrance to the hospital, day surgery room, pre-holding room. A voice-over was utilized to describe each scene.

SAMPLE

- Staff: anesthesiologists, CRNAs, child life specialists, ENT surgeons, nurses (See Table 1)

- Pediatric patients and parents

DATA COLLECTION

- Staff, parents, and children had individualized anonymous post-viewing surveys

DATA ANALYSIS

- Descriptive statistics
- Narrative comments

RESULTS

- Barrier: low response rate from parents due to declining to stay after clinic appointment to view the video
- The project team changed the video offering from clinic appointment to the day surgery room, on the day of surgery. This increased response rate by 80% ($N = 6$)
- Parents believed the video helped them feel less anxious, better prepared, and more comfortable talking about their child's surgery. They found the information easy to understand
- Children found the video easy to understand while increasing comfort before surgery
- The majority of parents reported that the video would increase their child's preparedness for surgery

RESULTS

NARRATIVE COMMENTS ON STAFF SURVEYS

- "Excellent"
- "Great Idea"
- "Brilliant"
- "Outstanding and much needed. Children being familiarized with the day surgery process before experiencing it is a must. This project will hopefully prompt [healthcare institution] to create a better process for pediatric patients that ensures higher patient satisfaction from them and from their parents."

TABLE 1: Staff Demographic Data

Job Title	Percentage	
Surgeon / Physician Assistant	6.7%	
Registered nurse/ Surgical assistant/ Scrub technician	20.0%	
Anesthesiologist/ CRNA/ Anesthesia technician	60.0%	
Child life specialist	13.3 %	
Total	100.0%	
Years		
	0-5	26.7%
	6-10	40.0%
	11-15	6.7%
	> 15	26.7%
	Total	100.0%

$N = 15$

TABLE 2: Staff Likert Scale Results

	Strongly Disagree		Disagree		Neutral		Agree		Strongly Agree	
Survey Question	Count	%	Count	%	Count	%	Count	%	Count	%
Q1: Accuracy	0	0	0	0	0	0	7	46.7	8	53.3
Q2: Language	0	0	0	0	1	6.7	7	46.7	7	46.7
Q3: Preparedness	0	0	0	0	0	0	4	26.7	11	73.3
Q4: Patient-centered care	0	0	0	0	0	0	7	46.7	8	53.3
Q5: Offer video in future	0	0	0	0	0	0	4	26.7	11	73.3

$N = 15$

DISCUSSION

- Based on positive feedback from staff and parents (see Table 2), a new, professional video for pediatric preoperative education is supported
- A professional video could be placed on the patient's portal to allow them to view at their own convenience

STRENGTHS

- Accessibility of video format allowed to be offered at various times.

LIMITATIONS

- Low response rate of parents
- Potential delay in sustainability

CONCLUSIONS

The purpose of this pilot project was to create a new preoperative education video. This aimed to determine the feasibility of creating a larger scale video to implement into practice. The purpose of the video was to decrease preoperative anxiety for the pediatric population, enabling a smooth anesthetic induction and fewer complications. The updated video included a peer-led tour of the facilities and relevant explanations of events the patient may experience on the day of their procedure. The results of this project were in support of a professional video. This can ultimately result in decreased cost of care, shorter length of stay, and improved outcomes for patients.

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