A Pediatric Gastrostomy Tube (G-tube) Educational Video Initiative to Promote Caregiver Knowledge and Ease

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Introduction & Background

-Pediatric G-tube placement is a common inpatient surgical procedure in the U.S.

-associated with high degree of

complications and subsequent caregiver burden¹

-G-tube related ED visits take an average of 5 hours and cost \$1200 per visit ³

-At the institution of implementation, 37 pediatric surgery consults were made in 2019 for tube-related complications ⁴

- 19 of these consults were for tubes placed in the past year ⁴

-Literature, along with the high degree of caregiver burden and healthcare utilization indicate a need for high quality G-tube teaching prior to discharge ²

Methods

Participants: Adult caregivers of pediatric patients with newly placed G-tubes (within past 48 hours)

Intervention: 7-minute educational video reviewing the most essential aspects of Gtube care

Measurement:

-Pre- and Post- knowledge and anxiety questionnaires

-Review of pediatric surgical consult list to track 30-day ED visits post tube placement **Analysis:**

-Aims 1 & 2: Wilcoxon-Signed Rank Test -Aim 3: Fisher's Exact Test



Purpose

To determine whether a newly developed pediatric gastrostomy educational video leads to an increase in caregiver knowledge and decrease in anxiety, in addition to a reduction in emergency visits related to Gtube complications within 30 days of placement.

Video Intervention



Aim 2: Caregiver Anxiety

To decrease caregiver anxiety related to pediatric gastrostomy care after completion of the educational video

> Mean Caregiver Anxiety Scores Pre- and Post- Educational G-tube Video Intervention (N=13)



Aim 1: Caregiver Knowledge

To increase caregiver knowledge on the management of pediatric gastrostomy care after completion of an educational video

Mean Caregiver Knowledge Scores Pre- and Post- Educational G-tube Video Intervention (N=13) p=0.003



Aim 3: 30-Day ED Readmissions

To decrease the percentage of G-tube related emergency department visits within 30 days of tube placement

Percentage of Patients who Returned to the Emergency Room for a G-tube Related Complaint within 30 Days of Tube Placement



Conclusions

High quality discharge teaching is an effective way of increasing knowledge and decreasing caregiver anxiety surrounding Gtube care. However, the intervention had no impact on 30-day ED visits related to G-tube complications

Discussion

Project strengths:

- ease of use
- sustainability
- low cost
- interdisciplinary involvement

Project limitations

- small sample size
- limited availability of validated questionnaires related to topic
- small time frame to measure outcome
- education limited to English language

References

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