

## Abstract

**Background and Purpose:** Gastrostomy tube (G-tube) placement is associated with numerous postoperative complications among pediatric patients, resulting in frequent hospital visits along with caregiver burden. Thus, there is a need for high quality education prior to discharge to promote caregiver empowerment surrounding tube feeding at home. The purpose of this quality improvement project was to determine whether a newly developed gastrostomy educational video improved caregiver knowledge and ease and decreased healthcare utilization 30 days post G-tube placement.

**Methods:** This project utilized a pre- and post-survey design at a large urban, academic center. The intervention involved a 7-minute educational video that emphasized the most important aspects of G-tube care. Participants were adult caregivers of pediatric patients with newly placed G-tubes who completed Likert-type knowledge and anxiety questionnaires prior to and after watching the video intervention. Emergency room visits 30 days post G-tube placement were also tracked via the pediatric surgical consult list. Outcomes were assessed with Wilcoxon-Signed Rank and Fisher's Exact tests.

**Results:** A total of 14 female caregivers were included. The majority of respondents were between ages 31 and 45 (71.4%) and Black (50%). Caregiver knowledge surrounding G-tubes significantly improved (M=16.9, SD=6.4 vs. M=29.5, SD=4.4,  $p=0.003$ ), and caregiver anxiety significantly decreased (M=39.9, SD=19.9 vs. M=32.1, SD=8.5,  $p=.012$ ) after the video intervention. However, there was no difference in the proportion of emergency room visits 30

days after G-tube placement among those who did and did not receive the intervention (3% pre-intervention vs. 7% post-intervention,  $p=0.53$ ).

**Conclusions:** The results of this project reveal an educational video intervention to be an effective means of promoting caregiver knowledge and ease after pediatric G-tube placement.

**Implications:** Future studies should be conducted to compare various modalities of delivering G-tube education and should assess both caregiver and patient outcomes and healthcare utilization over longer timeframes.

**Keywords:** pediatric, gastrostomy, education, caregiver burden