



The effects of pre-operative, video-assisted consultation for Spanish-speaking legal guardians of pediatric patients requiring dental treatment under general anesthesia: a pilot study

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BACKGROUND

Introduction

- ❖ Dental treatment under general anesthesia (GA) is common in pediatric patients with extensive dental needs.
- ❖ Consultations involving legal guardians (LGs) for pediatric dental treatment under general anesthesia (GA) often present challenges in terms of anxiety, comprehension, satisfaction, and efficiency, especially, for instance, those requiring Spanish interpretation services.

Evaluation

- ❖ Effectiveness of pre-recorded Spanish consultation video in comparison to traditional consultation method utilizing live virtual Spanish interpretation service.
- ❖ Consultation duration differences to evaluate potential time-saving benefits.

Hypothesis

- ❖ Pre-recorded Spanish consultation video will reduce anxiety, increase knowledge, enhance satisfaction among LGs, and reduce duration compared to conventional consultation methods involving virtual interpretation services.

METHODS

Data Collection

- ❖ Randomized prospective non-blinded pilot study
- ❖ Population: Spanish-speaking LGs of ASA I pediatric patients age 0-5 years old requiring dental treatment under GA
- ❖ Survey to collect the following outcome measures:
 - ❖ Anxiety level towards dental treatment under GA
 - ❖ Knowledge regarding hospital visit and GA procedure
 - ❖ Satisfaction rates for those with prior GA consultation
 - ❖ Duration of consultation

Statistical Methods

- ❖ Wilcoxon test (compare difference in median time between participants utilizing interpreter vs. video)
- ❖ Fisher's exact tests (compare the responses for Likert scale questions between these groups)

RESULTS

	Interpreter (N=11)	Video (N=11)
Duration of consultation (mins)		
Median (Q1, Q3)	19.3 (14.9, 23.1)	15.4 (14.8, 16.0)
Q1: I better understand my child's dental treatment under general anesthesia after today's consultation.		
Neither agree nor disagree	0 (0%)	0 (0%)
Somewhat agree	0 (0%)	0 (0%)
Completely agree	11 (100%)	11 (100%)
Q2: I have less anxiety about my child's dental treatment under general anesthesia after today's appointment.		
Neither agree nor disagree	0 (0%)	1 (9.1%)
Somewhat agree	1 (9.1%)	2 (18.2%)
Completely agree	10 (90.9%)	8 (72.7%)
Q3: I am more satisfied with today's consultation with video compared to my last consultation without video (if applicable).		
Neither agree nor disagree	NA	0 (0%)
Somewhat agree	NA	0 (0%)
Completely agree	NA	3 (100%)
Not applicable	11 (100%)	8 (72.7%)
There is no statistically significant difference in the duration of consultation for pediatric dental treatment under GA when using an interpreter vs. video (p-value = 0.17). Additionally, there was no statistically significant difference between Q1 or Q2 for interpreter vs. video (p-value = 1 and 0.586, respectively).		

CONCLUSIONS

- ❖ No statistically significant differences in duration of consultations when comparing traditional interpreter services with pre-recorded video consultation (median 19.3 vs. 15.4 minutes; p=0.17).
- ❖ Both LGs in interpreter and video groups reported full understanding of their child's dental treatment under GA.
- ❖ Levels of anxiety about treatment were comparable, with most LGs agreeing that they had less anxiety post-consultation.
- ❖ High satisfaction with video consultation among those with prior GA consultations, indicating preference for video method over previous experiences.

IMPLICATIONS

Pre-recorded video consultations

- ❖ May not significantly reduce duration or affect understanding and anxiety levels compared to traditional interpreter services.
- ❖ With higher satisfaction rate among LGs with previous GA experiences, there may be a preference for video format due to factors such as convenience, reviewing information at own pace, or novelty of approach.
- ❖ Strong satisfaction response may indicate this format being an optimal method for delivering pre-operative information, particularly for repeat LGs familiar with GA process.
- ❖ Personnel requirement may be lowered, where multiple consultations can be completed at the same time with only one personnel required to answer questions.

Future studies

- ❖ Explore specific elements of video consultations that contribute to LG satisfaction and examine potential for long-term integration into pre-operative protocols.
- ❖ Inform healthcare providers and policymakers aiming to improve healthcare experiences and outcomes for non-English-speaking populations.

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