

Accuracy and Quality of Social Media YouTube, TikTok, and Facebook on Cesarean

Yoojin Kang, MD, Donald Lee, MD, Mark Zakowski, MD
Cedars-Sinai Medical Center



Background & Hypothesis

- **Background**
 - **74%** of young adults use social media for health information
 - **>90%** of parturients search the internet for pregnancy-related information
 - **Pain during cesarean delivery** occurs in ~15% of surgeries
- **Objective**
 - To evaluate the **accuracy** and **reliability** of cesarean anesthesia–related information on:
 - **YouTube, TikTok, Facebook**

Study Design and Methods

- **Cross-sectional analysis of publicly available videos from**
 - YouTube / TikTok / Facebook
 - Using cesarean anesthesia–related keywords (November 2025)
- **Keywords included**
 - pain during cesarean
 - anesthesia for cesarean (neuraxial or general)
 - anesthesia risk during cesarean
- **Outcome Measures**
 - **Primary**
 - Accuracy (%)
 - Quality : PEMAT-A/V (Understandability, Actionability)
 - Reliability : mDISCERN
 - Readability
 - **Secondary**
 - Video uploader type
 - AI-generated detection
- **Statistical analysis**
 - ANOVA, Chi-square, Krippendorff's α

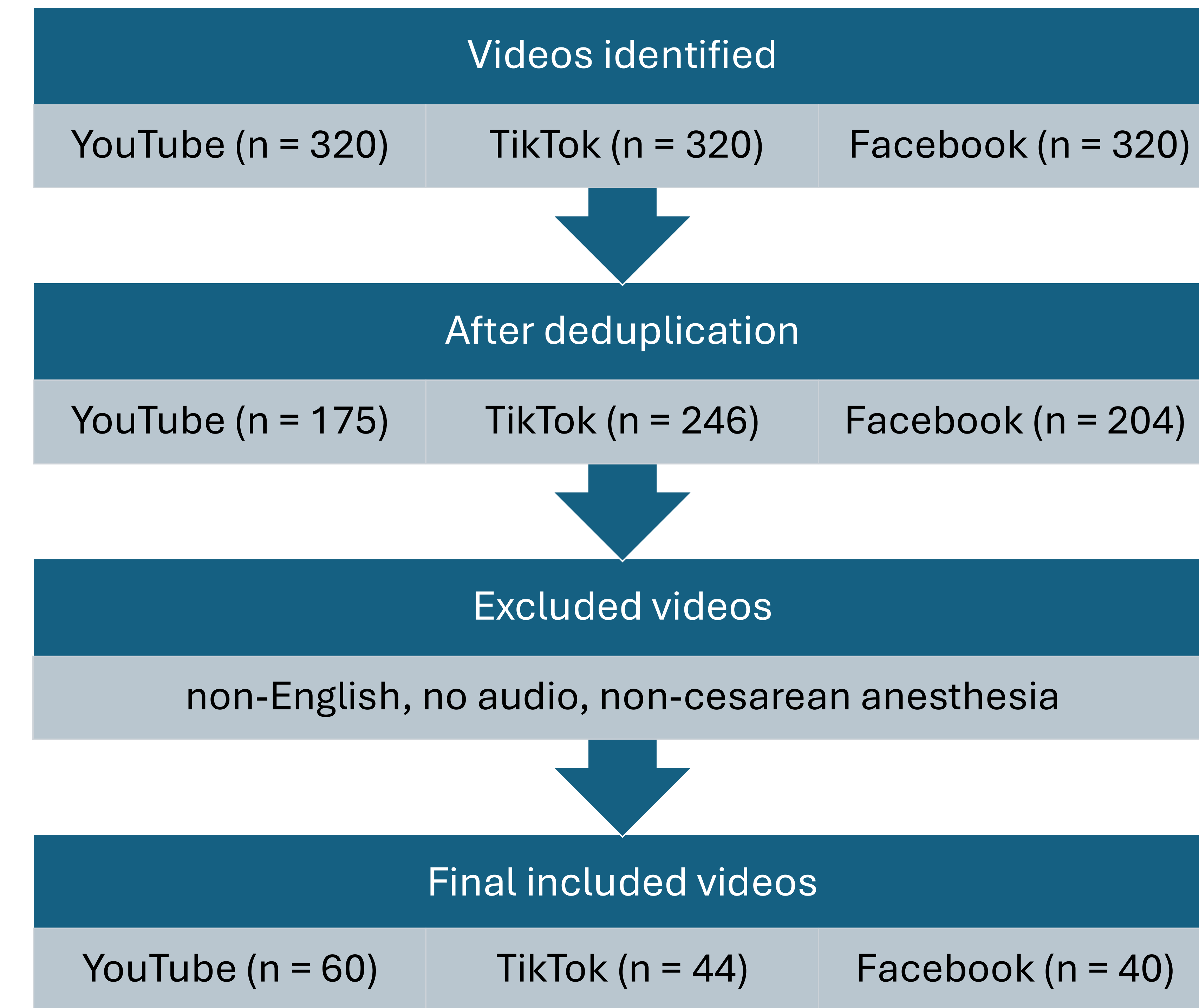


Figure 1. Flow diagram of video identification and selection

Results

- **Video Characteristics**
 - Final videos analyzed: **n=144**
 - **YT=60, TT=44, FB=40**
 - Most videos created by healthcare professionals
 - **YT 81.7%, TT 88.6%, FB 72.5%** (P=.248)
 - Mean video duration
 - **YT 2.4 ± 2.0 min, TT 1.8 ± 1.5 min, FB 1.6 ± 1.7 min** (P=.06)
- **Readability**
 - Above **college-graduate level** across all platforms
 - YouTube showed significantly higher readability scores than TikTok (**all P ≤ .007**)
- **AI-generated content** detected in
 - **YT 17%, TT 18%, FB 5%** (P=.157)
- **Interrater reliability** was 98%
- **Pain during cesarean** mentioned in
 - **YT 18%. TT 18% and FB 20%** (P= .97)

Measure	YouTube (n=60)	TikTok (n=44)	Facebook (n=40)	p-value
	Mean ± SD ²	Mean ± SD ²	Mean ± SD ²	
Content quality				
PEMAT – Understandability (%)	48.28 ± 11.45	45.24 ± 10.55	46.40 ± 11.20	0.372
PEMAT – Actionability (%)	4.72 ± 18.44	4.17 ± 15.72	4.58 ± 16.45	0.986
mDISCERN	1.2 ± 0.58	1.16 ± 1.11	1.08 ± 0.27	0.76
Accuracy				
% correct	96.13 ± 9.06	95.90 ± 9.84	97.34 ± 14.70	0.815
Number of statements	14.1 ± 8.83	10.5 ± 4.7	11.6 ± 8.6	0.058
Readability				
Average grade level	39.36 ± 15.49	30.25 ± 7.62	34.07 ± 14.24	0.0026
ARI	89.60 ± 50.63	59.91 ± 25.05	72.23 ± 47.34	0.0028
Gunning Fog	49.60 ± 22.29	37.48 ± 12.20	42.66 ± 20.09	0.0064
FKGL	73.37 ± 39.55	50.02 ± 19.32	59.81 ± 36.93	0.0026
SMOG	38.31 ± 13.18	30.59 ± 7.68	33.81 ± 11.67	0.003

Conclusion and Discussion

- **Conclusion**
 - Cesarean anesthesia content on social media showed **high accuracy**, but **low understandability** and **reliability**, **low actionability** with **high readability grade levels**.
 - **Healthcare professionals created most content (73–89%)**, yet understandability remained limited.
 - Up to **18% of content was AI-generated**.
- **Limitations**
 - AI detection tools have **~65% accuracy**
 - English-language-only content
 - Limited number of cesarean anesthesia videos
- **Implications**
 - Medical information should meet standards for **accuracy, quality, and readability** as suggested by AHRQ.
 - Social media platforms represent an opportunity for **institutions and professional societies** to provide verified educational content.
 - There is a need for **more understandable, high-quality information** on cesarean anesthesia.
 - **Pain during cesarean** was infrequently mentioned, highlighting a need for improved patient education on this topic.