Impact of Medical vs Layman's Terms on YouTube Search Results for Surgical Errors

Nicholas Valenta, RN, BSN

Introduction

Layman's terms and medical terms vary wildly. As patients increasingly use social media to seek out health information, layman's search terms may not return relevant information. One study found that over 30% of social media posts regarding elective procedures contained false information (Nasiri et al, 2025). This Inaccurate information regarding surgical complications is a barrier to care, as it may frighten patients and delay procedures (OSG, 2021). The purpose of this project is to examine how conducting a social media search using medical terms versus layman's terms affects the relevance of search results.

Literature Review

Most research regarding health information on social media is dedicated to infectious diseases and vaccines. Healthcare organizations provide relevant information, but there is no way to filter untrustworthy sources from searches. Few studies on surgical misinformation, and only one focused on social media, were identified, suggesting a need for further research.

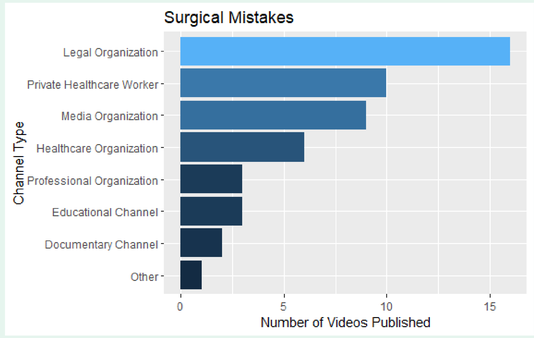
Conceptual Framework

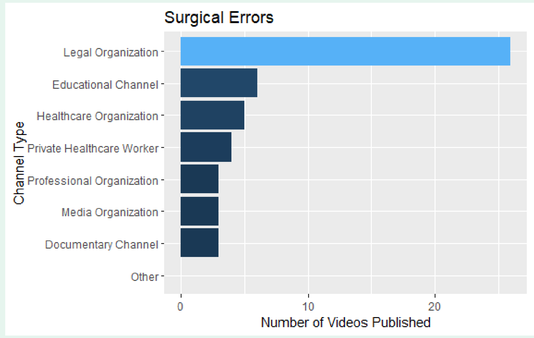
The data for this project was obtained via observational study. Reliability was ensured by using a new Incognito tab for each search to eliminate interference from previous searches and internet cookies. Validity was supported by using the same sample size and inclusion/exclusion criteria for each search term.

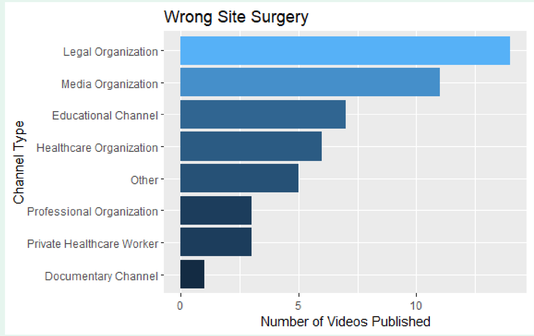
Methods

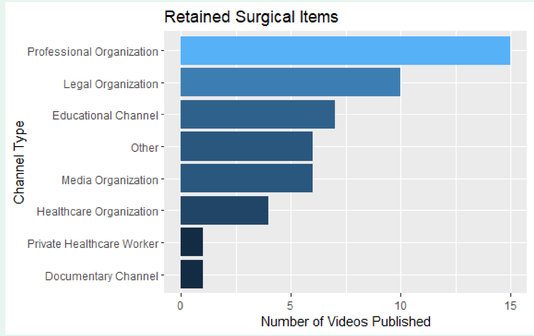
Four YouTube searches were conducted on April 27, 2025. The search terms were "surgical mistakes", "surgical errors", "wrong site surgery", and "retained surgical items". The first 50 results of each search (total n=200), excluding YouTube Shorts and videos with a duration of one minute or less, were examined and the source channel of each video was categorized as one of the following: Healthcare Organization, Legal, Private Healthcare Worker, News/Media, Professional Organization, Documentary, Educational Channel, or Other.

Results









Data Analysis

The total number of videos in each category for each search result was recorded. The percentage of results in each category was calculated. R Studio was used to visualize the data. For each search except "Retained Surgical Items", videos from legal channels had the highest percentage of results. News channels are responsible for 6-22% (n=3-11) of results. Videos posted by healthcare organizations made up 8-12% (n=4-6) of search results. Professional organizations composed 6% (n=3) of results for three searches, while making up 30% (n=15) of results for "Retained Surgical Items".

Discussion

Most YouTube search results using layman's terms are posted by legal channels and by the news/media. Specific terms yielded more results from professional organizations and educational channels. This is concerning; professional organizations, healthcare organizations, and educational channels will provide more relevant and accurate information than news and legal channels, but they make up fewer search results.

Implications and Conclusion

Perioperative nurses must understand how their patients seek information from social media. Knowing that social media search results may not be relevant or accurate, perioperative nurses should encourage patients to use relevant sources from healthcare and professional organizations.

References

Nasiri Bonaki, H., Sadeghi, S., Asemi Esfahani, A., Alishahi, F., & Ardalani Nasab, N. (2025). Algorithmic amplification of surgical misinformation: How social media prioritizes engagement over accuracy and distorts patient choices. *InfoScience Trends*, *2*(7), 38–48. https://doi.org/10.61882/ist.202502.07.04

Office of the Surgeon General (OSG). Confronting Health Misinformation: The U.S. Surgeon General's Advisory on Building a Healthy Information Environment [Internet]. Washington (DC): US Department of Health and Human Services; 2021. WE CAN TAKE ACTION. Available from: https://www.ncbi.nlm.nih.gov/books/NBK572168/

Contact Information

Nicholas Valenta:
nicholas.valenta@ahn.org

AHN