LASIK on TikTok: Examining Trends, Reliability, and Impact Using Discern Criteria

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Introduction:

- TikTok is a popular social media platform where users share information in short user-engaging videos. TikTok has grown tremendously in the last 5 years, with an 800% increase in usership from 2018 to 2023 and a total of 150 million current active users in the United States [(1)].

- Medical topics, especially procedures, have become prevalent subjects of these videos. Videos may be shared by any producer regardless of education or background. Therefore, medical content may include misinformation and not be evidence-based.

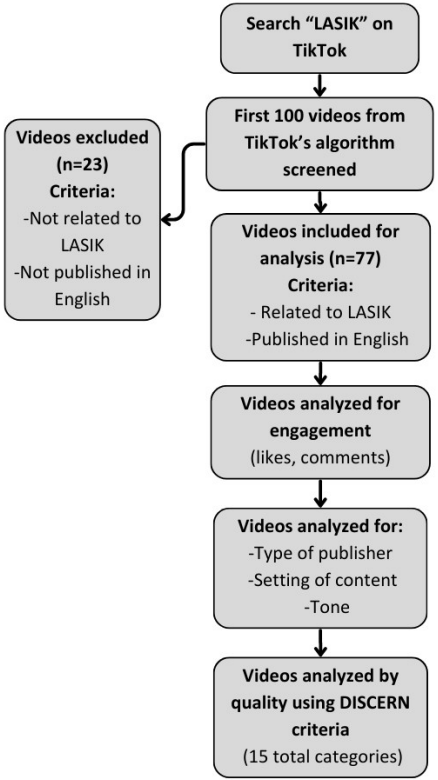
Purpose:

This study analyzes the quality of information regarding laser in situ keratomileusis (LASIK) published by health care professionals (HCP) versus non-professionals (Non-HCP) on the social media platform TikTok.

Keywords: LASIK, TikTok, Social Media, DISCERN

Methods

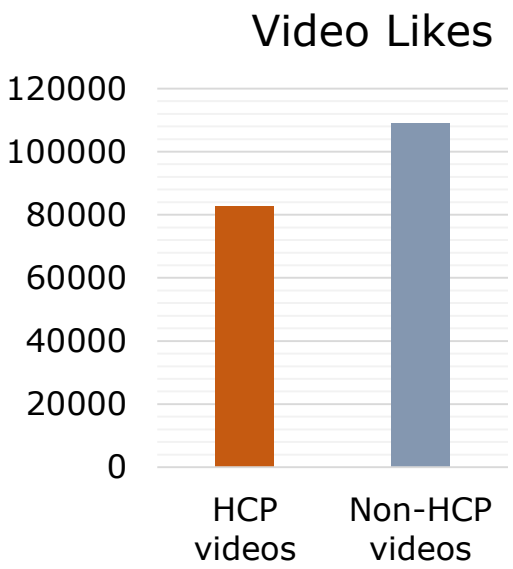
- A same-day cross-sectional analysis queried the first 100 videos with the keyword search of "Lasik" on TikTok. Videos that were excluded were not related to Lasik.
- Data extraction for the 77 remaining videos was performed by two independent reviewers.
- The video elements analyzed included the number of likes and comments, total video length, type of publisher, video setting (post-op or not), tone, and numeric quality of the video as per the DISCERN Criteria Analysis tool. (2)
- After averaging scores by the two reviewers, unpaired t-tests were used to compare the DISCERN scores between healthcare professionals versus non-healthcare professionals.

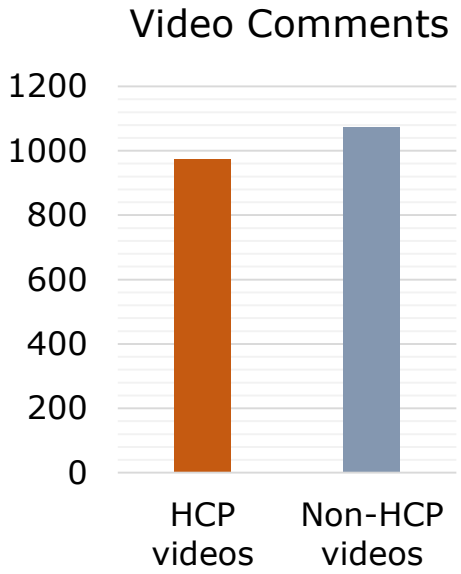


Results: Levels of Engagement

There was a total combined 7.2 million likes and 77,000 comments among all videos.

Levels of engagement were not statistically different between HCP videos and Non-HCP videos.

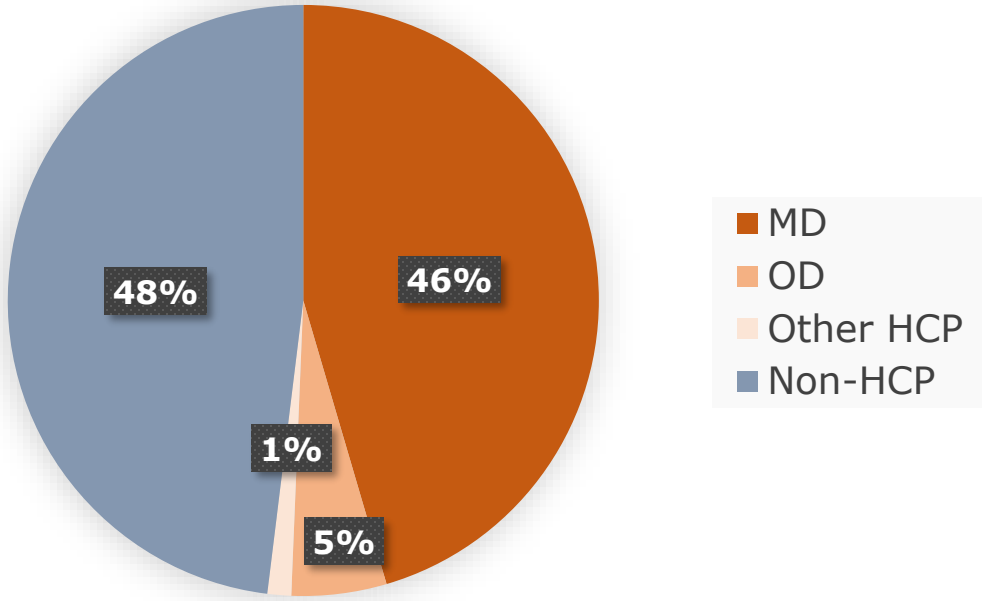




Results: Producer Breakdown

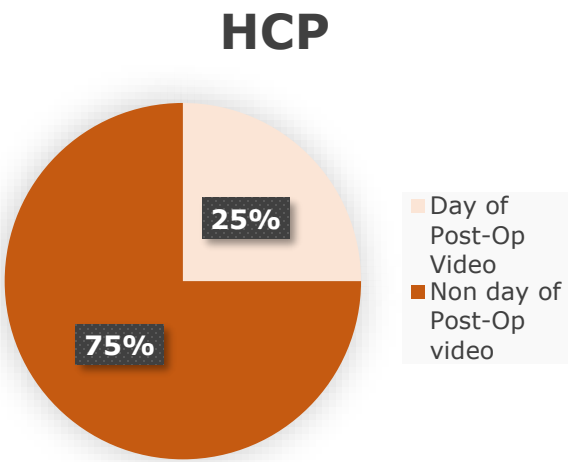
40 videos from HCP (MD, OD, Other) accounted for 52%.

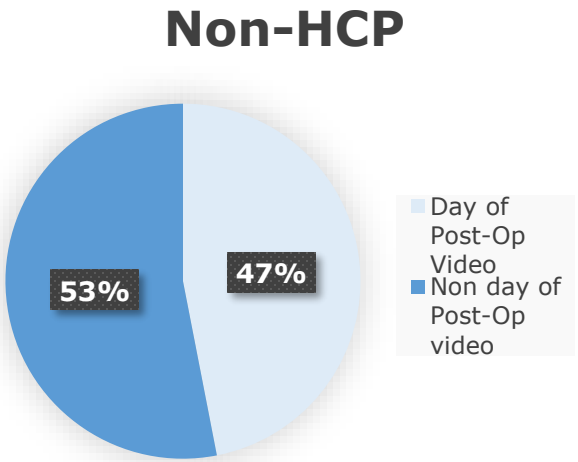
While 37 videos from Non-HCP accounted for 48%, showing similar levels of content available under "LASIK" query.



Results: Setting

Non-HCP videos featured a higher proportion of "Day of Post-Op" videos than HCP videos.

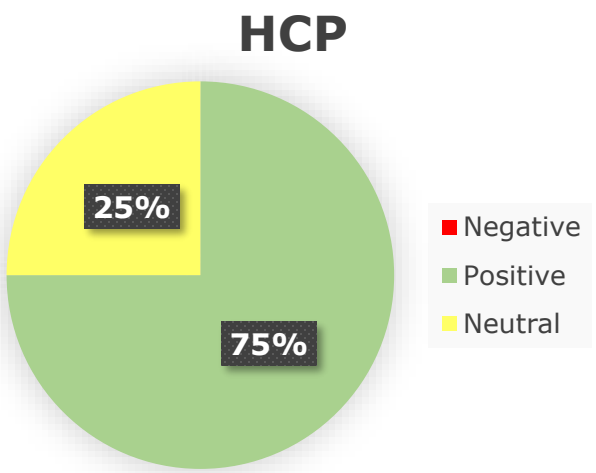


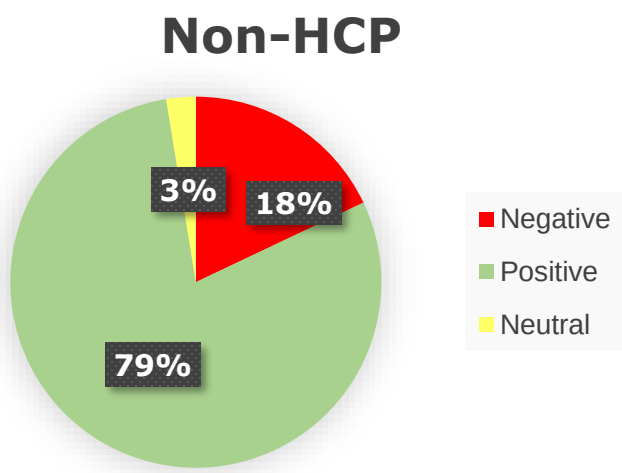


Results: Tone

The tone of the video was determined "Positive" if it made specific recommendations to undergo LASIK or expressed positive experiences; "neutral" if it was purely informational and lacked specific recommendations; "negative" if it discouraged the procedure or focused only on negative side effects

HCP videos featured a higher proportion of "Neutral" toned videos compared to Non-HCP videos. Whereas Non-HCP videos had a higher proportion of "Negative" toned videos compared to HCP videos.

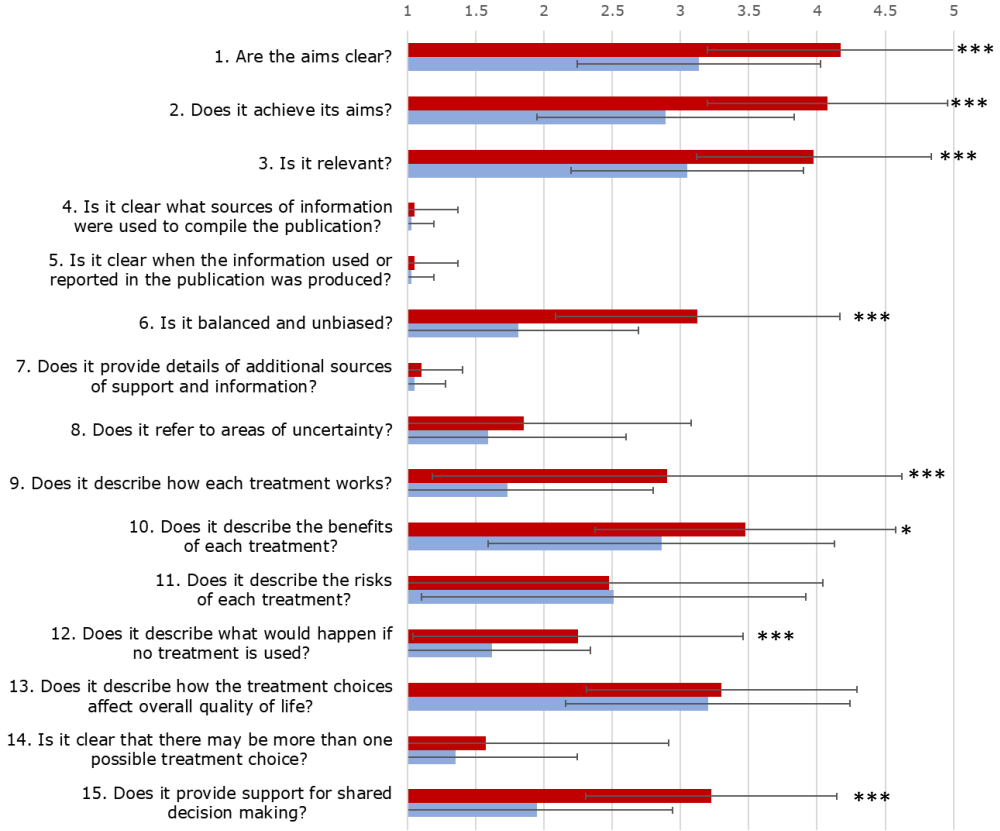




Results: Discern Analysis

HCP videos significantly scored higher than Non-HCP videos in 8/15 categories:

- having clear aims
- achieving aims
- relevance
- balanced and unbiased
- describing treatment
- benefits of treatment
- results of no treatment
- support for shared decision-making

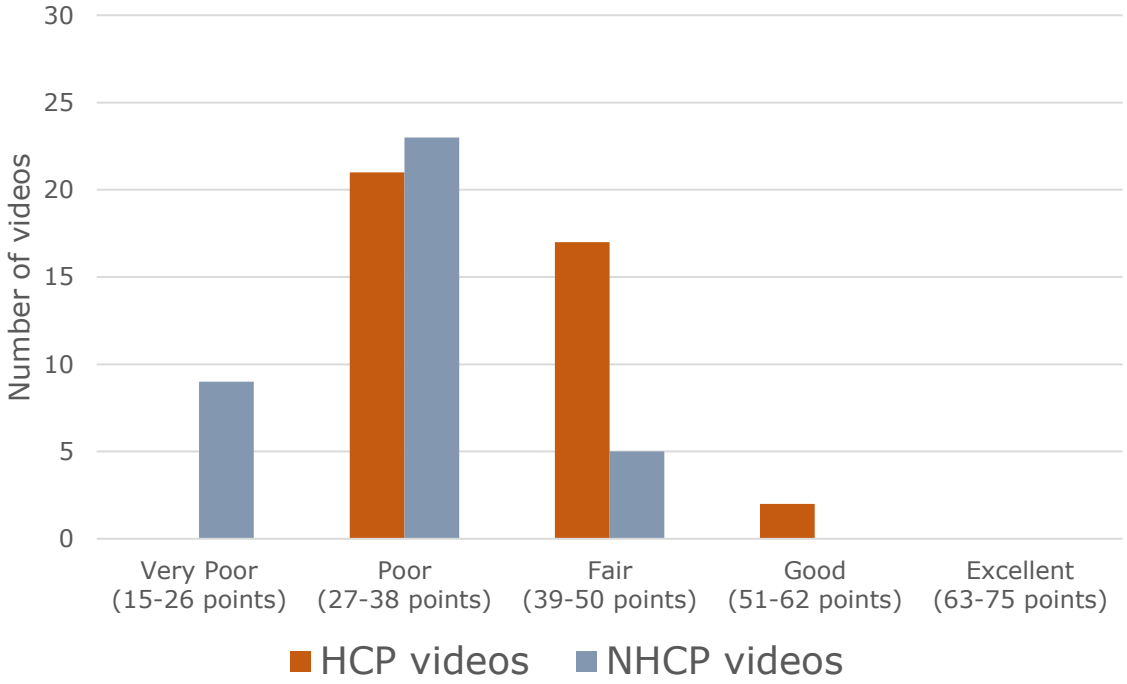


Results: Content Quality By Group

Video total DISCERN scores (sum of 15 categories) were categorized by quality per Cassidy and Baker 2016. [3]

HCP videos were:
- 5% "Good"
- 42.5% "Fair"
- 52.5% "Poor"

NHCP videos were:
- 13.5% "Fair"
- 62.2% "Poor"
- 24.3% "Very Poor"



Discussion

- This study addresses the challenges posed by the perpetuation of medical information on TikTok, including the need for reputable sources and information and fostering critical media literacy skills among users. Medical topics on TikTok are very popular, like LASIK with videos analyzed of 7.2 million combined likes.

- Social media trends like sharing post-op videos in ophthalmology clinics are popular.

- DISCERN can be applied to rate short videos and ophthalmology topics effectively. Medical professionals, given their background, overall lead in content creation and reliability with shorter videos of higher quality health care information for consumers. However, a majority were only “fair” or “poor” quality.

- Social Media can be a strategic resource for spreading factual medical information to a large user base if used appropriately. Healthcare providers should be cognizant of the structure and content of videos that they place on social media, especially on TikTok.

Conclusion

- LASIK videos on TikTok are popular, thus it is important to analyze video content and trends to improve the quality of public healthcare information.
- A majority of LASIK videos lack reference to evidence-based information.
- TikTok users, especially those considering medical procedures, should be aware that medical misinformation does exist on the platform.
- Even with overall higher-rated quality content, medical professionals still have room for improvement in structuring ophthalmology TikTok content, like LASIK, for consumers.

References

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