Strabismus: An assessment of content on social media.

Eeshaan Ghanekar[1], Rachel Duff[2], Lakshmi Kowdley Hemanth[1], Saurabh Jain[1,3]

1. University College London, 2. The University of Edinburgh, 3. Royal Free London NHS Foundation Trust

INTRODUCTION

Social media is playing a growing role in patient education, especially for Strabismus, which affects **2–5%** of the population and can lead to both visual and psychosocial challenges.

However, the quality of this information is unknown.

This study evaluates the quality of strabismus-related educational content on **TikTok** and **Instagram**.

METHODS

- **Platforms searched**: TikTok & Instagram
- **Hashtags:** #strabismus, #lazyeye (others excluded due to irrelevance)
- **Sample**: Top **50** videos per hashtag per platform meeting inclusion criteria
- **Inclusion criteria**: English, public, patient-facing educational videos
- **Quality Tools:** mDISCERN (reliability), GQS (overall quality), PEMAT-A/V (understandability & actionability)
- **Analysis**: Pearson's correlation coefficient, Kruskal-Wallis test, Mann-Whitney U test

RESULTS & ANALYSIS

Of 200 total videos, only 54 (27%) were patient-facing educational content.

66.7% of these were made by healthcare professionals:
- 35% by ophthalmologists
- 28% by other HCPs

Notably, no UK-based ophthalmologists or orthoptists were represented

Correlation Analysis *(see Figure 1)*
- Significant negative correlation between likes and GQS ($r = -0.37$, $p < 0.01$)
- Similar trend with mDISCERN
- Actionability showed positive correlation with likes ($r = 0.34$, $p = 0.01$)

Patients prefer content that tells them what to do, even if the educational and medical quality is lower.

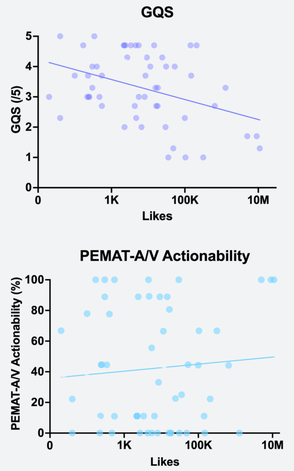


Figure 1 - Correlation plots GQS and PEMAT-AV actionability

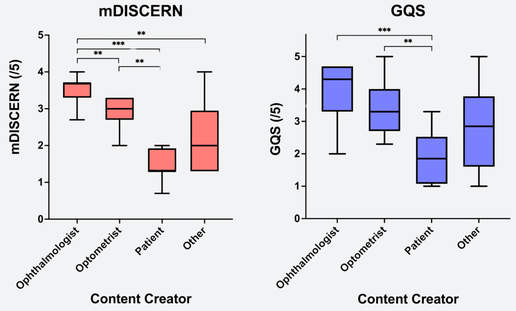


Figure 2 - mDISCERN and GQS by creator type

Ophthalmologists produced the highest-quality content, which scored significantly **higher** in mDISCERN, GQS, and Understandability ***(See Figure 2)***

Patient-created content consistently scored the **lowest**

No significant differences in **actionability** found between creator types

CONCLUSIONS

Lower-quality videos regarding Strabismus education often perform better in terms of **engagement**.

Actionability draws **attention**, even if content is misleading.

There is a need for **more credible**, UK-based **professionals** on these platforms, including ophthalmologists, orthoptists and optometrists.

FUTURE WORK

Develop **standardised frameworks** for **assessing** and labelling high-quality medical content on social media.

Expand analysis to: **other platforms** (YouTube, Facebook), non-English content, and longitudinal changes in video **quality over time**.

Improve **inter-rater consistency** with calibration or AI-assisted scoring tools.

REFERENCES

- Lim MSC et al. Young Adults' Use of Social Media for Health Info. J Med Internet Res. 2022; 24(1):e23656.
- Kanukollu VM, Sood G. Strabismus. StatPearls. 2023.
- Buffenn AN. Impact of Strabismus on Psychosocial Health. Surv Ophthalmol. 2021; 66(6):1051–64.
- Charnock D et al. DISCERN: Tool for Consumer Health Info. J Epidemiol Community Health. 1999; 53(2):105.
- Shoemaker SJ et al. PEMAT: Tool for Patient Ed Materials. Patient Educ Couns. 2014; 96(3):395.
- Agency for Healthcare Research and Quality. PEMAT-A/V Tool.