A REVIEW OF THE QUALITY OF INFORMATION ON EXTERNAL HORDEOLA ON TIKTOK

BACKGROUND

- The rise of video-sharing platforms such as TikTok® has brought with it an increase in the **availability** and **reach** of **health-related videos**
- While this could pose a valuable opportunity for the dissemination of healthcare education, previous studies suggest that such videos may be of **poor quality** and/or contain **misinformation**

- Studies are emerging that have evaluated educational Tik Tok videos in other healthcare fields, including **contraception**[1], **autism**[2], and **burn disorders**[3].
- Similar studies have started to arise within ophthalmology including **strabismus**[4], **contact lens use**[5], **oculoplastics**[6], and **ophthalmic presentations** in general (*excluding* hordeola)[7].
- ***No studies as yet*** have investigated the quality of information relating specifically to **external hordeola (“styes”)** on Tik Tok

- **Hordeola** are a common ophthalmic presentation, including amongst **younger people**
- Whilst rarely associated with significant morbidity, they may concern patients due to their troubling effects on **cosmesis**
- Given that the audience provided by TikTok predominantly consists of younger users, a considerable volume of content on this common and bothersome presentation is to be expected

- This study sought to characterise the **quality of information on external hordeola on TikTok.**

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METHODS

- term “***stye***” searched using TikTok’s default algorithm, on 08/12/2023
  - more technical terms e.g. hordeolum **avoided** - unlikely to be representative of videos that users would interact with
- **top 50 results** reviewed
  - larger volume of videos less likely to be accessed by users[8]
- Following application of exclusion criteria → **27 videos** remained for analysis
- **Exclusion criteria:**
  - duplicate videos
  - non-English language videos
  - no informational / educational content provided
  - content unrelated to hordeola

- Basic statistics collected for each video:

1. View count	2. ‘Like’ count
3. Number of comments	4. Video duration

- Videos were categorised according to ‘creator type’:
  - eye health professional
  - other health professional
  - non-health professional

- **DISCERN tool**
  - used to assess quality of health communications, widely adopted for rating online information[9]
  - consists of 16 questions
  - generates score out of 80 (min 16, max 80)
- DISCERN score was used to assign quality category[8]:

Excellent	63-80
Good	51-62
Fair	39-50
Poor	27-38
Very poor	16-26

RESULTS

- The 27 videos assessed had a combined total of 210 million views
- The mean number of views was highest for non-health professionals (12.05 million), and lowest for eye health professionals (1.47 million)
- Interestingly, the mean DISCERN score was highest for other health professionals (**33.5**)
  - Eye health professionals mean DISCERN score = **31.4**
  - Non-health professionals mean DICSERN score = **27.4**
- 1 video was rated **'satisfactory'** based on the DISCERN score
  - the remainder were **'poor'** or **'very poor'**.
- Low scores were a result of the following factors:
  - references / sources of information not provided
  - additional sources of patient support/information not given
  - no explanation of how treatments work given
  - risks of treatment not described
  - no alternative treatments suggested.

SELECTED EXAMPLES

- One user advocated using a **hot, hard-boiled egg** wrapped in a **sock** applied to the eye[10]
  - No. of views: **4.8M**; No. of likes: **288K** [Non-health professional]
- Another suggested rubbing garlic on the stye to heal it, then applying petroleum jelly[11]
  - No. of views: **1.6M;** No. of likes: **59.2K** [Non-health professional]
- A further popular theme that emerged was the use of gold, such as a gold ring, to be rubbed on the stye to ‘reduce inflammation’[12]



CONCLUSIONS

- Videos relating to external hordeola (styes) on TikTok have a **huge reach** – over **200 million views** across just **27 videos** in the sample
- The vast majority of these videos are of **poor** or **very poor** quality, ***including*** those which are produced by eye health or other health professionals
- Some non-health professional produced videos included **false** / possibly **harmful** advice
  - part of this deficit in attributed quality is in part a result of the inherent nature of the video-sharing platform itself → only possible to share short videos
  - shorter videos tended to have greater engagement.

Key considerations:
- Practitioners should be conscious of the **wealth of (mis)information** when **counselling** patients with hordeola on sites such as Tik Tok
- Possible steps for the future: development of **high-quality informational videos,** to counter the existing incomplete or false information on TikTok & harness its wide reach
- **Benefits could include:** encouraging safe and effective **self-management** to circumvent **unnecessary presentations** to healthcare services and **preclude complications** resulting from poor advice

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