BRIEF ARTICLE

Hidradenitis Suppurativa: A Cross-sectional Study of Content Quality on TikTok

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ABSTRACT

Introduction: TikTok is a social media platform that is sometimes used to share medical information. Creators share their experiences with or provide education regarding medical diagnoses. This study investigated the content quality of TikTok videos regarding hidradenitis suppurativa (HS).

Methods: On October 24, 2022, we searched #hidradenitissuppurativa on TikTok and filtered by most liked videos. Two independent reviewers analyzed the videos, excluding those not in English, irrelevant to HS, and duplicates. Videos were scored using the Global Quality Scale (GQS), a one question scale (1-poor quality to 5-excellent quality), and the DISCERN tool, a 15-question analysis (1-low quality to 5-high quality).

Results: One-hundred videos were included. Mean GQS score was 2.49 [SD 0.87] and mean total DISCERN score was 24.83 [SD 7.70], with substantial interrater reliability (Cohen's Kappa 0.667). Twenty-six videos (26%) were physician-created and 74 (74%) were non-physician-created. Mean GQS and mean total DISCERN scores for physician versus non-physician videos were 3.40 and 38.65, and 2.16 and 26.11, respectively. Both mean GQS and mean total DISCERN scores were greater for videos created by physicians versus non-physicians (p < 0.0001).

Conclusion: Overall, there is a lack of information on treatment benefits, risks, and mechanisms of action. Given the mean GQS and DISCERN scores, the average video was of generally poor quality, creating potential for lack of knowledge and misinformation regarding HS. With the growing use of TikTok for educational purposes, improving content quality should be a priority to provide accurate information regarding medical conditions such as HS.

INTRODUCTION

TikTok is a social media platform with 1 billion monthly active users[1] and is often used as an educational tool. Creators share their experiences with or provide education regarding medical diagnoses, such as hidradenitis suppurativa (HS). With its growing popularity, evaluating the educational quality of TikTok videos is important. Therefore, this study investigated the educational quality of TikTok videos for HS.

METHODS

On October 24, 2022, using the search term #hidradenitissuppurativa, we sorted by most liked videos and identified the top 147. Two independent reviewers analyzed the videos, excluding those not in English, irrelevant to HS, and duplicates. Thus, 100 videos were included. Videos were scored using the Global Quality Scale (GQS)[2], a one-question score of quality ranging from 1 (poor quality) to 5 (excellent quality), and the DISCERN tool[3], a 15-question analysis ranging from a score of 1 (low quality) to 5 (high quality) for each, and categorized by score ranges, as previously reported in the literature.[4] This protocol and outcome measures are consistent with a previous study on content quality of TikTok videos regarding HS[5], with the addition of GQS score in this analysis.

RESULTS

The top 100 videos had a combined total of 6,465,874 likes, with an average of 64,659 likes [SD 167486.44] per video. The mean GQS score was 2.49 [SD 0.87] and mean total DISCERN score was 24.83 [SD 7.70], with substantial interrater reliability (Cohen's Kappa 0.667). Twenty-six videos (26%) were created by physicians and 74 (74%) were created by non-physicians. Mean GQS and mean total DISCERN scores for physician-created videos were 3.40 and 38.65, respectively. Mean GQS and mean total DISCERN scores for non-physician-created videos were 2.16 and 26.11, respectively (**Table 1**). Both mean GQS and mean total DISCERN scores were greater for videos created by physicians versus non-physicians (p<0.0001) (**Figure 1**). Among DISCERN scores, 0% of videos were "excellent" (63-75 points), 0% of videos were "good" (51-62.9 points), 17% (n = 17) were "average" (39-50.9 points), 28% (n = 28) were "poor" (28-38.9 points), and 55% (n = 55) were "very poor" (< 28 points).

DISCUSSION

Our results replicated those of the previous study[5] regarding physician versus non-physician DISCERN scores. However, our results included an additional form of quality analysis, the GQS score, in which physician creators again had a higher mean score than non-physician creators. Importantly, 82% of videos included in this study were posted after the search date of the previous paper.[5] Even among physician-created videos, there is a lack of information on treatment mechanisms of action, benefits, and risks. Creators can improve video quality by including treatment information, sources of their content, and current research.

Limitations include the cross-sectional design of this study and the large difference in magnitude of videos created by physicians versus non-physicians, which should be acknowledged when considering the results. Most videos did not include references or their publication dates, potentially affecting DISCERN scores for question 5, as many scores were determined by the post date of the video. While GQS and DISCERN scores have been validated tools for determining information quality, they generally assess written quality[5], and a scale for rating video quality should be developed to accurately assess videos. With the growing use of TikTok for educational purposes, improving content quality of videos should become a priority to provide accurate information regarding medical conditions such as HS.

Table 1. Analysis of the 100 most-liked hidradenitis suppurativa videos on Tiktok.

Creator Type	Number of videos (n=100)	Mean Number of Likes	Mean GQS scores	Mean total DISCERN scores
Physician	**26**	**112,302**	**3.40**	**38.65**
Board-certified dermatologist	20	141,016	3.53	40.15
Non-dermatologist physician	6	16,589	3.0	33.67
Non-Physician	**74**	**48,506**	**2.16**	**26.11**
Patient	68	25,190	2.15	26.02
Esthetician/ beautician	3	604,967	2.33	27.67
Other medical provider	2	6,563	2.50	26.50
Other	1	5,063	2.00	27.00
Gender				
Male	25	114,554	2.92	34.54
Female	75	48,027	2.34	27.65
Video Type				
Personal Anecdote	44	27,793	2.08	25.57
Educational Content	37	77,765	3.19	35.28
Home remedies	10	12,857	2.10	25.30
Treatment	5	37,274	2.50	32.30
Other	3	682,733	1.33	23.67
Advertisement/ product review	1	2,546	1.50	22.00
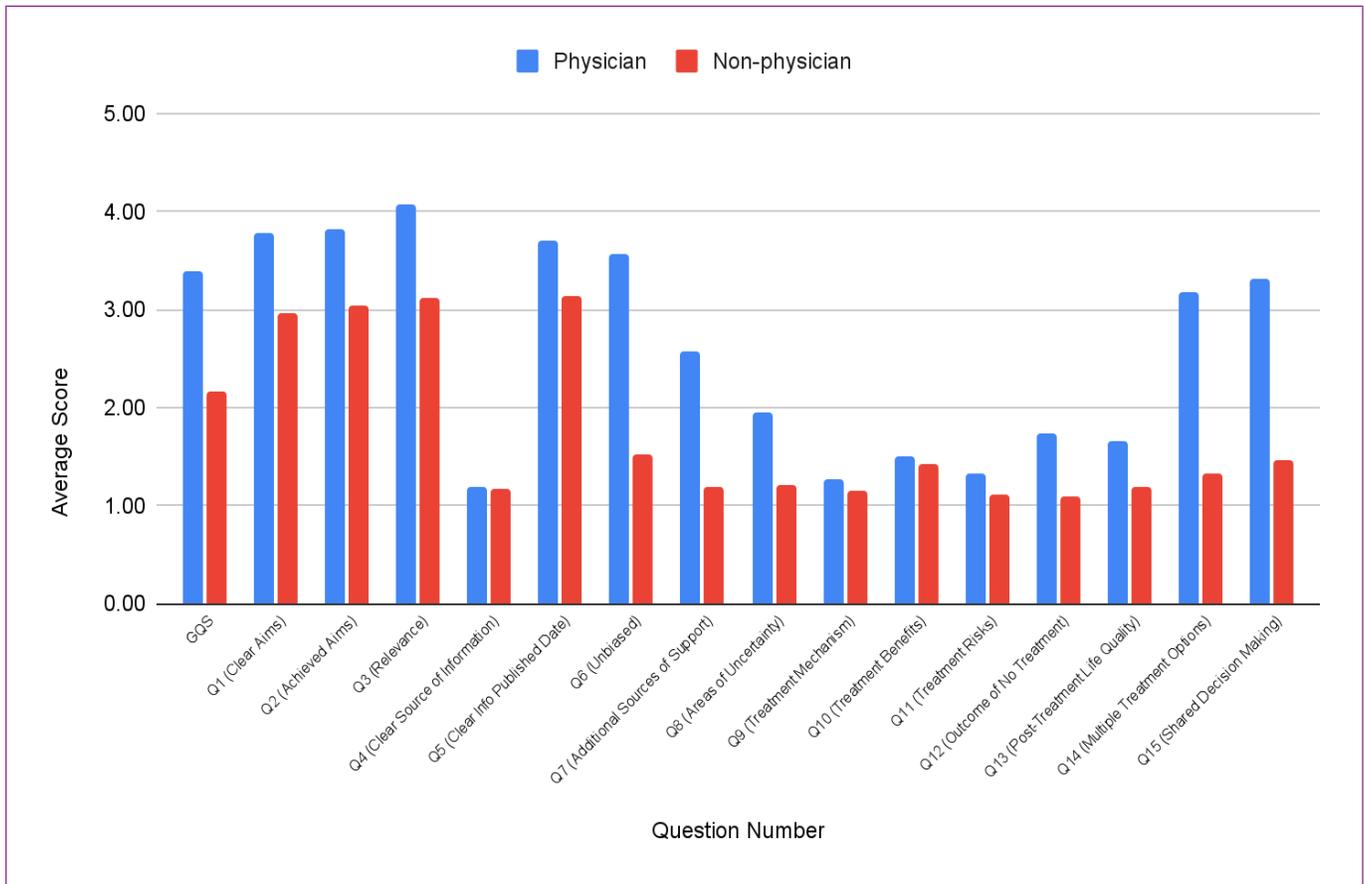
Figure 1. Hidradenitis suppurativa Global Quality Scale (GQS) and DISCERN (Q1-Q15) score averages for physician versus non-physician creators.

Parentheses adjacent to the question number for DISCERN scores indicate the content being scored by each question. GQS is a one question score using a scale of 1-5 (poor quality - excellent quality) while DISCERN is a 15-question scoring system, also using a scale of 1-5 (Questions 1-15: 1 = no, 3 = partially, 5 = yes), indicating content quality. The difference between physician versus non-physician creators was statistically significant (p<0.0001).

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