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Quality of TikTok Videos on STD Related Content: A Cross-Sectional Study

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ABSTRACT

Background: Sexually transmitted diseases (STDs) continue to pose a significant public health challenge in the United States, with over 2.4 million cases reported in 2023. Although diagnostic tools and online resources are more accessible, infection rates continue to rise, indicating persistent gaps in health literacy, information quality, and public perception. Social media platforms like TikTok are now major sources of health information, but the accuracy and reliability of STD-related content are uncertain.

Objective: This study aimed to evaluate the quality, reliability, and source of STD-related content on TikTok using standardized assessment tools.

Methods: We conducted a cross-sectional content analysis of TikTok videos on June 28, 2025, using the hashtag #STD. We created a new account to minimize algorithm bias. We included 89 eligible English-language videos after applying inclusion and exclusion criteria. Metadata collected included creator type (healthcare professional [HCP] vs. non-HCP), engagement metrics, and content characteristics. We assessed videos using the Patient Education Materials Assessment Tool for Audiovisual Materials (PEMAT-A/V) and the DISCERN instrument. Four reviewers evaluated the videos, and we resolved discrepancies through consensus. Statistical analyses included descriptive statistics, Wilcoxon rank-sum tests, chi-square tests, and Spearman correlations.

Results: Of the 89 videos, 7 were created by HCPs and 82 by non-HCPs. HCP videos demonstrated significantly higher quality, with superior PEMAT understandability (median 3 vs. 1, $p = 0.011$), actionability (median 2 vs. 0, $p = 0.011$), and DISCERN scores (median 24 vs. 16, $p = 0.001$). HCP content more frequently included structured, clear, and actionable information. Higher-quality scores correlated positively with video duration and HCP authorship, and negatively with engagement rates.

Conclusion: STD-related content on TikTok is predominantly created by non-HCPs and varies in quality. Although HCP-generated videos are more reliable and informative, they tend to receive lower engagement. These findings highlight the need for improved dissemination of accurate, evidence-based sexual health information on social media platforms.

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Background

STDs have been steadily increasing in recent years, posing a growing threat to public health. According to the Centers for Disease Control and Prevention (CDC), over 2.4 million cases of syphilis and chlamydia were reported in the United States in 2023, underscoring the urgent need for effective education, prevention, and intervention strategies. Despite the availability of more resources than ever—such as online testing, rapid diagnostic tools, and self-collection kits. STD rates continue to rise. This suggests that factors beyond access to testing, such as quality of health information, public perception, and health literacy, may be influencing outcomes.

Recently, there has been increasing use of social media platforms, especially TikTok and YouTube, to obtain health-related information, including content about STDs. During the COVID-19 pandemic, TikTok became one of the most popular social media platforms worldwide, with an estimated 1.5 billion monthly active users in 2023 and continued growth anticipated through 2024. TikTok's rise as one of the most downloaded mobile applications has accelerated research into how health-related content spreads and its quality on the platform [1]. Several contributing factors, such as social stigma around STD testing, lack of awareness, changing relationship dynamics, and the rise of dating apps, may drive individuals to seek information outside of traditional healthcare settings.

These results from a study done to promote HIV testing among key populations, especially around the COVID-19 pandemic that created barriers to accessing sexual health services, underscore the importance of expanding accessible HIV testing services through improved education, accurate information dissemination, and timely point-of-care testing [2]. Although internet-based testing is positively perceived, uptake could be improved by highlighting its privacy, convenience, and reliability, while also addressing concerns about self-sampling and access to specialist advice [3]. Most existing studies focus on the acceptability of self-collected testing methods or the effectiveness of online health interventions, but little is known about the accuracy, source credibility (professional vs. non-professional), or potential public health impact of STD content shared on TikTok. As social media increasingly shapes health information dissemination, continued research and targeted interventions are essential to protect public health by promoting accurate, reliable, and evidence-based content [4].

Given TikTok's massive reach and influence, there is a pressing need to evaluate the accuracy, reliability, and source (professional healthcare provider vs. non-professional) of Std-related content being presented to users. Using standardized tools to assess health information quality, such as the Discern instrument and JAMA benchmark criteria, can help determine whether users receive scientifically sound, actionable health information.

This study aims to analyze TikTok videos using the search term #STD, categorize content by source, assess accuracy, and evaluate the overall quality and reliability of the information provided. By identifying the current strengths and gaps in STD-related content on TikTok, this research hopes to inform future public health strategies and digital health communication efforts.

Methods

We conducted a cross-sectional content analysis of TikTok videos on June 28, 2025, to assess engagement metrics, quality, and content characteristics related to #sexually transmitted diseases (STDs). We searched TikTok using the query "#STD" over a defined study period. To reduce the algorithm bias caused by previous searches

A new TikTok account was created. Videos were identified in the order of appearance consecutively until 109 eligible videos met the inclusion and exclusion criteria. Inclusion criteria included informational content related to sexually transmitted diseases. Exclusion criteria included videos in non-English, those with no audio or text, duplicates, or videos unrelated to STDs.

We initially screened 109 videos; however, we excluded 20 after full review due to duplication, non-English language, lack of audio or text, or irrelevance to sexually transmitted diseases, resulting in a final analytic sample of 89 videos.

Afterward, we extracted metadata from the videos. It included account type (health care professional versus non-health care professional), video duration, number of followers, number of views, likes, shares, saves, and comments. Comments, gender, setting (video taken at home/hospital/outdoor/other), any content of stigma (social/public/none), and sponsored versus selling were also noted.

Videos were assessed using two validated tools: PEMAT AND DISCERN. Quality assessment of videos was performed using two validated tools. The Patient Education Materials Assessment Tool for Audiovisual Materials (PEMAT-AV) evaluated understandability and actionability, while the DISCERN instrument assessed reliability and overall quality of health information. We scored each domain according to standardized criteria.

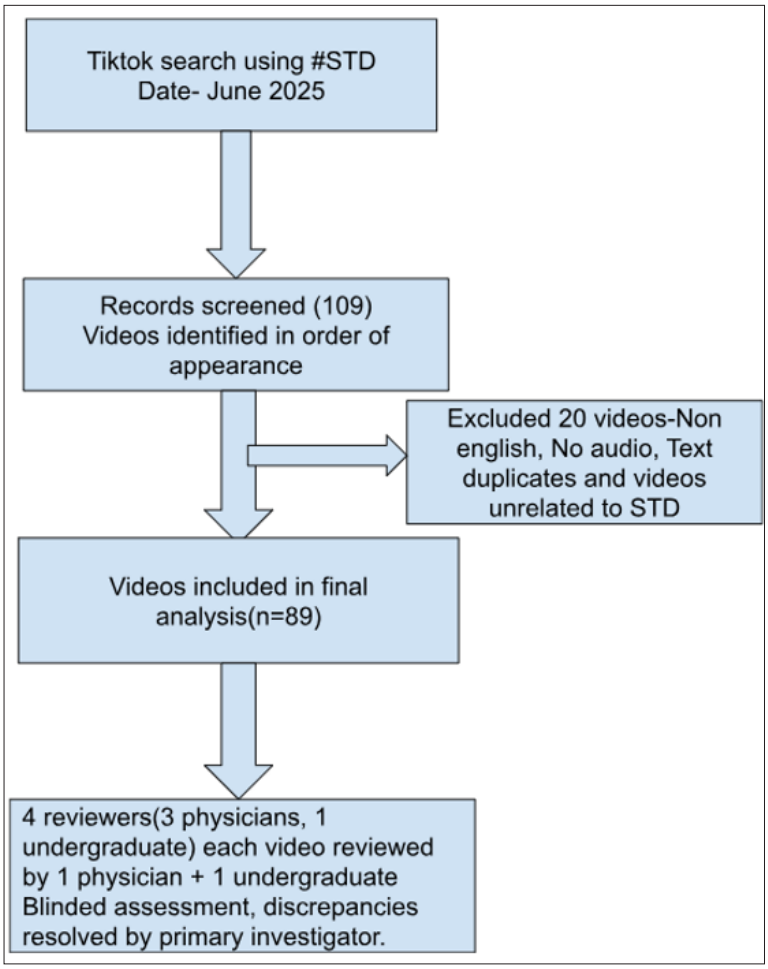
Patient Education Materials Assessment Tool for Audiovisual Materials (PEMAT-A/V): This tool evaluates understandability and actionability of audiovisual patient education content, generating percentage scores for both domains.

Four reviewers rated the videos: 3 physicians and 1 undergraduate physician. Each video was reviewed by 1 physician and 1 undergraduate physician. During assessment, the reviewers were blinded, and all discrepancies in scores (differing scores in personal experience, useful video, and PEMAT) were discussed and resolved by the primary investigator; if needed, the video was seen again by both reviewers until discrepancies were resolved. As shown in Figure 1.

Descriptive statistics summarized video characteristics and quality scores. We report continuous variables as median with interquartile range, and categorical variables as counts and percentages. We assessed differences between HCP and non-HCP videos using the Wilcoxon rank-sum test for continuous variables and the Chi-square or Fisher's exact test for categorical variables, as appropriate.

We used Spearman correlation analysis to examine relationships among video characteristics, creator type, quality scores, and video sentiment. We defined statistical significance as a p-value less than 0.05. All analyses were performed using [statistical software, e.g., R version X.X or Stata version X.X].

Flowchart Showing the Selection Process and Screening of Videos



Results

We assessed 89 TikTok videos, including 7 created by healthcare professionals (HCPs) and 82 by non-healthcare professionals (non-HCPs) (Table 1). Overall, video metrics such as followers, views, likes, comments, and engagement rates were comparable between groups, with no statistically significant differences.

Table 1: Descriptive Statistics

	Overall (N=89)	HCP (n=7)	Non-HCP (n=82)	P-value
Video Metrics				
Number of followers, Median (IQR)	51900 (9783.5 -397700)	716400 (9814 -1600000)	47200 (9378 -354875)	0.214
Video duration in seconds, Median (IQR)	34 (12 -92.5)	31 (18 -67)	35 (11.75 -100.5)	0.755
Number of views, Median (IQR)	243300 (62850 -688600)	139300 (96100 -520700)	244400 (59100 -713950)	0.982
Number of comments, Median (IQR)	384 (80.5 -779.5)	644 (130 -704)	361.5 (80 -804)	0.732
Number of likes, Median (IQR)	10700 (2253.5 -36400)	10800 (723 -44700)	10550 (2377.75 -36250)	0.909
Number of reshares, Median (IQR)	742 (104.5 -3030)	742 (33 -4270)	764 (107.75 -3025.5)	0.921
Number of Video Saves, Median (IQR)	969 (137 -2667.5)	496 (107 -1983)	978 (139 -3037.5)	0.664
Engagement Rate by Views (%), Median (IQR)	7.02 (2.735 -13.29)	2.53 (1.13 -10.2)	7.16 (2.8675 -13.4725)	0.232
Gender of Content Creator				

Male	24 (27)	4 (57.14)	20 (24.39)	0.151
Female	57 (64)	3 (42.86)	54 (65.85)	
Unknown	8 (9)	0 (0)	8 (9.76)	
Video Location				
Home	22 (24.7)	1 (14.29)	21 (25.61)	
Work place/ Hospital	16 (18)	3 (42.86)	13 (15.85)	0.345
Outdoor	22 (24.7)	1 (14.29)	21 (25.61)	
Other	29 (32.6)	2 (28.57)	27 (32.93)	
Topic talk				
Public awareness	16 (18)	4 (57.14)	12 (14.63)	
Patient story	34 (38.2)	0 (0)	34 (41.46)	0.040*
Education	4 (4.5)	1 (14.29)	3 (3.66)	
Entertainment	6 (6.7)	0 (0)	6 (7.32)	
HCP Perspective	1 (1.1)	0 (0)	1 (1.22)	
Other	28 (31.5)	2 (28.57)	26 (31.71)	
Social stigma Type				
Self-stigma	5 (5.6)	0 (0)	5 (6.1)	1
None	84 (94.4)	7 (100)	77 (93.9)	
PMAT Understandability score, Median (IQR)	1 (0 -2.5)	3 (2 -7)	1 (0 -2)	0.011
PMAT Actionability Score, Median (IQR)	0 (0-0)	2 (0 -2)	0 (0 -0)	0.011
DISCERN Score, Median (IQR)	16 (16 -18.5)	24 (17 -29)	16 (16 -17.25)	0.001

*p-value < 0.05 indicates statistical significance

Significant differences were observed in content quality measures. Videos from HCPs had higher PEMAT-A/V understandability scores (median 3 vs. 1, p = 0.011), higher PEMAT-A/V actionability scores (median 2 vs. 0, p = 0.011), and higher DISCERN scores (median 24 vs. 16, p = 0.001), indicating superior quality and reliability (Table 1).

Regarding content topics, HCPs were more likely to post public awareness content (57.1% vs. 14.6%, p = 0.040), whereas non-HCPs more often shared patient stories. Gender, location of video recording, and engagement patterns showed no significant differences, although HCP creators tended to have more followers on average (Table 1).

In the PEMAT-A/V assessment, HCP videos performed better across several domains of understandability and actionability (Table 2).

Table 2: Comparison of PMAT Score Domains by HCP vs Non HCP

	Overall (N=89)	HCP (n=7)	Non-HCP (n=82)	P-value
PMAT-AV Score Domains of Understandability, n (%)				
The material makes its purpose completely evident				
No	68 (76.4)	3 (42.86)	65 (79.27)	0.051
Yes	21 (23.6)	4 (57.14)	17 (20.73)	
The material uses common, everyday language.				
No	54 (60.7)	3 (42.86)	51 (62.2)	0.427
Yes	35 (39.3)	4 (57.14)	31 (37.8)	
Medical terms are used only to familiarize audience with the terms. When used, medical terms are defined.				
No	86 (96.6)	7 (100)	79 (96.34)	1
Yes	3 (3.4)	0 (0)	3 (3.66)	
The material uses the active voice.				
No	72 (80.9)	3 (42.86)	69 (84.15)	
Yes	17 (19.1)	4 (57.14)	13 (15.85)	
The material breaks or "chunks" information into short sections.				

No	46 (51.7)	2 (28.57)	44 (53.66)	
Yes	5 (5.6)	2 (28.57)	3 (3.66)	0.019*
Not Available	38 (42.7)	3 (42.86)	35 (42.68)	
The material's sections have informative headers				
No	44 (49.4)	1 (14.29)	43 (52.44)	
Yes	7 (7.9)	2 (28.57)	5 (6.1)	0.041*
Not Available	38 (42.7)	4 (57.14)	34 (41.46)	
The material presents information in a logical sequence.				
No	85 (95.5)	5 (71.43)	80 (97.56)	
Yes	4 (4.5)	2 (28.57)	2 (2.44)	
The material provides a summary				
No	40 (44.9)	2 (28.57)	38 (46.34)	
Yes	3 (3.4)	2 (28.57)	1 (1.22)	
Not Available	46 (51.7)	3 (42.86)	43 (52.44)	
The material uses visual cues (e.g., arrows, boxes, bullets, bold, larger font, highlighting) to draw attention to key points.				
No	20 (22.5)	2 (28.57)	18 (21.95)	
Yes	1 (1.1)	0 (0)	1 (1.22)	0.889
Not Available	68 (76.4)	5 (71.43)	63 (76.83)	
The material uses visual aids whenever they could make content easily understood				
No	89 (100.0)	7 (100.0)	82 (100.0)	Not estimable
The material reinforce rather than Distract from the content				
No	16 (18)	1 (14.29)	15 (18.29)	
Yes	4 (4.5)	2 (28.57)	2 (2.44)	0.006*
Not Available	69 (77.5)	4 (57.14)	65 (79.27)	
The material visual aids have clear titles or captions				
No	16 (18.0)	3 (42.86)	13 (15.85)	
Yes	1 (1.1)	0 (0)	1 (1.22)	0.199
Not Available	72 (80.9)	4 (57.14)	68 (82.93)	
Text on the screen is easy to read.				
No	56 (62.9)	4 (57.14)	52 (63.41)	
Yes	19 (21.3)	2 (28.57)	17 (20.73)	
Not Available	14 (15.7)	1 (14.29)	13 (15.85)	
The material allows the user to hear the words clearly (e.g., not too fast, not garbled)				
No	35 (39.3)	3 (42.86)	32 (39.02)	
Yes	26 (29.2)	2 (28.57)	17 (20.73)	
Not Available	28 (31.5)	2 (28.57)	13 (15.85)	
The material uses illustrations and photographs that are clear and uncluttered.				
No	20 (22.5)	3 (42.86)	17 (20.73)	
Yes	1 (1.1)	0 (0)	1 (1.22)	
Not Available	68 (76.4)	4 (57.14)	64 (78.05)	
The material uses simple tables with short and clear row and column headings.				
Yes	1 (1.1)	0 (0.0)	1 (1.22)	
Not Available	88 (98.9)	7 (100)	81 (98.78)	
Domains of Actionability, n (%)				
The material clearly identifies at least one action the user can take.				
No	70 (78.7)	3 (42.86)	67 (81.71)	0.035*
Yes	19 (21.3)	4 (57.14)	15 (18.29)	
The material addresses the user directly when describing actions.				

No	76 (85.4)	4 (57.14)	72 (87.8)	
Yes	13 (14.6)	3 (42.86)	10 (12.2)	
The material breaks down any action into manageable, explicit steps				
No	88 (98.9)	6 (85.71)	82 (100)	
Yes	1 (1.1)	1 (14.29)	0 (0)	0.079
The material provides tangible tool(check list)whenever it could help user take action				
No	89 (100.0)	7 (100.0)	82 (100.0)	Not estimable
The material provides simple instructions or examples of how to perform calculations				
Not Available	89 (100.0)	7 (100.0)	82 (100.0)	Not estimable
The material uses visual aids whenever they could make it easier to act on instructions				
No	89 (100.0)	7 (100.0)	82 (100.0)	Not estimable
The material explains how to use the charts, graphs, tables, or diagrams to take actions				
No	1 (1.1)	0 (0)	1 (1.22)	1
Not Available	88 (98.9)	7 (100)	81 (98.78)	

*p-value < 0.05 indicates statistical significance

HCP videos were more likely to use the active voice (57.1% vs. 15.9%, p = 0.023), break content into short sections (28.6% vs. 3.7%, p = 0.019), include informative headers (28.6% vs. 6.1%, p = 0.041), present information in a logical sequence (28.6% vs. 2.4%, p = 0.030), provide summaries (28.6% vs. 1.2%, p = 0.001), and reinforce rather than distract from content (28.6% vs. 2.4%, p = 0.006). HCP videos were also more likely to identify at least one specific action for the viewer (57.1% vs. 18.3%, p = 0.035). Other features, such as addressing users directly (p = 0.061) and breaking down actions into steps (p = 0.079), showed trends favoring HCP content but did not reach statistical significance.

In the DISCERN assessment, HCP videos scored significantly higher across multiple domains (Table 3).

Table 3: Comparison of Discern Score Domains by HCP vs Non-HCP

	Overall (N=89)	HCP (n=7)	Non-HCP (n=82)	P-value
DISCERN Score Domains				
Are the aims clear? of, Median (IQR)	1 (1 -2)	3 (1 -4)	1 (1 -1)	0.0004*
Does it achieve its aims? (Skip if answer to first question is No) of, Median (IQR)	1 (1 -1)	3 (1 -3)	1 (1 -1)	0.0003*
Is it relevant? of, Median (IQR)	1 (1 -2)	3 (2 -3)	1 (1 -2)	0.0005*
Is it clear what sources of information were used to compile the publication (other than the author or producer)? of, Median (IQR)	1 (1 -1)	1 (1 -1)	1 (1 -1)	Not estimable
Is it clear when the information used or reported in the publication was produced? of, Median (IQR)	1 (1 -1)	1 (1 -1)	1 (1 -1)	Not estimable
Is it balanced and unbiased? of, Median (IQR)	1 (1 -1)	1 (1 -1)	1 (1 -1)	Not estimable
Does it provide details of additional sources of support and information? of, Median (IQR)	1 (1 -1)	1 (1 -1)	1 (1 -1)	0.802
Does it refer to areas of uncertainty? of, Median (IQR)	1 (1 -1)	1 (1 -1)	1 (1 -1)	Not estimable
Does it describe how each treatment works? of, Median (IQR)	1 (1 -1)	1 (1 -1)	1 (1 -1)	<0.0001*
Does it describe the benefits of each treatment? of, Median (IQR)	1 (1 -1)	1 (1 -1)	1 (1 -1)	<0.0001*
Does it describe the risks of each treatment? of, Median (IQR)	1 (1 -1)	1 (1 -1)	1 (1 -1)	0.0002*
Does it describe what would happen if no treatment is used? of, Median (IQR)	1 (1 -1)	1 (1 -1)	1 (1 -1)	0.108
Does it describe how the treatment choices affect overall quality of life? of, Median (IQR)	1 (1 -1)	1 (1 -1)	1 (1 -1)	0.802
Is it clear that there may be more than one possible treatment choice? of, Median (IQR)	1 (1 -1)	1 (1 -1)	1 (1 -1)	Not estimable
Does it provide support for shared decision-making? of, Median (IQR)	1 (1 -1)	1 (1 -1)	1 (1 -1)	Not estimable
Based on the answers to all of the above questions, rate the overall quality of the publication as a source of of, Median (IQR)	1 (1 -1.5)	1 (1 -1)	1 (1 -1)	0.011*

*p-value < 0.05 indicates statistical significance

These included presenting clear aims (median 3 vs. 1, p = 0.0004), achieving stated aims (median 3 vs. 1, p = 0.0003), and providing relevant information (median 3 vs. 1, p = 0.0005). HCP content was also more likely to describe how treatments work, outline treatment benefits, and address associated risks (all p < 0.001). The overall quality rating was modestly higher for HCP videos compared with non-HCPs (p = 0.011). Some domains, such as describing what would happen if no treatment is used (p = 0.108) and explaining how treatment choices affect quality of life (p = 0.802), showed non-significant trends favoring HCP content.

Correlation analyses revealed that higher DISCERN scores were positively correlated with video duration (ρ = 0.265, p = 0.012) and HCP content (ρ = 0.363, p = 0.001), and negatively correlated with engagement rate (ρ = –0.277, p = 0.009). No significant trends were observed for number of followers (ρ = 0.187, p = 0.080) or number of views (ρ = 0.174, p = 0.103). Similarly, PEMAT understandability scores correlated positively with video duration (ρ = 0.414, p < 0.0001) and HCP content (ρ = 0.274, p = 0.010), and negatively with engagement rate (ρ = –0.268, p = 0.011). PEMAT actionability scores also correlated positively with video duration (ρ = 0.343, p = 0.001) and HCP content (ρ = 0.272, p = 0.010) and negatively with engagement rate (ρ = –0.217, p = 0.041) (Table4)

Table 4: Correlations of Understandability, Actionability and Discern Scores to Various Video Characteristics and HCP*p-value < 0.05 Indicates Statistical Significance

	Spearman rank correlation coefficient (Rho) (ρ)	p-value
DISCERN Score		
Number of followers	0.187	0.080
Video duration in seconds	0.265	0.012*
Number of views	0.174	0.103
Number of comments	0.024	0.821
Number of likes	-0.027	0.802
Number of reshares	-0.081	0.452
Engagement rate	-0.277	0.009*
HCP (1=HCP- 0= Non-HCP)	0.363	0.001*
PEMAT Understandability Score		
Number of followers	-0.041	0.701
Video duration in seconds	0.414	<0.0001*
Number of views	0.145	0.175
Number of comments	0.070	0.517
Number of likes	-0.041	0.704
Number of reshares	-0.117	0.274
Engagement rate	-0.268	0.011*
HCP (1=HCP- 0= Non-HCP)	0.274	0.010*
PEMAT Actionability Score		
Number of followers	0.012	0.915
Video duration in seconds	0.343	0.001*
Number of views	0.116	0.279
Number of comments	-0.005	0.964
Number of likes	-0.072	0.502
Number of reshares	-0.081	0.453
Engagement rate	-0.217	0.041*
HCP (1=HCP- 0= Non-HCP)	0.272	0.010*

Discussion

This study provides a novel, comprehensive evaluation of TikTok content on STDs, comparing engagement characteristics and informational quality between videos created by healthcare professionals (HCPs) and non-healthcare professionals (non-HCPs). Social media platforms are increasingly used as sources of health information, yet the reliability of user-generated content remains highly variable. Current research on medical misinformation focuses on specific platforms, leaving major platforms such as Weibo, WeChat, and TikTok underexamined despite their large user bases. Future studies should include non-English social media platforms to provide a more comprehensive global perspective on health information dissemination [5].

Sexually transmitted diseases can cause a spectrum of complications, ranging from mild to severe. Early or localized manifestations may include coexisting chronic urinary infections, while systemic inflammation can increase the risk of thrombotic events, such as acute deep vein thrombosis. Chronic inflammation promotes a prothrombotic state by increasing coagulation factors, which in the context of STDs may exacerbate vascular complications in infected individuals [6]. Tricuspid valve endocarditis, which accounts for 5–10% of infective endocarditis cases, is typically linked to intravenous drug use but can also arise from systemic infections,

including sexually transmitted infections such as syphilis or HIV-related bacteremia [7]. In severe cases, especially with systemic viral infections (HIV), excessive immune activation may trigger life-threatening conditions such as secondary haemophagocytic lymphohistiocytosis. Early recognition and management of underlying causes can prevent disease progression and markedly improve outcomes [8].

Healthcare professionals can mitigate STD-related misinformation on TikTok by increasing their presence and producing clear, evidence-based, and actionable content. Responsible use of TikTok and other social media is imperative to how health information is disseminated globally, and ongoing evaluation of platform trends is essential to strengthen public trust in online sexual health guidance [9].

In our study, HCP-generated videos scored significantly higher on validated assessment tools. DISCERN is a validated and reliable instrument for assessing the quality of consumer health information. Although some criteria require subjective judgment, experienced users and healthcare professionals can use it to distinguish between high- and low-quality materials, and it is also valuable for patients when supported by training [10]. The PEMAT showed strong internal consistency and reliability across both understandability and actionability domains. It also demonstrated construct validity, supporting its use in evaluating clarity and practical usefulness of patient education materials [11].

Prior research evaluating health-related videos on YouTube has shown that videos produced by government agencies and professional medical associations were more likely to provide accurate, reliable, and high-quality health information [12]. Despite these advantages, the literature identifies key gaps and recommends future research on social media health communication, including testing platform effectiveness through randomized trials and exploring mechanisms to monitor and improve content quality. Robust, multi-method evaluations are needed to assess social media's short- and long-term impact on public health practice [13].

Emerging research tools, such as Imagga, automated image recognition and tagging software, are being introduced to analyze the growing volume of health-related content on Instagram and similar platforms [14]. Online sources heavily influence how younger generations seek information and shape their beliefs and behaviors [15]. Platforms like YouTube have demonstrated extensive reach; viewership during the 2019 novel coronavirus outbreak exceeded that of previous epidemics. However, many videos' medical content remained suboptimal, and international health agencies were underrepresented. Given its reach, YouTube should also be recognized as an important platform for health information dissemination [16]. Similarly, the study Quality of TikTok videos on sudden cardiac death by video characteristics and health information accuracy reinforces concerns regarding the inconsistent accuracy and educational value of health-related TikTok content [17].

These findings highlight a gap between the quality and visibility of STD-related content on TikTok, with HCP-generated videos showing higher quality but lower engagement. Increased involvement of healthcare professionals is needed to improve access to accurate sexual health information. Future work should focus on strategies to enhance the reach and impact of evidence-based content on social media platforms.

This study has several limitations. The number of healthcare professional (HCP) videos was small (n = 7), which may limit the robustness of comparisons between HCP and non-HCP content. Although a new account was used to reduce algorithmic bias, TikTok's personalized recommendation system cannot be fully controlled. The inclusion of only English-language videos limits generalizability to non-English content. In addition, the cross-sectional design reflects a single time point and does not capture temporal changes in content or engagement. While validated tools (PEMAT-A/V and DISCERN) were used, some subjectivity in scoring may still exist.

Conclusion

In summary, HCP-created TikTok videos provide more reliable and actionable STD-related information than non-HCP videos, despite similar engagement levels. Addressing the mismatch between informational quality and platform visibility is essential to maximizing TikTok's role in sexual health education and mitigating the spread of misinformation.

Conflict of Interest: The authors declare no conflicts of interest.

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