

## Medication abortion on TikTok: misinformation or reliable resource?

**OBJECTIVE:** TikTok, a short-form video-sharing application, is a popular platform used by 50.3% of the United States digital population.<sup>1</sup> Viral videos promoting non-US Food and Drug Administration (FDA)-approved regimens for inducing abortion have raised questions regarding the safety and accuracy of reproductive health information.<sup>2</sup> We systematically analyzed and evaluated videos about medication abortion on TikTok.

**STUDY DESIGN:** We evaluated the 100 most-viewed videos tagged under the hashtags #abortionpill, #medicalabortion, and #medicationabortion. We used the web-scraping application, Apify, to automatically download, extract, and compile information from the 100 most-viewed videos under each hashtag on September 25, 2022.<sup>3</sup> Three independent reviewers (E.T., M.H., and M.G.) performed standardized video coding and a fourth reviewer (J.W.) served as arbitrator when differences arose. We a priori defined 18 descriptive data points about each video that could be collected by independent reviewers. Two standardized scales were also used, namely a modified 5-point DISCERN scale to evaluate the information quality and the Patient Education Materials Assessment Tool (PEMAT) to evaluate the understandability and actionability of each video.<sup>4,5</sup> Coding was standardized over 2 sessions involving all reviewers who jointly agreed upon data points and scoring and who were trained through group-practice coding of 10 videos. Duke University Medical Center's Institutional Review Board deemed this study to be nonhuman subject research.

**RESULTS:** The top 100 videos about medication abortion on TikTok had a total of 12.1 million views, 1.8 million likes, and averaged 57 seconds in length. Eighteen videos were excluded because they were not in English language (n=10) or were duplicates (n=8). More than half (58%) of the videos provided medical education followed by personal experiences (13%), opinions (7%), and news-related information (7%) (Table). Abortion services accounts created 30% of the videos and often featured healthcare professionals who were the primary speakers in 28% of the videos. A majority (83%) had a pro-abortion stance. Almost half (45%) of the popular videos highlighted resources on how to obtain a medication abortion, and 14% specifically discussed the mechanism of action of medication abortion. Among educational videos, more than half discussed FDA-approved medications including mifepristone (n=30; 51.7%) and

misoprostol (n=30; 51.7%), whereas only 4 videos discussed other methods of self-managed abortion.

Of the 51 videos that presented scientific claims, 86.3% were mostly accurate and 13.7% were mixed. Of the 65 videos that presented public health information, 89.2% were mostly accurate and 10.8% were mixed. No videos presented mostly inaccurate information.

Video information quality averaged 2.8 out of 5 points on the DISCERN scale (median, 3; interquartile range [IQR], 2–4). Videos averaged 88.1% for understandability (median, 87.5%; IQR, 87.5%–100%) and 47.7% for actionability (median, 33.3%; IQR, 0%–100%) on the PEMAT.

**CONCLUSION:** Almost 40% of young people search on TikTok before Google, yet 1 previous investigation concluded that up to 20% of videos contain misinformation.<sup>2</sup> In contrast, we found that content related to medication abortion on TikTok was accurate and reliable. This may be attributable to TikTok's internal policies for flagging inaccurate or unverified information as well as the significant number of videos by healthcare professionals and abortion organizations. Videos on medication abortion were of medium information quality based on DISCERN and scored highly in understandability on PEMAT. Our study suggests that engaging with TikTok allows the healthcare community to shape the accessible information about abortion. In a post-Roe era characterized by decreased access to reproductive health services, social media applications provide important opportunities to address knowledge gaps, combat abortion stigma, and empower patients.

Strengths include a standardized method of content compilation and the use of 2 standardized scales. Limitations include the subjective nature of content analysis and inability to assess viewer engagement with abortion resources. ■

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TABLE

## Video characteristics of 100 TikTok videos evaluated

Characteristic evaluated		N = 100 (%)
Country of origin	United States	81 (81.0)
	Mexico	9 (9.0)
	Europe	4 (4.0)
	Canada	2 (2.0)
	Other	4 (4.0)
Creator age	≤21 y	3 (3.0)
	≥21 y	88 (88.0)
	Unspecified	9 (9.0)
Creator gender	Female	78 (78.0)
	Male	4 (4.0)
	Unspecified	18 (18.0)
Healthcare professional	Yes	28 (28.0)
	MD	11 (11.0)
	RN	5 (5.0)
	Midwife	5 (5.0)
	Other	7 (7.0)
	No or unspecified	72 (72.0)
Abortion services account	Yes	30 (30.0)
	Carafem	10 (10.0)
	Safe2choose	9 (9.0)
	Hey Jane	3 (3.0)
	Planned Parenthood	1 (1.0)
	Other	7 (7.0)
	No	72 (72.0)
Abortion Stance	Pro-abortion	83 (83.0)
	Anti-abortion	4 (4.0)
	Neutral	4 (4.0)
	Mixed or ambiguous	9 (9.0)
Primary type of video	Medical education	58 (58.0)
	Personal experience	13 (13.0)
	Creator opinion	7 (7.0)
	News	7 (7.0)
	Humor	6 (6.0)
	Political	4 (4.0)
	Other	5 (5.0)

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(continued)

## TABLE

## Video characteristics of 100 TikTok videos evaluated (continued)

Characteristic evaluated		N = 100 (%)
Medications discussed	Mifepristone	35 (35.0)
	Misoprostol	30 (30.0)
	Other	5 (5.0)
	Methotrexate	2 (2.0)
	Mugwort tea	1 (1.0)
	Vitamin C	1 (1.0)
	Alcohol	1 (1.0)
Compelling factors	Trustworthy source	56
	Compelling story	56
	Length of video	44
	Audiovisual supplements	41
	Catchy music	40
	Humor	14
Modified DISCERN	Mean, 2.8; median, 3; IQR, 2–4	
PEMAT A/V		
Understandability	Mean, 88.1%; median, 87.5%; IQR, 87.5%–100%	
Actionability	Mean, 47.7%; median, 33.3%; IQR, 0%–100%	

Selective descriptive characteristics of TikTok videos collected through standardized coding performed by 2 independent reviewers per video.

IQR, interquartile range; MD, medical doctor; PEMAT, Patient Education Materials Assessment Tool; RN, registered nurse.

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The findings of this study will be presented at the 46th annual meeting of the National Abortion Federation being held in Denver, Colorado, April 29–May 2, 2023.

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