

Examining Communicative Forms in #TikTokDocs' Sexual Health Videos

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We build on the theoretical framework of communicative forms and memetic dimensions to examine how obstetrics and gynecology (OBGYN) doctors' TikTok videos function as digital artifacts to educate and engage with youth culture. The framework of communicative forms defines TikTok as a communicative environment with unique practices, technological affordances, aesthetics, and digital culture. The three memetic dimensions of content, form, and stance refer to the ideas, configurations, and positions conveyed by memes that are shown on TikTok. We identified interrelated memetic ways OBGYN TikTok Docs deliver sexual health information using five communicative forms (explanatory, documentary, comedic, communal, and interactive). Our findings show that the relatability of OBGYN TikTok Docs was a key element in each communicative form and was crafted by a combination of the three memetic dimensions. In using various communicative forms, the boundaries of health education and entertainment are blurred. Through this blurring, the videos portray a dual-sided presentation of OBGYN TikTok docs, showing them as authentic health professionals and relatable people.

Keywords: digital health communication, digital health promotion, communicative forms, memetic dimensions, sexual health, women's health, TikTok

Social media platforms have become an increasingly important medium for health promotion and for health-care professionals to disseminate health information (Chretien, Azar, & Kind, 2011; Eghtesadi & Florea, 2020; Hawn, 2009; Lwin, Lu, Sheldenkar, & Schulz, 2018; Strelakova & Krieger, 2017). Due to this, doctors have formed a digital culture called TikTok Docs as they are increasingly using TikTok, a social audiovisual platform, widely used by adolescents. They use relevant hashtags, such as #tiktokdoc, and feature themselves dancing to music and covering topics like health lessons, medical advice, and human anatomy (Pitcher, 2020). Key affordances of the platform are the algorithm-driven "For You" recommendation page and various audiovisual features. TikTok holds great potential for doctors to share information and interact with viewers because of its easy-to-use technical design.

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Social media sites like TikTok make health-related information accessible to a wide range of people, particularly, youth, women, ethnic minorities, those who may not feel comfortable seeing a doctor in person, and those impacted by health disparities (Gibbons et al., 2011; Lee et al., 2016; Ruan, Raeside, Singleton, Redfern, & Partridge, 2020). Despite a growing interest in using TikTok as a platform for health communication (Li, Guan, Hammond, & Berrey, 2021; Roche, Dhonncha, & Murphy, 2021; Zheng et al., 2021), it remains understudied, especially for historically and culturally stigmatized health topics (Herek, Chopp, & Strohl, 2007; Todd, 1989).

The effectiveness of digital health communication is impacted by the platform it takes place on and by the information being shared. Schellewald (2021) defines the communicative forms as “platform-specific languages or memes, trends, and aesthetic styles that are specific to TikTok and the meaning-making practices of its users” (p. 1439). Additionally, Shifman’s (2013) memetic dimensions of content, form, and stance refer to the ideas, configurations, and positions conveyed by memes. Understanding the communicative forms and memetic dimensions of TikTok Docs’ videos is crucial, as communicating health as entertainment has the potential to reach youth in ways that were not previously available. These frameworks help explain TikTok’s cultural and technical aspects. Because of this, we applied the communicative forms and memetic dimensions to examine obstetrics and gynecology (OBGYN) TikTok Docs’ videos. Our study makes the following contributions:

1. It explains how the communicative forms and memetic dimensions weave together to form a dual-sided representation of OBGYN TikTok Docs being both credible professionals and relatable people.
2. It shows that relatability is present in all five communicative forms.
3. It specifies that interactivity manifests itself on both internal and external levels.
4. It is one of the first studies to examine the communicative forms and the memetic dimensions of content, form, and stance in TikTok Docs’ sexual health videos.

Literature Review

Doctors as Medical Influencers

Eysenbach (2001) defined e-health as “not only a technical development, but also a state-of-mind, a way of thinking, an attitude, and a commitment for networked, global thinking, to improve health care locally, regionally, and worldwide by using information and communication technology” (p. 1). New technologies in health care have been “rapidly challenging the old, linear ‘expert message sender to receiver’ approach” (Kreps & Neuhauser, 2010, p. 330). They offer health-care professionals opportunities to establish new relationships with patients, to extend the scope of information exchange, and to provide more equitable health services (Eysenbach, 2001). Although research about health care and social media has primarily focused on how medical institutions use social media for health promotion (Kim & Kim, 2020; Lwin et al., 2018; Roberts, Seymour, Fish, Robinson, & Zuckerman, 2017), a growing body of research focuses on individual doctors as medical influencers, their presence on social media, and nonclinical audiences (Alpert & Womble, 2016; Chen, 2018; Riddell, Brown, Kovic, & Jauregui, 2017).

Although social media offers health-care providers a means to communicate with the public (Gibbons et al., 2011) and enhances users' participation in their own health (Fisher & Clayton, 2012), providers still face the challenge of how to make health-related information interactive, relevant, and accessible. Eysenbach (2001) states that Internet-based health communication should be strategically designed, "easy-to-use, entertaining, and exciting" (p. 2). Health communication scholarship has examined strategies to create persuasive, engaging, and effective health messages, such as combining storytelling and evidence-based information (Shelby & Ernst, 2013), incorporating personal narratives with health topics (Zhang & Wen, 2020), and entertainment-education, namely weaving educational health messages with popular entertainment content (Moyer-Gusé, 2008; Slater & Rouner, 2002).

Another area of research examines the potential negative consequences of personal and unprofessional information revealed by doctors on Twitter and Facebook (Chretien et al., 2011; MacDonald, Sohn, & Ellis, 2010; Thompson et al., 2008; Usher, 2011). These repercussions include violating patient privacy, damaging the reputation of the medical profession, and raise new questions about ethics. Because of this, using social media as a medical reference, like using WebMD or googling symptoms, is a cause for concern. This is especially true for TikTok because not all TikTok videos provide factual information, and TikTok does not regulate content or provide disclaimers about misinformation (Fowler, Schoen, Smith, & Morain, 2021). Although we do not believe using social media as a medical reference can replace meeting with a trained medical doctor, we argue that it is critical to study how individual doctors use social media, as they are increasingly present on varying platforms.

TikTok as a Health Communication Platform

Videos on social media have been recognized as artifacts of virality (Nahon & Hemsley, 2014), enabling health topics to spread widely and rapidly to disseminate health (mis)information (Briones, Nan, Madden, & Waks, 2012; Keelan, Pavri-Garcia, Tomlinson, & Wilson, 2007), to reduce patients' uncertainties (Perrault & Silk, 2016), and to facilitate discussion about medical treatment (Fernandez-Luque, Elahi, & Grajales, 2009). Moreover, the use of social media like YouTube for health information has become a trend among young health consumers (Strekalova & Krieger, 2017; Thackeray, Crookston, & West, 2013), and their need for evidence-based, readable, and interactive health information (Ruan et al., 2020).

Because of its special affordances, TikTok functions as a new platform to circulate health information in ways that are different from traditional video-based social media. It has been downloaded 2 billion times and reported having nearly 690 million global monthly users as of August 2020 (Sherman, 2020). TikTok videos are shareable, user-generated, short, and audiovisual in nature. They can be up to 60 seconds long and feature music, lip-syncing, choreographed dances, comedy, and other performance characteristics. A recent study of COVID-19 TikTok videos showed that dance videos had more shares compared to other types because of their audience-centered characteristics (Li et al., 2021). As a youth-oriented application that claims to "inspire creativity and bring joy" (Mahendran & Alsherif, 2020, para. 1), TikTok also provides a range of engaging and easy-to-use tools to help users film, edit, and share videos. Duet is a great example and a feature often used on TikTok. Duet splits the screen in half, juxtaposing both clips on the same screen, allowing creators to make connections with other videos and creators (Mataskis, 2019). TikTok also encourages users to initiate challenges that center around community-created trends,

such as songs, dances, and food. They start when a TikTok user asks other users to perform a certain task, record themselves doing it, and share their video using challenge-specific hashtags. The more people participating and sharing videos with the challenge hashtag, the more the hashtag trends (Geysler, 2020).

TikTok enables videos containing serious content to go viral as entertainment. For instance, Medina Serrano, Papakyriakopoulos, and Hegelich (2020) found that videos "create short political spectacles resulting in the realization of politics as entertainment" (Medina Serrano et al., 2020, p. 265). Similarly, TikTok provides doctors a space to package their health message(s) into funny and creative clips, informing young adults about coronavirus disease (Li et al., 2021), acne-related conditions (Roche et al., 2021), birth control, sexually transmitted infections (STI), and personal hygiene (Goldberg, 2020). In addition, researchers urge doctors to avoid dismissing TikTok's medical utility because of its entertaining components (Walshaw, Taylor, Iyer, & Cashman, 2020) and to leverage TikTok to better understand adolescents' health concerns (Zheng et al., 2021). TikTok has the potential to be an influential platform for health professionals to disseminate health information (Li et al., 2021), yet professional sources of health information on the platform are limited (Basch, Hillyer, & Jaime, 2020). For example, one study showed that only 6% of the most popular COVID-19-related videos were generated by health-care professionals, even though they generated more user engagement (Ostrovsky & Chen, 2020).

TikTok's Communicative Forms and Memetic Dimensions

As an emerging platform, theorizing about TikTok is still limited. Since our study interrogates how health-care professionals interact with youth culture on TikTok, Schellewald's (2021) framework works well to observe these doctors' communications that are aesthetically, narratively, and formatively unique to TikTok. Schellewald (2021) introduced six communicative forms of TikTok videos: comedic, documentary, communal, explanatory, interactive, and meta. The comedic form accentuates the jocular and inventive nature of short videos, such as delivering a joke, parodying a situation, or recording a prank. These videos are deemed as "just funny," but Schellewald (2021) asserts that through parody, punchline, sketch, and other comedic elements, "they create and sustain specific patterns of how people relate to and become aware of others and the world" (p. 1445). Second, though conveyed in a comedic tone, many of these videos also manifest a documentary genre. They are used to express the self in common settings and document everyday life. Third, closely related to the first two forms, the communal form draws attention to "togetherness" displayed in videos that feature both close social relationships and relationships with strangers. For example, one popular genre on TikTok is recording a group dance with friends or family members to a trending song. The fourth form, explanatory, centers around tutorial or educational videos that contain professional knowledge, experiences, and tricks. Most educational and informative videos fall into this category. Like the explanatory form, the interactive form shows special skills, as the videos feature creators competing in trendy TikTok challenges. The interactive form also opens space for engagement through TikTok's affordances, such as using the feature "duet" to interact with other users. The last form highlights meta communication, which makes communication on TikTok (e.g., its algorithmic practice, the "For You" page) a subject to talk about in the videos.

Schellewald (2021) also used Shifman's (2013) three memetic dimensions of content, form, and stance to examine communication practices on TikTok. The memetic dimensions are applicable to our study

as they provide deeper insight into the ideas, configurations, and positions found in TikTok videos. The memetic dimension of content pertains to the ideas, messages, and ideologies delivered through memes. The dimension of form refers to the visual and audible characteristics that support texts and genre-related actions like lip-syncing. The stance dimension describes how content creators position themselves to certain topics, discourse, or trends (Shifman, 2013). Take the "door slam" meme articulated in Schellewald's (2021) study as an example. The "content" of that memetic video is a person angrily enters a room, slams the door, and screams; the "format" is the loud music followed by the door slamming; and the "stance" is the emotions and opinions delivered by textual annotation shown in the video, such as "Me when (a TV character) dies" (Schellewald, 2021, p. 1446).

Interweaving with the communicative forms and memetic dimensions, Schellewald (2021) explains the concept of relatability in the documentary form. Relatability is constructed when content creators use vernacular and funny language, document mundane circumstances, and/or address relevant topics. For instance, content creators use everyday settings and circumstances such as college and school to communicate typical, absurd, or funny moments (Schellewald, 2021). Relatability also refers to how content creators persuade viewers to connect with them (Abidin, 2017). TikTok content creators are humanized through relatability, especially through the use of humor (Ask & Abidin, 2018).

Research Questions

Understanding TikTok's communicative forms and memetic dimensions is pivotal, as TikTok affords medical doctors access to a global audience. For example, reaching those with limited access to health care and health education, and providing access to information about potentially stigmatized or under-resourced health topics. How medical professionals use social media and how audiovisual features are embedded in health-care-themed content remains understudied. To address this, we ask the following research questions:

RQ1: How are the communicative forms present in TikTok Docs' sexual health videos?

RQ2: How are the memetic dimensions of content, form, and stance present in TikTok Docs' sexual health videos?

RQ3: How is the concept of relatability present in TikTok Docs' sexual health videos?

RQ4: How is the concept of interactivity present in the TikTok Docs' sexual health videos?

Methods and Data

Data Gathering Methods

To address our research questions, we first used purposive sampling (Elo et al., 2014) to gather 30 public TikTok videos. To avoid bias caused by previous viewing, we created and used a new TikTok account to collect videos between April 16, 2020, and April 25, 2020. The videos collected were posted on

various dates and were not only posted during our data collection period. We used the screen capture function on Yueyang's mobile device and stored the videos on her personal computer. Our codebook, coding results, OBGYN TikTok Doc account information, and the TikTok URLs can be found in our OSF Report (https://osf.io/g53v8/?view_only=72fb9aa9adc647dfa0d739096c73b976). The videos are referenced via the video numbers, doctor name, and/or doctor handle in the findings and discussion section.

We browsed several doctors' accounts that were covered in the news (e.g., Dr. Danielle Jones, who was featured in the *New York Times*; see Goldberg, 2020) and identified the most frequently used hashtags by OBGYN doctors. Using the following hashtags, #doctor, #tiktokdoc, #obgyn, #gynecology, #fertility, #mfm, #sti, #stdcheck, #femininehygiene, #teenmom, #contraception, #birthcontrol, we were able to find popular OBGYN accounts. To determine whether an account was an OBGYN, we came up with three qualifiers. First, the account used OBGYN-related titles or labels, such as obstetric nurse (OB nurse) or maternal-fetal medicine (MFM) in their account description; second, they added relevant hashtags (e.g., #obgyn, #gynecology, #fertility) to more than five of their videos; third, more than five of their videos were explicitly relevant to working as an OBGYN (videos shot in a hospital office). Any account that satisfied one or more of these qualifiers was added. As a result, we identified 12 OBGYN accounts. The range of numbers of videos collected from one single TikTok Doc was 1–5, with the average being 2.5. When we started following various accounts, videos created by other doctors started to show up on our "For You" page. Therefore, we used TikTok's recommendation algorithm to track more diverse videos and accounts, resulting in 30 total videos. We stopped at 30 videos because at that point we had reached saturation. There were no more emergent themes that appeared, and we noticed each theme being repeated.

Data Analysis

Taking a similar approach as Schellewald (2021), we conducted several coding rounds for analysis. To build our codebook, we first used attribute coding (Saldaña, 2016) to log essential and technical information about each account and video. We coded two types of attributes: those indicating the popularity of videos and of accounts (number of followers, views, shares, comments), and those related to personal characteristics or demographics (account name and signature, gender, self-disclosed ethnicity). These attributes provided contextual information about the data and characterized the doctors as video creators. Next, we used descriptive coding (Saldaña, 2016) to analyze the video content, and the following categories emerged from the data: health topics, verbal/nonverbal, music, performance, setting and props, special features, emotions, and tones.

To capture more holistic patterns and build on Schellewald's (2021) communicative forms framework and Shifman's (2013) memetic dimensions, we used elaborative coding (Saldaña, 2016) to connect codes, categories, and themes to the six communicative forms and the three memetic dimensions. At this stage, we created subcategories of each communicative form that reflected the patterns we recognized. It is important to note that the main categories and subcategories were not mutually exclusive but overlapping. In other words, one video could manifest a range of different forms and subcategories of forms. After the codebook was finalized, Krysten and Yueyang, the first and second authors, coded 30 videos independently in terms of the presence of each subcategory and each memetic dimension to assess

intercoder agreement. By comparing coding decisions, calculating the percentage of agreement of each variable, resolving discrepancies, and recoding for the second time, they ended up satisfying intercoder agreement across all 16 variables, ranging from 83.33% to 96.67%.

Findings

Communicative Forms in TikTok Docs' Sexual Health Videos

The findings show that five communicative forms (explanatory, documentary, comedic, communal, and interactive) manifest in 13 various ways, and that the meta form was not present. We describe the 13 subcategories in the following section and provide links to examples of each in Table 1.

Table 1. Subcategories of Communicative Forms and Primary Memetic Dimensions in TikTok Docs' Videos.

Communicative Form			Primary Memetic Dimension	Example Videos	
Main Category	Subcategory	Description of the Subcategory			
Explanatory	Sexual health lectures	Doctors present women's health topics using definitions, clarification, and explanations.	Form	Lincoln (2020a)	Retrieved from https://bit.ly/3HjMS2v
	Sexual health tutorials	Doctors show practical instructions about women's health.	Form	Jones (2020)	Retrieved from https://bit.ly/3qxXgxG
	Mis/disinformation and stigmas	Doctors identify stigmas, myths, false information, dangerous behaviors, and unnecessary products.	Content, Stance	Cheema (2020)	Retrieved from https://bit.ly/2YJaa00
Documentary	Personal life	Doctors feature family members in their videos, or their videos are recorded in intimate spaces.	Content	Rodgers (2020a)	Retrieved from https://bit.ly/30k85bO
	Individual lived experiences	Doctors share their personal stories in relation to their nonmedical experiences.	Content, Stance	Cath (2020)	Retrieved from https://bit.ly/3on4i5F

	Personal values	Doctors convey their personal values and positions especially about controversial issues.	Stance	Tanouye (2020a)	Retrieved from https://bit.ly/3kvmmJM
Comedic	Music and comedy	Doctors use both musical elements and comedic devices.	Form	Tanouye (2020b)	Retrieved from https://bit.ly/3n87yT4
	Imitation	Doctors create medical sketches and play the role of nonmedical people.	Form	Crawford (2020)	Retrieved from https://bit.ly/3Hh0CLx
Communal	Family members	Doctors create videos featuring their family members to talk about health topics and answer viewers' questions.	Form	Rodgers (2020b)	Retrieved from https://bit.ly/3c6SAqf
	Doctors and viewers	Doctors communicate with other doctors and viewers, signifying their membership in the larger community.	Form	Cath (2020)	Retrieved from https://bit.ly/3on4i5F
Interactive	Audiovisual features	Doctors leverage various audiovisual features, such as duet and text annotation.	Form	Clark (2020)	Retrieved from https://bit.ly/3Dc3GGm
	Challenges	Doctors participate in trendy challenges to engage with young viewers.	Form	Lincoln (2020b)	Retrieved from https://bit.ly/3qBpW94
	Hashtags	Doctors use hashtags to engage with youth communities, other doctors, and to search for common topics.	Form	Kathiresan (2020)	Retrieved from https://bit.ly/31XJFWk

Explanatory Communicative Form

In this section, we describe how the explanatory communicative form manifested in three ways, through: *sexual health topics*; *sexual health tutorials*; and *mis/disinformation and stigmas*.

Sexual Health Topics

The explanatory form was present when the doctors discussed women's sexual health topics using relevant definitions, clarification, and explanations. The videos were structured like a lecture in a classroom, which was mostly a one-way interaction. The main memetic dimension of content appeared in the videos as health information and facts being shared. The doctors discussed topics that were widely known about or applicable to women's health specifically. Some topics covered were commonly found feminine wash products and childbirth. All these topics built the relatability of the health content as many girls and women might be familiar with or have questions about them.

Sexual Health Tutorials

The explanatory communicative form was also present in the videos where doctors showed specific instructions about women's health. This subcategory resembled doctors counseling viewers as if they were at an in-person doctor appointment. The tutorial videos provided step-by-step instructions and covered topics such as hygiene, diet, and preventive care. Highlighting popular and well-known health topics were discussed to build relatability with the users, and the memetic dimension of content appeared via the step-by-step instructions being shared.

Mis/Disinformation and Stigmas

The videos also showed doctors correcting health misinformation and addressing stigmas. It occurred in videos where the doctors identified myths, false information, dangerous behaviors, and unnecessary health products. The memetic dimension of content appeared in the videos as information and facts being shared to correct myths or misinformation. Highlighting health topics applicable to girls and women specifically were discussed to build relatability with the users, as the content was female centric. Some examples included dispelling the myth that putting an ice cube in the vagina can cure depression or tighten the vagina, and the myth that oils and lotions can prevent stretch marks. In addition to correcting mis/disinformation, the videos showed the memetic dimension of stance as doctors (re)defined normality and broke stigmas around women's bodies and health. This took place through their discussions of female-centric topics such as disease, symptoms, treatments, drugs/products, anatomical structure, and diagnostic tools.

Documentary Communicative Form

In this section, we describe how the documentary communicative form was enacted, drawing attention to the doctors' relatable personalities, social roles, social relationships, and gender identities. The documentary form was crafted when doctors showed themselves as ordinary people and expressed their personal perspectives about controversial topics. We identified the following three subcategories of the documentary communicative form: *personal life*, *individual lived experiences*, and *personal values*.

Personal Life

Doctors' personal lives were highlighted through their social relationships and personalities. The memetic dimension of content appeared as the doctors featured their family members in their videos or recorded videos in their own personal and intimate spaces. By including family members and personal items in the videos, the doctors' dispositions and social roles stood out, which contributed to representing them as authentic, relatable people.

Individual Lived Experiences

Some documentary content was created in a narrative form as the doctors shared stories about their lived experiences. The memetic dimension of content showed the doctors sharing their personal narratives, individual lived experiences, and nonmedical experiences in relation to their identities. Their self-disclosure showed that they are ordinary people who also had lives before becoming medical doctors. This also built relatability with users either working or not working in health care and encouraged viewers to pursue their dream jobs.

Personal Values

The documentary communicative form was also enacted when doctors shared their personal values and positions about controversial issues. The memetic dimensions of content and stance were highlighted as doctors embedded their awareness of certain cultural norms by sharing their stances and perspectives. This subcategory may also be present along with other forms such as the explanatory form. Through this form, the doctors no longer distanced their professional experiences and medical knowledge from their personal values; rather, both sides were integrated into their positionality. In other words, they did not ground their stance through their medical training and experiences, but through their identities, observations, and personal experiences that viewers could relate to. They redefined normality by articulating their personal values, sharing medical knowledge, and by expressing their gender ideologies. Additionally, they challenged persistent cultural stigmas surrounding women's health.

Comedic Communicative Form

Related to the interactive form, comedic and entertaining characteristics were embedded in the videos. By integrating comedic elements from the TikTok youth community, the doctors' health content appeared to be catchy, entertaining, and accessible. The comedic communicative form was primarily shown in two interconnected ways, through *music and comedy* and *imitation*.

Music and Comedy

The comedic communicative form applies to TikTok Docs' performances. The memetic dimension of form was present through musical elements, such as songs, dance, lip-syncing, and various comedic devices, such as parody and punchlines. It also enhanced the relatability of the health content because younger audiences identify with and recognize the popular culture references. In addition to dancing, simple

body movements like nodding heads and waving hands were paired with trending musical elements from the TikTok community. This connected TikTok Docs' videos to other videos featuring the same song. Examples of these songs include "Relationship" (Williams, Burgess, De la Rosa, & Sharrieff, 2017), "Myself" (Bazzi & LaVigne, 2018), and "Cannibal" (Sebert, Coleman, Jomphe, & Sebert, 2010). The combination of musical elements and comedic devices functioned to make the content more approachable, entertaining, accessible, and memorable.

Imitation

Another subcategory in the comedic communicative form highlighted doctors performing health-themed sketches based on their medical encounters and experiences. The memetic dimension of form was seen in these videos as the doctors played the role of patients or other nonmedical people. By deliberately adopting exaggeration and role-play, the doctors created an entertaining contrast to their professional personas.

Communal Communicative Form

The communal communicative form is characterized by "togetherness" and coexistence. The communal form shows doctors' social roles and relationships beyond the workplace and is enacted by featuring *family members* and by engaging with other *doctors and viewers*. In the following section, we describe these two subcategories.

Family Members

Many videos featured doctors' family members when discussing health topics or answering viewers' questions. The memetic dimension of form was shown as videos created by the doctors spotlighted and incorporated their family members into the video format. Featuring family members builds relatability with users because it gives a look into an intimate aspect of the doctor's life. A patient visiting a doctor physically in a medical facility would likely not have the opportunity to meet or see a doctors' family member.

Doctors and Viewers

In this subcategory, doctors communicated with other doctors and viewers, signifying their membership in the medical community. Duet was widely used as it enabled doctors to produce videos featuring other doctors or patients, side by side (Figure 1). The memetic dimension of form appeared in how the videos were constructed and recorded via duet. Additionally, engaging with other doctors and viewers crafted relatability, as it showed doctors as kind and friendly people who are open to engaging with others.

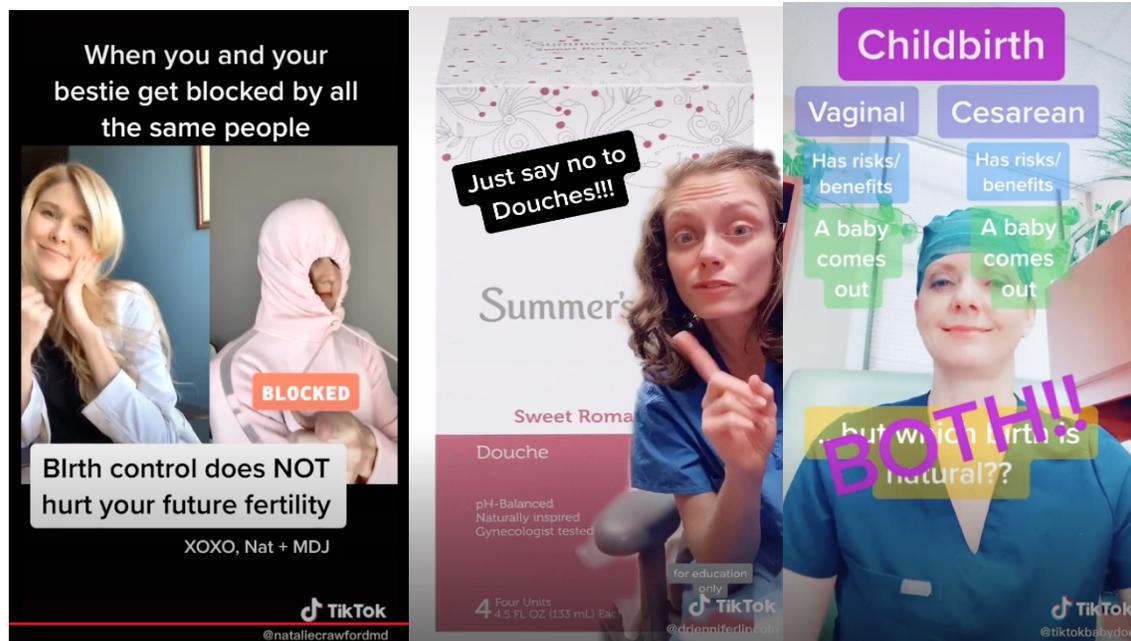


Figure 1. TikTok Docs using duet, green screen, and text annotation.
(Sources from left to right: Crawford, 2020; Lincoln, 2020a; Clark, 2020).

Interactive Communicative Form

The interactive communicative form was visible through the platform's features and playful atmosphere. Although the interactive communicative form in Schellewald's (2021) work mainly revolves around the idea that TikTok is an interactive space, we argue that interactivity can manifest on two levels: internally, addressing different ways video content can be made more engaging to other TikTok content creators and users, and externally, highlighting how videos can be promoted to a wider audience—for example, to those not following a particular content creator. In this section, we identify and describe three subcategories of the interactive communicative form: *audiovisual features*, *challenges*, and *trendy hashtags*. All three subcategories work to facilitate external and/or internal interactivity.

Audiovisual Features

Considering the audiovisual nature of TikTok, the built-in features and community-generated elements can be used to create messages combining health and entertainment, making content more relatable and interactive. Health as entertainment blends accurate health information with fun, relatable, and engaging entertainment content to grab the viewer's attention. The memetic dimension of form manifested through audiovisual features like duet, green screen, text annotation, and popular soundtracks.

Duetting can stimulate a quasiconversational connection among content creators, transitioning the video format from a monologue to a copresent dialogue. Duetting enables doctors to interact with users and

share cross-references and professional endorsements with other doctors. Creating duet videos may provide doctors the opportunity to enhance interactivity internally and externally, for instance, to those who already view their videos, and to those who may not view their videos but follow the accounts of the content creators they duet with (Figure 1). Like duet, the use of green screen as a dimension of form serves as a visual aid to enhance what is being taught (Figure 1). In addition, text annotation can facilitate the delivery of health messages and sustain overall interactivity as it fulfills the role of the doctor's "voice" (Figure 1). This gives TikTok Docs the ability to produce interactive content without sacrificing accuracy of textual information. As a platform that encourages users to upload original soundtracks and songs, TikTok also provides content creators with numerous choices for interactive background sound.

Challenges

In addition to audiovisual features, doctors also participated in challenges. Challenges can be goofy, entertaining, and contagious, ranging from reaction challenges to dance challenges, to creating a food dish challenge, and song challenges. They function as video "memes" and typically go viral via trendy hashtags and participation, and feature particular dance moves, songs, or movie quotes. These videos incorporate specific popular culture artifacts that people associate with the particular challenge prompt. Compared to image-based memes with captions, the video-based challenges are flexible. They give users the opportunity to integrate their own traits, opinions, creative visuals, and vocals. Challenges help doctors build their networks as they connect them to the youth community. The memetic dimension of form manifested when videos were crafted around a specific TikTok challenge. Participating in these challenges enhanced relatability, as it connected doctors with other challenge participants and made them appear fun and approachable.

Hashtags

The use of hashtags can help doctors engage with the youth community and aid in strengthening ties between doctors. Hashtags allow doctors to search for videos covering topics they might also cover. Incorporating hashtags also strengthens relatability and interactivity with users, enabling them to search for topics of interest and to find more videos. The memetic dimension of form materialized as the videos were created with specific hashtags in mind. We categorized hashtags in four ways: *health care*; *"For You"*; *popular among young users*; and *cooccurrence*. Many videos included health-care-related hashtags like #doctor, #doctorsoftiktok, #obgyn, #tiktokdoc, #edutokhealth, #healthclass, and #healthtips. Some videos included hashtags that did not relate to the content covered as a way to game the algorithm. A main example of this was when videos included hashtags like #foryou and #fyp to gain visibility on the "For You" feed. Additionally, some videos featured hashtags popular among TikTok users but not directly related to the video content, such as #showerthoughts, #highschool, #ikdnever, #woah, #oops. A cooccurrence of hashtags, defined loosely as various related or unrelated hashtags strung together, was also shown in some videos.

Discussion and Conclusion

This study deepens our understanding of #tiktokdoc culture, which is intertwined with the youth community on TikTok. We build on Schellewald's (2021) communicative forms to study short videos, and Shifman's (2013) memetic dimensions to analyze meme-oriented digital content by examining the realm of digital health communication via TikTok Docs' sexual health videos. We found that the five communicative forms were embodied through 13 subcategories in our data set. The explanatory form was present when doctors presented women's health topics, provided specific instructions about women's health topics and/or products, and identified myths and false information. The documentary form was constructed when doctors featured their family members, discussed their personal experiences, and shared their personal positions. Musical elements and comedic devices in addition to doctors performing medical sketches and playing the role of nonmedical people crafted the comedic form. The communal form was shown when doctors featured their family members and interacted with other doctors or users. Using audiovisual features like duet, participating in trendy TikTok challenges, and using hashtags were the ways in which the interactive communicative form was developed. Both the documentary form and the communal form were enacted when doctors featured their families, showing how the communicative forms were intertwined.

Based on the above findings, we argue that the communicative forms and memetic dimensions weave together to form a dual-sided representation of OBGYN TikTok Docs being credible professionals and relatable people. This balance constructs them as being accessible and approachable, especially as relatability was found in all five communicative forms. All these aspects (communicative forms, memetic dimensions, and relatability) work together to create both internal and external interactivity. That is, the videos reach various audiences like those they were intended for, and wider audiences where the videos can be pushed and promoted through things like TikTok challenges. TikTok enables doctors to engage with the youth community and historically marginalized populations in new and interesting ways and gives young people a digital space to learn about sexual health topics. In the following section, we will discuss our findings more deeply, expounding the theoretical and practical implications of our study, the limitations of our study, and our suggestions for future studies.

Extending the Communicative Forms and Memetic Dimensions: Relatability and Interactivity

The first contribution of our study extends the communicative forms framework and the memetic dimensions. We found that relatability was present in all five communicative forms through the dimensions of content, form, and stance, and that interactivity manifests itself on both internal and external levels. Schellewald (2021) discussed relatability only in the documentary form, while in our study, we found relatability as a key aspect in all five communicative forms and 13 subcategories crafted by form, content, and stance. The doctors used audiovisual features, humor, funny language, and/or light-hearted performance (form) to share their own thoughts and positionalities (stance) about widely relatable or applicable female-centric health topics (content). In combining the communicative forms and memetic devices, the videos presented traditionally serious health topics in a more lighthearted and approachable fashion, making the information accessible, entertaining, and interactive. This finding shows that the videos are like memes in that they can be funny and serious at the same time. For example, the videos in our data

set used common and comedic language, documented mundane and private circumstances, and discussed serious health topics.

We also found that each of the 13 subcategories had a key memetic dimension that drove the others to form relatability. Within the explanatory, comedic, communal, and interactive forms, sexual health lectures, sexual health tutorials, music and comedy, imitation, family members, doctors and viewers, audiovisual features, challenges, and hashtags were all crafted through the dimension of form as they centered around video production, organization, and leveraged TikTok features and affordances. Mis/disinformation and stigmas and individual lived experiences within the explanatory, and documentary forms were constructed primarily through the dimension of content but also fed the dimension of stance as the videos focused on identifying false information, communicated doctors' opinions on topics, and centered on doctors' feelings about their own experiences. Within the documentary form, the dimension of content constructed personal life as the videos shared messages by doctors and their family members, and the dimension of stance created personal values as the videos showed the doctors stance or positionality about health topics. Each of the dimensions held a symbiotic relationship with one another. For instance, the creative and cheerful atmosphere of TikTok drives creators to follow popular formats and create videos that will be successful (form) that feed into what messages are constructed by the creators (content) and can communicate how the creator feels about trends or topics (stance). Through this, the communicative forms and memetic dimensions worked together to build the relatability of the TikTok Docs.

In addition to relatability, TikTok is a space where features, practices, and dynamics center around interactivity (Schellewald, 2021). Another main finding of ours extends the notion of interactivity by showing two levels of interactivity, internal and external. The internal level focuses on making video content for an intended audience with the goal of making viewer engagement strong. For example, the TikTok Docs talked about OBGYN-related topics one might expect (e.g., period blood, vulva wash, Plan B). The external level addresses the ways videos can be promoted to wider audiences and communities. By using TikTok's affordances, like challenges and duets, both levels of interactivity serve to strengthen ties between doctors and viewers, connecting doctors with their own social networks and with the larger TikTok community. This finding reveals the unique technological affordances TikTok provides to content creators and how those affordances can be leveraged for deeper interactivity.

#Tiktokdocs as Medical Influencers: Balancing the Personal and Professional

Our study also contributes to the literature of medical influencers by looking at how #tiktokdocs videos construct a dual-sided representation of OBGYN TikTok Docs being credible professionals and relatable people. The videos challenged the idea that doctors always present themselves to the public in a manner that highlights professionalism. Rather, the videos showed them as both professional health-care providers who are willing to share their knowledge and expertise, and ordinary individuals who have their own attitudes, tastes, social roles, and personal struggles. This can be seen as a more holistic approach, as their dual-sided presentation demonstrate a brand-new "state-of-mind, way of thinking, attitude, and commitment" (Eysenbach, 2001, p. 1) as they make health content more accessible and applicable to the younger generation. Specifically, the TikTok Docs blend their professional and personal lives by harnessing various communicative forms and memetic dimensions.

First, the doctors integrate their lived experiences, identities, thoughts, and even their family members into their videos primarily through the documentary, explanatory, and communal communicative forms, and through the memetic dimensions of stance and content. For example, some discussed cultural differences, health disparities, and gender bias in OBGYN care. They embedded these topics through the documentary, personal values communicative form, and the memetic dimensions of stance and content. The notion of relatability was immense here as TikTok Docs unveil a different side of them, one that viewers might not always see, especially during a traditional doctor-patient interaction in a medical setting, bringing viewers into their homes and personal environments give audiences a peek behind the curtain that they might not see otherwise. The relatability of this content functions to persuade viewers to connect with the doctors. This takes place as the communicative forms and memetic dimensions work together to humanize the TikTok Docs. Through this, a contemporary and unique genre of digital health communication is developed in the TikTok videos, where doctors act as both lecturers and performers of entertainment health messages.

Second, the doctors incorporated entertaining and trendy elements originally created by TikTok's youth community. Echoing the idea of politics as entertainment (Medina Serrano et al., 2020), our study also shows how health as entertainment is created on TikTok. While addressing important health topics, doctors show their personal side by incorporating dance, lip-syncing, comedic performances, trendy challenges, and popular hashtags via the comedic, communal, and interactive communicative forms, and the memetic dimension of form. The TikTok Docs clearly took time to learn the platform and modify their health content to reach a wide audience. This helps us understand how the communicative forms and memetic dimensions can be leveraged to craft relatable and interactive health content that will fit the accepted TikTok video format. The blurring of the personal and professional is key as it humanizes the TikTok Docs and builds their relatability. This relatability is important as it aids in building the connection between TikTok Docs and viewers, possibly leading to more views and virality.

TikTok's Potential as a Health Communication Platform

Our study also contributes to the ongoing scholarly discussion about TikTok's potential as a health communication platform (Li et al., 2021; Roche et al., 2021; Walshaw et al., 2020; Zheng et al., 2021). As a platform that aims to "inspire creativity and bring joy" (Mahendran & Alsherif, 2020, para. 1), our findings suggest that TikTok's built-in features (e.g., duet, green screen, text-annotation) and community-generated components (e.g., challenges, dances, soundtracks) promote both external and internal interactivity. The global reach of TikTok can provide youth around the world access to health content. Sexual health content is important and relevant to young people, especially young women, even if they come from different regions and cultural backgrounds.

Limitations and Future Work

The first limitation of this study is the constraint in data gathering, created by TikTok's hidden algorithm. It determines the content more likely to be shown on the "For You" page and the hashtag search result page is unknown.

TikTok explained that their recommendation system is primarily driven by users' preferences, and their goals of diversifying and moderating ineligible content (TikTok, 2020). However, their disclosure does not specify which factors are taken into consideration by the algorithm to make recommendations. For example, knowing whether different devices or IP addresses will impact the content one sees or not is left unanswered. Similarly, how the order of the videos on the hashtag search page is determined is also ambiguous. These questions require further investigation and TikTok's disclosure.

Another limitation is the small sample size. Future researchers should conduct studies with larger data sets if the goal is to use a quantitative or mixed methods approach. To go deeper with the qualitative approach, future researchers should conduct interviews with the TikTok Docs, as they could provide firsthand accounts of their experiences. Lastly, as we chose to focus on sexual health videos, our findings might not be applicable to doctors of other health topics. Future research should examine a wide range of health topics and medical specializations to determine if the communicative forms and memetic dimensions are constructed in similar or different ways.

Despite these limitations, our study contributes to the body of literature on TikTok's communicative forms and memetic dimensions, TikTok Docs as medical influencers, and TikTok as a platform for health communication. Our findings uncover how the communicative forms and memetic dimensions manifest in the TikTok Docs' videos crafting relatability and interactivity. This shows that TikTok does indeed have unique, platform-specific content and features, and that the TikTok Doc culture blurs the boundaries of the personal and the professional to connect TikTok Docs with their viewers. This helps us understand how TikTok Docs communicate important health topics to inform and engage with young users.

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