

Perception and Contraception: Attitudes Towards Hormonal Birth Control on TikTok

Halley Egnew*, OMS-II, Vivian Yu*, OMS-II,

Dr. Elisabeth Guenther, MD MPH¹, Dr. Anita Nelson, MD²

¹Chair & Professor of Pediatrics, Western University of Health Sciences COMP-Northwest, Lebanon, OR

²Chair & Professor of OB/GYN, Western University of Health Sciences COMP, Pomona, CA

*Equally contributing authors



ABSTRACT

Social media has been used to sample informal attitudes and messages shared about birth control between users. On TikTok, content creators openly share their experiences with birth control through dialogue and humorous interpretations. A birth control sentiment study has previously been conducted on Twitter, but TikTok is a newer platform with younger users than other platforms studied. Identification of sentiment about hormonal birth control in the previously untapped TikTok population could provide insight into younger patients' attitudes towards birth control.

In this qualitative study, 100 videos per hormonal birth control method (Oral contraceptive pill [OCP], injection, intrauterine device [IUD] and implant) were identified through hashtags. Videos were then analyzed for sentiment, factual accuracy, and theme saturation.

60% of the content we surveyed on TikTok was negative, and just 8% was positive. A previous study on Twitter had found a majority of birth control content was neutral or positive.

TikTok content most commonly highlighted side effects, experiences with providers, and humor. OCP videos discussed side effects the least and were more likely to include humor. Implant, IUD and injection videos focused on side effects much more than OCP videos. IUD and OCP videos were most likely to contain misinformation. IUD contained the most videos mentioning complications.

We found that short-acting methods were over twice as positive as long-acting. A previous study found that Tweets mentioning long-acting methods were most positive.

Humor was utilized most in OCP and IUD. Many of the humorous videos joked about the onset and severity of side effects, or used humor to make fun of children's misbehavior as their motivation for using birth control. Much of the humorous content on TikTok relied on trending audio tracks, self-deprecating jokes, and facial expressions.

Attitudes and themes towards hormonal birth control options presented on TikTok differ from previous studies on public platforms, and introduce a humorous component. Recognition of different perceptions of birth control by the younger TikTok user population in comparison to the older Twitter population can be used to strategically target misinformation and potentially identify generational differences in perception of birth control.

INTRODUCTION

Using social media to track users' opinions about birth control has precedent on Twitter, Instagram, Youtube, and Reddit. However, different sentiments are likely to be shared depending on the context of a social media platform. TikTok is a wildly popular video-sharing social media platform that was created in 2017, but rose to popularity in the US more recently. TikTok has a reputation for being teen-centric and the largest age group of users is 18-24, compared to Twitter's 30-49.

In order for providers to anticipate patient questions and address misinformation, it is first important to know current sentiments around different methods, as well as what misinformation and rumors are being shared. Thus far, no study has attempted to tap into the wealth of information on TikTok. This study investigated the kinds of messages being shared about birth control options by users of TikTok, and identified whether and how these messages differ from those presented on other social media sites.

OBJECTIVE

What themes and experiences about hormonal birth control are being shared by users through the app TikTok?

STUDY DESIGN

Inclusionary criteria for videos

- content created by adults falling into time frame of June 2020 - June 2021
- content created in English
- videos found under hashtags #bc, #womens, #iud (only hormonal), #implant, #depo, etc.

Videos under each hashtag mentioning one or more contraceptive methods, focusing on sharing experiences and sentiments about specific hormonal contraceptive

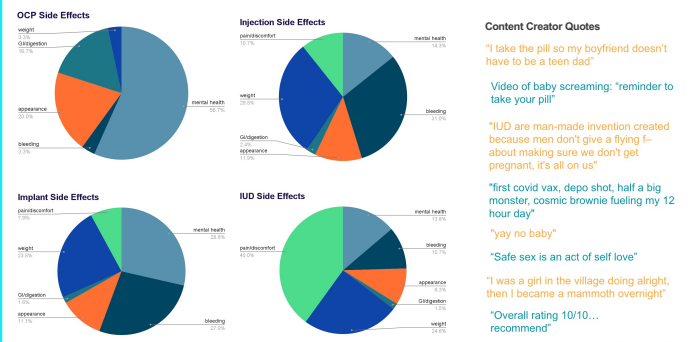
Content of included videos were sorted by primary method mentioned on, with multiple entries possible

OCP, Injection, IUD, Implant

Identifying overall sentiment of videos and user engagement (comments, shares, likes, retweets, reposts, etc.)

Exclusionary criteria

- identified as being posted by healthcare providers or professionals
- being methods without sharing thoughts and opinions
- outside of June 2020 - June 2021
- not hormonal method specific, copper IUD
- brand/advertorial content, shared thoughts or experiences with product placement



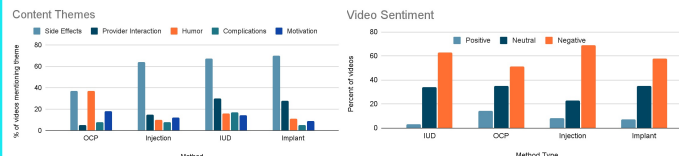
RESULTS

For OCP, 11 videos across multiple categories mentioned the physical size of the warning sheet. One memorable video showed the user pretending to use the warning sheet as a blanket at a sleepover. There were several videos that showed children misbehaving and then users taking birth control pills in reaction. There were videos mentioning phrases such as "hormone imbalance," "synthetic hormones," and "terrible hormones." Several videos mentioned birth control causing miscarriages, and other videos from users who experienced rare and severe medical problems they blamed on the method mentioned blood clots, PE, bone pain, liver tumor, alopecia, and suicidality. More videos in this method than any other method we sampled included humor about birth control use.

For Injection, a majority of videos mentioned side effects, with weight gain and bleeding being the most commonly mentioned. More videos mentioned problems with provider interaction than with OCP. Common themes for videos included users asking for other user experience with the method, including how to get off of it. Videos also mentioned difficulty with resuming a "normal" cycle after stopping the injection, or having difficulty trying to conceive after having the injection. Several men identified themselves as trans and cited depo as the best method for them because the cessation of periods helped with gender dysphoria.

For IUD, pain/discomfort was the most common side effect IUD users highlighted about their experience with an IUD, followed by experiences with weight gain. 30% of videos created by users fell under the theme of "provider interactions" which included their IUD insertion and removal experience. Of the 30 videos sharing provider interactions, 67% included negative sentiments. This theme was most commonly found under #iudexperience, including users who specified having a hormonal IUD. Common videos to highlight include users recording the actual insertion and removal at the provider office and sharing their facial reaction, including crying. 17% of videos sampled also included users highlighting the complications they experienced with an IUD in place, such as perforation of the uterus, unable to find the IUD during removal and malfunction leading to pregnancy. Videos about complications, specifically becoming pregnant while on birth control, were most common under the IUD hashtags.

For Implant, the most common concerns users voiced were about their mental health, excessive bleeding and weight gain. Mental health was most discussed among implant users. Content included users discussing they experienced the implant causing depression, and advocating for the removal of the implant to "go back to normal". Provider interaction was highlighted in 28% of videos, with content creators recording their consultation or procedure for implant insertion/removal. Of the 28 videos sharing provider interactions, there were 13 videos containing negative sentiments and 15 videos containing neutral sentiments.



Content Creator Quotes

"I take the pill so my boyfriend doesn't have to be a teen dad"

Video of baby screaming: "reminder to take your pill"

"IUD are man-made invention created because men don't give a flying f-- about making sure we don't get pregnant, it's all on us"

"first covid vax, depo shot, half a big monster, cosmic brownie fueling my 12 hour day"

"yay no baby"

"Safe sex is an act of self love"

"I was a girl in the village doing alright, then I became a mammoth overnight"

"Overall rating 10/10... recommend"

Singing to OCP packet: "Oh my gosh did you kill my baby? maybe."

DISCUSSION

The major saturation of themes were of side effects including mental health, weight gain and pain/discomfort. Negative videos often spoke of how "natural" a method was, and stated a preference for non-medical methods such as fertility tracking or the rhythm method. There is an impression that for some users birth control can have long ranging, full body negative effects.

There is an overall higher percentage of negative sentiments than positive for hormonal birth control on TikTok. This could be due to a negativity bias, that users are more likely to report on an anomaly or point out how their birth control is contributing to a problem rather than highlight that birth control is having its intended effect. The results we found on TikTok differ from previous results about birth control sentiments on Twitter. The difference in sentiment results could be due to a difference in content creator age gap, or a result of the medium on TikTok and the type of content that goes viral.

This project is limited in scope due to its methods and overall goal. The study is not intended to create a comprehensive guide to sentiments about birth control on TikTok, but rather to summarize themes and misinformation that is frequently mentioned by content creators on the app, as well as develop a method of performing content and sentiment analysis for a new social media platform. Because of this, our sample size was small, and further research could be conducted to investigate whether the trends that we found are present on a wider scale. There were also limitations to the number of contraceptives explored, with a great variety of content also overlapping in the IUD content (ie nonhormonal copper IUD). More general hashtags had more engagement, while more technical or specific hashtags had less engagement.

Additionally, TikTok presents a new kind of social media platform, combining the virality of Twitter with the video content of YouTube, and introducing an audio/visual humor element that is unique to the platform's user base. The format of TikTok videos make them difficult to study, but development of a standardized classification system could add to the analysis of this platform.

CONCLUSION

TikTok's massive user base shares information about the usage of birth control and sheds light on the gaps of knowledge patients may have about the side effects of birth control. Providers should become familiar with the misinformation, terminology, rumors and reported side effects shared on social media in order to target their messages appropriately.

Though OCP are the most widely used form of hormonal birth control, IUD was the most frequently mentioned method on TikTok. Negativity bias likely contributed to reporting extreme side effects. Misinformation in videos frequently involved misunderstanding of anatomy and physiology. Attitudes and themes towards hormonal birth control options presented on TikTok differ from previous studies on public platforms, and introduce a humorous component. Recognition of different perceptions of birth control by the younger TikTok user population in comparison to the older Twitter population can be used to strategically target misinformation and potentially identify generational differences in perception of birth control.

ACKNOWLEDGEMENTS

A huge thank you to our mentors Dr. Elisabeth Guenther and Dr. Anita Nelson, as well as to the WesternU Summer Research Grant program that made this research possible.