

Impact of #PCOSweightloss: A global X hashtag analysis study of weight loss narratives in the PCOS community

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Abstract

Introduction: Social media plays a significant role in fostering communities around health and wellness. The hashtag #PCOSweightloss has become a pivotal forum on the platform X, where individuals exchange experiences, share information, and motivate each other concerning weight loss strategies connected with Polycystic Ovary Syndrome (PCOS).

Objective: This study aims to analyze the trends of #PCOSweightloss on X to gain insights into the social media metrics, including overall hashtag reach, key themes, and potential influence on management practices of PCOS.

Methods: Fedica research analytics tool (<https://fedica.com>) was utilized to automatically evaluate quantitatively the posts on the platform X containing #PCOSweightloss from July 1st, 2017 to July 1st, 2023.

Results: During the defined period, 1570 users shared 12,200 posts on X, gathering 2,967,001 views. The highest number of posts originated from the United States (38.6%), followed by India (30.6%) and the United Kingdom (10.6%). Top co-occurring hashtags associated with #PCOSweightloss included #PCOS, #healthyfood, #pcosmood and #diabetes. Physicians were key contributors to the discourse, contributing to 30% of the ten most engaging posts and 20% of the top ten influencers. Sentiment analysis revealed a predominant neutral sentiment (98%), while 1% each revealed positive and negative sentiments.

Conclusion: Our study affirms the substantial presence of #PCOSweightloss in the PCOS discourse on X. The involvement of physicians is particularly noteworthy, as it emphasizes the importance of expert-guided discussions in the online health discourse. On the background of geographical variances and the challenge of engaging a wider audience due to the limited follower counts of many participants, there is a clear opportunity for further community engagement and outreach. The prevailing neutral tone showcases a community engaged primarily in an informational exchange, setting the stage for more profound discussions of novel PCOS weight loss strategies.

Keywords

Polycystic Ovary Syndrome, social media, influencers, peer support, healthcare advocacy

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Introduction

Social media has a growing influence in disseminating health information, which signifies a notable transformation in the communication of public health knowledge and initiatives.¹ This evolution has transitioned from conventional, linear forms of outreach to more dynamic and interactive mediums.² Social Media platforms like X, Facebook, Instagram, and YouTube are vital channels for health experts to distribute updates, research outcomes, wellness advice, and awareness campaign messages to a widespread audience.^{1,3} These platforms help in overcoming barriers related to education, ethnicity, and access to healthcare, thus enhancing health literacy and awareness across diverse populations.⁴ Particularly for managing complex health conditions, these interactive spaces can offer support by helping individuals navigate both the established and the evolving treatment strategies. Among these conditions, Polycystic Ovary Syndrome (PCOS) emerges as a global health concern that benefits from the support and information exchange on social media.⁵

PCOS is a diverse endocrine disorder that affects approximately 8–13% of women of reproductive age worldwide.⁶ It is primarily characterized by hyperandrogenism and ovulatory dysfunction, complicated by the association with weight gain and metabolic dysfunction. Remarkably, up to 60% of women with PCOS are classified as overweight or obese.⁷ The ongoing global obesity epidemic further exacerbates the issue of weight gain in PCOS,⁸ making it a multifaceted challenge that intertwines the disorder with broader public health concerns. Therefore, weight management plays a critical role in mitigating symptoms and reducing the risk of developing serious long-term health complications in PCOS. However, despite the recommendation of weight management as the primary intervention in PCOS treatment,⁹ the lack of specific dietary guidelines and the difficulty many women face in losing weight point to the gaps in conventional medical approaches to this condition.¹⁰

In response to these challenges, a significant number of individuals turn to social media for support, information, and a sense of community,¹¹ often through the use of specific hashtags that facilitate the sharing of experiences and strategies. Hashtags (representing words or phrases preceded by a hash sign) are used in X in order to organize posts and help in search within a vast amount of data.^{12,13} Social media serves as a dynamic platform that facilitates interactions between healthcare professionals and patients or those at risk, however the open access of these platforms also opens the door for the general public to contribute content which may not always be quality assured. This dual role of social media underscores the need for the critical evaluation of the information shared, given the potential of misinformation due to varying levels of accuracy and reliability. #PCOSweightloss is one of the hashtags that brings together broad spectrum of users and contributors, and in the present

work, we aim to examine its impact on platform X and explore the narratives and experiences shared related to weight management associated with PCOS.

Methods

The study was conducted using the Fedica research analytics tool to quantitatively analyze posts on the platform X that featured #PCOSweightloss. This analysis spanned from July 1, 2017, to July 1, 2023. Fedica, formerly called Tweepmap, is a comprehensive platform for X analytics, including hashtag and keyword analysis. It provides detailed reports that include a variety of analytics and demographics to help understand the audience engaging with specific hashtags or keywords. The Fedica platform uses an AI-driven approach to engagement analytics, publishing, and listening, offering precision in its geographical-based analyses.¹⁴ Using this tool, we were able to extract meaningful patterns, trends, and insights from the vast amount of data collected, providing a deeper understanding of the digital conversation surrounding #PCOSweightloss.

We examined hashtag usage and how it evolved over time in the form of an activity timeline. The volume and frequency of tweets were quantified to gauge the popularity of the hashtag. The geographical distribution of the tweets helped us understand the global reach of the hashtag and identify any regional variations. Engagement metrics, such as likes, replies, reposts, and quotes, were analyzed to assess how users interacted with the content. The top 10 most reposted content was identified, and the content of the posts was qualitatively analyzed by the authors. The sentiment was determined through a proprietary Fedica algorithm called Naive Bayes algorithm that uses multiple large datasets of classified tweets in different languages. The algorithm ranks each individual post, aggregates the result for the analysis and shows the scores in the report.

Ethics statement

This research did not require an ethics review as it utilized pre-existing public data on X, avoiding direct interaction with human participants. Furthermore, all data referenced in the research is deidentified, ensuring no specific users or accounts are identifiable.

Results

Global reach

In the defined study period of six years from 2017 to 2023, the #PCOSweightloss hashtag on X was observed in 12,200 posts shared by 1570 users. This hashtag use spanned 54 countries and 294 cities, with a maximum reach of

2,967,001 impressions (views). The highest number of posts were generated in the United States (38.6%), followed by India (30.6%), the United Kingdom (10.6%), Kenya (3%) and Pakistan (2%). Table 1 illustrates the top 10 countries using #PCOSweightloss.

Table 1. Top 10 countries using #PCOSweightloss.

S.no	Country	Number of posts	Percentage
1	United States of America	4708	38.6%
2	India	3731	30.6%
3	United Kingdom	1298	10.6%
4	Kenya	363	3%
5	Pakistan	254	2%
6	Canada	221	1.8%
7	France	208	1.7%
8	Australia	196	1.6%
9	Belgium	187	1.5%
10	Philippines	133	1.1%

Activity timeline

The activity timeline of the posts revealed an increasing trend from 2017 to 2019, followed by a decreasing trend from 2019 to 2023 (Figure 1). The number of posts saw an initial rise, starting from 1424 posts in 2017, increasing to 2495 posts in 2018, and reaching a peak of 2937 posts in 2019. Subsequently, there was a decrease, with the counts of posts falling to 1959 in 2020, 2202 in 2021, then significantly dropping to 875 in 2022, and further down to 307 by the end of the study duration in 2023. The quarterly breakdown of post frequencies showed that the highest number of posts, amounting to 1212, occurred in the third quarter (July to September) of 2021. This was closely followed by the first quarter (January to March) of 2019, which yielded 1004 posts in total.

Reach distribution

Analyzing the reach distribution, the results showed a diverse range of follower counts of the involved users (Figure 2). A total of 752 users (47.8%) had fewer than 100 followers. There were 501 users (31.9%) with followers ranging from 100 to 1,000, and 227 users (14.5%) had between 1000 and 10,000 followers. The data also revealed that 35 users (2.2%) had between 10,000 and 50,000 followers, while a smaller group of 10 users (0.63%) had a significant following of over 50,000. Additionally, 45 users (2.8%) were identified with no followers.

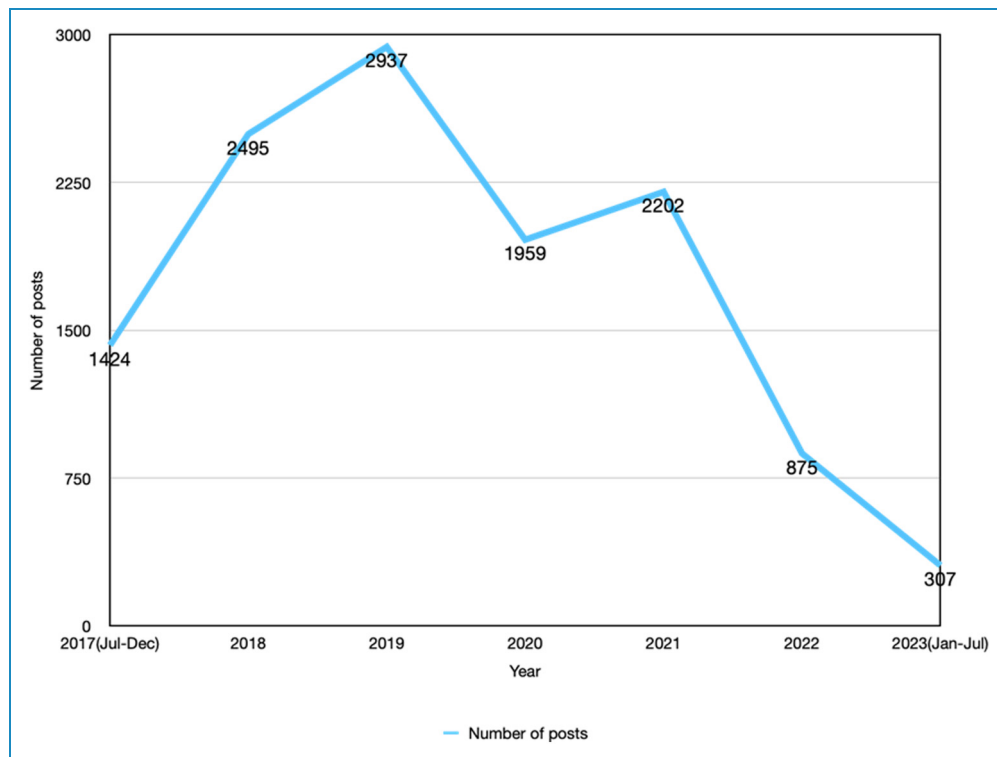


Figure 1. Yearly activity timeline of #PCOSweightloss on platform X.

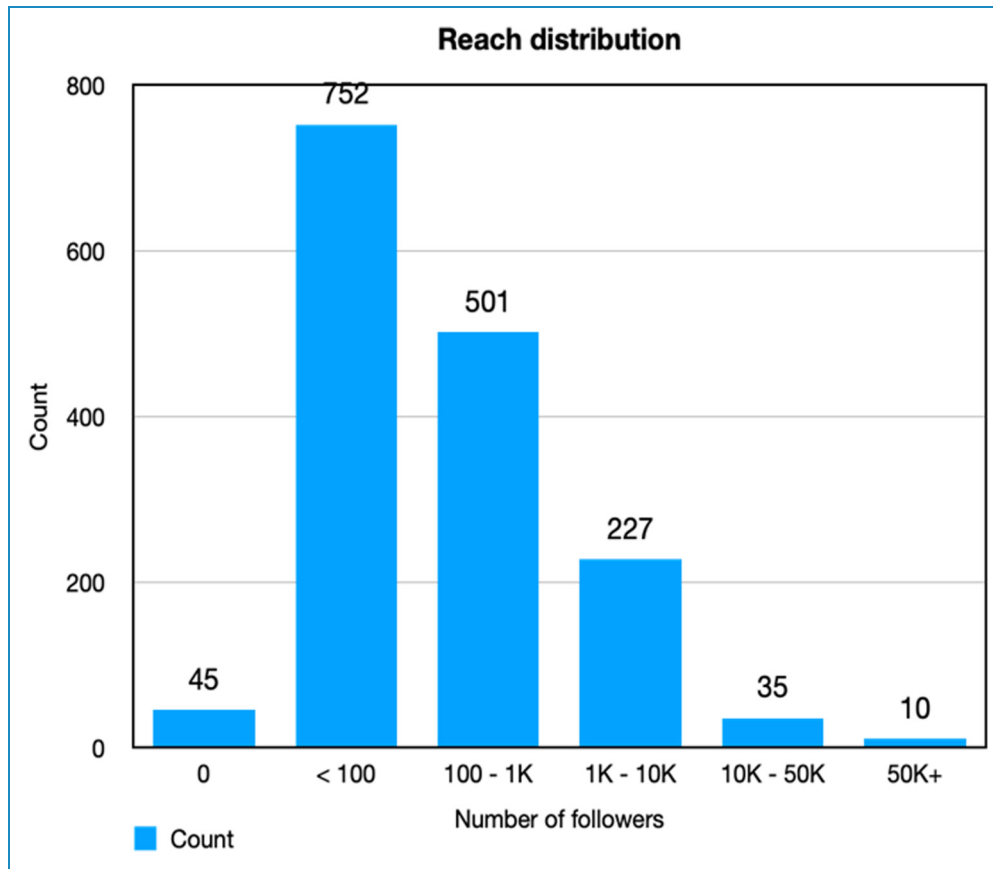


Figure 2. Reach distribution of #PCOSweightloss on platform X.

Sentiment analysis and top associated hashtags

The sentiment analysis revealed predominantly neutral sentiments (98%) of the posts, while 1% each showed positive and negative sentiments (Figure 3). The most popular co-occurring hashtags with #PCOSweightloss included #PCOS, #weightlossgoals, #healthyfood, #pcosmood, and #diabetes.

Popular narratives

The top ten most reposted posts involving #PCOSweightloss included a rich array of themes and discussions around the management of weight in PCOS (see Table 2). At the forefront, a physician's video highlighted hyperinsulinemia as the root cause of PCOS, which is often overlooked in evaluations and treatments. The video described how excessive carbohydrate intake, dubbed 'carbohydrate overdose syndrome,' contributes significantly to hyperinsulinemia and that dietary modifications can help in reversing it. Following closely, a nutritional coach's insights on the low-glycemic diet highlighted the importance of dietary choices in combating PCOS. A paid platform introduced games as

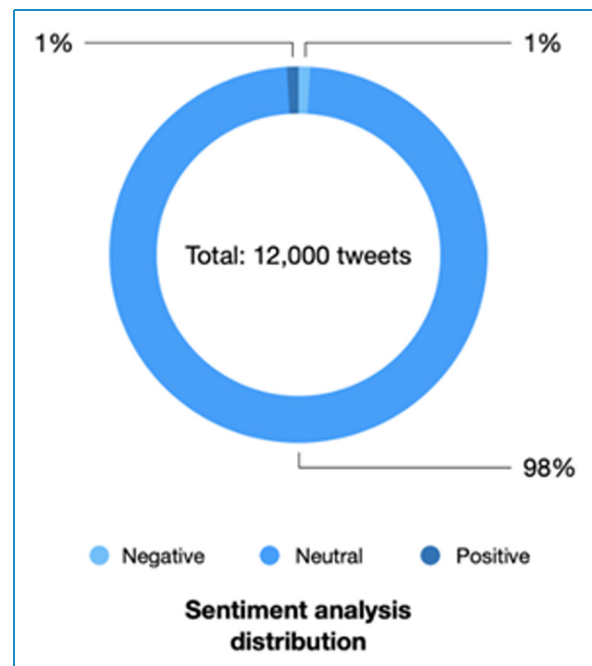


Figure 3. Sentiment analysis of #PCOSweightloss on platform X.

Table 2. Popular narratives - top 10 reposted content on platform X.

Theme of posts	User category	Content of post	Narrative
Root cause of PCOS	Doctor	Video	Hyperinsulinemia needs to be addressed by dietary adjustments.
Dietary modification	Nutritional coach	Text	Low glycemic diet.
Games for weight loss	Paid platform	Text	Fun way of losing weight.
Weight and PCOS	Business Consultant	Text	Introducing podcast episode on weight and PCOS.
Weight and PCOS	Podcast channel (belonged to the same user s.no 4)	Text	Introducing podcast episode on weight and PCOS.
Therapeutic power of food	Paid platform	Text	Helping clients understand PCOS and use food to restore health.
Weight loss success stories	Doctor	Text	Motivation.
Lifestyle activity	Doctor	Video	Practical approach to weight loss.
Lifestyle modification	Healthcare Service Text		Highlighted regular exercise, balanced diet, stress management, and proper vitamin D levels.
Dietary modification	Dietician	Video	Starch retrogradation.

an innovative approach to weight loss in PCOS. Meanwhile, two other most popular posts originated from the same host and podcast channel, discussing PCOS and its related weight gain. Another paid platform emphasized the therapeutic power of food in combating PCOS by offering personalized strategies to manage the condition. Weight loss success stories shared by a doctor also resonated deeply. A post by a physician introduced 'lifestyle activity' - everyday physical activities outside of structured exercise, as a viable means for calorie burning and weight management. The narrative continued with a service specializing in assisted reproduction, sharing crucial lifestyle adjustments such as regular exercise, a balanced diet, stress management, and the significance of maintaining proper vitamin D levels for PCOS management. Finally, a dietician offered advice through a video on the benefits of starch retrogradation (cooked and cooled starchy foods) in managing PCOS and diabetes. Half the users contributing to the most popular narratives came from professionals, including doctors and nutritional coaches.

Influencer trends

Analyzing influencer trends from the data revealed diverse contributors, from celebrities and medical professionals to organizational heads and media. The data showed a blend

of personal accounts and organizations. Specifically, the top 10 influencers comprised an equal gender distribution among individuals, with three males and three females. Six influencers operated personal accounts, while three were associated with organizational accounts (one clinic, one organization, and one media outlet). One influencer's non-English language content prevented a detailed assessment of identity. Among these influencers, two were physicians, one was a celebrity, one was a coach, and two were heads of organizations. Notably, two of the influencers' accounts belonged to individuals who also had their personal profiles among the top 10 influencers. One of the influencers, a physician, also contributed to the most engaging post as mentioned earlier in the section on popular narratives.

Discussion

Global reach

This study's analysis of #PCOSweightloss on X reveals significant insights into the global conversation about weight loss in the PCOS community. Analyzing 12,200 posts across 54 countries reveals the international concern over PCOS, a health issue gaining worldwide recognition.

Studies have shown rising trends of global incidence of PCOS and its impact on life possibly due to the rising obesity and increased health awareness.¹⁵ Obesity contributes to insulin resistance and promotes the clinical manifestations of PCOS, highlighting the intertwined nature of obesity and PCOS in affecting global health.¹⁶ A high volume of posts from the United States, India, and the United Kingdom reflect the diverse experiences and challenges faced by individuals with PCOS in various communities. The noticeable engagement with #PCOSweightloss in these countries, compared to minimal engagement elsewhere, points to the complex interplay of factors influencing the conversation around PCOS and weight loss. While the frequency of PCOS varies across high, middle, and low income countries,¹⁵ the level of awareness and the extent of discussions in online communities also differ. This variation could partly be because of the varying access to digital platforms. For instance, according to the 2023 Statista report, India and the US are among the top three countries in terms of digital access.¹⁷ Specifically, X was listed among the top 10 social media apps in the United States in 2022, with the United Kingdom and India not far behind, both ranking in the top five. India and the United States are also recognized for their high levels of social media engagement.¹⁸ Furthermore, according to a recent study, two-thirds of Americans seek health information, mostly wellness advice (56%), and advertisements on medications (52%) on social media.¹⁹ It is important to acknowledge that our study analyzed posts exclusively in English, which may limit the representation of countries where other languages dominate online discourse. However, it is noteworthy that India, a country with a significant contribution to the online conversation about PCOS weight loss, speaks a diverse range of languages. Despite this linguistic diversity, English remains a key medium of communication, particularly among women of reproductive age who are more likely to be educated and engaged in digital platforms. Given that PCOS is a lifestyle disorder commonly affecting this demographic, English is likely to play a pivotal role in the dissemination of information about healthcare disorders like PCOS, even in multilingual societies.

While a recent report highlights a significant digital divide, with only 35% of individuals in developing countries having internet access compared to 80% in the developed world,²⁰ the role of social media in these regions is increasingly significant, especially in health education and awareness campaigns.²¹ This trend is underscored by our findings, where Kenya emerges as notably active participants in the #PCOSweightloss conversation, contributing to 3% of the dialogue. As a lower-middle-income country,²² Kenya's economic growth over the past decade has been remarkable, with substantial improvements in the education and health sectors being the key drivers of this progress.²³ This scenario suggests that despite the

lower overall internet penetration in developing countries, the targeted use of social media platforms can play a crucial role in disseminating health information and fostering community engagement, as evidenced by Kenya's substantial involvement in global health conversations. Leveraging geographical insights is crucial for developing health policies and targeted interventions that cater to the diverse needs and experiences of affected individuals. Moreover, specific cultural and language parameters may also be taken into consideration to observe the full impact of health awareness campaigns on social media.

Activity timeline

The activity timeline depicted by our study may indicate a shifting public interest or awareness levels over time. Further investigation is needed to understand the factors influencing these trends. The highest posting activity, particularly in the third quarter of 2019, coincides with the timing of PCOS Awareness Month in September, likely influencing the increase in discussions and engagement during this period. This observation is consistent with Malhotra et al.'s (2023) study, which highlighted the significant role of PCOS Awareness Month in boosting awareness about PCOS.⁵ However, after the initial rise till 2019, it appears that public health priorities and the media's focus might have shifted, especially with the advent of the COVID-19 pandemic in early 2020.²⁴ The pandemic brought a significant shift in global health discussions, potentially overshadowing ongoing conversations about health concerns like weight gain in PCOS.

Reach distribution

The distribution of reach among users participating in this hashtag conversation highlights both the diversity and disparity in social media influence. Firstly, the majority of users had fewer than 100 followers. This suggests that the conversation is possibly not limited to social media influencers or those with a large following; rather, it is a grassroots movement where individuals with limited reach are also actively participating. About 17% of users with followers equal to or greater than 1000 shows that #PCOSweightloss is also engaging users with significant online influence. Such users possess the ability to significantly extend the message's reach, potentially swaying public opinion and boosting awareness effectively.

Influencer-led public health initiatives have been shown to impact health behaviors markedly. Powell and Pring's systematic review (2024), though limited by the methodologies of the included studies, sheds light on the dual potential of influencers to impact health outcomes positively and negatively. The review showed how influencers could bolster public health campaigns, with positive impacts observed in promoting hygiene protocols for COVID-19

and influenza, while negative impacts were seen with body image and dietary habits. Influencers can strongly shape their followers' thoughts and actions with recommendations and captivating posts.²⁵ While influencers with deep knowledge of PCOS management can drive positive change and dispel myths, there exists a risk of misinformation from less informed sources.

The observed enthusiasm for #PCOSweightloss also reflects broader trends in health communication, emphasizing the need for strategic engagement with credible voices in the health community. Despite a general skepticism towards health advice on social media, as evidenced by a U.S. survey showing over 83% of Americans express distrust in online medical information,¹⁹ influencers continue to be a vital link in health education and awareness campaigns. This skepticism calls for a collaborative effort to enhance the quality and reliability of online health content, suggesting a more active role for healthcare professionals in social media spaces to improve health literacy and counteract misinformation. Highlighting the critical importance of this issue, a study emphasizes the pressing necessity to identify reliable influencers in the domain of women's health.²⁶

Additionally, the fact that physicians made up 20% of the top influencers using #PCOSweightloss underscores the preferences within the PCOS community and the proactive part the medical professionals are taking in providing education about PCOS. This particular preference is supported by data from the Shandwick survey, indicating that individuals seeking health information online felt most satisfied with the information given by medical professionals, with 66% expressing high satisfaction with the information from physician assistants, nurses, and eye doctors.¹⁹ In light of the increasing influence of social media in health-related discussions, it is imperative that healthcare providers enhance their presence in social media trends to disseminate accurate information and combat misinformation effectively.

Engagement

A video by a physician addressing hyperinsulinemia, a condition that affects 65–70% of women with PCOS,²⁷ received significant attention. This points towards the community's eagerness to engage with disease-related knowledge shared on social media. Supporting this notion, Colwell et al. (2010) found in their study with 43 patients that enhanced awareness about PCOS was positively associated with changes in concern ($P = 0.045$), healthy dietary habits ($P = 0.04$), activity levels ($P = 0.003$), and health care satisfaction ($P < 0.001$).²⁸ Similarly, an interview study with 12 ethnically diverse women with PCOS reinforced the value of educating both the public and healthcare professionals about PCOS, enhancing communal support and awareness.²⁹ Additionally, platforms like X have been shown to improve health literacy and motivate users to seek more information.³⁰

Further engagement was seen in posts advocating for low glycemic diets and healthy lifestyle choices as essential components of weight management in PCOS. This increased focus on adopting healthy lifestyle behaviors, including diet, physical activity, and behavioral interventions, is strongly supported by literature identifying it as the recommended approach for managing weight in PCOS effectively.^{31,32} The trend noticed in our analysis is indicative of a well-informed community that is increasingly talking about evidence-based recommendations for the lifestyle management of PCOS.

Along with traditional advice on diet, one of the trending posts mentioned the significance of vitamin D in managing PCOS. Studies have indicated the association between vitamin D deficiency and insulin resistance in PCOS. Current evidence supports the potential of vitamin D supplementation as an effective adjunct treatment, particularly for PCOS patients experiencing obesity and insulin resistance.³³ Discussions extended to innovative dietary techniques like starch retrogradation, which is creating resistant starch through cooking and cooling starchy foods, as a promising approach to weight loss in PCOS. This technique, has been linked to improving insulin sensitivity³⁰ and holds potential as a beneficial dietary option.³⁴ These emerging dialogues on X reflect an increased awareness within the community about a subject that is both a current focus of discussion and an area of active research. However, with ongoing research about weight loss in PCOS, it's essential to accurately educate the public about what is scientifically validated versus what remains speculative. Therefore, scientific and medical communities should monitor and participate in these discussions.

Beyond dietary advice, our findings reveal a growing interest in practical approaches like fun games to encourage weight loss in PCOS. Gamification in weight loss programs is an emerging area of interest and is under active investigation.³⁵ Similarly, the concept of 'lifestyle activity' also resonated with the audience. Defined as "the daily accumulation of at least 30 min of self-selected activities, including all leisure, occupational, or household activities that are at least moderate to vigorous in their intensity³⁶", this approach emphasizes the integration of planned or unplanned physical activities into one's daily routine. This notion appealed to the target audience, highlighting the value of viewing moderate to vigorous intensity activities as an inherent component of everyday life rather than as structured exercise sessions. While healthy eating and physical activity are key for overweight and obese PCOS patients, traditional weight loss programs often see high dropout rates, highlighting the challenge of sustained weight loss for patients.³⁷ Since a weight loss of 5–10% significantly helps with PCOS,⁹ there is an urgent need to introduce and promote more engaging, long-term physical activity methods. While the scientific community tries and tests novel methods to establish effective and long-term

weight loss strategies for women with PCOS, social media trends can potentially play a role in monitoring health behaviors related to these innovative techniques. .

Amongst the top narratives was the reposting of weight loss success stories, suggesting that personal narratives and relatable experiences are highly engaging. Studies have found that peer support is beneficial in helping women with PCOS and motivating them to lose weight.^{29,38} Women actively seek personal stories, advice, and support from others experiencing similar symptoms and challenges on social media platforms. This approach allows them to compare treatments, understand diverse experiences, and feel part of a community. However, a challenge arises because PCOS impacts women in unique ways.³⁹ A method that proves effective for one individual might not yield the same results for another. While the success of one can serve as inspiration, it could also potentially demotivate someone else. In this context, clinicians have a crucial responsibility to guide women on how to navigate the vast array of information available on social media judiciously.

The diversity in the engaging content, which includes scientific insights, nutritional advice, and inspiring personal stories, illustrates the community's willingness to delve into holistic PCOS management strategies and the power of social media in empowering women with knowledge and a practical approach to their condition. The engagement with emerging research likely reflects the ongoing struggle of individuals to find sustainable, long-term solutions. The emphasis on evidence-based information from credible sources like physicians, nutritional coaches, and organizations underlines the PCOS community's preference for authoritative content.

Themes and trends

Our study's findings of a predominantly neutral sentiment in the posts, with only a minor fraction of positive or negative sentiments, denote the informative nature of these online communities. The co-occurrence of hashtags related to broader health and lifestyle topics, like #healthyfood, #pcosmood, and #diabetes, alongside #PCOSweightloss, suggests that the conversation is not limited to weight loss alone. Instead, the discussion extends to a holistic approach to managing PCOS, including diet, lifestyle, and mental health. The presence of hashtags like #healthyfood points to an emphasis on diet as a critical component of managing weight in PCOS as indicated by vast research on dietary interventions in PCOS.³² Social media has emerged as one of the predominant sources for the spread of information about dietary plans in PCOS.^{31,40} Consequently, the pairing of #healthyfood with #PCOSweightloss highlights a growing awareness of the role of nutritious eating in weight management for PCOS sufferers.

The use of hashtags such as #pcosmood highlights the recognition of the psychological impact of PCOS and the

weight gain associated with it. Women with PCOS often struggle with body image issues stemming from obesity, which can negatively impact their mood and overall psychological health. The adverse effects on mood not only compound the overall burden of the disease but also diminish the motivation for weight loss and maintaining lifestyle changes, further complicating the weight loss journey in PCOS.⁹ Therefore, the inclusion of mental health topics in these online discussions reflects an understanding that managing PCOS involves supporting mental and emotional well-being.⁴¹ In addition, the mention of #diabetes alongside PCOS-related hashtags signifies awareness of comorbid conditions often associated with PCOS as women with PCOS are at a higher risk for conditions like type 2 diabetes.⁴²

Strengths and limitations

Our study spanned over a six-year period, providing comprehensive insights into the trends and patterns over time. The extended time frame allowed us to observe changes and developments in the use of #PCOSweightloss on X. A large sample size of 12,200 posts shared by 1570 users generated a substantial amount of data. Furthermore, analyzing the geographical distribution of these discussions highlighted the possible impact of socio-ethnic factors on PCOS, underscoring the global nature of the discourse.

This study, however, is not without limitations. Our focus was exclusively on the platform X, excluding potential insights from organizations or users who do not use X as their main social media platform to spread awareness about weight loss in PCOS. Additionally, the reliability of user-profiles and public data for demographic analysis may be compromised by the unverified nature of these profiles and the potential distortion from bot accounts. Aside of the qualitative evaluation of the top 10 most reposted content, the remaining analysis in our work was quantitative in nature, and this can be considered as one limitation of the present work. Thus, qualitative analysis of the relevant popular narratives might reveal further insights and could be a promising direction for future research. The analysis was limited to posts in English, which could influence the findings from areas where social media is primarily used in local languages. Future research should explore the reasons behind the trends observed and the effectiveness of social media interventions in improving health outcomes for individuals with PCOS. Recognizing geographical disparities is critical, as it prompts us to bridge the digital divide and ensure equitable information access.

Conclusion

This study provides valuable insights into the global discourse on PCOS and weight loss on the platform X. It

highlights the potential of this platform in promoting a supportive community, spreading awareness, and influencing health behaviors. However, the varying engagement levels and follower bases of users also indicate the need for targeted strategies to amplify the reach and impact of health messages. Ultimately, health communication strategies on social media must combine expert knowledge with relatable and practical advice, utilizing the credibility of professionals and the compelling nature of personal narratives related to this syndrome. Healthcare providers hold the essential responsibility of disseminating accurate information a guarding against misinformation while also vigilantly observing the advocacy of new management strategies on social media for weight loss in PCOS.

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