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The Reliability and Quality of Orthognathic Surgery Videos on Tiktok: A Cross-Sectional Study

Tiktok'taki Ortognatik Cerrahi Videolarının Güvenilirliği ve Kalitesi: Kesitsel Bir Çalışma

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ABSTRACT

Aim: Thousands of videos about orthognathic surgery (OS) are shared on TikTok, one of the most popular social media platforms, and these videos receive millions of interactions. However, the quality and reliability of these videos has not been evaluated yet. The aim of this study is to evaluate the reliability and quality of popular videos about OS on TikTok.
Material and Methods: The hashtags #jawsurgery and #orthognathicsurgery were used as search terms, and the first 100 videos were watched for each hashtag. The reliability of the contents was determined by the DISCERN tool and the quality was determined by the Global Quality Scale (GQS).
Results: After inclusion and exclusion criteria, 122 videos were included in the study. There was no correlation between the number of likes, views, and comments, and DISCERN scores and GQS scores. DISCERN scores and GQS scores increased as the length of the videos increased. 75.4% of the videos had low reliability, while 41.8% had low quality.
Conclusion: TikTok videos offer low quality information about OS. Judging by the number of interactions, TikTok can be a useful resource for OS patients to learn. However, OS patients should consult health professionals to verify the accuracy and reliability of the information they obtain from social media platforms and should not accept single-source information.

Keywords: Orthognathic surgery, Social media, Reliability, Quality

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ÖZ

Amaç: En popüler sosyal medya platformlarından biri olan TikTok'ta ortognatik cerrahi (OC) ile ilgili binlerce video paylaşılmakta ve bu videolar milyonlarca etkileşim almaktadır. Ancak bu videoların kalitesi ve güvenilirliği henüz değerlendirilmemiştir. Bu çalışmanın amacı, TikTok'ta OC ile ilgili popüler videoların güvenilirliğini ve kalitesini değerlendirmektir.
Gereç ve Yöntem: Arama terimleri olarak #jawsurgery ve #orthognathicsurgery hashtagleri kullanıldı ve her hashtag için ilk 100 video izlendi. İçeriklerin güvenilirliği DISCERN aracıyla, kalitesi ise Küresel Kalite Ölçeği (KKÖ) ile belirlendi.
Bulgular: Dahil etme ve hariç tutma kriterlerinden sonra 122 video çalışmaya dahil edildi. Görüntülenme sayısı, beğeni sayısı ve yorum sayısı ile DISCERN puanları ve KKÖ puanları arasında bir ilişki bulunamadı. Videoların uzunluğu arttıkça DISCERN puanları ve KKÖ puanları da arttı. Videoların %75.4'ü düşük güvenilirliğe sahipken, %41.8'i düşük kaliteye sahipti.
Sonuç: TikTok videoları, OC hakkında düşük kaliteli bilgiler sunar. Etkileşim sayısına bakılırsa TikTok, işletim sistemi hastalarının öğrenmesi için yararlı bir kaynak olabilir. Ancak OC hastalarının sosyal medya platformlarından elde ettikleri bilgilerin doğruluğunu ve güvenilirliğini doğrulamak için sağlık uzmanlarına başvurması ve tek kaynaklı bilgileri kabul etmemesi gerekir.

Anahtar Kelimeler: Ortognatik cerrahi, Sosyal medya, Güvenilirlik, Kalite

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INTRODUCTION

Social media platforms (SMPs) are becoming more accessible and widespread day by day due to various factors, such as the increasing demand for easier access to information, the advancement of mobile devices, and the growing internet connectivity.[1] TikTok is a popular SMP where users can create and share videos up to 3 minutes long through personalized profiles or pages.[2] TikTok features shorter videos compared to other SMPs and presents them to billions of users worldwide by highlighting the key aspects of the content in an entertaining manner.[3]

SMPs have become a resource that an increasing number of people use to access and share health information.[4–6] When patients utilize SMPs for obtaining health information, they can access a larger volume of information compared to what they can obtain from healthcare professionals.[7] However, concerns arise regarding the accuracy and reliability of the information obtained through SMPs.[8,9] The accuracy and reliability of health information on SMPs are frequently scrutinized in the field of oral and maxillofacial surgery, as well as in other fields, and serve as topics of discussion in academic articles.[10–13]

The orthognathic surgery (OS) population and TikTok users share a common characteristic: they are both more prevalent among the younger population, typically up to their 40s.[14,15] Therefore, it is highly likely that OS patients will use TikTok as a source of information, and this should not be overlooked.

While there are publications[16–18] that evaluate the content on various SMPs related to OS, no study has been found that specifically analyzes the content on the TikTok platform. The objective of this study is to assess the reliability and quality of popular videos about OS on TikTok.

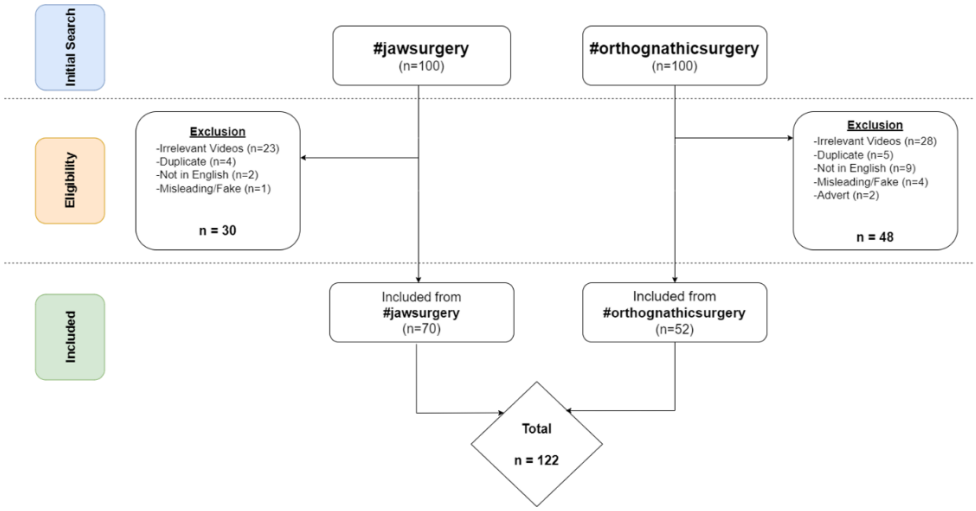
MATERIAL AND METHODS

As the data analyzed in this study were obtained from publicly available sources on TikTok, no research or ethics committee approval was required. However, it is important to note that ethical considerations were still taken into account during the study, including the preservation of confidentiality for video creators and adherence to principles of data protection.

The cross-sectional analysis was initiated on 02.12.2022 by the author, who is experienced in OS on TikTok. Data collection was completed on the same day. To avoid any bias from search history, searches were conducted using the "Incognito/Worldwide" mode of the relevant internet browser, with a new TikTok account being created. The search hashtags #jawsurgery and #orthognathicsurgery were selected. The top 100 videos for each hashtag were reviewed for relevance in the study.

For the purpose of this study, a total of 200 videos were initially screened and selected based on predetermined inclusion and exclusion criteria. Videos that were considered irrelevant, misleading, commercial, duplicates, or not in English were removed from the analysis. As a result, a total of 122 videos were included in the final analysis, as shown in Figure 1. It is important to note that these selection criteria were established to ensure that the evaluated videos were suitable for assessing the quality and reliability of OS content on TikTok.

Figure 1: Flowchart applied in content selection



The videos included in the analysis were downloaded to local storage for later quality assessment. Descriptive statistics were recorded for each video, including duration in seconds, views, likes, comments, days since upload, upload source, and video topic.

The video sources were categorized into three groups: Healthcare Professionals, Patients, and Blog Pages. Furthermore, these users were further classified based on the number of followers they had. The influencers were divided into five groups, with the classification based on the number of followers they had.[19]

The communication quality of the videos was categorized into three groups. Videos in Group 1 did not include any additional images. Group 2 videos had minimal supporting images, typically featuring a single image. Lastly, Group 3 consisted of videos that included a variety of additional images, such as motion pictures or multiple images.[19]

To assess the reliability of the videos, the DISCERN tool[20], a standardized questionnaire, was utilized. The quality of the videos was measured using the Global Quality Scale (GQS)[21]. The evaluation of quality and reliability was performed by the same author at one-week intervals, demonstrating almost perfect agreement (κ=0.909).

Statistical analysis

Based on the results of the Kolmogorov-Smirnov test, it was determined that the data deviated from a normal distribution. To compare two groups, the non-parametric Mann-Whitney test was employed. Conversely, the Kruskal-Wallis test was used for comparing three or more groups. The Games-Howell test was utilized to determine the differences between the groups. The Chi-square test was employed to examine the relationship between categorical variables. For non-normally distributed continuous variables, the Spearman correlation method was used, whereas Kendall's Tau correlation technique was employed to evaluate the relationship between categorical and continuous variables. The significance level (p-value) was set at less than 0.05, and IBM SPSS 26.0 was used for statistical calculations.

RESULTS

This study analyzed videos with the hashtags #jawsurgery and #orthognathicsurgery, which accounted for 70% and 52% of the videos, respectively. Descriptive statistics for continuous data and categorical data were presented in Tables 1 and 2, respectively. The most viewed video had 92.4 million views, while the mean number of comments and likes were 4,826±17,179 and 1,191,304±4,321,374, respectively. The reliability of 75.4% of the videos was assessed as low, with only 0.8% demonstrating high reliability. Based on the GQS scoring for quality assessment, 41.8% of the videos were rated as low quality.

Table 1: Descriptive Statistics of Continuously Variable Features of Tiktok Videos

	N	Minimum	Maximum	Mean	Standard deviation
Number of views	122	45100	92,400,000	8,163,971.43	15,197,212.448
Days since upload	122	6	998	290.20	250.331
Number of likes	122	967	35,000,000	1,191,304.44	4,321,374.865
Number of comments	122	0	133,900	4,826.74	17,179.080
Video length (sec)	122	5	178	29.11	28.789
DISCERN Section 1	122	7	32	15.33	6.797
DISCERN Section 2	122	7	26	9.12	3.302
Total DISCERN Score	122	15	63	26.34	10.406

Table 2: Descriptive Statistics of Categorical Variable Features of Tiktok Videos

	n	%
DISCERN Section 3		
• **Low:** *Serious or extensive shortcomings*	92	75.4
• **Moderate:** *Potentially important but not serious shortcoming*	29	23.8
• **High:** *Minimal shortcomings*	1	.8
Global Quality Scale (GQS)		
• ***Score 1:*** *Poor quality, poor flow of the video, most information missing, not at all useful for patients*	51	41.8
• ***Score 2:*** *Generally poor quality and flow, some information listed but many important topics missing, of very limited use to patients*	34	27.9
• ***Score 3:*** *Moderate quality, suboptimal flow, some important information adequately discussed but others poorly discussed, somewhat useful for patients*	14	11.5
• ***Score 4:*** *Good quality and generally good flow. Most of the relevant information is listed but some topics are not listed. useful for patients*	18	14.8
• ***Score 5:*** *Excellent quality and flow, very useful for patients*	5	4.1
Source of Upload		
• *Patient*	93	76.2
• *Healthcare professionals*	21	17.2
• *Blogger*	8	6.6
Influencer Groups		
• *Nano influencer*	39	32.0
• *Micro influencer*	25	20.5
• *Mid-tier influencer*	39	32.0
• *Macro influencer*	3	2.5
• *Mega influencer*	16	13.1
Subject of the Video		
• *Preoperative-Postoperative Appearances*	27	22.1
• *How the surgery is done*	17	13.9
• *Recovery process*	65	53.3
• *Information content*	13	10.7
Quality of communication		
• *Videos had no supplementary visuals*	56	45.9
• *Videos had minimal supplementary visuals*	40	32.8
• *Videos rich in supplementary visuals*	26	21.3

Table 3: Comparison of Total DISCERN Scores Means by Variables

		n	Minimum	Maximum	Mean	Standard deviation	p
Hashtag	#jawsurgery	70	15	63	27.74	12.351	*0.595
	#orthognathicsurgery	52	16	43	24.44	6.646	
Source of Upload	Patient	93	15	63	25.59	10.787	**0.010
	Healthcare professionals	21	16	50	31.10	8.723	
	Blogger	8	15	28	22.50	5.757	
Influencer Groups	Nano influencer	39	15	47	25.56	8.488	**0.297
	Micro influencer	25	16	48	29.20	10.500	
	Mid-tier influencer	39	15	63	24.56	11.339	
	Macro influencer	3	17	36	27.00	9.539	
	Mega influencer	16	15	50	27.94	12.272	
Subject of the Video	Preoperative-Postoperative Appearances	27	15	29	20.04	4.735	**0.000
	How the surgery is done	17	16	44	28.35	8.551	
	Recovery process	65	15	47	25.86	9.425	
	Information content	13	16	63	39.15	14.064	
Quality of communication	Videos had no supplementary visuals	56	15	48	21.20	8.158	**0.000
	Videos had minimal supplementary visuals	40	15	50	29.75	10.595	
	Videos rich in supplementary visuals	26	17	63	32.15	9.464	

* Mann-Whitney Test ** Kruskal-Wallis Test

Table 3 shows that there was no significant difference between the total DISCERN scores of the two hashtags (p=0.595). While healthcare professionals' videos had higher DISCERN scores than other groups (p=0.010), there was no difference in DISCERN scores between different influencer groups (p=0.297). In terms of video content, informational videos scored higher on DISCERN than other topics (p<0.05). Moreover, videos with a rich variety of supporting images received higher DISCERN scores than those with minimal or no supporting images (p<0.05).

Table 4: Correlations between descriptive statistics of the features of videos and DISCERN Section 1, Discern Section 2, Discern Section 3, Total DISCERN, and Global Quality Scale

		DISCERN Section 1*	DISCERN Section 2*	DISCERN Section 3**	Total DISCERN Score*	Global Quality Scale**
Number of views	Rho	-.016	-.077	-.011	-.022	-.015
	p	.862	.399	.882	.814	.826
Days since upload	Rho	-.022	-.017	-.092	-.028	-.042
	p	.808	.850	.215	.760	.536
Number of likes	Rho	-.013	-.124	.012	-.026	-.009
	p	.889	.174	.868	.779	.898
Number of comments	Rho	.089	.007	.027	.082	.058
	p	.332	.942	.717	.371	.401
Video length (sec)	Rho	.548	.478	.391	.544	.444
	p	**.000**	**.000**	**.000**	**.000**	**.000**
DISCERN Section 1	Rho	1.000	.758	.582	.986	.784
	p		**.000**	**.000**	**.000**	**.000**
DISCERN Section 2	Rho		1.000	.632	.835	.748
	p			**.000**	**.000**	**.000**
DISCERN Section 3	Rho			1.000	.606	.704
	p				**.000**	**.000**
Total DISCERN Score	Rho				1.000	.815
	p					**.000**
Global Quality Scale	Rho					1.000
	p					

* Spearman Correlation Test ** Kendal's Tau Test

Table 4 presents the results of the correlation tests performed to examine the relationship between the descriptive statistics of the videos, DISCERN scores, and GQS scores. No relationship was found between the number of views, the number of days since the video was uploaded, the number of likes and comments, and quality and reliability (p>0.05). However, video length had a moderate positive correlation with quality and reliability (p<0.05). Furthermore, there was a positive correlation between GQS scores and DISCERN scores (p<0.05).

Table 5 presents the findings on the differences between the hashtags in terms of the average number of views, where the #jawsurgery hashtag had a significantly higher average number of views than the other hashtag (p<0.05). The analysis also revealed that channels with a larger number of followers had a significantly higher average number of views compared to channels with fewer followers (p<0.05). However, no significant difference was found in the mean number of views between patients, healthcare professionals, and blog pages (p=0.106). Although videos on the healing process were more frequently watched than videos on other topics, the difference was not significant (p=0.053). Furthermore, the groups did not differ in terms of the number of videos watched based on the quality of communication (p=0.269).

Table 5: Comparison of the Averages of Views of Tiktok Videos by Variable

		n	Minimum	Maximum	Mean	Standard deviation	p
Hashtag	#jawsurgery	70	45,100	92,400,000	8,163,971.43	15,197,212.448	*0.000
	#orthognathicsurgery	52	1,394	22,500,000	1,746,976.31	3,947,432.234	
Source of Upload	Patient	93	4,637	92,400,000	6,731,035.20	13,672,147.887	**0.106
	Healthcare professionals	21	1,394	7,300,000	1,402,190.19	1,878,146.615	
	Blogger	8	14,200	5,600,000	861,062.50	1,934,294.318	
Influencer Groups	Nano influencer	39	4,673	72,00,000	1,060,545.77	1,808,350.090	**0.001
	Micro influencer	25	4,637	30,300,000	6,129,003.56	7,973,929.088	
	Mid-tier influencer	39	14,200	92,400,000	10,889,035.90	19,270,078.132	
	Macro influencer	3	75,100	1,500,000	778,266.67	712,631.422	
	Mega influencer	16	1,394	7,300,000	2,545,449.63	2,310,047.094	
Subject of the Video	Preoperative-Postoperative Appearances	27	9,227	16,300,000	3,010,504.70	4,787,906.532	**0.053
	How the surgery is done	17	1,394	5,600,000	1,117,603.94	1,562,103.905	
	Recovery process	65	5,531	92,400,000	8,177,671.34	15,890,795.171	
	Information content	13	4,637	7,300,000	2,345,325.92	2,489,670.386	
Quality of communication	Videos had no supplementary visuals	56	4,673	45,300,000	4,927,528.09	8,235,581.049	**0.269
	Videos had minimal supplementary visuals	40	4,637	92,400,000	7,546,718.58	17,998,743.517	
	Videos rich in supplementary visuals	26	1,394	30,300,000	3,250,402.00	7,149,030.530	

* Mann-Whitney Test **Kruskal-Wallis Test

DISCUSSION

The proliferation of social media platforms has greatly accelerated and simplified communication and information sharing among individuals. This trend has also impacted the healthcare sector.[22–24] Users now have the opportunity to engage with others by sharing their personal experiences with surgeries and medical procedures.[25] TikTok is one such platform where this interaction takes place rapidly. The platform's format, characterized by fast-paced and relatively entertaining videos, allows content to garner millions of views within a short span of time.

OS patients and the target audience of TikTok share a common characteristic: they are both predominantly found in the younger population.[14,15] In the available data from 2023, it is observed that 92% of TikTok users fall within the age range of 13-34[15], which coincides with the age range where OS procedures are most commonly performed. Patients seeking information about OS, including those undergoing orthodontic treatment or awaiting surgery, may have a demand for videos addressing their concerns. Consequently, it becomes crucial to assess the quality and reliability of information shared on SMPs. To the best of our knowledge, this study represents the initial effort to evaluate the quality and reliability of videos related to orthognathic surgery uploaded on TikTok.

The rising popularity of video-sharing platforms has resulted in a decrease in the number of patients seeking information on official health websites, while an increasing number of patients rely on social media sites for health-related information.[26] In our study, we found that the total number of views for the 122 posts related to OS on TikTok exceeded 622 million. Upon analyzing the interactions, we observed that there were over 90 million likes and more than 3.6 million comments. Compared to previous studies that evaluated OS content on other SMPs, TikTok displayed a significantly higher level of interaction.[16,17,27,28]

In this study, two hashtags were utilized to gather data, one being more general (#jawsurgery) and the other containing a more specific technical term (#orthognathicsurgery). It was found that 70% of the videos under the #jawsurgery hashtag were relevant to OS, while the #orthognathicsurgery hashtag had 52% of relevant posts. In the more technical term OS, the main reason for more data loss was the sharing of orthodontic processes and more sharing of non-English content. In the studies conducted by Buyuk and Imamoglu[28] in 2019, where videos with OS content on YouTube were evaluated using the same hashtags as the present study, data losses were observed to be 43% for the #jawsurgery hashtag and 47% for the #orthognathicsurgery hashtag, which aligns with the findings of the current study. The results of the

present study indicated no significant difference between the two hashtags in terms of reliability assessment (p=0.595). Furthermore, when considering the number of views, it can be observed that the more general term #jawsurgery reaches a broader audience.

Previous literature has examined the reliability and quality of YouTube videos on OS. Hegarty et al.[27] found that the majority of videos had low informational content, with over half containing poor-quality information. Ultimately, YouTube was deemed inadequate as a reliable source of information. Similarly, in a study by Grewal et al.[18], patient-uploaded videos were categorized as excellent, moderate, and poor in terms of information content, and over 60% were found to have moderate information content. It was suggested that patients seeking information on the topic should be directed to specialists. In the present study, 75.4% of OS content on TikTok was found to have low reliability. The analysis revealed that healthcare professionals produced more reliable content compared to patients and blog pages (p<0.05) (Table 3). Informative videos were also found to be more reliable (p<0.05), followed by videos describing the surgical procedure and the healing process. The number of followers of the video creators had an impact on the number of views (p=0.001), but it did not affect the reliability of the videos (p=0.297). Furthermore, the study results demonstrated that there was no significant relationship between the quality and reliability of the content and metrics such as likes, views, and comments. This suggests that videos with a higher number of views may not necessarily provide accurate or trustworthy information. Therefore, individuals should prioritize the reliability and accuracy of the content when seeking information on OS through TikTok, rather than relying solely on the popularity or engagement level of the content.

Although the content about OS on the TikTok platform has low reliability and quality, it reaches a very large number of audiences. In this context, the power of TikTok should be considered. Part of the problem of low quality here is due to the patients' lack of knowledge and one-sided experiences. For example, the normal swelling and bruising that would occur after OS could be exaggerated by patients, which could intimidate the audience. There was a biased approach to this issue, and it was not presented that the swellings/bruises would go away in a short time. Strengthening the communication between TikTok users and doctors, and even improving the quality of these videos by producing collaborative content, can lead to the formation of patient communities that are more knowledgeable about OS.

This study had several limitations. Firstly, it was a cross-sectional study that examined a small data set from the TikTok platform, which provides a vast amount of data. As TikTok is a platform with rapidly flowing data, different search results can be obtained at different times. Additionally, it should be noted that while the GQS and DISCERN tools used for evaluation are standardized, they still have a subjective nature, and the results can be influenced by individual observers. Therefore, it is important to interpret the study findings within the context of these potential limitations.

Moreover, there are challenges in determining ethical principles in social media research. While traditional research methods require ethical committee approval, addressing issues such as participant benefits and harms, privacy, informed consent, and confidentiality, the boundaries of these issues are not clearly defined in social media studies. In some European Union countries, social media-based research is ethically controversial and not permitted. However, the concerns raised here are related to the sharing of users' data.[29] The data of TikTok users used in our present study has not been publicly disclosed or shared but has been evaluated and reported solely in the public interest. Furthermore, methodologies similar to those used in social media studies that do not require ethics committee approval were employed in our study.

CONCLUSION

TikTok videos offer low quality information about OS. Videos with high number of views, likes and comments may not always have quality and reliable information content. Thanks to possible collaborations between healthcare professionals and TikTok users, the quality of these videos can be increased and more accurate information can be delivered to wider audiences. As a result, TikTok can be a useful resource for obtaining information for OS patients. However, OS patients should consult

health professionals to verify the accuracy and reliability of the information they obtain from social media platforms and should not accept single-source information.

Ethical Committee Approval: The approval from the Ethics Committee was not required as no human or animal samples were used in this study.

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Conflict of Interest: The author denies any conflicts of interest related to this study.

Author Contributions: Design: YB, Data collection or processing: YB, Analysis and interpretation: YB, Literature review: YB, Writing: YB.

REFERENCES

1. Kamath KY, Caverlee J, Cheng Z, Sui DZ. Spatial influence vs. community influence: modeling the global spread of social media. In: Proceedings of the 21st ACM international conference on Information and knowledge management. 2012;1:962–71.
2. Yeung A, Ng E, Abi-Jaoude E. TikTok and Attention-Deficit/Hyperactivity Disorder: A Cross-Sectional Study of Social Media Content Quality. Can J Psychiatry. 2022;67:899–906.
3. Basch CH, Yalamanchili B, Fera J. #Climate Change on TikTok: A Content Analysis of Videos. J Community Health. 2022;47:163–7.
4. Moorhead SA, Hazlett DE, Harrison L, Carroll JK, Irwin A, Hoving C. A new dimension of health care: systematic review of the uses, benefits, and limitations of social media for health communication. J Med Internet Res. 2013;15:e1933.
5. Massey PM. Where do US adults who do not use the internet get health information? Examining digital health information disparities from 2008 to 2013. J Health Commun. 2016;21:118–24.
6. Korda H, Itani Z. Harnessing social media for health promotion and behavior change. Health Promot Pract. 2013;14:15–23.
7. Rosenberg D. Searched and found? The association between use of health information sources and success in getting the desired information. Heal Inf Libr J. 2022;
8. Sahni H, Sharma H. Role of social media during the COVID-19 pandemic: Beneficial, destructive, or reconstructive? Int J Acad Med. 2020;6:70.
9. Yong JY, Stvilia B, Mon L. Cultural influences on seeking quality health information: An exploratory study of the Korean community. Libr Inf Sci Res. 2012;34:45–51.
10. Yang SC, Wu BW, Karlis V, Saghezchi S. Current status of Instagram utilization by oral and maxillofacial surgery residency programs: a comparison with related dental and surgical specialties. J Oral Maxillofac Surg. 2020;78:2128-e1.
11. Harris JA, Beck NA, Niedziela CJ, Alvarez GA, Danquah SA, Afshar S. The global reach of social media in oral and maxillofacial surgery. Oral Maxillofac Surg. 2022:1;1–5.
12. Warren VT, Patel B, Boyd CJ. Determining the relationship between altmetric score and literature citations in the oral and maxillofacial surgery literature. J Oral Maxillofac Surg. 2020;78:1460-e1.
13. Paksoy T, Ceylan Şen S, Ustaoğlu G, Bulut DG. What do TikTok videos offer us about dental implants treatment? J Stomatol Oral Maxillofac Surg . 2023;124:e101320
14. Weaver N, Glover K, Major P, Varnhagen C, Grace M. Age limitation on provision of orthopedic therapy and orthognathic surgery. Am J Orthod Dentofac Orthop. 1998;113:156–64.
15. Oberlo. TikTok Age Demographics [Internet]. Accessed on: 15 February 2023. Available from: https://www.oberlo.com/statistics/tiktok-age-demographics
16. Ayranci F, Buyuk SK, Kahveci K. Are YouTubeTM videos a reliable source of information about genioplasty? J Stomatol Oral Maxillofac Surg. 2021;122:39–42.
17. Bayazıt S, Ege B, Koparal M. Is the YouTubeTM a useful resource of information about orthognathic surgery?: A cross-sectional study. J Stomatol Oral Maxillofac Surg. 2022;123:e981–7.
18. Grewal J, Marria G, Goel S. Information content of YouTube videos on orthognathic surgery–helpful? Indian J Dent Sci. 2019;11:90.
19. Naseer S, Hasan S, Bhuiyan J, Prasad A. Current Public Trends in the Discussion of Dry Eyes: A Cross-Sectional Analysis of Popular Content on TikTok. Cureus. 2022;14.
20. Charnock D, Shepperd S, Needham G, Gann R. DISCERN: an instrument for judging the quality of written consumer health information on treatment choices. J Epidemiol Community Heal. 1999;53:105–11.
21. Altunisik E, Firat YE. Quality and Reliability Analysis of Essential Tremor Disease Information on Social Media: The Study of YouTube. Tremor and Other Hyperkinetic Movements. 2022;12.
22. Tursunbayeva A, Franco M, Pagliari C. Use of social media for e-Government in the public health sector: A systematic review of published studies. Gov Inf Q. 2017;34:270–82.
23. Franco M, Tursunbayeva A, Pagliari C. Social media for e-Government in the public health sector:

protocol for a systematic review. JMIR Res Protoc. 2016;5:e5421.

24. Chaudhri V, Oomen T, Pridmore J, Joon A. "CARE" in social media: perceptions of reputation in the healthcare sector. J Commun Manag. 2021;25:125–41.

25. Kamath P, Kursewicz C, Ingrasci G, Jacobs R, Agarwal N, Nouri K. Analysis of patient perceptions of Mohs surgery on social media platforms. Arch Dermatol Res. 2019;311:731–4.

26. Fernández-Luque L, Bau T. Health and social media: perfect storm of information. Healthc Inform Res. 2015;21:67–73.

27. Hegarty E, Campbell C, Grammatopoulos E, DiBiase AT, Sherriff M, Cobourne MT. YouTubeTM as an information resource for orthognathic surgery. J Orthod. 2017;44:90–6.

28. Buyuk SK, Imamoglu T. Instagram as a social media tool about orthognathic surgery. Heal Promot Perspect. 2019;9:319–22.

29. Golder S, Ahmed S, Norman G, Booth A. Attitudes Toward the Ethics of Research Using Social Media: A Systematic Review. J Med Internet Res. 2017;19:e195