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Evaluation Quality of YouTube Videos About Post Core Restorations

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Abstract

Background: The aim of this study is to evaluate the 'post core 'videos on YouTube.
Materials and Methods: YouTube videos were searched with the world 'post core ' and first 50 videos were examined. The language is not English and Turkish videos and insufficient videos were not included in the study. Criteria such as the definition of post core, indications, contraindications, information about the process, cost, expertise required, post cementation, crown preparation, measurement and describing the tools used were used when evaluating the content of the videos. Each criterion was scored between 0-3 by two researchers. According to this rating, the videos were separated into three different (low, medium, high) quality groups.
Results: 31 of the first 50 scanned videos were included in the study. When the distributions were evaluated according to the video uploaders, it was seen that the most videos were uploaded by medical personnel. (n=15, 48.38%) The distribution of videos according to quality groups was found to be 22.58% at a poor level, 74.19% at a moderate level and 3.22% at a high level of quality.
Conclusion: Most videos have been found to be moderately functional. Analysis according to the quality content, it was found that the significant difference in the crown preparation and GQS values of the videos. ($p<0.05$)
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Keywords: Internet, post core, social media, video.

Introduction

In dentistry, in the restoration of the crown part of the tooth that has lost a large part of the crown, root canal support is provided to the restoration with post-core materials (1,2).

Post-core restorations consist of two main parts. It consists of a canal post placed at least 2/3 of the length of the root canal and a core substructure supported by this structure. The core and post merge and form a truncated tooth shape is created. A retantion area is created for permanent restoration (3). Patient education and motivation are very important in dental treatments. As in all treatments, physicians make a lot of effort to inform patients and involve them in the treatment during post core treatment. The information given is usually not properly understood by the patient (4). Then patients try to access this information by using various internet tools. With the Covid pandemic, there has been an increase in the rate of online access to information by the society(5). Getting information about health online has become increasingly popular and YouTube has become almost the first source of reference in this regard. According to Alexa.com, which conducts various statistical research on social media use, YouTube is the second most visited website worldwide, and the fact that it has become one of the most popular mass media of the last decade has attracted great interest from the academic world (6). In addition, the usefulness of websites in conveying health- related information to patients has been proven by various studies (7,8).

However, in this platform where video sharing is facilitated and videos are not produced according to any standard, the accuracy of the information is questionable (9). Easy access to information on social media may lead to some dangers. Some content that provides information about various diseases or shares patient experiences may lead people to alternative treatment options. Therefore, the usefulness of videos is being examined by researchers. The aim of this study was to evaluate the

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content of relevant videos in English and Turkish by typing 'post core 'into the search engine on YouTube.

Materials and Methods

Data Collection Instruments

In order to find Turkish and English videos about post core on YouTube, a search was conducted on January 6,2023 by typing 'post core'in the search bar without using any of the search filters such as number of views, upload date and without changing the default settings. For each video the link, video duration, number of views and the name of the channel on which the video was broadcast were recorded. Since publicly available data were used in the study, ethics committee approval was not applied.

The first 50 videos accessed by two researchers were evaluated. Some criteria were used to evaluate the video content. These criteria were determined according to the criteria in previous studies (9) and important stages of the treatment. Accordingly, the videos were evaluated in terms of definition of post core, indications, contraindications, information about the procedure, cost, need for expertise, post cementation stage, crown preparation, measurement and instruments used. Each criterion was scored between 0 and 3 by the observers. The definitions in this scoring are.

'0: no information or incorrect information, 1: insufficient information,2: sufficient information and 3:detailed information'. The videos were categorized into groups according to the upload sources as uploads by health personnel and institutions, television channels, new agencies, individuals and other users. Videos whose narrative language was not in English or Turkish, videos with more than half (more than five) of the criteria zero, repetitive videos ,videos that were not suitable in terms of content and advertising videos were excluded from the evaluation.(19 videos) The length of the video durations varied between 1 and 44 minutes and the number of views varied between 2800 and 999100.

The null hypothesis of this study is that there is no difference in the evaluation criteria of the post core videos that can be watched on YouTube in terms of uploader source and usefulness level.

Data Analysis

The data obtained in this study were analyzed with SPSS 21 program. Since the data were not normally distributed, Kruskal Wallis H Test was used for comparisons between three or more groups. The relationship between categorical data was analyzed by Chi-Square analysis. Spearman -correlation analysis was used for the relationship between variables. The agreement between two observation scores was examined by 'intraclass' correlation. Descriptive statistical method was used to evaluate the study data. The significance level was set at 0.05.

Results

The relationship between the usefulness groups and the scoring values of the evaluation criteria was analyzed using the Kruskall Wallis H test (Table 1).

Table 1. Scoring distribution according to evaluation criteria and usefulness level

		Group					Kruskall Wallis H Test		
		n	Average	Median	Minimum	Maximum	ss	Rank Avg.	H	p
Observer 1 Points	1=Health Institution	7	1.57	1.00	1.00	3.00	.79	14.64	0.235	0.889
	2=Healthcare Personnel	15	1.73	2.00	0.00	3.00	1.10	16.27		
	3=Other User	9	1.78	2.00	1.00	3.00	.83	16.61		
	Total	31	1.71	2.00	0.00	3.00	.94			
Observer 2 Points	1=Health Institution	7	1.29	2.00	0.00	3.00	1.25	14,14	0.423	0.809
	2=Healthcare Personnel	15	1.60	1.00	0.00	3.00	1.30	16.73		
	3=Other User	9	1.56	2.00	0.00	3.00	1.13	16.22		
	Total	31	1.52	2.00	0.00	3.00	1.21			

INDICATION1	1=Health Institution	7	1.29	1.00	0.00	2.00	.76	14.86	0.209	0.901
	2=Healthcare Personnel	15	1.47	1.00	0.00	3.00	.83	16.07		
	3=Other User	9	1.44	2.00	0.00	2.00	.73	16.78		
	Total	31	1.42	1.00	0.00	3.00	.76			
INDICATION2	1=Health Institution	7	.86	1.00	0.00	2.00	.90	12.29	1,677	0.432
	2=Healthcare Personnel	15	1.40	2.00	0.00	3.00	1.06	16.93		
	3=Other User	9	1.44	2.00	0.00	3.00	1.01	17.33		
	Total	31	1.29	1.00	0.00	3.00	1.01			
CONTRAINDICATION	1=Health Institution	7	.29	0.00	0.00	2.00	.76	16.43	0.082	0.96
	2=Healthcare Personnel	15	.13	0.00	0.00	1.00	.35	16.00		
	3=Other User	9	,11th	0.00	0.00	1.00	.33	15.67		
	Total	31	.16	0.00	0.00	2.00	.45			
INFORMATION ABOUT THE TRANSACTION1	1=Health Institution	7	1.86	2.00	0.00	3.00	.90	14.93	1,755	0.416
	2=Healthcare Personnel	15	2.20	2.00	1.00	3.00	.56	17.80		
	3=Other User	9	1.89	2.00	1.00	3.00	.60	13.83		
	Total	31	2.03	2.00	0.00	3.00	.66			
INFORMATION ABOUT THE TRANSACTION2	1=Health Institution	7	1.29	1.00	0.00	3.00	1.11	11.57	3,075	0.215
	2=Healthcare Personnel	15	2.07	2.00	1.00	3.00	.80	18.40		
	3=Other User	9	1.78	2.00	1.00	3.00	.67	15.44		
	Total	31	1.81	2.00	0.00	3.00	.87			

		Group						Kruskall Wallis H Test	
		n	Average	Median	Minimum	Maximum	ss	Rank Avg.	H	p
POST CEMENTATION1	1=Health Institution	7	1.43	1.00	0.00	3.00	1.27	12.57	1,442	0.486
	2=Healthcare Personnel	15	2.07	2.00	0.00	3.00	.88	16.77		
	3=Other User	9	2.00	3.00	0.00	3.00	1.32	17.39		
	Total	31	1.90	2.00	0.00	3.00	1.11			
POST CEMENTATION2	1=Health Institution	7	.86	0.00	0.00	3.00	1.21	9.86	4,578	0.101
	2=Healthcare Personnel	15	2.13	2.00	0.00	3.00	.92	18.03		
	3=Other User	9	1.89	3.00	0.00	3.00	1.45	17.39		
	Total	31	1.77	2.00	0.00	3.00	1.23			
CROWN PREPARATION1	1=Health Institution	7	1.43	1.00	0.00	3.00	1.13	16.93	2,403	0.301
	2=Healthcare	1	1.47	1.00	0.00	3.00	.99	17.73		

	Personnel	5								
	3=Other User	9	.89	1.00	0.00	3.00	.93	12.39		
	Total	31	1.29	1.00	0.00	3.00	1.01			
CROWN PREPARATION2	1=Health Institution	7	1.14	1.00	1.00	2.00	.38	16.50	0.641	0.726
	2=Healthcare Personnel	15	1.27	1.00	0.00	3.00	.96	16.90		
	3=Other User	9	1.00	1.00	0.00	3.00	1.12	14,11		
	Total	31	1.16	1.00	0.00	3.00	.90			
IMPRESSION1	1=Health Institution	7	.14	0.00	0.00	1.00	.38	15.00	1,011	0.603
	2=Healthcare Personnel	15	.47	0.00	0.00	3.00	.92	17,17		
	3=Other User	9	.22	0.00	0.00	2.00	.67	14.83		
	Total	31	.32	0.00	0.00	3.00	.75			
IMPRESSION2	1=Health Institution	7	.43	0.00	0.00	2.00	.79	17.36	0.642	0.725
	2=Healthcare Personnel	15	.33	0.00	0.00	3.00	.82	16.07		
	3=Other User	9	.22	0.00	0.00	2.00	.67	14.83		
	Total	31	.32	0.00	0.00	3.00	.75			
TOOLS USED1	1=Health Institution	7	1.86	2.00	1.00	3.00	.69	14.64	1,906	0.386
	2=Healthcare Personnel	15	2.13	2.00	1.00	3.00	.64	18.03		
	3=Other User	9	1.78	2.00	1.00	3.00	.67	13.67		
	Total	31	1.97	2.00	1.00	3.00	.66			
TOOLS USED2	1=Health Institution	7	1.29	1.00	0.00	3.00	.95	13.07	4,373	0.112
	2=Healthcare Personnel	15	1.93	2.00	1.00	3.00	.80	19.33		
	3=Other User	9	1.22	1.00	0.00	3.00	.97	12.72		
	Total	31	1.58	1.00	0.00	3.00	.92			
Observer 1 Total Points	1=Health Institution	7	9.86	10.00	7.00	12.00	1.86	14.00	0.898	0.638
	2=Healthcare Personnel	15	11.67	10.00	8.00	20.00	3.70	17.53		
	3=Other User	9	10,11	10.00	6.00	14.00	2.32	15.00		
	Total	31	10.81	10.00	6.00	20.00	3.04			
Observer 2 Total Score	1=Health Institution	7	7.14	8.00	2.00	11.00	3.53	11.07	3,429	0.18
	2=Healthcare Personnel	15	10.73	10.00	5.00	19.00	3.75	18.67		
	3=Other User	9	9,11	8.00	4.00	13.00	3.02	15.39		
	Total	31	9.45	9.00	2.00	19.00	3.69			

In the distrubition of the videos according to the uploading sources, it was determined that they were mostly uploaded by healthcare personnel (%48.4). There were no videos uploaded by television channels and news agencies.

When the distribution of the videos according to their level of usefulness was analyzed, it was determined that those with low level of usefulness were the most (%45.2) and those with high level of usefulness were the least (%19.4) (Table 2).

Table 2. Distribution of video demographic characteristics by source of attribution and usefulness group

		n	%
Group	Health Institution	7	22.6
	Health personnel	15	48.4
	Other User	9	29.0
	Total	31	100.0
GQS	poor quality	14	45.2
	Generally poor quality	11th	35.5
	Moderate+Good quality	6	19.4
	Total	31	100.0

There was a significant difference between the groups in terms of 'post cementation' and 'crown preparation' values ($p<0.05$). The mentioned criteria were higher in the 'generally poor quality' and 'moderate +good quality' video groups, while the 'poor quality 'group showed significantly lower values. This groups also showed significantly lower values for 'number of views' ($p<0.05$).

When evaluated in terms of 'video duration' values, a significant difference is observed ($p<0.05$). 'Video duration' values of those with 'generally poor quality' group are significantly lower than those with 'poor quality' and 'moderate + good quality' group.

When the uploader groups and the number of views, video duration, year of publication, and number of likes, number of comments and ratings of the videos are analyzed, there is no significant difference between the groups. (Table 3)

Table 3. Statistical distribution between upload sources and video information

		Group						Kruskall Wallis H Test	
		n	Average	Median	Minimum	Maximum	ss	Rank Avg.	H	p
VIEWS	1=Health Institution	7	151542.86	115000.00	2800.00	364000.00	146605.58	18.71	1,348	0.51
	2=Healthcare Personnel	15	140200.00	67000.00	4300.00	991000.00	246394.89	16.27		
	3=Other User	9	85233.33	33000.00	4700.00	370000.00	118799.92	13.44		
	Total	31	126803.23	63000.00	2800.00	991000.00	192729.66			
VIDEO DURATION	1=Health Institution	7	8.00	2.00	1.00	34.00	11.96	11.86	2,406	0.3
	2=Healthcare Personnel	15	10.80	7.00	1.00	44.00	11,12	18.23		
	3=Other User	9	6.22	5.00	3.00	17.00	4.49	15.50		
	Total	31	8.84	5.00	1.00	44.00	9.79			
Year	1=Health Institution	7	6.43	7.00	2.00	11.00	3.82	22,21	4,583	0.101
	2=Healthcare Personnel	15	3.13	2.00	1.00	10.00	2.70	13.43		
	3=Other User	9	3.87	4.00	.33	8.00	2.86	15.44		
	Total	31	4.09	3.00	.33	11.00	3.20			
NUMBER OF LIKES	1=Health Institution	6	1153.67	475.00	19.00	3900.00	1506.90	13.08	1.37	0.504
	2=Healthcare Personnel	15	1377.00	927.00	73.00	6000.00	1579.64	16,17		

	3=Other User	7	721.14	335.00	37.00	2300.00	802.45	12,14		
	Total	28	1165.18	651.00	19.00	6000.00	1390.51			
NUMBER OF COMMENTS	1=Health Institution	6	27.83	24.00	0.00	71.00	27,19	12.08	3,113	0.211
	2=Healthcare Personnel	15	76.20	47.00	2.00	250.00	83.66	17.03		
	3=Other User	7	21.71	11.00	0.00	55.00	21,20	11,14		
	Total	28	52.21	28.00	0.00	250.00	67.52			
VIEWING RATE	1=Health Institution	7	165.69	40.09	3.83	713.72	263.95	14.71	0.657	0.72
	2=Healthcare Personnel	15	254.28	68.49	10.54	2715.00	683.54	17.37		
	3=Other User	9	63.56	72.22	4.29	126.71	45.80	14.72		
	Total	31	178.91	56.16	3.83	2715.00	489.29			

The relationship between the total scores of the observers and the number of views, duration, likes and comments of the videos were analyzed. There is a significant and positive relationship between ‘observer 1 total score’ and ‘number of comment ‘values($r=0.440$; $p<0.05$). As the ‘observer 1 total score ‘increases, the ‘number of comments’ values also increase. There is a significant and positive relationship between ‘observer 2 total score’ and ‘video duration’ values. ($r=0.635$; $p<0.05$) As the ‘observer 2 total score’ increases, the ‘video duration’ values also increase.

There is no significant difference between quality groups and uploader groups. ($p>0.05$)(Table 4) Most of the uploaded videos were found to be of low quality. When the distribution of uploaders in this group is examined, it is seen that most videos were uploaded by healthcare personnel. Good quality videos were the lowest in number. Medium quality videos were also found to be uploaded mostly by health personnel. (Table 4)

Table 4. Statistical relationship between loader groups and usefulness groups

		GQS								Chi-Square Analysis	
		poor quality		Generally poor quality		Moderate+Good quality		Total			
		n	%	n	%	n	%	n	%	Chi-Square	p
Group	Health Institution	3	42.9	4	57.1	0	0.0	7	100.0	*	0.452
	Health personnel	7	46.7	5	33.3	3	20.0	15	100.0		
	Other User	4	44.4	2	22.2	3	33.3	9	100.0		
	Total	14	45.2	11th	35.5	6	19.4	31	100.0		

The agreement between the observers was examined with ‘ıntraclass correlation’. There is a highly significant relationship ($r=0.894$) between ‘observer 1 score’ and ‘observer 2 score’ values. ($p<0.05$)

Discussion

While healthcare professionals can access scientific evidence to enhance their understanding, patients often rely on social media platforms for health information. Audio-visual sources like YouTube positively impact patients seeking health information freely (28). In the literature, there are many YouTube video analysis studies on medical and dental health-related topics (10-21), but there is no study on post core restorations.

Patients need for additional information about post core restorations, which are frequently applied by dentists, leads them to use the internet.

Since technology and the internet have become an indispensable part of our daily lives, providing access to quality videos on digital platform is important in terms of patient education (12,13,15,16). Although patients are informed with videos, this information is sometimes not sufficient or has the effect of increasing the patient’s anxiety (16). According to the results of YouTube video analysis studies related to dental topics conducted to date, videos have exhibited inconsistency in quality. In studies

conducted on different topics, some researchers reported that the information content quality of the videos was sufficient (12,13), while others reported that the information content of the videos was insufficient (14,16,18,19). According to the results of the content analysis of the videos related to post core, most of the videos showed a low level of usefulness and most of the videos were published by healthcare personnel as the uploader group.

When the findings were evaluated, it was revealed that the null hypothesis of the study was rejected and that there were statistically significant differences between the evaluation criteria in terms of the level of usefulness and the predictor source. In another study in which implant related videos were evaluated, it was determined that videos were mostly uploaded by TV channels or news agencies(%48) in the distribution according to upload sources(25). In this study, most videos were uploaded by healthcare personnel(%48.4) and then by other users(%29). There was no significant difference between quality groups and user groups.

In one study, the rate of YouTube users not watching more than the first 60 results was found to be %95(21).For this reason, it was found appropriate to evaluate the first 50 videos accessed in this study. It is known that most of the uploaded videos are in English (19,25). For this reason, the analysis was made from English and Turkish videos.

YouTube users watch the videos they access without evaluating or distinguishing the content of the videos (29). In a study, it was concluded that 86% of internet users trust the accuracy of the information they access via the internet in the field of health, and 64% of them believe that this information affects their choice of treatment (30).

Some researchers have shown that the public is less likely to watch high quality videos uploaded by healthcare professionals (25), but in this study, the number of views of low usefulness videos was lower than other usefulness groups.

At the same time, when evaluated in terms of containing information about the process, it was seen that poor quality videos received significantly lower values than other groups. In our study, it was seen that information about post core, post cementation and crown preparation were the most mentioned criteria in the videos.

In another study, it was stated that the viewership rates of high quality videos were lower than those of low quality videos and it was necessary to increase the attractiveness of these videos(28). As strategies to increase the viewership rates of published videos, it may be an alternative that the person presenting the videos is famous and the video content contains understandable and entertaining information.

Considering the limitations of this study, it is the lack of definitive criteria for evaluating video content in internet-based studies (31).

Therefore, the criteria were determined using other similar studies. Additionally, since internet information was used in the study, it should be taken into consideration that the data obtained may vary over time.

Conclusion

In this study, the information level and quality of YouTube videos about post core were found to be mostly inadequate. Since the uploaders of most videos are healthcare personnel on this subject, it was found appropriate for healthcare personnel and institution to increase the level of knowledge and sensitivity of the society by uploading more useful and high-quality videos about post core.

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There is no conflict of interest in this study.

References

1. Nobel Medical Bookstores, 2006:273-313.
2. Robbins JW. Restoration of the endodontically treated tooth. Dent Clin North Am, 2002 Apr; 46 (2): 367-84.
3. Rosenstiel et al., 2006; Jacobi and Shillingburg, 1993; Cheung, 2005
4. McGuire, L. C. Remembering what the doctor said: Organization and adults' memory for medical information. Experimental Aging Research, 1996,22(4), 403-428.
5. Holmes EA, O'Connor RC, Perry VH, Tracey I, Wessely S, Arseneault L. et al. Multidisciplinary research priorities for the COVID-19 pandemic: a call for action for mental health science. Lancet Psychiatry. 2020 Jun;7(6):547-560. doi: 10.1016/S2215-0366(20)30168-1. Epub 2020 Apr 15. PMID: 32304649; PMCID: PMC7159850.
6. Bärtl, M. (2018). YouTube channels, uploads and views: A statistical analysis of the past 10 years. Convergence, 24(1), 16–32. https://doi.org/10.1177/1354856517736979
7. Vance, K., Howe, W., & Dellavalle, R. P. (2009). Social websites as a source of public health information. Dermatologic clinics, 27(2), 133–vi. https://doi.org/10.1016/j.det.2008.11.010
8. Boyers, L. N., Quest, T., Karimkhani, C., Connett, J., & Dellavalle, R. P. (2014). Dermatology on YouTube. Dermatology online journal, 20(6), 13030/qt5037g18h.
9. Nason, G. J., Tareen, F., & Quinn, F. (2013). Hydrocele on the web: an evaluation of Internet-based information. Scandinavian journal of urology, 47(2), 152–157. https://doi.org/10.3109/00365599.2012.719540
10. Nagpal, S. J., Karimianpour, A., Mukhija, D., Mohan, D., & Brateanu, A. (2015). YouTube videos as a source of medical information during the Ebola hemorrhagic fever epidemic. SpringerPlus, 4, 457. https://doi.org/10.1186/s40064-015-1251-9
11. ElKarmi, R., Hassona, Y., Taimeh, D., & Scully, C. (2017). YouTube as a source for parents' education on early childhood

careers. International journal of pediatric dentistry, 27(6), 437–443. https://doi.org/10.1111/ipd.12277
12. Yavuz, M. C., Buyuk, S. K., & Genc, E. (2020). Does YouTube™ offer high quality information? Evaluation of accelerated orthodontics videos. Irish journal of medical science, 189(2), 505–509. https://doi.org/10.1007/s11845-019-02119-z
13. Gaş, S., Zincir, Ö. Ö., & Bozkurt, A. P. (2019). Are YouTube Videos Useful for Patients Interested in Botulinum Toxin for Bruxism?. Journal of oral and maxillofacial surgery: official journal of the American Association of Oral and Maxillofacial Surgeons, 77(9), 1776–1783. https://doi.org/10.1016/j.joms.2019.04.004
14. Hassona, Y., Taimeh, D., Marahleh, A., & Scully, C. (2016). YouTube as a source of information on mouth (oral) cancer. Oral diseases, 22(3), 202–208. https://doi.org/10.1111/odi.12434
15. Hegarty, E., Campbell, C., Grammatopoulos, E., DiBiase, A. T., Sherriff, M. et al. (2017). YouTube™ as an information resource for orthognathic surgery. Journal of orthodontics, 44(2), 90–96. https://doi.org/10.1080/14653125.2017.1319010
16. Yilmaz, H., & Aydin, M. N. (2020). YouTube™ video content analysis on space maintainers. Journal of the Indian Society of Pedodontics and Preventive Dentistry, 38(1), 34–40. https://doi.org/10.4103/JISPPD.JISPPD_215_19
17. Menziletoglu, D., Guler, A. Y., & Isik, B. K. (2020). Are YouTube videos related to dental implant useful for patient education?. Journal of stomatology, oral and maxillofacial surgery, 121(6), 661–664. https://doi.org/10.1016/j.jormas.2019.12.022
18. Abukaraky, A., Hamdan, A. A., Ameera, M. N., Nasief, M., & Hassona, Y. (2018). Quality of YouTube TM videos on dental implants. Medicina oral, patologia oral y cirugia bucal, 23(4), e463–e468. https://doi.org/10.4317/medoral.22447
19. Pons-Fuster, E., Ruiz Roca, J., Tvarijonaviciute, A., & López-Jornet, P. (2020). YouTube information about diabetes and oral healthcare. Odontology, 108(1), 84–90. https://doi.org/10.1007/s10266-019-00445-3
20. Carneiro, B., & Dizon, D. S. (2019). Prostate Cancer Social Media: In YouTube We Trust?. European urology, 75(4), 568–569. https://doi.org/10.1016/j.eururo.2019.01.004
21. Leong, A. Y., Sanghera, R., Jhajj, J., Desai N., Jammu, B. S., & Makowsky, M. J. (2018). Is YouTube Useful as a Source of Health Information for Adults With Type 2 Diabetes? A South Asian Perspective. Canadian journal of diabetes, 42(4), 395–403.e4. https://doi.org/10.1016/j.jcjd.2017.10.056
22. Koller, U., Waldstein, W., Schatz, K. D., & Windhager, R. (2016). YouTube provides irrelevant information for the diagnosis and treatment of hip arthritis. International orthopaedics, 40(10), 1995–2002. https://doi.org/10.1007/s00264-016-3174-7
23. Kumar, N., Pandey, A., Venkatraman, A., & Garg, N. (2014). Are video sharing websites a useful source of information on hypertension?. Journal of the American Society of Hypertension: JASH, 8(7), 481–490. https://doi.org/10.1016/j.jash.2014.05.001
24. Ozdede, M., & Peker, I. (2020). Analysis of Dentistry YouTube Videos Related To COVID-19. Brazilian dental journal, 31(4), 392–398. https://doi.org/10.1590/0103-6440202003767
25. Desai, T., Shariff, A., Dhingra, V., Minhas, D., Eure, M., & Kats, M. (2013). Is content really king? An objective analysis of the public's response to medical videos on YouTube. PloS one, 8(12), e82469. https://doi.org/10.1371/journal.pone.0082469
26. Wong NSM, Yeung AWK, McGrath CP, Leung YY. Qualitative Evaluation of YouTube Videos on Dental Fear, Anxiety and Phobia. Int J Environ Res Public Health. 2022 Dec 31;20(1):750. doi: 10.3390/ijerph20010750. PMID: 36613071; PMCID: PMC9819845.
27. DieltjensM,BraemMJ,VroegopAVMT,etal.Objectivelymeasured vs self-reported compliance during oral appliance therapy for sleep-disordered breathing. *Chest*. 2013;144(5):1495-1502.
28. Hassona Y., Taimeh D., Marahleh A., Scully C. YouTube as a source of information on mouth (oral) cancer. Oral Dis 2016;22:202-8.
29. Morr S, Shanti N, Carrer A, Kubeck J, Gerling MC. Quality of information concerning cervical disc herniation on the Internet. Spine J 2010;10:350-4.
30. Charnock D, Shepperd S, Needham G, Gann R. DISCERN. An instrument for judging the quality of written consumer health information on treatment choices. JECH 1999;53:105-11.