Cumhuriyet Dental Journal, 29(3): 526-531, 2026
DOI: https://doi.org/10.7126/cumudj.1988337

Cumhuriyet Dental Journal

| cdj.cumhuriyet.edu.tr | Founded: 1998 Available online, ISSN: 1302-5805 Publisher: Sivas Cumhuriyet Üniversitesi

Content and Usefulness of YouTube Videos on Oil Pulling: A Cross-Sectional Study

Dilara Haroğlu[1,a,*], Kübra Taka[2,b], Meryem Toraman[3,c], İlkay Peker[3,d], Sema Yazıcı Akbıyık[4,e]

[1]*Department of Oral and Maxillofacial Radiology, Faculty of Dentistry, Lokman Hekim University, Health Practice and Research Center, Ankara, Türkiye.*
[2]*Department of Oral and Maxillofacial Radiology, Şanlıurfa Oral and Dental Health Hospital, Şanlıurfa, Türkiye.*
[3]*Department of Oral and Maxillofacial Radiology, Faculty of Dentistry, Gazi University, Ankara, Türkiye.*
[4]*Department of Restorative Dentistry, Faculty of Dentistry, Lokman Hekim University, Ankara, Türkiye.*
**Corresponding author*

Research Article

History

Received: 06/07/2026
Accepted: 27/08/2026

ABSTRACT

Objectives: The increasing use of social media as a source of health information has raised concerns regarding the scientific accuracy of online educational content. This study aimed to evaluate the content and usefulness of YouTube™ videos on oil pulling available in Turkish or English and to compare their educational value according to upload source.
Materials and Methods: In this cross-sectional study, a YouTube™ search using the keyword "oil pulling" was performed on May 21, 2021. The search yielded 305 potentially relevant videos, all of which were screened for eligibility, and 178 eligible videos were included in the analysis. Video duration, upload year, numbers of views, likes, dislikes, and upload sources were recorded. Content was evaluated using a predefined 10-item usefulness scoring system, and videos were classified as not useful, slightly useful, useful, or highly useful. Statistical analyses included descriptive statistics, chi-square test, Spearman's correlation analysis, and Cohen's kappa coefficient.
Results: Among the 178 analyzed videos, 60.7% were classified as useful and 21.9% as highly useful. Verbal explanation of the procedure (94.9%) and information regarding oral health effects (92.1%) were the most frequently presented content items, whereas references to scientific evidence were identified in only 17.4% of videos. Videos uploaded by healthcare professionals demonstrated significantly higher educational usefulness than those uploaded by individual users or websites. No significant correlations were found between usefulness scores and video popularity indicators, including views, likes, dislikes, or upload year ($p > 0.05$). Interobserver agreement was almost perfect (Cohen's $\kappa = 0.935$).
Conclusions: Although most YouTube™ videos on oil pulling provided useful educational information, evidence-based content remained limited. Videos uploaded by healthcare professionals demonstrated superior educational value, while viewer popularity did not reflect scientific quality. Greater involvement of oral healthcare professionals and academic institutions in producing evidence-based digital educational content may help improve oral health literacy and reduce misinformation.

Keywords: Health literacy, oil pulling, oral health education, preventive dentistry, Youtube

Oil Pulling ile İlgili Youtube Videolarının İçerik ve Yararlılık Açısından Değerlendirilmesi: Kesitsel Bir Çalışma

Araştırma Makalesi

Süreç

Geliş: 06/07/2026
Kabul: 27/08/2026

ÖZ

Amaç: Sosyal medyanın sağlık bilgisi ediniminde giderek daha yaygın kullanılması, çevrim içi eğitim içeriklerinin bilimsel doğruluğuna ilişkin kaygıları artırmıştır. Bu çalışmanın amacı, oil pulling ile ilgili Türkçe ve İngilizce YouTube™ videolarının içerik ve yararlılık düzeylerini değerlendirmek ve videoların eğitsel değerini yükleyici kaynağına göre karşılaştırmaktır.
Gereç ve Yöntem: Bu kesitsel çalışmada, 21 Mayıs 2021 tarihinde YouTube™ platformunda "oil pulling" anahtar kelimesi kullanılarak arama yapılmıştır. Varsayılan arama ayarları ile ulaşılan ilk 305 video taranmış, uygunluk kriterlerini karşılayan 178 video çalışmaya dahil edilmiştir. Videoların yüklenme yılı, süresi, görüntülenme, beğeni ve beğenmeme sayıları ile yükleyici kaynakları kaydedilmiştir. İçerikler önceden belirlenmiş 10 maddelik yararlılık değerlendirme sistemi kullanılarak analiz edilmiş ve videolar yararsız, az yararlı, yararlı ve çok yararlı olarak sınıflandırılmıştır. İstatistiksel analizlerde tanımlayıcı istatistikler, Spearman korelasyon analizi, ki-kare testi ve Cohen's kappa katsayısı kullanılmıştır.
Bulgular: İncelenen 178 videonun %60,7'si yararlı, %21,9'u ise çok yararlı olarak sınıflandırılmıştır. İşlemin sözlü olarak açıklanması (%94,9) ve ağız sağlığına ilişkin bilgilerin sunulması (%92,1) en sık değerlendirilen içerik başlıkları olurken, bilimsel kanıtlara yer veren video oranı yalnızca %17,4 olarak belirlenmiştir. Sağlık profesyonelleri tarafından yüklenen videoların yararlılık düzeyleri, bireysel kullanıcılar ve internet siteleri tarafından yüklenen videolardan daha yüksek bulunmuştur. Yararlılık puanı ile görüntülenme sayısı, beğeni sayısı, beğenmeme sayısı ve yüklenme yılı arasında istatistiksel olarak anlamlı bir ilişki saptanmamıştır ($p > 0,05$). Gözlemciler arası uyum düzeyi ise oldukça yüksek bulunmuştur (Cohen's kappa $\kappa = 0,935$).
Sonuç: YouTube™ platformunda oil pulling ile ilgili çok sayıda eğitsel içerik bulunmasına rağmen, bu videoların bilimsel dayanakları sınırlıdır. Sağlık profesyonelleri tarafından hazırlanan videolar daha yüksek eğitsel değere sahipken, video popülerliği bilimsel kaliteyi yansıtmamaktadır. Kanıta dayalı dijital eğitim içeriklerinin ağız ve diş sağlığı profesyonelleri ile akademik kurumlar tarafından daha fazla üretilmesi, toplumun ağız sağlığı okuryazarlığının geliştirilmesine ve yanlış bilgilerin azaltılmasına katkı sağlayabilir.

Anahtar Kelimeler: Sağlık okuryazarlığı, oil pulling, ağız sağlığı eğitimi, koruyucu diş hekimliği, YouTube

Copyright

This work is licensed under Creative Commons Attribution 4.0 International License

[a] *dilaraharoglu@yahoo.com* *0000-0002-4768-7837*
[b] *dt.kubrataka@gmail.com* *0000-0002-0328-7516*
[c] *mtalkurt@gmail.com* *0000-0003-0908-8304*
[d] *drilkaypeker@gmail.com* *0000-0002-2888-2979*
[e] *sema.akbiyik@lokmanhekim.com* *0000-0002-2134-7746*

How to Cite: Haroğlu D, Taka K, Toraman M, Peker İ, Yazıcı Akbıyık S. (2026) Content and Usefulness of YouTube Videos on Oil Pulling: A Cross-Sectional Study. Cumhuriyet Dental Journal, 29(3): 526-531.

Introduction

The way people obtain health-related information has changed considerably over the past two decades. Instead of relying solely on healthcare professionals or printed educational resources, many individuals now seek medical and dental information through digital media before making health-related decisions. Among these resources, video-sharing platforms have become particularly attractive because they combine visual demonstration with verbal explanation in an easily accessible format. As one of the most frequently visited video-sharing platforms worldwide, YouTube hosts a vast amount of health-related content produced by healthcare professionals, commercial organizations, and individual users.[1,2] However, because this content is uploaded without a standardized scientific review process, the accuracy and educational value of the available information may vary substantially. Therefore, assessing the quality of health-related videos has become increasingly relevant in contemporary healthcare research.[3]

Oil pulling refers to an oral cleansing technique that involves swishing a small amount of edible oil throughout the oral cavity for several minutes before expectoration. Although the practice has its roots in traditional Ayurvedic medicine[4], it has recently gained attention in dentistry because of its possible contribution to oral health maintenance.[5] Clinical investigations by Asokan et al.[6] demonstrated a reduction in salivary Streptococcus mutans counts following regular oil pulling, while Sood et al.[7] reported improvements in oral malodor comparable to those achieved with chlorhexidine mouthwash. In addition, previous studies have suggested favorable effects on plaque accumulation and gingival health.[5,8] Despite these encouraging findings, the available evidence remains limited and heterogeneous, and current data do not support replacing conventional oral hygiene practices with oil pulling.[8] Therefore, individuals seeking information about this practice should have access to accurate, balanced, and evidence-based educational resources.

For individuals interested in trying oil pulling, obtaining practical information is often the first step before adopting the practice. Questions regarding the recommended type of oil, application technique, duration, frequency, and expected benefits are frequently addressed through online videos rather than scientific publications. Because audiovisual content is easy to access and understand, YouTube has become one of the preferred platforms for obtaining information on oral health practices.[1] However, the educational quality of these videos depends largely on the knowledge and intentions of the content creators, resulting in substantial differences in the accuracy and completeness of the information presented. Previous studies evaluating YouTube videos on dental topics have consistently shown that professionally produced videos generally provide higher-quality information than content uploaded by non-professional users.[1-3] Nevertheless, evidence regarding the quality and usefulness of YouTube videos specifically focusing on oil pulling remains scarce, particularly for videos available in both Turkish and English.

Although interest in oil pulling has increased considerably in recent years, the quality of online information available to the public has received relatively little scientific attention.[8] A recent study by Yaung et al.[3] evaluated YouTube Shorts related to oil pulling and highlighted important concerns regarding the presentation of evidence-based information in short-form video content. Although public interest in oil pulling has increased considerably in recent years, comprehensive evaluations of the educational content and usefulness of conventional YouTube™ videos, particularly those available in both Turkish and English, remain limited. This study aimed to evaluate the content and usefulness of YouTube™ videos on oil pulling available in Turkish or English and to compare their educational value according to upload source.

Materials and Methods

This observational study investigated the content and usefulness of YouTube videos addressing oil pulling. Publicly accessible videos available on the YouTube platform were identified and evaluated on May 21, 2021. As the study was based solely on publicly available online material and did not involve human participants, patient information, or identifiable personal data, neither ethics committee approval nor informed consent was required.

A systematic search of YouTube was conducted on May 21, 2021, using the keyword “oil pulling”. A newly created YouTube account was used to minimize the influence of previous viewing history on search results. The search yielded 305 potentially relevant videos, all of which were screened according to the predefined eligibility criteria. Videos unrelated to oil pulling, duplicate recordings, promotional content, videos without audiovisual content, and videos presented in languages other than Turkish or English were excluded. Following the screening process, 127 videos were excluded and 178 eligible videos were included in the final analysis. Video language was assessed during eligibility screening to exclude videos presented in languages other than Turkish or English; however, language was not retained as a separate analytical variable. All video characteristics and engagement metrics were recorded during the same evaluation period to ensure consistency of data collection.

For each eligible video, a standardized data collection form was completed to record descriptive characteristics and engagement metrics. The collected variables included the upload date, video duration, number of views, number of likes, number of dislikes, and upload source. Videos were subsequently categorized according to the source of upload as healthcare professionals, websites, or individual users. Healthcare professionals included identifiable dentists, physicians, other healthcare practitioners, and professional healthcare organizations. Individual users comprised personal accounts without an identifiable professional healthcare affiliation. Websites comprised commercial, media, informational, or organization-based channels that could not be classified as healthcare professionals. To minimize potential variations in publicly available

engagement data, all information was recorded during the same evaluation period.

Video content was evaluated using a structured assessment form adapted from the methodology described by Bağcı et al.[2] The assessment included ten predefined content criteria reflecting the completeness and usefulness of the information presented. These criteria evaluated whether the videos provided an explanation of oil pulling, verbal instructions regarding the procedure, practical demonstration, reference to scientific evidence, explanation of the proposed mechanism of action, information on the type of oil used, recommendation by a healthcare professional, use of supporting visual materials, information related to oral health, and information related to systemic health. Each criterion was scored dichotomously as present (1) or absent (0), yielding a total usefulness score ranging from 0 to 10. According to the total score, videos were categorized as not useful (0–2), slightly useful (3–4), useful (5–7), or highly useful (8–10). Higher scores indicated that a video included a greater number of the predefined educational content components. Accordingly, the usefulness classification represented the completeness of the information presented rather than independently verifying the scientific accuracy of every statement or the clinical effectiveness of oil pulling.

Interobserver agreement was assessed using Cohen's kappa coefficient based on the independent evaluation of 99 randomly selected videos by two investigators.

Statistical analyses were performed using IBM SPSS Statistics version 22.0 (IBM Corp., Armonk, NY, USA). Categorical variables were presented as frequencies and percentages, whereas continuous variables were summarized using descriptive statistics. The distribution of continuous variables was assessed using the Shapiro–Wilk test. Associations between categorical variables were evaluated using the chi-square test. Correlations between video characteristics and usefulness scores were examined using Spearman's correlation analysis. Interobserver agreement was assessed using Cohen's kappa coefficient. Statistical significance was set at $p < 0.05$.

Table 1. Selection process of YouTube™ videos included in the study

Selection process	n	%
Videos initially identified	305	100.0
Videos excluded	127	41.6
Videos included in the final analysis	178	58.4

Results

The predefined search strategy yielded 305 potentially relevant YouTube™ videos. Following eligibility screening, 127 videos (41.6%) were excluded because they did not meet the inclusion criteria, and the remaining 178 videos (58.4%) were included in the final analysis. The video selection process is presented in Table 1.

The included videos were uploaded between 2007 and 2021, with a mean upload year of 2017.31 ± 2.61. The mean video duration was 6 min 21 s (SD: 4 min 43 s). The mean numbers of views, likes, and dislikes per video were 179,430.12 ± 501,318.30, 2,534.96 ± 9,493.40, and 151.70 ± 493.64, respectively. The mean total usefulness score was 6.13 ± 1.85. Nearly half of the evaluated videos (48.3%) were uploaded by individual users, followed by websites (30.3%) and healthcare professionals (21.3%). The general characteristics of the included videos are summarized in Table 2.

Content analysis revealed substantial differences in the frequency of the evaluated criteria. Verbal description of the procedure (94.9%) and oral health-related information (92.1%) were the most frequently identified content criteria. In contrast, references to scientific evidence (17.4%) and recommendations by healthcare professionals (24.7%) were observed considerably less often. The frequencies of all content evaluation criteria are presented in Table 3.

Table 2. General characteristics of the included YouTube™ videos (n = 178)

Characteristic	Value
Upload year	2017.31 ± 2.61
Video duration	6 min 21 s ± 4 min 43 s
Views	179,430.12 ± 501,318.30
Likes	2,534.96 ± 9,493.40
Dislikes	151.70 ± 493.64
Total usefulness score	6.13 ± 1.85
Healthcare professionals	38 (21.3%)
Individual users	86 (48.3%)
Websites	54 (30.3%)

Overall usefulness assessment demonstrated that the majority of the evaluated videos (60.7%) were classified as useful. Highly useful videos represented approximately one-fifth of the sample (21.9%), whereas only a small proportion of videos were categorized as slightly useful (13.5%) or not useful (3.9%). The distribution of videos according to usefulness category is shown in Table 4.

The distribution of usefulness categories differed significantly according to upload source (Pearson $\chi^2 = 19.23$, $df = 6$, $p = 0.004$). Videos uploaded by healthcare professionals were more frequently classified as highly useful

(44.7%) than those uploaded by individual users (20.9%) or websites (7.4%). Conversely, videos uploaded by websites were predominantly classified as useful (72.2%). The association between upload source and usefulness category is presented in Table 5.

Spearman's correlation analysis revealed no statistically significant correlations between the total usefulness score and the number of views (ρ = 0.059, p = 0.560), likes (ρ = 0.103, p = 0.309), dislikes (ρ = −0.019, p = 0.848), or upload year (ρ = 0.102, p = 0.315). The results of the correlation analysis are summarized in Table 6.

Independent assessment of the selected videos demonstrated excellent consistency between the two observers. Agreement for the overall usefulness score was almost perfect (Cohen's κ = 0.935; 95% CI: 0.879–0.990), supporting the reproducibility of the evaluation protocol. Interobserver agreement results are presented in Table 7.

Table 3. Frequency of content evaluation criteria in YouTube™ videos (n = 178)

Content evaluation criterion	n	%
Explanation of oil pulling	125	70.2
Verbal description of the procedure	169	94.9
Practical demonstration	121	68.0
Reference to scientific evidence	31	17.4
Explanation of mechanism of action	87	48.9
Use of supporting visual materials	98	55.1
Information on the type of oil used	124	69.7
Recommendation by a healthcare professional	44	24.7
Oral health-related information	164	92.1
Systemic health-related information	126	70.8

Table 4. Distribution of YouTube™ videos according to usefulness category (n = 178)

Usefulness category	n	%
Not useful (0–2)	7	3.9
Slightly useful (3–4)	24	13.5
Useful (5–7)	108	60.7
Highly useful (8–10)	39	21.9

Table 5. Association between upload source and usefulness category of YouTube™ videos (n = 178)

Upload source	Not useful n (%)	Slightly useful n (%)	Useful n (%)	Highly useful n (%)
Healthcare professionals	2 (5.3)	4 (10.5)	15 (39.5)	17 (44.7)
Individual users	3 (3.5)	11 (12.8)	54 (62.8)	18 (20.9)
Websites	2 (3.7)	9 (16.7)	39 (72.2)	4 (7.4)

Table 6. Correlation between video characteristics and total usefulness score

Variable	Spearman's ρ	p value
Number of views	0.059	0.560
Number of likes	0.103	0.309
Number of dislikes	-0.019	0.848
Upload year	0.102	0.315

Table 7. Interobserver agreement for the evaluation of YouTube™ videos

Variable	Cohen's κ	95% CI	Interpretation
Total usefulness score	0.935	0.879–0.990	Almost perfect agreement

Discussion

The present study demonstrated that YouTube™ provides a substantial amount of practical information regarding oil pulling; however, the available information frequently lacks sufficient scientific support. Most of the evaluated videos explained how the procedure should be performed and discussed its potential effects on oral health. In contrast, only a limited proportion of videos referred to scientific evidence or encouraged viewers to seek advice from healthcare professionals. These findings suggest that YouTube may serve as an accessible introductory resource, although its educational value should be interpreted with caution when evidence-based decision making is required.[1,3]

The limited use of scientific evidence observed in the present study reflects a broader challenge associated with health-related information shared through online video platforms. Although YouTube has become an increasingly important source of patient education, the scientific quality of its content remains highly variable depending on both the topic and the source of upload. Desai et al. [1] reported that the popularity of medical videos does not necessarily correspond to their educational value, indicating that widely viewed content may still provide incomplete or potentially misleading information.

Comparable concerns have also been identified in dentistry. For example, Bağcı et al.[2] reported substantial differences in the quality of Turkish-language YouTube videos on oral cancer, while Yaung et al.[3] demonstrated that evidence-based information was similarly underrepresented in YouTube Shorts related to oil pulling. Taken together, these findings highlight the need for greater availability of evidence-based educational content developed by oral healthcare professionals and academic institutions.[1,9,10] Although Yaung et al. evaluated short-form video content, our findings suggest that limitations in evidence-based information are not restricted to YouTube Shorts but also extend to conventional YouTube™ videos, indicating that video format alone does not guarantee higher educational quality.[3]

Educational quality appeared to vary according to the source of video upload. Videos produced by healthcare professionals were more frequently categorized as highly useful than those uploaded by individual users or websites. This observation is consistent with the statistically significant association identified between upload source and usefulness category in the present study. Rather than reflecting differences in communication skills alone, this finding may be associated with professional training and greater familiarity with evidence-based dentistry. Comparable observations have also been reported in previous evaluations of dental YouTube content. Both İnce Kuka and Gürsoy and Arı et al. observed that videos prepared by oral healthcare professionals or academic sources generally provided more reliable and educational information than content originating from non-professional or commercial sources.[9,10] In contrast, videos created outside professional settings may place greater emphasis on personal experiences or simplified recommendations, leaving less opportunity to discuss the strength of available evidence, potential limitations, or appropriate indications for oil pulling.[1,2]

Popularity and educational value did not appear to progress in parallel. Videos that attracted larger audiences were not necessarily those providing the most useful information, and viewer engagement showed no meaningful relationship with the overall usefulness scores. This observation highlights an important challenge for online health communication, where visibility may depend more on platform algorithms, presentation style, or public interest than on the scientific quality of the information provided. Comparable findings have been reported in studies evaluating YouTube content across different health topics, emphasizing that popularity should not be interpreted as an indicator of educational reliability.[1,11]

The growing influence of social media on health-related decision making highlights an emerging responsibility for oral healthcare professionals. Information obtained from YouTube™ may influence patients' expectations before they seek professional advice, particularly for complementary practices such as oil pulling. When scientifically supported information is difficult to identify, misconceptions regarding potential benefits, limitations, and appropriate indications may become increasingly common.

The increasing public interest in oil pulling may also explain the growing volume of related content available on YouTube.™ Unlike conventional oral hygiene practices that are routinely recommended by dental professionals, oil pulling is frequently promoted through social media as a simple, inexpensive, and natural adjunctive practice. Such characteristics may enhance its appeal to the general public, particularly when information is presented in an accessible and persuasive manner. However, the popularity of a complementary practice should not be interpreted as confirmation of its clinical effectiveness. Current evidence suggests that oil pulling may provide certain oral health benefits when used as an adjunct to routine oral hygiene measures; nevertheless, the available literature remains insufficient to support its use as a substitute for established preventive strategies.[5,8]

Several aspects of the study design contribute to the credibility of the present findings. By combining predefined content evaluation criteria with an overall usefulness assessment, the analysis extended beyond simple popularity indicators and provided a broader perspective on the educational value of oil pulling–related YouTube™ videos. Furthermore, the inclusion of both Turkish- and English-language videos increased the scope of the evaluation, while the high level of agreement between two independent observers supports the consistency and reproducibility of the assessment process.

Interpretation of the present findings should take several methodological considerations into account. First, the YouTube™ search and data collection were conducted in May 2021, and the approximately five-year interval between data collection and the present publication should be considered when interpreting the findings. Given the dynamic nature of YouTube™, video availability, engagement metrics, content characteristics, and search rankings may have changed substantially over time. Therefore, the present findings should be interpreted as a cross-sectional snapshot of oil pulling–related YouTube™ content available at the time of data collection and may not fully reflect the current digital information environment. Second, the analysis was limited to Turkish- and English-language videos and therefore may not fully reflect the characteristics of content published in other languages. Additionally, although both Turkish- and English-language videos were included to broaden the scope of the analysis, videos were not comparatively analyzed according to language. Therefore, potential language-related differences in content characteristics, usefulness, and upload sources could not be determined. Future studies incorporating language-stratified analyses may provide further insight into potential differences in the quality of online information across linguistic contexts. Finally, although predefined evaluation criteria and excellent interobserver agreement strengthened the consistency of the assessments, the usefulness

assessment still relied partly on expert judgment and cannot be considered entirely free of subjectivity.

Conclusions

Reliable digital health information has become an essential component of contemporary patient education. The present findings indicate that, although YouTube™ provides extensive information on oil pulling, the educational quality of this content remains dependent on its source rather than its popularity. Expanding the availability of evidence-based educational videos developed by oral healthcare professionals and academic institutions may help improve oral health literacy and enable individuals to make more informed decisions regarding complementary oral health practices.

Acknowledgements

Not applicable.

Conflicts of Interest Statements

The authors declare that they have no conflict of interest.

References

1. Desai T, Shariff A, Dhingra V, Minhas D, Eure M, Kats M. Is content really king? An objective analysis of the public's response to medical videos on YouTube. PLOS one. 2013;8(12):e82469.
2. Bağcı N, Taka K, Peker İ. Ağız kanseri konusundaki YouTube videolarının değerlendirilmesi. 7tepe Klinik Dergisi. 2021;17(2):102-107.
3. Yaung J, Park SH, Al Khalifah S. A Cross-Sectional Analysis of Oil Pulling on YouTube Shorts. Dentistry Journal. 2025;13(7):330.
4. Lad V. An introduction to Ayurveda. Alternative therapies in health and medicine. 1995;1(3):57-63.
5. Asokan S. Oil pulling therapy. Indian Journal of Dental Research. 2008;19(2):169.
6. Asokan S, Rathan J, Muthu M, Rathna PV, Emmadi P. Effect of oil pulling on Streptococcus mutans count in plaque and saliva using Dentocult SM Strip mutans test: a randomized, controlled, triple-blind study. Journal of Indian Society of Pedodontics and Preventive Dentistry. 2008;26(1):12-17.
7. Sood P, Narang R, Makkar DK. Comparative efficacy of oil pulling and chlorhexidine on oral malodor: A randomized controlled trial. Journal of clinical and diagnostic research: JCDR. 2014;8(11):ZC18.
8. Naseem M, Khiyani MF, Nauman H, Zafar MS, Shah AH, Khalil HS. Oil pulling and importance of traditional medicine in oral health maintenance. International journal of health sciences. 2017;11(4):65-70.
9. Kuka GI, Gursoy H. Content quality and reliablity of YouTube™ videos as a source of information about good oral hygiene practices in adults. PeerJ. 2024;12:e18183.
10. Arı I, Yılmaz A, Hürmüzlü S, Samunahmetoğlu E. Assessment of the Content and Quality of Youtube Videos Related Subperiosteal Implants: A Cross-Sectional Study. Cumhuriyet Dental Journal. 2025;28(2):167-173.
11. Hakami Z, Maganur PC, Khanagar SB, Naik S, Alhakami K, Bawazeer OA*, et al.* Thumb-sucking habits and oral health: an analysis of YouTube content. Children. 2022;9(2):225.