

YouTube as a Source of Information on Pulmonary Rehabilitation for COPD Patients

KOAH Hastalarında Pulmoner Rehabilitasyon Hakkında Bilgi Kaynağı Olarak Youtube

Hatice ŞAHİN¹

 0000-0002-3317-3640

Bilgehan KOLUTEK AY²

 0000-0003-2941-9035

¹Department of Pulmonary Diseases,
Kahramanmaraş Sütçü İmam
University Faculty of Medicine,
Kahramanmaraş, Türkiye

²Department of Physical Medicine and
Rehabilitation, Kahramanmaraş Sütçü
İmam University Faculty of Medicine,
Kahramanmaraş, Türkiye

ABSTRACT

Aim: YouTube is increasingly being used as a platform for accessing health-related information, including diseases and treatments. This study aimed to evaluate the reliability and quality of YouTube video content on pulmonary rehabilitation in chronic obstructive pulmonary disease (COPD) patients and determine whether YouTube is a reliable source of information.

Material and Methods: A total of 60 videos were included in the study by searching on YouTube with the keywords "pulmonary rehabilitation", "COPD exercises", and "breathing exercises". The quality, reliability, and accuracy of the videos were assessed using the Global Quality Scale (GQS), the modified DISCERN (mDISCERN) score, and the Journal of the American Medical Association (JAMA) scoring system, respectively. Data such as video duration, view rate, uploader, and narrator were analyzed and used to compare quality and reliability.

Results: None of the videos had a full JAMA score. A statistically significant relationship was found between view rate and low-to-moderate quality videos ($p<0.001$). A significant difference was observed in JAMA ($p=0.003$) and mDISCERN ($p=0.005$) scores, according to the GQS quality assessment. Additionally, GQS showed a positive correlation with the number of views, likes, and view rate (all $p<0.001$).

Conclusion: The quality, reliability, and accuracy of Turkish-language videos on COPD and pulmonary rehabilitation were found to be low. Considering that rehabilitation is an individualized process, exercises performed without a physician's recommendation or prescription may have limited benefits. Where access to healthcare professionals is limited, high-view-count videos may still offer relatively better information compared to others.

Keywords: Chronic obstructive pulmonary disease; internet; rehabilitation; YouTube.

ÖZ

Amaç: YouTube, hastalıklar ve tedaviler de dahil olmak üzere sağlıkla ilgili bilgilere erişim için giderek daha fazla kullanılan bir platform haline gelmektedir. Bu çalışmanın amacı kronik obstrüktif akciğer hastalığı (KOAH) hastalarında pulmoner rehabilitasyona ilişkin YouTube video içeriklerinin güvenilirliğini ve kalitesini değerlendirmek ve YouTube'un güvenilir bir bilgi kaynağı olup olmadığını belirlemektir.

Gereç ve Yöntemler: Çalışmaya YouTube'da "pulmoner rehabilitasyon", "KOAH egzersizleri" ve "nefes egzersizleri" anahtar sözcükleriyle arama yapılarak toplam 60 video dahil edildi. Videoların kalitesi, güvenilirliği ve doğruluğu sırasıyla küresel kalite ölçeği (global quality scale, GQS), modifiye DISCERN (mDISCERN) skoru ve Journal of the American Medical Association (JAMA) skorum sistemi kullanılarak değerlendirildi. Video süresi, görüntülenme oranı, yükleyen ve anlatan gibi veriler kalite ve güvenilirliği karşılaştırmak için analiz edildi.

Bulgular: JAMA puanlaması tam olan hiç video yoktu. Görüntülenme oranı ile düşük ve orta kalite videolar arasında istatistiksel olarak anlamlı bir ilişki bulundu ($p<0,001$). GQS kalite değerlendirmesine göre JAMA ($p=0,003$) ve mDISCERN ($p=0,005$) puanlarında anlamlı bir farklılık gözlemlendi. Ek olarak, GQS, görüntüleme sayısı, beğeniler ve görüntüleme oranı ile pozitif bir korelasyon gösterdi (tümü $p<0,001$).

Sonuç: KOAH ve pulmoner rehabilitasyon ile ilgili Türkçe videoların kalitesi, güvenilirliği ve doğruluğunun düşük olduğu bulundu. Rehabilitasyonun bireysel bir süreç olduğu düşünüldüğünde, hekim önerisi veya reçetesi olmadan yapılacak egzersizlerin faydası sınırlı olabilir. Sağlık profesyonellerine erişiminin kısıtlı olduğu durumlarda, yüksek izlenme sayılarına sahip videolar, diğer videolara göre yine de nispeten daha iyi bilgi sağlayabilir.

Anahtar kelimeler: Kronik obstrüktif akciğer hastalığı; internet; rehabilitasyon; YouTube.

Corresponding Author

Sorumlu Yazar

Hatice ŞAHİN

drh.sahin@hotmail.com

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INTRODUCTION

Chronic obstructive pulmonary disease (COPD) is a chronic inflammatory lung disease characterized by cough and shortness of breath (1). COPD is a significant global health problem. As the disease progresses, quality of life significantly decreases, and limitations are experienced in daily activities. In this context, pulmonary rehabilitation, which holds a significant place in COPD management, attracts attention with its potential to improve patients' quality of life and slow disease progression (2,3). Pulmonary rehabilitation is a comprehensive, evidence-based intervention program composed of multiple components, including exercise training, patient education, nutritional counseling, psychosocial support, and breathing techniques. Exercise training aims to enhance physical endurance, while patient education helps individuals better understand their disease and manage symptoms effectively. Nutritional counseling addresses conditions such as malnutrition or obesity, which may impact respiratory function. Psychosocial support is essential for managing common psychological issues like anxiety and depression. Additionally, teaching breathing techniques such as pursed-lip and diaphragmatic breathing can improve dyspnea control and contribute to a better quality of life. It is an effective non-pharmacological treatment method that includes pre-rehabilitation assessment, efficient oxygen use, airway clearance, and exercises. Studies have shown that it reduces the number of exacerbations and increases survival rates (4).

With the widespread use of the internet in recent years, how people obtain health information has changed. YouTube, a popular video-based search platform founded in February 2005, has become a go-to resource for both healthcare professionals and patients seeking information. This has led to YouTube becoming a popular platform for those who want to obtain health information and provide information for various purposes (5,6). One of the advantages of using the YouTube platform in the healthcare field is its ease of access. However, a disadvantage is that the videos are not regulated, making it difficult to determine the reliability and quality of the content.

COPD patients often turn to YouTube to learn about their disease and explore treatment options (7). However, there is limited information available on the adequacy of the content of these videos (8). This study aimed to academically evaluate pulmonary rehabilitation-related videos on YouTube for COPD, to determine the extent to which the content of these videos is accurate and reliable. Additionally, the potential of these videos to raise awareness about their impact on patients and the importance of pulmonary rehabilitation will be evaluated. The results of this study will also highlight the standards that healthcare professionals should adhere to when providing information on the YouTube platform.

MATERIAL AND METHODS

Study Design

The planning and conduct of the study were carried out considering the previous studies on this topic. On August 26, 2024, a search was conducted for videos in the Turkish language on YouTube (www.youtube.com) using the keywords "pulmonary rehabilitation", "COPD exercises", and "respiratory exercises", and the videos were ranked

according to their relevance. A playlist of 148 videos resulting from the search was created and evaluated. Videos were excluded from the study based on following criteria, which resulted in total of 88 exclusions: duplicate or repeated videos (n=8), videos shorter than 1 minute (n=18), advertisements and sponsored content (n=42), videos not related to COPD and pulmonary rehabilitation (n=31), and silent videos (n=2). After applying these criteria, 60 videos were included in the final analysis. The included videos were scored by two independent observers using the Global Quality Scale (GQS), modified DISCERN (mDISCERN), and Journal of the American Medical Association (JAMA) scores. The scores that the researchers did not agree on were evaluated by a third independent observer to reach the final score. General information, such as the number of views, the number of likes, and the time elapsed from the upload date to the viewing date of the videos, were recorded. The information contained in the videos was evaluated according to the components of pulmonary rehabilitation. Using these data, comparisons were made regarding the quality, accuracy, and reliability of the videos.

Video Evaluation

Global Quality Scale (GQS): The GQS is a 5-point rating system. A score of 1 indicates that the video is of low quality, with poor information flow, missing most information, and is unhelpful for patients. A score of 5 indicates that the video is of high quality and contains very useful information for patients (9). Videos with a GQS score of 1-2 are considered low quality, 3 is considered medium quality, and 4 or above is considered high quality (10).

Modified DISCERN: The reliability and quality of the videos were assessed using the mDISCERN tool (11), which consists of five questions with yes/no answers. Yes is scored as 1 and no as 0 points. For a video to be considered reliable, the score must be 3 or above. A score below 3 is considered low reliability. Each question was numbered and assessed as follows: i) Is the video clear, concise, and understandable?, ii) Does it refer to valid sources (valid studies, chest disease specialists, physical therapists, etc.)?, iii) Is the information provided balanced and unbiased?, iv) Are additional information sources listed for patient reference?, v) Does the video address controversial or uncertain areas?

JAMA Criteria: The JAMA criteria assess the accuracy of online information based on four criteria: authorship, citation, disclosure, and currency. One point is given for each criterion, with a maximum of 4 points. Videos with a JAMA score of 1-2 are considered inadequate, 3 is considered partially adequate, and 4 points is considered adequate accuracy (12).

Video Parameters: Video upload time, number of views, number of likes, number of comments, video duration, and view rate were recorded. The view rate was calculated by dividing the number of views by the number of days between the upload time and the day viewed.

Video Sources: Video sources were categorized as follows: general health channels, associations, private units, TV channels, individual channels, and others.

Video Content: Video content was evaluated according to the pulmonary rehabilitation components it contained. The video contents were evaluated based on the following

components of pulmonary rehabilitation: pre-rehabilitation assessment (including patient education and smoking cessation), nutritional assessment and support, psychosocial support, long-term oxygen therapy, mechanical ventilation, occupational therapy, bronchial hygiene techniques, controlled breathing techniques, and exercise training.

Statistical Analysis

Data analyses were performed using IBM SPSS version 27.0 (IBM Corp., Armonk, NY, USA). The distribution of the data was determined by visual (histograms and probability plots) and analytical (Kolmogorov-Smirnov test) methods. Categorical data were presented as numbers and percentages, while continuous data were presented as median, 25th-75th percentile, and minimum-maximum. The Mann-Whitney U test was used for pairwise comparisons, and the Kruskal-Wallis test (with Dunn-Bonferroni post hoc test) was used for multiple comparisons between groups. For comparison of categorical variables, depending on the expected counts, the Pearson chi-square or likelihood ratio test statistic was used. Post hoc comparisons were performed using the Z-test for column proportions with Bonferroni adjustment. Spearman's correlation analysis was used to examine the correlation between variables. $p < 0.05$ was considered statistically significant.

RESULTS

Of the 148 videos scanned, 60 that met the study's inclusion and exclusion criteria were analyzed. No video received a perfect score based on the evaluations. The general characteristics of the videos included in the study were shown in Table 1.

The frequencies of the different component types found in the videos were presented in Table 2.

When video parameters, and mDISCERN and JAMA scores were compared according to the quality classification by GQS, view rate ($p < 0.001$), source ($p = 0.041$), mDISCERN ($p = 0.005$), and JAMA ($p = 0.003$) scores were found significantly different in the medium-quality and high-quality groups compared to the low-quality group. Dunn-Bonferroni post hoc analysis indicated statistically significant differences in view rate between videos of medium-quality ($p = 0.001$) and high-quality ($p = 0.003$) in comparison to the low-quality group. Post hoc column proportion analysis revealed a statistically significant difference in the medium-quality GQS category, where the proportion of content from television channels was significantly lower compared to other sources. Although the proportion of high-quality videos was greater in the mDISCERN ≥ 3 group compared to the < 3 group, post hoc comparison revealed no statistically significant differences in GQS categories between the mDISCERN < 3 and ≥ 3 groups. Similarly, although videos with a JAMA score of 3 appeared to have higher proportions of moderate-quality and high-quality GQS scores compared to those with a score of 2, post hoc comparison of column proportions revealed no statistically significant differences between the groups. However, when video duration, upload time, total component count, and narrator parameters were considered, no significant difference was found between the groups (Table 3).

Comparison based on mDISCERN scores revealed that the view rate was significantly higher in the mDISCERN ≥ 3 group compared to the mDISCERN < 3 group ($p < 0.001$).

In addition, JAMA ($p < 0.001$) and GQS scores ($p = 0.002$) differed significantly between the groups. Although no statistically significant differences were found between JAMA score groups in terms of mDISCERN categories, it is noteworthy that none of the videos with a JAMA score of 1 and 2 had an mDISCERN score above 3. Similarly, the post hoc comparisons indicated that the distribution of

Table 1. General characteristics of the videos

Number of views (n)	951 (164-6316) [2-280,857]
Number of likes (n)	7 (2-85) [0-2,300]
Number of comments (n)	0 (0-4) [0-40]
Upload time (day)	1234 (824-2301) [63-4,034]
View rate (n/day)	0.6 (0.2-6.7) [0.01-182.1]
Video duration (sec)	261 (136-574) [80-3,380]
Source, n (%)	
General health channel	15 (25.0)
Association	7 (11.7)
Special unit	16 (26.7)
TV channel	15 (25.0)
Individual channel	4 (6.7)
Other	3 (5.0)
Narrator, n (%)	
Physiatrist	7 (11.7)
Pulmonologist	24 (40.0)
Physiotherapist	26 (43.3)
Other	3 (5.0)
Number of components, n (%)	
1	32 (53.3)
2	16 (26.7)
3	9 (15.0)
4	3 (5.0)
JAMA, n (%)	
1	0 (0.0)
2	22 (36.7)
3	38 (63.3)
4	0 (0.0)
mDISCERN, n (%)	
1	8 (13.3)
2	37 (61.7)
3	14 (23.3)
4	1 (1.7)
GQS, n (%)	
1	9 (15.0)
2	26 (43.3)
3	21 (35.0)
4	4 (6.7)

JAMA: Journal of the American Medical Association, GQS: global quality scale, numerical data were presented as median (25th-75th percentile) [min-max]

Table 2. Distribution of video content

Component Type	n (%)
Pre-rehabilitation assessment	39 (65.0)
Nutritional support	5 (8.3)
Psychosocial support	4 (6.7)
Long-term oxygen therapy	0 (0.0)
Mechanical ventilation	0 (0.0)
Occupational therapy	4 (6.7)
Bronchial hygiene techniques	17 (28.3)
Controlled breathing techniques	23 (38.3)
Exercise training	11 (18.3)

GQS categories significantly differed according to the mDISCERN scores. Specifically, the low-quality videos were more prevalent in the mDISCERN <3 group, while

high-quality videos were more common in the mDISCERN ≥3 group (p=0.002). No significant differences were found for other compared parameters (Table 4).

Table 3. Comparison of videos according to quality classification by global quality scale

	Low (n=35)	Medium (n=21)	High (n=4)	p
Video duration (sec)	208 (131-790) [80-3,380]	261 (159-462) [114-3,221]	200 (83-335) [82-342]	0.382
Upload time (day)	1650 (362-2,641) [63-4,034]	1230 (886-1670) [753-2,832]	874 (598-2,778) [514-3,404]	0.874
View rate (n/day)	0.4 (0.1-0.8) [0.01-7.4]	6.6 (0.7-14.4) [0.02-182.13]	37.1 (9.4-126.5) [4.4-152.0]	<0.001
Source , n (%)				
General health channel	7 (20.0)	8 (38.1)	0 (0.0)	0.041
Association	4 (11.4)	2 (9.4)	1 (25.0)	
Special unit	7 (20.0)	8 (38.1)	1 (25.0)	
TV channel	14 (40.0)	1 (4.8)	0 (0.0)	
Individual channel	2 (5.7)	1 (4.8)	1 (25.0)	
Other	1 (2.9)	1 (4.8)	1 (25.0)	
Narrator , n (%)				
Physiatrist	4 (11.4)	2 (9.4)	1 (25.0)	0.358
Pulmonologist	16 (45.7)	7 (33.3)	1 (25.0)	
Physiotherapist	13 (37.1)	12 (57.1)	1 (25.0)	
Other	2 (5.7)	0 (0.0)	1 (25.0)	
Number of components , n (%)				
1	21 (60.0)	10 (47.7)	1 (25.0)	0.462
2	8 (22.9)	7 (33.3)	1 (25.0)	
3	5 (14.2)	2 (9.5)	2 (50.0)	
4	1 (2.9)	2 (9.5)	0 (0.0)	
mDISCERN , n (%)				
<3	31 (88.6)	13 (61.9)	1 (25.0)	0.005
≥3	4 (11.4)	8 (38.1)	3 (75.0)	
JAMA , n (%)				
Insufficient	19 (54.3)	3 (14.3)	0 (0.0)	0.003
Partially sufficient	16 (45.7)	18 (85.7)	4 (100)	

JAMA: Journal of the American Medical Association, GQS: global quality scale, numerical data were presented as median (25th-75th percentile) [min-max]

Table 4. Comparison of videos based on mDISCERN criteria

	<3 (n=45)	≥3 (n=15)	p
Video duration (sec)	193 (131-759) [80-3,221]	295 (208-390) [86-3,380]	0.627
Upload time (day)	1601 (845-2,520) [63-4,034]	1014 (816-1,542) [300-2,648]	0.164
View rate (n/day)	0.5 (0.07-2.6) [0.01-19.8]	13.4 (0.9-49.9) [0.1-182.1]	<0.001
Source , n (%)			
General health channel	9 (20.0)	6 (40.0)	0.366
Association	6 (13.4)	1 (6.7)	
Special unit	13 (28.9)	3 (20.0)	
TV channel	13 (28.9)	2 (13.3)	
Individual channel	2 (4.4)	2 (13.3)	
Other	2 (4.4)	1 (6.7)	
Narrator , n (%)			
Physiatrist	4 (8.9)	3 (20.0)	0.461
Pulmonologist	18 (40.0)	6 (40.0)	
Physiotherapist	21 (46.7)	5 (33.3)	
Other	2 (4.4)	1 (6.7)	
Number of components , n (%)			
1	26 (57.8)	6 (40.0)	0.807
2	11 (24.4)	5 (33.3)	
3	6 (13.3)	3 (20.0)	
4	2 (4.4)	1 (6.7)	
GQS , n (%)			
Low	31 (68.9)	4 (26.7)	0.002
Medium	13 (28.9)	8 (53.3)	
High	1 (2.2)	3 (20.0)	
JAMA , n (%)			
Insufficient	22 (48.9)	0 (0.0)	<0.001
Partially sufficient	23 (51.1)	15 (100)	

JAMA: Journal of the American Medical Association, GQS: global quality scale, numerical data were presented as median (25th-75th percentile) [min-max]

Correlation analysis between video parameters and tool used to evaluate reliability and quality of the videos revealed that the number of views, likes, and view rate were significantly correlated with the scores of GQS and mDISCERN (all $p < 0.001$), and JAMA ($p = 0.008$, $p = 0.008$, and $p = 0.015$, respectively). In contrast, source, narrator, and number of components ($p = 0.171$, $p = 0.155$, and $p = 0.182$, respectively) showed no significant correlation with GQS, mDISCERN, and JAMA (Table 5).

DISCUSSION

The present study demonstrated that YouTube videos related to pulmonary rehabilitation for COPD patients vary significantly in terms of reliability, quality, and accuracy, with higher mDISCERN scores observed in videos produced by healthcare professionals and reputable organizations. Search engines and social media platforms have become primary online resources for individuals seeking medical information (13). Chronic disease patients, in particular, rely heavily on these platforms (14). Given this trend, the quality and accuracy of the information disseminated through these channels may have significant effects on patient outcomes. The lack of medical review and content moderation on platforms like YouTube raises concerns about the accuracy of the information presented. This study aimed to evaluate the quality, reliability, and accuracy of Turkish YouTube videos on pulmonary rehabilitation for COPD patients using a comprehensive assessment. By employing multiple keywords in the search strategy, it was sought to identify a broader range of popular videos and information. Studies investigating the reliability, quality, and accuracy of internet resources are not very old, and according to a literature review, the first YouTube study was conducted in 2007 (15). A significant finding in both previous studies and the present study is the positive correlation between mDISCERN, JAMA, and GQS scores (16,17). This indicates that the scoring systems are consistent and that reliable videos may be of high quality, and the accuracy levels are higher in high-quality and reliable videos. The present study found that high-quality medical videos, as assessed by the mDISCERN, JAMA, and GQS scales, received significantly more views than low-quality videos. This indicates that the scoring systems are consistent.

Reliable videos may be of high quality, and the accuracy levels tend to be higher in these videos. Factors such as the video source, mDISCERN, and JAMA scores showed a significant relationship with the number of views, supporting the conclusion that video quality directly affects viewer engagement. These findings align with previous research, which has also shown a positive correlation between video quality and viewership (16,18). Furthermore, the evaluation based on mDISCERN scores revealed that videos with high reliability also exhibited higher scores for quality and accuracy. The correlation analysis in this study corroborates the aforementioned, demonstrating a correlation between the mDISCERN, JAMA, and GQS parameters. While statistically significant, the presentation of videos with high view counts to internet searchers can elevate the view count and instigate a cycle where the same videos are watched more frequently. Videos with very low-quality and unreliable content are ranked lower on the search page, hindering accessibility for users. Given that this distinction can only be made by healthcare professionals, patients' preference for videos with high view counts still provides them with partial access to high-quality and accurate information.

It was determined that the source parameter differed significantly between the medium and high-quality groups and the low-quality group for mDISCERN and JAMA scores. This significant difference was found to be due to videos originating from TV channels. The fact that 13 out of 14 videos from TV channels were in the low-quality group suggests that patients should avoid these videos. Physicians providing information on TV channels should pay attention to providing quality, accurate, and reliable information. It is remarkable that the viewership rate was not significantly influenced by video duration, upload time, total number of components, or explanatory parameters. This finding indicates that patients are primarily concerned with content quality and trustworthiness. Technical details seem to be of secondary importance or reveal a gap in technical knowledge.

Most of the component contents of the videos examined in the present study were about pre-pulmonary rehabilitation assessment in COPD patients (65%). This was followed by bronchial hygiene techniques (39.3%). This suggests that pre-pulmonary rehabilitation assessment and bronchial hygiene are the components that are focused on more in pulmonary rehabilitation, and that the videos lack additional information as components. The absence of videos containing components such as long-term oxygen therapy and mechanical ventilation suggests that the videos are more targeted towards mild and moderate COPD patients and are lacking for severe COPD patients. Unfortunately, in the videos evaluated as observers, no specific guidance on tailoring rehabilitation plans to different COPD stages was found. Given the personalized nature of rehabilitation, this is considered a notable gap in the information provided.

A YouTube study on COPD and pulmonary rehabilitation in the literature found results similar to the present study, showing that most videos in the study had low reliability and were insufficient in content. The same study also emphasized that patients need to be well-educated, and content creation by non-healthcare professionals should be prevented in order for YouTube to be used for

Table 5. Correlation between video parameters

		GQS	mDISCERN	JAMA
Number of views	r_s	0.587	0.472	0.340
	p	<0.001	<0.001	0.008
Number of likes	r_s	0.559	0.436	0.338
	p	<0.001	0.001	0.008
View rate	r_s	0.578	0.532	0.313
	p	<0.001	<0.001	0.015
Video duration	r_s	0.074	0.181	0.284
	p	0.575	0.167	0.028
Number of components	r_s	0.179	0.186	0.175
	p	0.171	0.155	0.182
GQS	r_s		0.580	0.525
	p		<0.001	<0.001
mDISCERN	r_s			0.592
	p			<0.001

JAMA: Journal of the American Medical Association, GQS: global quality scale

informational purposes (19). Findings of the present study appear similar, but one significant difference is that most of the Turkish video content in this study was created by healthcare professionals.

The fact that most of the content in this study was created by healthcare professionals, but was insufficient in terms of evaluations, suggests that there is a need to enrich the content. Similar deficiencies have been expressed in studies in the literature. Previous studies on topics such as testicular cancer, geriatric education programs, and COVID-19 vaccination in rheumatologic diseases have demonstrated a positive correlation between video quality and evaluation scores (16,18,19). Although these studies are not directly related to pulmonary rehabilitation, findings of this study similarly suggest that these scoring systems (mDISCERN, JAMA, and GQS) are compatible and consistent with each other. It is believed that this situation can be mitigated by content producers and platform owners using scales such as mDISCERN, JAMA, and GQS to evaluate their content and achieve high scores on these scales, in order to produce and publish high-quality medical content.

A key limitation of this study is the lack of a dedicated analysis addressing misinformation or misleading content. Although the scoring tools used (GQS, mDISCERN, JAMA) indirectly assess quality, they do not explicitly capture false or non-evidence-based claims. Additionally, YouTube's algorithm favors engagement over accuracy, potentially introducing selection bias by promoting popular but less reliable content. The dynamic nature of the platform and the restriction to Turkish-language videos may also limit generalizability. Furthermore, the absence of qualitative analysis prevents insight into how patients

interpret or act on video content. Notably, subgroup distributions were not considered during sample size estimation, and the lack of statistically significant post hoc differences may be due to small or highly unbalanced groups, reducing the power to detect true effects. Future research should adopt multilingual, longitudinal designs and incorporate tools specifically targeting misinformation, as well as patient-centered assessments, to better understand the real-world impact of online health information.

CONCLUSION

While YouTube serves as a valuable source of information for patients, there are significant concerns regarding the quality and reliability of its content. Patients should approach information found on YouTube with a critical eye and avoid implementing any treatment without consulting a healthcare professional. Healthcare providers, in turn, should effectively utilize social media platforms to guide patients towards accurate information. To ensure that patients have access to reliable and high-quality information, it is recommended that when disseminating information online, platforms consider using scoring systems such as mDISCERN, GQS, and JAMA. Platforms should require content creators to provide these assessments and refrain from publishing videos with incomplete evaluations. Given the current relationship between viewership and evaluation scales, it is reasonable to assume that when searching for information on pulmonary rehabilitation, COPD patients who prioritize videos with high view counts are more likely to access higher-quality content compared to videos with fewer views.

Ethics Committee Approval: Since our study was not an experimental study including human or animal subject, ethics committee approval was not required.

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