THE TURKISH JOURNAL ON ADDICTIONS
www.addicta.com.tr

ORIGINAL ARTICLE

Quality and Reliability of YouTube™ Videos of Methamphetamine Addiction

Ender Cesur[1], **Buket Koparal**[2]

[1]Department of Psychiatry, Acıbadem University Faculty of Medicine, Istanbul, Türkiye
[2]Department of Psychiatry, Gazi University Faculty of Medicine, Ankara, Türkiye

ORCID iDs of the authors: E.C. 0000-0002-8982-8626, B.K. 0000-0003-1874-270X.

Main Points

- YouTube™ videos created by healthcare professionals about methamphetamine addiction have higher quality, reliability, and usefulness scores than those of videos which were created.
- Duration of videos, number of days since uploading, number of views, comments, and likes are positively related to the reliability, information accuracy, quality score, and the content usefulness scores of the videos. It may be useful for viewers to pay attention to these criteria when choosing videos.
- When producing video content on methamphetamine addiction, it is crucial to consider factors such as information flow, consistency, visual aids, and content enrichment.

Abstract

Methamphetamine addiction has become one of the most serious health problems in Türkiye. With this study, we aimed to evaluate the reliability, usefulness, and quality of YouTube™ videos about methamphetamine addiction. We used the term "meth addiction" to search for videos. The first 204 videos were preliminarily assessed; 148 videos met the inclusion criteria and were scored. Quality Criteria for Consumer Health Information (DISCERN) and the video information and quality index were used for evaluation. The content usefulness index was created by the researchers to evaluate content items. Video narrators were categorized as methamphetamine addicts, healthcare professionals, and organizations. In terms of quality and content, videos prepared by healthcare professional had higher reliability scores, flow scores, and information accuracy scores compared to videos prepared by methamphetamine addicts and organizations ($p < .005$). Significant positive correlations were identified between video features, reliability scores, quality scores, and content usefulness in healthcare professionals' videos. However, the quality and usefulness scores of all groups were found to be below average. This study shows that the relationships between the reliability, quality, and usefulness of the video content should be considered. Utilizing information from reliable sources will contribute to the creation of more useful content.

Keywords: Methamphetamine addiction, reliability, usefulness, video quality, YouTube

Corresponding Author: Ender Cesur **E-mail:** ender_cesur@hotmail.com

Received: June 5, 2024
Revision Requested: July 17, 2024
Last Revision Received: July 19, 2024
Accepted: August 5, 2024
Publication Date: May 2, 2025

Introduction

Methamphetamine use is increasing both in Türkiye and around the world. In its 2023 report, the European Monitoring Center for Drugs and Drugs Addiction underlines that approximately 81% of the methamphetamine amount in Europe was seized in Türkiye and that this amount increased by 375% compared to the previous year (European Monitoring Center for Drugs and Drug Addiction, 2023). In America, 1.6 million people used methamphetamine in 2021; it is seen that the usage rate increased by 45.5% compared to 2019 (Substance Abuse and Mental Health Services Administration, 2022). In 2021, 32 537 people died due to psychostimulant overdoses, the majority of which were due to methamphetamine (National Institute on Drug Abuse, 2024).

Methamphetamine is a powerful stimulant with significant effects on the central nervous system. Its use can lead to a range of serious physical and psychological effects, both short-term and long-term

Cite this article as: Cesur, E., & Koparal, B. (2025). Quality and reliability of YouTube videos of methamphetamine addiction. *Addicta: The Turkish Journal on Addictions*, 12(2), 170-177.

DOI: 10.5152/ADDICTA.2025.24100

(Petit et al., 2012). In the short term, users experience increased energy, enhanced physical performance, appetite suppression, and euphoria. But in the long term, it may cause serious heart problems, dental issues, brain damage, and skin problems. Long-term use of drug also causes addiction and severe psychiatric problems such as anxiety, paranoia, hallucinations, psychotic disorders, and anxiety disorders (Petit et al., 2012). Overdose causes significant morbidity and mortality among methamphetamine users (Marshall & Werb, 2010).

The internet and social media are increasingly important for examining substance abuse problems and disseminating resources and solutions (Kilgo & Midberry, 2020). YouTube™ and other video-sharing sites enable both users and healthcare professionals (HPs) to share their knowledge and experiences. The majority of active internet users seek health-related information online (Cesur et al., 2024). YouTube™, the largest video-sharing platform, is used to examine and support mental health issues (Manning, 2013). However, there is limited information on how the issue of addiction is addressed and how addiction-related video content is framed.

Due to the popularity of addiction, more and more videos about methamphetamine addiction are released every day. Questions are raised about whether these increasing contents are a source of misinformation and misdirection, as well as the quality and reliability of the videos (Cesur et al., 2024; Manning, 2013). Questions regarding the quality of the videos, whether they support addiction treatment, and the potential for them to glamorize addiction are becoming more prevalent.

Misinformation on social media about methamphetamine addiction may adversely affect patients' treatment and help-seeking behavior. The quality of information regarding addiction and methamphetamine addiction on YouTube remains largely unexplored. Currently, no studies have examined YouTube™ videos concerning methamphetamine addiction. We hypothesize that the most frequently viewed YouTube™ videos are predominantly shared by non-HPs and lack scientific accuracy. We assume that these videos on methamphetamine addiction are biased, incomplete, or inaccurate. The aim of this study is to evaluate the quality, reliability, and content of YouTube™ videos about methamphetamine addiction. This study also evaluates the accuracy of the information that people are exposed to about methamphetamine addiction and its alignment with scientific data.

Material and Methods

Google Trends application (https://trends.google.com) is a service that provides users with statistical information on which region, in which languages, and how often word or sentence queries are searched. In this research, this website was used to determine the most frequently used search term worldwide for "methamphetamine addiction", and a search was made using various keywords for this purpose. Search criteria are restricted to the last 5 years and worldwide. The keywords used for searching were "methamphetamine addiction" and "meth addiction." According to the comparison search results, the most frequently used search term was determined to be "meth addiction" (Google Trends, 1 June, 2024).

In this study, YouTube™ (https://www.youtube.com) was utilized to search for videos on "meth addiction." A search was conducted using the term "Meth addiction," and the results were ranked according to their relevance to the subject (1 June, 2024). To prevent bias, all cookies and search history were cleared prior to the search. Research on search engine user behavior indicates that users typically evaluate results on the first page, focusing primarily on the top few results without scrolling further (Lewandowski, 2009). It has been noted that most of (90%) internet users click within the first three pages of results, with fewer users exploring beyond the first page if they do not find their desired results (Cesur et al., 2024). Consequently, this study evaluated the first 204 videos rather than all results. Due to the potential changes in video order from searches conducted on different days as new videos are added, a playlist was created from the evaluated videos in the same sequence, and the source locators (URLs) were recorded. Multi-part videos were treated as single entries.

YouTube™ ads and videos created by brands were eliminated from the evaluated videos. Again, videos that are not in English, not related to the topic, do not contain audio, video, or subtitles, and are repetitive were excluded from evaluation. It is reported that search engine users generally view the first few results and the average session duration is less than 15 minutes (Cesur et al., 2024; Lewandowski, 2009). Therefore, in our research, videos longer than 15 minutes were not included for evaluation, and as a result, 148 videos that met all criteria were scored. All evaluations were made simultaneously and unaware of each other by two psychiatrists (... and ...), and inter-rater reliability was calculated. Three days after the initial evaluation, 15 out of the 148 scored videos were selected randomly via a randomization website (https://www.randomizer.org). These videos were then re-evaluated in order to assess intraobserver reliability. Since the research was conducted only through YouTube™ videos, informed consent was not obtained. Ethical approval for this study was obtained from Acibadem University Ethics Committee (approval number: 2024-9/342).

The video narrators were categorized as individuals sharing their experiences/methamphetamine addicts (MA), HPs, and organizations (media and non-governmental organizations) (ORG).

Video Assessment

All videos were watched from start to finish. The number of views, the number of likes, the number of comments, the time since upload, and the video duration (minutes) were recorded. Using these data, the viewing rate formula was used (Cesur et al., 2024). A similar formula was used in this research and recorded for each video: number of views / since upload time.

Video power index (VPI) was used to measure both the view and the like ratio of the videos. The VPI was calculated with the formula which was created in 2021. The number of likes multiplied by the total number of views divided by 100 was the formula (Salman & Bayar, 2021).

DISCERN (Quality Criteria for Consumer Health Information) is an assessment tool introduced in 1999, designed to evaluate written health research. It comprises a total of 16 questions (Charnock et al., 1999). Although the DISCERN instrument is highly effective

for assessing the reliability and quality of written texts, some questions of the instrument may not be fully applicable to web and video formats. Consequently, previous studies have opted to use a modified version of this scale. It consists of five questions in order to evaluate the reliability of information in videos (Cesur et al., 2024; Singh et al., 2012). For this reason, in this study, the use of the modified index consisting of five questions was preferred in evaluating video reliability. When evaluating the reliability scores of the videos, each question was scored as 0 (no) or 1 (yes), and the total score (ranging from 0 to 5) was recorded (Table 1).

The video quality was evaluated with the video information and quality index (VIQI). This index meets every component of the Global Quality Scale (GQS), which is used for the evaluation of websites' quality (Kumar et al., 2014; Nagpal et al., 2015). While GQS was used to determine video quality in some previous similar studies, VIQI was preferred to evaluate video quality in this study because the GQS is not suitable for evaluating videos. Video information and quality index is a five-point Likert scale. It evaluates video quality (Cesur et al., 2024). The total quality scores of the videos were calculated by summing the scores from each of the following fields: information flow, information accuracy, quality (one point each for the use of images, use of animation, conducted interviews, video subtitles, use of summary report), and precision (the level of harmony between the video title and content). Each field was scored from 0 (poor quality) to 5 (high quality). These scores are totaled to obtain a total quality score ranging from 0 to 20.

In order to assess the usefulness of the video content, a usefulness index comprising 10 steps was developed: 1. Definition of methamphetamine, 2. Definition of methamphetamine addiction, 3. Symptoms of methamphetamine addiction, 4. Symptoms of methamphetamine withdrawal, 5. Symptoms of methamphetamine intoxication, 6. Physical consequences of methamphetamine addiction, 7. Psychiatric effects of methamphetamine addiction, 8. Treatment of methamphetamine addiction, 9. Cost Information, 10. Duration of treatment. Based on whether the video contained information about the relevant topics, each section was assigned a score of 0 or 1, and a "total content usefulness score" was calculated. The scores were categorized as follows: a score of 0 indicated not useful, scores of 1 – 4 indicated slightly useful, scores of 5 – 7 indicated moderately useful, and scores of 8 – 10 indicated very useful.

Statistics

SPSS software version 27.0 (IBM SPSS Corp.; Armonk, NY, USA) was used for the statistical analyses. Descriptive statistics were used in order to evaluate the characteristics of the videos, such as frequencies, percentages, standard deviations, and means.

Inter-rater reliability was assessed using the intraclass correlation coefficient (ICC) for each of the video quality indices (DISCERN score, VIQI score, and content usefulness index). An ICC value greater than 0.75 was considered as an excellent reliability.

The videos were categorized based on the type of content narrator (methamphetamine addicts (MA), HPs, and ORG. One-way ANOVA was used to compare the mean scores of video characteristics (e.g., number of views, likes, comments, duration) and quality (DISCERN score, VIQI score, and content usefulness index) among the different groups. Post-hoc analyses were conducted using the Tukey HSD test to identify significant differences between specific group pairs.

Pearson correlation coefficients were calculated to explore the relationships between video characteristics (e.g., duration of videos, number of likes, views, comments) and the quality indices (DISCERN score, VIQI score, and content usefulness index) for HPs. $p < 0.05$ was accepted to be statistically significant.

Results

In the initial evaluation of the videos, a total of 204 videos were recorded. Videos shorter than 1 minute and longer than 15 minutes, videos without subtitles/audio, and videos unrelated to the search topic or related to other substances were excluded. The remaining 148 videos were analyzed (Table 2).

The inter-rater correlation coefficients ranged from 0.754 to 0.981. This correlation indicates a high level of agreement between raters. Consistency in repeated assessments was demonstrated, with intra-observer correlation coefficients ranging from 0.941 to 0.985 for the first rater and 0.885 to 0.982 for the second rater. Consequently, the statistical analyses were conducted based on the evaluations by the researchers.

The mean reliability score of DISCERN was 1.91 ± 1.51. The mean VIQI total score was 9.66 ± 5.56. The mean scores for the VIQI quality criteria were as follows: video flow (2.32 ± 1.43), information accuracy (2.45 ± 1.73), consistency (2.68 ± 1.52), and quality (2.22 ± 1.56). The content usefulness score, created by the researchers and consisting of 10 items with a range of scores between 0 and 10, was determined to be 3.01 ± 2.34 (Table 3).

The videos were divided into three groups based on who prepared them. When comparing the groups in terms of the content

Table 1.
Assessment of Reliability Scores of Videos

1. Are the goals clearly defined, and have they been successfully accomplished?
2. Are the sources of information reliable? (Has research been used or cited to support the claims? Is the person providing the information an expert in the field? etc.)
3. Is the information balanced and unbiased?
4. Are additional sources for information recommended for patients?
5. Are contradictory or uncertain issues mentioned?

Table 2.
Reasons for Excluding Videos

Reasons for Exclusion	Number of Videos
Longer than 15 minutes	40
Shorter than 1 minutes	4
No audios/subtitle	2
Not related to subject	3
Related about another substance	4
Same videos	3

Table 3.
Descriptive Statistics for Videos

***n*: 148**	**Minimum**	**Maximum**	**Mean**	**SD**
Duration (seconds)	64	900	320.51	249.610
Days since upload	30	5475	1678.20	1338.18
Number of views	87	11,456,692	400,620.93	1,246,905.016
Number of likes	0	279,000	5935.11	24,748.346
Number of comments	0	18,963	790.51	2314.006
Viewing rate	1.99	3,777,760.00	64,732.5239	318,925.9700
Reliabity score	0	5	1.91	1.512
Flow	0	5	2.32	1.439
Information accuracy	0	5	2.45	1.735
Quality	0	5	2.22	1.560
Precision	0	5	2.68	1.525
Total quality score	0	20	9.66	5.568
Total content usefulness index	0	8	3.01	2.344
Video power index	0.00	3.20E+10	294,636,327.5	2,649,686,809

related to their characteristics and quality, differences between the groups were found ($p < .05$). The videos prepared by MA were found to have statistically longer durations compared to those prepared by HP or ORG. The number of likes, number of views, number of comments, and view rates of videos prepared by MA and ORG were significantly higher compared to those prepared by HP ($p < .001$). However, there were no statistically significant differences between the two groups (videos prepared by MA and those prepared by ORG). In terms of the quality and content of the videos, those prepared by HP had significantly higher reliability scores, flow scores, and information accuracy scores compared to the videos prepared by MA and ORG ($p < .005$) In terms of quality, precision, and total quality scores, the videos prepared by HP had statistically significantly higher scores compared to those prepared by MA ($p < .005$). However, we could not find a statistically significant difference between the videos prepared by HP and those prepared by ORG ($p > .05$). Additionally, videos prepared by HP had higher VPI scores compared to the ORG ($p < .001$) (Table 4).

When evaluating the relationships between video characteristics, reliability scores, quality scores, and the content usefulness index, significant positive correlations were identified in videos of HP. Video duration exhibited positive correlations with the reliability score ($r = 0.643$, $p < .001$), flow ($r = 0.715$, $p < .001$), information accuracy ($r = 0.645$, $p < .01$), quality ($r = 0.663$, $p < .001$), precision ($r = 0.669$, $p < .001$), total quality score ($r = 0.694$, $p < .001$) and total content usefulness score ($r = 0.651$, $p < .001$). Similarly, the number of views, days since upload, number of comments, and number of likes were positively correlated with the reliability score, flow, information accuracy, quality, consistency, total quality score, and overall content usefulness score (Table 5).

Discussion

As far as we know, this is the first study which investigates the content of videos focusing on methamphetamine addiction on YouTube™. In this study, which analyzed the presentation of information and its relationship with its sources in videos, our main findings indicate that YouTube™ is an important source of information regarding methamphetamine addiction. However, regardless of the narrators, the videos were found to be quite weak in terms of content, reliability, and quality.

Studies evaluating social media user behaviors have indicated that individuals tend to focus on the initial few results they encounter before scrolling down the page (LaValley et al., 2017). With this in mind, we included the first 204 results. Although evaluating a large number of videos is an advantage, given evidence that newer videos are less likely to attract attention (Cesur et al., 2024), this may also be a limitation. Additionally, since most sessions are shorter than 15 minutes, videos longer than 15 minutes were excluded based on this. The purpose of this exclusion is to capture user attention. However, the exclusion of these videos may have contributed to the low scores in terms of content and quality.

Social media, which provides access to social support and healthcare for people affected by methamphetamine, has great potential for use in healthcare (Ellway et al., 2019). While social media can encourage substance use, it can also help overcome the stigma associated with methamphetamine addiction, increasing the likelihood of addicts getting help. In our study, although the videos were inadequate in terms of quality, reliability, and content, we observed that they all aimed to inform people about the negative consequences of addiction. Improving the quality of the video content could help the creators achieve this objective.

Studies show that the use of online social support increases people's coping skills and provides a platform for sharing experiences (LaValley et al., 2017). The results of this study can help HP, MA, and ORG groups understand the messages conveyed in popular YouTube videos and contribute to the production of better-quality videos in all aspects.

Table 4.
Characteristic Features and Video Qualities of the Videos Based on Their Narrators

	MA	HP	ORG	*p*
Duration (seconds) (mean, SD)	434.56 ± 241.963 (b)	222.77 ± 212.862 (a)	276.16 ± 244.138 (a)	<.001
Days since upload (mean, SD)	1635.03 ± 1392.633	1606.23 ± 1184.244	1960.88 ± 1562.684	.732
Number of views (mean, SD)	472,113.81 ± 1,146,892.341 (a)	138,191.90 ± 384,353.099 (b)	863,645.40 ± 2,323,548.684 (a)	.002
Number of likes (mean, SD)	6110.52 ± 12,246.955(a)	1600.36 ± 5216.758 (b)	16,076.92 ± 56,099.988 (a)	<.001
Number of comments (mean, SD)	1194.92 ± 2823.330 (a)	199.31 ± 402.333 (b)	1230.08 ± 3258.855 (a)	<.001
Viewing rate (mean, SD)	124,431.4855 ± 484,847.1429 (a)	11,487.3490 ± 29670.35676 (b)	46,597.3261 ± 80,957.07599 (a)	.002
Reliabity score (mean, SD)	1.68 ± 1.225 (a)	2.33 ± 1.767 (b)	1.48 ± 1.262 (a)	.035
Flow (mean, SD)	2.02 ± 1.123 (a)	2.79 ± 1.603 (b)	1.96 ± 1.457 (a)	.009
Information accuracy (mean, SD)	1.161 ± 1.430 (b)	3.21 ± 1.714 (a)	2.68 ± 1.60 (a)	<.001
Quality (mean, SD)	1.84 ± 1.134 (z)	2.66 ± 1.843 (x)	2.12 ± 1.509 (y)	.024
Precision (mean, SD)	2.18 ± 1.235 (z)	3.25 ± 1.567 (x)	2.56 ± 1,660 (y)	<.001
Total quality score (mean, SD)	7.61 ± 3.541 (z)	11.89 ± 6.346 (x)	9.28 ± 5.813 (y)	<.001
Total content usefulness index (mean, SD)	2.40 ± 1.664(a)	3.84 ± 2.794 (b)	2.52 ± 2.044 (a)	.022
Video power index (mean, SD)	13,6792,304.5 ± 560,588,932.2 (a)	13,414,103.28 ± 74,387,070.09 (b)	1,372,271,731 ± 6,380,831,439 (a)	<.001

Note: HP = Healthcare professional; MA = Individuals sharing their experiences/methamphetamine addicts; ORG = Organizations (media and non-governmental organizations).
a-b, there is no statistically significant difference between the groups with the same letter.
x-z, statisticaly difference between x and z, but, no statistically difference between x-y and y-z.
*$p < .05$ was accepted to be statistically significant.

Although the reliability and total quality scores of the videos of HPs and ORG are higher than those sharing their personal experiences, the average scores are quite low in all three groups. Although there is no statistically significant difference between the total usefulness scores of the videos, the scores are still quite low. The use of social media is extremely important in providing information about many mental problems; the low quality and usefulness of methamphetamine-related videos may indicate that those who access the videos cannot find useful content about methamphetamine addiction and treatment. It is stated that inappropriate use of digital media and misinformation received are risky in terms of substance use, especially in children and young people (Romer & Moreno, 2017). It is important to develop potential strategies to intervene in these environments and increase the reliability of information presented on the internet, especially to protect adolescents and young adults from the negative effects of these products (Bright et al., 2008). Considering the complex and multifaceted effects of social media, particularly YouTube, on addiction, a careful approach is required to enhance positive impacts and minimize negative ones. Healthcare professionals should leverage the power of social media to support the dissemination of accurate information and develop strategies to prevent the spread of misinformation. Additionally, communities and individuals should be encouraged to use social media resources consciously and responsibly in the process of combating addiction.

Research indicates that social networking platforms can significantly influence health behaviors (Moorhead et al., 2013; Naslund et al., 2020). Maher et al. (2014) conducted a comprehensive analysis of research on interventions aimed at modifying health behaviors through online social networks and found that 90% of the studies reviewed reported notable enhancements in health behaviors. This demonstrates the potential of social media to provide social support to individuals affected by methamphetamine, representing a crucial first step towards rehabilitation.

According to our results, although HPs produce more useful, high-quality, and reliable videos than methamphetamine users, their number of views, likes, and comments is lower than those of these groups. These results may be related to the fact that metrics such as view counts, likes, and comments can be misleading regarding the quality of the content.

Conversely, it may also be associated with the less interesting nature of these videos. The cooperation of HPs, voluntary institutions, media, and patient groups is important in the prevention

Table 5.
Correlations Between Video Characteristics and Reliability, Quality, and Content Usefulness Scores of Videos According to Narrators

	Duration		Days Since Upload		Number of Views		Number of Likes		Number of Comments		Viewing Rate		Video Power Index	
	r	*p*	*r*	*p*	*r*	*p*	*r*	*p*	*r*	*p*	*r*	*p*	*r*	*p*
Reliability score	0.643**	<.001	0.276*	.031	0.656**	<.001	0.688**	<.001	0.576**	<.001	0.135	.520	0.142	.497
Flow	0.715**	<.001	0.372**	.003	0.520**	<.001	0.546**	<.001	0.474**	<.001	0.139	.506	0.191	.360
Information accuracy	0.645**	<.001	0.250	.052	0.432**	<.001	0.464**	<.001	0.312*	.014	0.063	.764	0.171	.415
Quality	0.663**	<.001	0.309*	.015	0.599**	<.001	0.625**	<.001	0.511**	<.001	0.164	.434	0.231	.266
Precision	0.669**	<.001	0.331**	.009	0.678**	<.001	0.693**	<.001	0.562**	<.001	0.077	.716	0.151	.470
Total quality score	0.694**	<.001	0.327*	.010	0.579**	<.001	0.602**	<.001	0.481**	<.001	0.125	.553	0.208	.317
Total content usefullnes score	0.651**	<.001	0.193	.136	0.584**	<.001	0.611**	<.001	0.524**	<.001	0.099	.636	0.136	.515

Note: *$p < .05$.
**$p < .001$.

and treatment of addiction (Alderwick et al., 2021; Kools et al., 2022). It is important to work multidisciplinary and strengthen collaborations in order to reach people with methamphetamine addiction and provide accurate information. We believe it is crucial for especially HPs to produce videos with more adequate content in this field. Creating videos about substance use and its long term results and supporting these through health policies could be particularly important for the primary prevention of addiction. Informing children and young people about addictive substances via social media, especially methamphetamine, before addiction develops could serve as a deterrent to start a substance use.

When we evaluated the relationships between video features and credibility, quality, and content usefulness, we found that longer videos were generally associated with higher credibility and overall quality scores. This finding is consistent with other studies where videos with richer content receive higher quality scores (Cesur et al., 2024; Erkin et al., 2023). In our study, we found that the number of views, number of days since upload, number of comments, and number of likes were also positively related to the reliability score, total quality score, and total content usefulness score. This data coincides with studies stating that sources that provide more reliable and accurate information attract more attention (Cesur et al., 2024; Civan Kahve et al., 2022). To improve video quality, it is recommended to include more visual content and patient experiences (Cakmak & Mantoğlu, 2021). Furthermore, to enhance the educational value of video content, it is advisable to include concise, evidence-based information that highlights the definition and key aspects of treatment (Krumm et al., 2022). Healthcare professionals creating such content should prioritize these considerations and ensure videos are grounded in scientific evidence while maintaining a reasonable duration.

As a result, the relationships between the reliability, quality, and usefulness of the content of the videos should be taken into account. Using information obtained from reliable sources will contribute to the emergence of more useful content. Similarly, as accuracy and precision improve, videos will become more reliable and useful.

Studies evaluating the quality of YouTube™ videos related to psychiatric disorders have shown that the content is variable and that some videos are likely to contain misleading information (Civan Kahve et al., 2022). While there are studies assessing the content and quality of YouTube™ videos on chronic mental illnesses such as schizophrenia and bipolar affective disorder (Altunsoy, 2023; Civan Kahve et al., 2022), there are no studies in the literature evaluating videos related to addiction despite its increasing prevalence and significance as a health issue. Therefore, we believe our study is important in this area.

This study has some limitations. Firstly, the sample is limited to videos on YouTube™, potentially overlooking content on other social media platforms. Secondly, both evaluators were psychiatrists. The evaluation of videos may be subjective, and the biases of the evaluators could influence the results. Additionally, given that videos can change and be updated over time, the findings of the study may only reflect a specific time period. Furthermore, metrics such as view counts and likes may be misleading regarding the quality of the content, as popularity does not necessarily guarantee accuracy or educational value. Lastly, the validity

and reliability of the evaluation criteria used in the study may be limited, affecting the generalizability of the results. The usefulness of the video contents was evaluated with a 10-item index created by the researchers, and the lack of reliability and validity scores of this index is an important limitation. The fact that only English videos were evaluated may invalidate generalizations, particularly in the context of Türkiye. However, to the best of our knowledge, this study represents the first attempt to assess videos concerning methamphetamine addiction on YouTube.

Findings show that videos about methamphetamine addiction have low levels of reliability and quality, and the content is largely useless. Video engagement rates are linked to the quality and reliability of the video content, underscoring the importance of these aspects for viewers. For this reason, it is important for both HPs and those sharing personal experiences to pay attention to information flow, consistency, and visual elements when creating content and to enrich the content with up-to-date information. This approach will contribute to correctly informing patients and creating more interaction. This will contribute positively to the process of those seeking information and help regarding methamphetamine addiction and treatment.

Ethics Committee Approval: Ethical approval for this study was obtained from Acibadem University Ethics Committee (approval number: 2024-9/342).

Informed Consent: N/A.

Peer-review: Externally peer-reviewed.

Author Contributions: Concept – E.C., B.K.; Design – E.C., B.K.; Supervision – E.C.; Resources – E.C., B.K.; Materials – E.C., B.K.; Data Collection and/or Processing – E.C., B.K.; Analysis and/or Interpretation – E.C., B.K.; Literature Search – E.C., B.K.; Writing – E.C., B.K.; Critical Review – E.C., B.K.

Declaration of Interests: The authors have no conflict of interest to declare.

Funding: The authors declared that this study has received no financial support.

References

Alderwick, H., Hutchings, A., Briggs, A., & Mays, N. (2021). The impacts of collaboration between local health care and non-health care organizations and factors shaping how they work: A systematic review of reviews. *BMC Public Health*, *21*(1), 753. [CrossRef]

Altunsoy, N. (2023). Reviewin YouTube as a source of information on bipolar disorder. *Journal of Medicine and Palliative Care*, *4*(5), 601 – 606. [CrossRef]

Bright, S. J., Marsh, A., Smith, L. M., & Bishop, B. (2008). What can we say about substance use? Dominant discourses and narratives emergent from Australian media. *Addiction Research and Theory*, *16*(2), 135 – 148. [CrossRef]

Cakmak, G., & Mantoglu, B. (2021). Reliability and quality of YouTube contents pertaining to pancreatic cancer. *Cureus*, *13*(3), e14085. [CrossRef]

Cesur, E., Tuncer, K., Sevgi, D., Balaban, B. C., & Arslan, C. (2024). Evaluation of the quality and reliability of YouTubeTM videos created by orthodontists as an information source for clear aligners. *Turkish Journal of Orthodontics*, *37*(1), 44 – 49. [CrossRef]

Charnock, D., Shepperd, S., Needham, G., & Gann, R. (1999). DISCERN: An instrument for judging the quality of written consumer health information on treatment choices. *Journal of Epidemiology and Community Health*, *53*(2), 105 – 111. [CrossRef]

Civan Kahve, A., Aşut, G., Kaya, H., & Hacımusalar, Y. (2022). What does YouTube say about schizophrenia: Is it a reliable source of information? *Acıbadem Üniversitesi Sağlık Bilimleri Dergisi*, *13*(1), 67 – 73. [CrossRef]

Ellway, D., Reilly, R., Le Couteur, A., & Ward, J. (2019). Exploring how people affected by methamphetamine exchange social support through online interactions on Facebook: Content analysis. *JMIR Mental Health*, *6*(10), e14011. [CrossRef]

Erkin, Y., Hanci, V., & Ozduran, E. (2023). Evaluation of the reliability and quality of YouTube videos as a source of information for transcutaneous electrical nerve stimulation. *PeerJ*, *11*, e15412. [CrossRef]

European Monitoring Centre for Drugs and Drug Addiction (2023). *European drug report 2023*. https://www.emcdda.europa.eu/event/2023/06/launch-event-european-drug-report-2023_en

I, M., A-m, M., G, F. D. G., & D, O. (2018). Evaluation of the quality of dentistry related YouTube videos made by Youtubers. Public Health Tool, or Large Scale Danger? *Journal of Epidemiology and Public Health Reviews*, *3*(2). [CrossRef]

Kilgo, D. K., & Midberry, J. (2020). Social media news production, emotional facebook reactions, and the politicization of drug addiction. *Health Communication*, *11*, 1 – 9. [CrossRef]

Kools, N., Dekker, G. G., Kaijen, B. A. P., Meijboom, B. R., Bovens, R. H. L. M., & Rozema, A. D. (2022). Interdisciplinary collaboration in the treatment of alcohol use disorders in a general hospital department: A mixed-method study. *Substance Abuse Treatment, Prevention, and Policy*, *17*(1), 59. [CrossRef]

Krumm, I. R., Miles, M. C., Clay, A., Carlos, W. G., & Adamson, R. (2022). Making effective educational videos for clinical teaching. *Chest*, *161*(3), 764 – 772. [CrossRef]

Kumar, N., Pandey, A., Venkatraman, A., & Garg, N. (2014). Are video sharing web sites a useful source of information on hypertension? *Journal of the American Society of Hypertension*, *8*(7), 481 – 490. [CrossRef]

LaValley, S. A., Kiviniemi, M. T., & Gage-Bouchard, E. A. (2017). Where people look for online health information. *Health Information and Libraries Journal*, *34*(2), 146 – 155. [CrossRef]

Lewandowski, D. (2009). Search engine user behaviour: How can users be guided to quality content? *Information Services and Use*, *28*(3 – 4), 261 – 268. [CrossRef]

Maher, C. A., Lewis, L. K., Ferrar, K., Marshall, S., De Bourdeaudhuij, I., & Vandelanotte, C. (2014). Are health behavior change interventions that use online social networks effective? A systematic review. *Journal of Medical Internet Research*, *16*(2), e40. [CrossRef]

Manning, P. (2013). YouTube, 'drug videos' and drugs education. *Drugs: Education, Prevention and Policy*, *20*(2), 120 – 130. [CrossRef]

Marshall, B. D. L., & Werb, D. (2010). Health outcomes associated with methamphetamine use among young people: A systematic review. *Addiction*, *105*(6), 991 – 1002. [CrossRef]

Moorhead, S. A., Hazlett, D. E., Harrison, L., Carroll, J. K., Irwin, A., & Hoving, C. (2013). A new dimension of health care: Systematic review of the uses, benefits, and limitations of social media for health communication. *Journal of Medical Internet Research*, *15*(4), e85. [CrossRef]

Nagpal, S. J. S., 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. [CrossRef]

Naslund, J. A., Bondre, A., Torous, J., & Aschbrenner, K. A. (2020). Social media and mental health: Benefits, risks, and opportunities for

research and practice. *Journal of Technology in Behavioral Science*, *5*(3), 245 – 257. [CrossRef]

National Institute on Drug Abuse (2024). Drug overdose death rates. Retrieved from https://nida.nih.gov/research-topics/trends-statistics/overdose-death-rates

Petit, A., Karila, L., Chalmin, F., & Lejoyeux, M. (2012). Methamphetamine addiction: A review of the literature. *Journal of Addiction Research and Therapy*, *1*(S1), 6. [CrossRef]

Romer, D., & Moreno, M. (2017). Digital media and risks for adolescent substance abuse and problematic gambling. *Pediatrics*, *140*(Suppl. 2), S102 – S106. [CrossRef]

Salman, M. Y., & Bayar, G. (2021). Evaluation of quality and reliability of YouTube videos on female urinary incontinence. *Journal of Gynecology Obstetrics and Human Reproduction*, *50*(10), 102200. [CrossRef]

Singh, A. G., Singh, S., & Singh, P. P. (2012). YouTube for information on rheumatoid arthritis--A wakeup call? *Journal of Rheumatology*, *39*(5), 899 – 903. [CrossRef]

Substance Abuse and Mental Health Services Administration (2022). Key substance use and mental health indicators in the United States: Results from the 2021 National Survey on Drug Use and Health. https://www.samhsa.gov/data/sites/default/files/reports/rpt39443/2021NSDUHFFRRev010323.pdf