

**ORIGINAL RESEARCH**

# Breaking misconceptions: assessing the quality of YouTube videos on penile fracture with validated scoring tool

Suleyman Sagir<sup>1,\*</sup>, Mehmet Şirin Ertek<sup>2</sup>, İzzettin Toktaş<sup>3</sup>

<sup>1</sup>Urology Department, Faculty of Medicine, Mardin Artuklu University, 47000 Mardin, Turkey

<sup>2</sup>Urology Clinic, Manisa City Hospital, 45000 Manisa, Turkey

<sup>3</sup>Department of Public Health, Mardin Artuklu University, 47000 Mardin, Turkey

**\*Correspondence**

suleymansagir@artuklu.edu.tr  
(Suleyman Sagir)

**Abstract**

**Background:** The main objective of this research was to evaluate the effectiveness of YouTube videos related to penile fracture by applying established rating systems. **Methods:** A descriptive investigation was carried out by browsing YouTube for videos related to “Penile fracture”. Out of a total of 108 videos that were found, 47 were deemed eligible for inclusion in the analysis. The features and substance of the videos were assessed utilizing the adjusted DISCERN tool, the criteria from the Journal of the American Medical Association (JAMA), and the Global Quality Scale (GQS). Statistical analysis was performed using SPSS 22.0 software, with a significance level of  $p < 0.05$ . **Results:** High-quality videos, as classified by GQS, had more views, likes, and comments than lower-quality videos; however, these differences were not statistically significant ( $p > 0.05$ ). In contrast, videos with detailed and accurate content had significantly higher view counts (approximately tenfold) and more likes (approximately twofold) than poor-content videos ( $p < 0.05$ ). A strong positive correlation was found between content analysis scores and DISCERN ( $r = 0.815$ ,  $p < 0.001$ ), JAMA ( $r = 0.781$ ,  $p < 0.001$ ), and GQS ( $r = 0.722$ ,  $p < 0.001$ ). Videos made by urologists and surgeons demonstrated superior quality across all measured criteria in comparison to those crafted by individuals without healthcare backgrounds ( $p < 0.001$ ). **Conclusions:** The quality of YouTube content addressing penile fracture exhibits a wide range, with content generated by healthcare experts standing out for its high quality. It is imperative for medical professionals to actively engage in disseminating accurate health information on these platforms.

**Keywords**

Penile fracture; YouTube; Video quality; DISCERN; JAMA; GQS

## Desmintiendo conceptos erróneos: evaluación de la calidad de los videos de YouTube sobre fractura de pene con una herramienta de evaluación validada

### Resumen

**Antecedentes:** Este estudio tuvo como objetivo evaluar la calidad de los videos de YouTube sobre fractura de pene utilizando sistemas de evaluación validados. **Métodos:** Se realizó un estudio descriptivo mediante la búsqueda de “Fractura de pene” en YouTube. Se identificaron un total de 108 videos, de los cuales 47 cumplían con los criterios de inclusión. Las características y el contenido de los videos fueron evaluados utilizando la herramienta DISCERN modificada, los criterios de la Journal of the American Medical Association (JAMA) y la Escala Global de Calidad (GQS). El análisis estadístico se realizó con el software SPSS 22.0, con un nivel de significación de  $p < 0.05$ . **Resultados:** Los videos de alta calidad, según la clasificación de GQS, tuvieron más visualizaciones, “me gusta” y comentarios que los videos de menor calidad; sin embargo, estas diferencias no fueron estadísticamente significativas ( $p > 0.05$ ). En contraste, los videos con contenido detallado y preciso tuvieron significativamente más visualizaciones (aproximadamente diez veces más) y más “me gusta” (aproximadamente el doble) que los videos con contenido deficiente ( $p < 0.05$ ). Se encontró una fuerte correlación positiva entre las puntuaciones del análisis de contenido y DISCERN ( $r = 0.815, p < 0.001$ ), JAMA ( $r = 0.781, p < 0.001$ ) y GQS ( $r = 0.722, p < 0.001$ ). Los videos creados por urólogos y cirujanos obtuvieron puntajes significativamente más altos en todas las métricas de calidad en comparación con los producidos por no profesionales de la salud ( $p < 0.001$ ). **Conclusiones:** La calidad de los videos de YouTube sobre fractura de pene varía ampliamente, siendo los profesionales de la salud los que producen contenido de mayor calidad. Es crucial que los profesionales médicos asuman un papel activo en la difusión de información sanitaria confiable en estas plataformas.

### Palabras Clave

Fractura de pene; YouTube; Calidad de video; DISCERN; JAMA; GQS

## 1. Introduction and background

Penile fracture, or PF, refers to a tear in the tunica albuginea layer of the corpus cavernosum caused by trauma, with occasional instances of rupture occurring in the tunica albuginea layer of the corpus spongiosum. In the United States and Europe, common incidents leading to PF involve the penis striking the perineum or the pubic symphysis during sexual activity or due to masturbation [1, 2]. In the United States, the incidence of penile fracture is observed as 1.02 per 100,000 males [3].

It has been noted that a sudden bending of the blood-filled corpus cavernosum can generate high pressures, surpassing the tensile strength of the thinned tunica albuginea during erection [3]. Injuries to the flaccid penis are relatively uncommon due to its thicker and more resilient tunica albuginea [3]. Individuals experiencing PF often describe auditory cues such as cracking or snapping during sexual encounters. This is typically followed by intense pain, a sudden inability to sustain an erection, dark discoloration, and swelling, resulting in the penis taking on a distinctive “eggplant-like” appearance [3]. Additionally, ecchymosis can extend to the scrotum, perineum, and even the suprapubic and inguinal regions [4].

Although the primary method for diagnosing PF is through a patient’s medical history and physical examination, imaging techniques like ultrasonography, diagnostic cavernosography, or Magnetic resonance imaging (MRI) can be employed in cases where the diagnosis is unclear in order to identify the site of the defect. In situations where urethral injury is suspected, it is recommended to conduct a retrograde urethrography (RUG) before proceeding with surgery [5, 6]. However, the European Association of Urology (EAU) guidelines suggest that

cystoscopy is a more appropriate method in cases of urethral injury due to the high rate of false-positive results associated with RUG [7].

Traditionally, conservative approaches for PF entailed the use of compression dressings, anti-inflammatory medications, or the use of ice at the site of the fracture. Nonetheless, these conventional techniques may result in potential complications over time, including erectile dysfunction (ED), penile plaques, painful erections, and penile curvature. Consequently, the prevailing treatment protocol now advocates for promptly performing surgical correction of the tunical defect as the standard of care [8]. Surgical repair includes exploration of the penis, evacuation of hematoma, and repair of tunica albuginea and urethral defects, typically performed through a sub-coronal circumferential incision [9].

Timely surgical treatment is essential for addressing tunical defects and/or accompanying urethral injuries. Postponed or non-operative approaches may result in adverse outcomes, including corporal fibrosis, curvature of the penis, reduction in penile length, and erectile dysfunction [10, 11].

In recent years, patients have increasingly turned to social media platforms for health information [12]. With their easy access and visually appealing content, platforms such as YouTube have gained popularity as sources of medical information [13]. However, the quality and precision of these videos differ significantly [13]. Misleading or insufficient information can have adverse effects on the treatment procedure [14]. Therefore, evaluating the quality of online medical content has become a necessity [15].

The objective of this study is to evaluate the quality of YouTube videos related to PF, analyze their impact on viewer preferences and knowledge, and underscore the critical impor-

tance of healthcare professionals adopting a more proactive role in delivering accurate and trustworthy content on these platforms.

**2. Materials and methods**

This descriptive study evaluated YouTube ([www.YouTube.com](http://www.YouTube.com)) videos by searching for the keyword “Penile fracture”. In order to reduce the impact of previous searches and browsing history on the search results, the browsing history was cleared prior to initiating video searches on multiple days. The videos were arranged in the sequence of their appearance, and the URLs of pertinent videos were bookmarked. The scanning of videos occurred from 01 August 2022 to 01 October 2022.

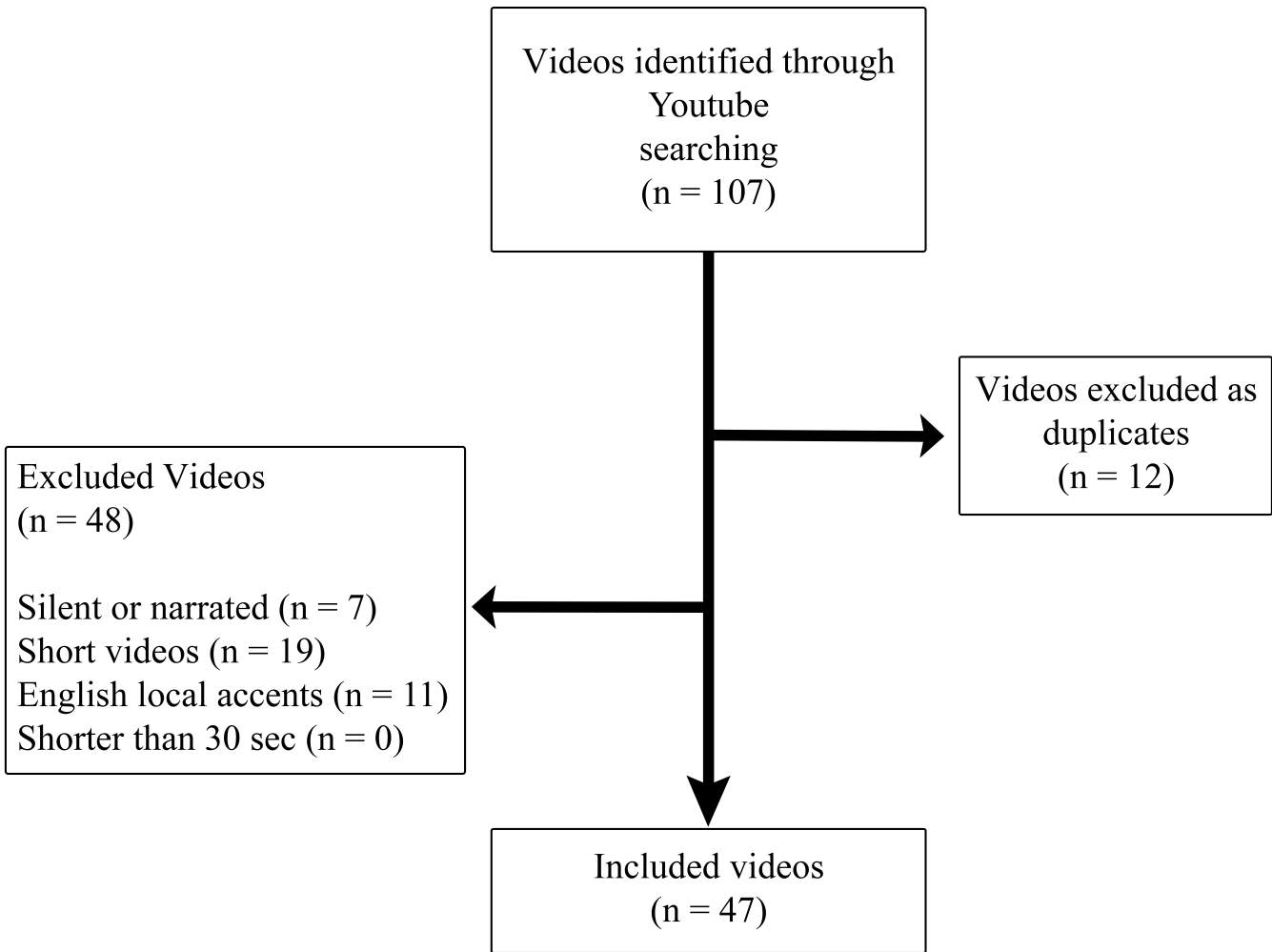
To be included in the study, videos had to meet specific criteria: they had to be at least 30 seconds long, relevant to the topic, and presented in English. Excluded from the study were videos characterized by substandard audio or video quality, as well as those that were either silent or narrated. Additionally, videos that featured English that was challenging to comprehend due to recurring themes or regional accents were excluded. Furthermore, videos that, despite having varying content, did not focus on penile fractures were also omitted from the analysis. Moreover, videos shorter than 30 seconds

or exceeding 15 minutes in duration were excluded from the research. Videos were grouped according to their duration as short ( $\geq 30$  sec,  $< 5$  min), medium ( $\geq 5$  min,  $< 10$  min) and long ( $\geq 10$  min,  $\leq 15$  min) duration videos. 107 videos were screened and after applying the exclusion criteria (Fig. 1), a total of 47 videos were included in the study.

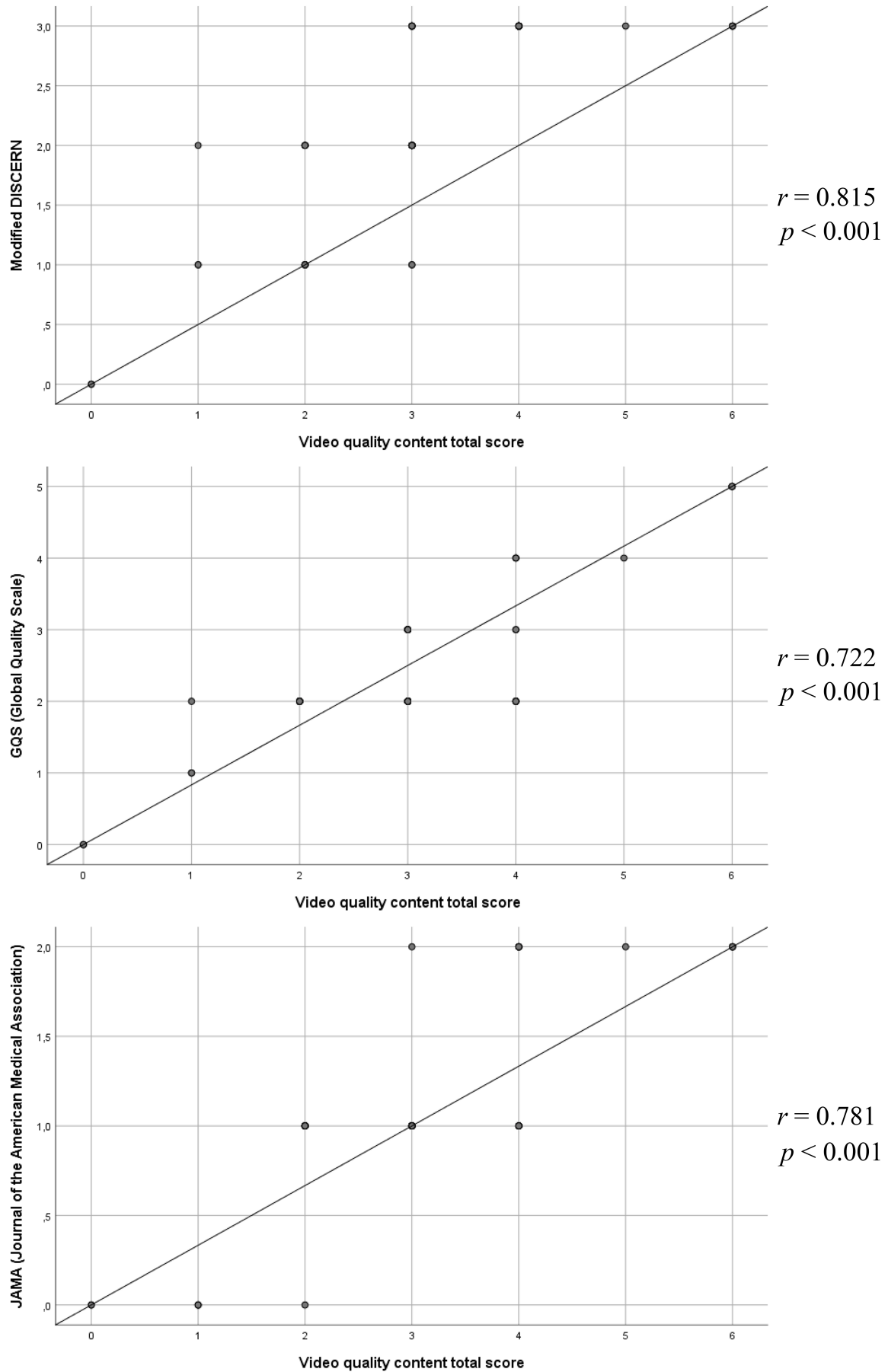
The content and descriptive features of the videos were recorded using a dedicated evaluation form. To assess the reliability of the videos, the Modified DISCERN scale [16] and the Journal of the American Medical Association (JAMA) criteria [17] were utilized. The Global Quality Scale (GQS) was used to assess the overall quality of the videos [18]. Additional data, such as the number of likes and comments, were also collected.

**2.1 Modified DISCERN scale**

The Modified DISCERN is a five-item tool designed to evaluate the reliability of health information. Each question is answered with either “yes” (scored as 1) or “no” (scored as 0). The total score ranges from 0 to 5, with higher scores indicating greater reliability (Fig. 2).



**FIGURE 1.** Flowchart of the selection of YouTube videos for analysis. sec: second.



**FIGURE 2. Correlation of video quality content total score with Modified DISCERN, global quality scale (GQS), and JAMA Scores.  $r$ : Indicates the correlation coefficient.**

## 2.2 Journal of the American Medical Association (JAMA) criteria

The JAMA criteria assess the reliability and validity of health-related content based on four criteria: authorship, references, disclosure of conflicts of interest, and currency of the information. Each criterion is scored as 1 if present or 0 if absent, for a maximum score of 4. Higher scores represent more reliable and up-to-date information (Fig. 2).

## 2.3 Global quality scale (GQS)

The GQS is used to assess the flow, usefulness, and quality of information in online videos. The scale ranges from 1 to 5, with a score of 5 indicating high-quality, well-structured content and a score of 1 indicating poor-quality, incomplete information (Fig. 2). Videos scoring  $\leq 2$  are classified as “low quality,” those scoring 3 as “moderate quality” and those scoring  $\geq 4$  as “high quality”.

## 2.4 The content analysis of the videos was conducted by evaluating the following aspects

- Are appropriate imaging methods mentioned for diagnosing penile fracture? (Yes/No)
- Is the surgical indication clearly defined, and are criteria for urgent intervention explained? (Yes/No)
- Are different suture techniques and materials described for penile fracture repair? (Yes/No)
- Are postoperative complications such as penile curvature or erectile dysfunction discussed? (Yes/No)
- Are recommendations for conservative management of penile fracture mentioned? (Yes/No)
- Is the importance of early surgical intervention in preventing long-term complications emphasized? (Yes/No)
- Are follow-up protocols to monitor functional outcomes and recurrence risk outlined? (Yes/No)

Videos addressing these questions were given a score of 1,

and those that did not were given a score of 0. A total score of  $\leq 3$  indicated “poor content”, while a score of  $\geq 4$  indicated “rich content”.

The reliability of the videos was assessed using the Modified DISCERN scale, GQS and JAMA criteria.

## 3. Statistical analysis

The normality of the data was tested using the Shapiro-Wilk test. Student’s *t*-test was used for normally distributed variables, while the Mann-Whitney U test was applied for non-normally distributed variables. Chi-square tests were used for categorical variables, and correlations between numerical variables were assessed using Spearman’s correlation coefficient. Statistical analysis was performed using SPSS 26.0 software (IBM Corp. Armonk, NY, USA), with  $p < 0.05$  considered statistically significant.

## 4. Results

Of the 47 videos included in the study, their quality was evaluated using the Global Quality Scale (GQS). No statistically significant differences were found between low, medium, and high-quality videos in terms of view count, number of likes, and comments ( $p > 0.05$ ). Although videos of better quality received a greater number of views, likes, and comments, the disparity was not deemed statistically significant (Table 1).

However, when videos were analyzed based on their content, those with rich content had significantly higher view counts approximately tenfold compared to poor-content videos ( $p < 0.05$ ). Likewise, high-quality videos received approximately double the number of likes compared to low-quality videos, and this disparity was found to be statistically significant ( $p < 0.05$ ). However, no significant differences were found regarding the number of comments and video durations (Table 2).

Short-duration videos were found to have proportionally

**TABLE 1. Evaluation of video features according to Global Quality Scale (GQS) grouping.**

Video features	GQS Quality Group	n	Median (Q1–Q3)	<i>p</i> -value*
Number of clicks	Low quality	31	5700 (1900–14,000)	0.169
	Medium quality	9	3300 (1300–16,500)	
	High quality	7	128,000 (2000–189,000)	
Number of Likes	Low quality	31	60 (15–164)	0.167
	Medium quality	9	58 (4–273)	
	High quality	7	625 (28–1000)	
Number of comments made	Low quality	31	3 (0–13)	0.168
	Medium quality	9	0 (0–13)	
	High quality	7	189 (0–534)	
Total		47		

Q1–Q3: Quartile 1–Quartile 3. \*: Kruskal Wallis Test was used in statistical analysis.

**TABLE 2. Evaluation of video features according to video content.**

Video features	Quality content	n	Median (Q1–Q3)	p-value*
Number of clicks				
	Poor content	34	3700 (1300–11,750)	0.034
	Rich content	13	32,000 (2000–128,000)	
Number of Likes				
	Poor content	34	51.50 (13.75–164)	0.048
	Rich content	13	92 (28–659)	
Number of Comments				
	Poor content	34	2 (0–8.75)	0.500
	Rich content	13	13 (0–235.50)	

Q1–Q3: Quartile 1–Quartile 3. \*: Mann-Whitney U test was used in statistical analysis.

richer content and higher quality ratio than medium and long-duration videos. However, it was not statistically significant ( $p > 0.05$ ). Furthermore, the study did not observe any statistically significant variance when analyzing the relationship between the duration of the video and its other characteristics, such as the number of clicks, likes, comments, as well as the Modified DISCERN and JAMA scores ( $p > 0.05$ ) (Table 3). Correlation analysis between quality scores and content analysis revealed strong positive correlations between the total content analysis score and the Modified DISCERN ( $r = 0.815$ ,  $p < 0.001$ ), JAMA ( $r = 0.781$ ,  $p < 0.001$ ), and GQS scores ( $r = 0.722$ ,  $p < 0.001$ ). These results indicate that video quality was evaluated in a consistent and reliable manner (Table 4).

Upon examination of the videos according to the creators' professional backgrounds, it was noted that the videos crafted by urology experts exhibited notably superior quality ratings in contrast to those generated by individuals outside of the healthcare field. This difference was statistically significant across content analysis, DISCERN, JAMA and GQS scores ( $p < 0.001$ ) (Table 5).

## 5. Discussion

YouTube, while widely accessible and catering to a large audience for health-related information, presents significant variability in the accuracy and reliability of its content. Patients facing health problems may struggle due to the absence of reliable medical information on the platform, which can potentially mislead them with incomplete or inaccurate content. The presence of health-related diagnostic and treatment information on social media and online platforms has become increasingly important in the digital age. Timely and precise access to information on conditions like penile fracture (PF), which can significantly impact sexual health, is crucial for prompt diagnosis and treatment. Inaccurate information circulating on social media platforms within the healthcare sector may impede patients' timely access to proper early interventions or steer them towards inappropriate treatment choices [19]. As highlighted in the introduction, delayed treatment following PF can lead to severe consequences.

The findings of our study align with previous research conducted on YouTube videos concerning other medical topics. A

research conducted by Sancı *et al.* [16] focused on YouTube videos concerning microdissection testicular sperm extraction revealed that the majority of the videos were deemed as low-quality and lacking reliability. Similarly, a study by Taştımur *et al.* [20] evaluating YouTube videos on kidney transplantation reported that 72% of the videos were of inadequate quality. Our study also demonstrates that the vast majority of these videos are of low quality, making it difficult for patients and their relatives to access accurate information.

Another significant finding of our study was the strong correlation between the Global Quality Scale (GQS) and the Modified DISCERN scores, indicating that the evaluation tools used are valid and effective in assessing the quality of the videos. These scoring systems provided an objective analysis of the video quality, aligning with the audience's perception of credible information. Moreover, there is a clear connection between the quantity of likes and the caliber of the videos, indicating that viewers can discern content quality accurately and generally gravitate towards videos of superior quality. Our research identified that short-duration videos generally offer denser content and exhibit a higher quality index compared to medium and long videos, although this discrepancy did not yield statistical significance. Interestingly, our findings underscore the limited presence of healthcare professionals or official health institutions in generating YouTube content related to PF. These videos were generally of higher quality, with greater numbers of views and likes. This finding underscores that health information sourced from reliable entities garners more interest from viewers. The majority of medical videos are created by individuals who lack a medical background, often emphasizing clicks and follower numbers more than the comprehensiveness and accuracy of the information presented.

One underlying issue is the lack of healthcare professionals actively contributing content to such platforms. Possible factors leading to this situation could involve the excessive workload, feelings of burnout, and a lack of adequate time for active participation on social media channels. Moreover, implementing a certification program for health-related video creators or forming review committees for content could be considered as viable strategies to address these challenges.

This study has several limitations. First, the subjective nature of video evaluations may limit the generalizability of the

**TABLE 3. Comparison of video features according to video duration.**

		Video duration			<i>p</i> -value*
		Short-term videos (≥30 sec, <5 min), (n = 19)	Medium duration videos (≥5 min, <10 min), (n = 20)	Long-term videos (≥10 min, ≤15 min), (n = 8)	
Number of clicks	Median (Q1–Q3)	3300 (2000–32,000)	3550 (779–25,250)	5800 (3650–12,850)	0.654
Number of Likes	Median (Q1–Q3)	60 (28–300)	34 (13.25–270.25)	62.5 (28.5–148.50)	0.690
Number of comments made	Median (Q1–Q3)	3 (0–25)	2 (0–14.75)	3 (0–7.75)	0.725
Modified DISCERN	Median (Q1–Q3)	3 (2–3)	2 (1–3)	2 (1.25–20)	0.057
JAMA (Journal of American Medical Association)	Median (Q1–Q3)	1 (1–2)	1 (1–1)	1 (0.25–10)	0.084
Video quality content total score					
	Poor content, n (%)	11 (57.90)	16 (80.00)	7 (87.50)	0.175**
	Rich content, n (%)	8 (42.10)	4 (20.00)	1 (12.50)	
GQS (Global Quality Scale)					
	Low Quality, n (%)	9 (47.40)	15 (75.00)	7 (87.50)	0.070**
	Medium Quality, n (%)	6 (31.60)	2 (10.00)	1 (12.50)	
	High Quality, n (%)	4 (21.10)	3 (15.00)	0 (0.00)	

*Q1–Q3: Quartile 1–Quartile 3.*

*\*Kruskal Wallis Test and \*\*Chi-square test were used in statistical analysis.*

*\*\* : Since the expected values in the cells were below 5, statistical analysis was performed by combining medium and long-term videos.*

**TABLE 4. JAMA, Modified DISCERN, GQS scoring.**

Criterion	JAMA	Modified DISCERN	GQS
Writing	The identities of the authors must be clearly stated.	The source providing the information must be specified.	The purpose of the source must be clear.
References	Sources must be reliable and valid.	Sources must be cited for all information.	Alternative treatments should be offered.
Conflict of interest	It must be disclosed whether there is a conflict of interest.	It should not contain biased information.	Information must be unbiased.
Clarity of objectives		It should have an informational purpose.	Must be suitable for the target audience.
Risks and benefits	Health information should include risks and benefits.	Risks and benefits should be presented in a balanced manner.	Advantages and disadvantages should be presented.
Overall quality	Scoring is done between 1–4.	Scoring is done between 1–5.	Scoring is done between 1–5.

*JAMA: Journal of American Medical Association; GQS: Global Quality Scale.*

**TABLE 5. Comparison of video features and video quality scores of urologists/pediatric urologists/pediatric surgeons and non-healthcare professionals who reviewed the video.**

	Urologists (n = 13)	Not a Healthcare Worker (n = 34)	p-value*
Number of clicks, Median (Q1–Q3)	32,000 (2000–128,000)	3700 (1375–11,750)	0.052
Number of Likes, Median (Q1–Q3)	92 (28–659)	51.5 (13.75–164)	0.052
Number of comments made, Median (Q1–Q3)	13 (0–235.5)	2 (0–8.75)	0.283
Video content analysis total score, Median (Q1–Q3)	4 (4–5.5)	3 (2–3)	<0.001
Modified DISCERN, Median (Q1–Q3)	3 (3–3)	2 (1–2)	<0.001
JAMA, Median (Q1–Q3)	2 (1–2)	1 (1–1)	<0.001
GQS, Median (Q1–Q3)	4 (2–4.5)	2 (2–2)	<0.001

Q1–Q3: Quartile 1–Quartile 3. \*: Mann-Whitney U test was used in statistical analysis.

JAMA: Journal of American Medical Association; GQS: Global Quality Scale.

findings. Furthermore, the scope of this research was limited to YouTube videos, with exclusions of content from other online platforms and websites. This limitation underscores the necessity for future studies to evaluate the accuracy of information related to PF across a wide range of online sources. Conducting more expansive and varied analyses has the potential to offer profound insights into enhancing the quality of medical information on similar platforms. It is also important to note that the sample size of videos in this study was restricted, underscoring the importance of conducting future research with larger video datasets. The study also did not account for the impact of YouTube's search algorithm, which can change over time and influence search results. Finally, although the DISCERN and GQS scales are widely used tools for evaluating the quality of online health information, there is a need to develop more comprehensive and objective methods to assess the reliability of such content.

## 6. Conclusions

In summary, although YouTube has emerged as a prominent tool for accessing information in the present day, it is crucial to acknowledge that there are various other social media platforms that individuals turn to for health-related knowledge. Social media channels such as Instagram, TikTok, Facebook and Twitter also wield significant influence in shaping public perceptions of medical subjects. Notably, YouTube has been identified as a source of considerable misinformation despite its widespread usage. This underscores the pressing importance for healthcare professionals to actively engage across these platforms in offering precise and trustworthy medical information. Moreover, professional associations and medical organizations specializing in different fields could assume a supervisory role in monitoring and regulating the content disseminated on these channels. Videos and posts containing accurate and trustworthy information not only serve to educate patients but also play a crucial role in improving early diagnosis rates and enhancing treatment outcomes.

## AVAILABILITY OF DATA AND MATERIALS

The data presented in this study are available on reasonable request from the corresponding author.

## AUTHOR CONTRIBUTIONS

SS—Concept; Literature Search. SS, MŞE—Design; Writing. İT—Data Collection or Processing. İT, SS—Analysis or Interpretation.

## ETHICS APPROVAL AND CONSENT TO PARTICIPATE

As per the policy at William Paterson University, studies not involving human subjects (such as this) are not subject to review by the Institutional Review Board.

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## CONFLICT OF INTEREST

The authors declare no conflict of interest.

## REFERENCES

- [1] Syarif S, Azis A, Natsir AS, Putra MZDA. What is the most dangerous sexual position that caused the penile fracture? A systematic review and meta-analysis. *International Brazilian Journal of Urology*. 2024; 50: 28–36.
- [2] Yokoyama S, Tsuboi I, Ogawa K, Yoshioka S, Kobayasi Y, Nakajima H, *et al.* Isolated rupture of the corpus spongiosum with urethral injury diagnosed by pre-surgical MRI. *International Journal of Urology Case Reports*. 2022; 6: 70–72.
- [3] Bernstein AP, Shayegh N, Piraino J, Ziegelmann M. Optimal timing of surgical intervention for penile fracture: a narrative review of the modern literature. *Sexual Medicine Reviews*. 2024; 12: 230–239.



- [4] Rezaee ME, Gross MS. The pelvic pop: an extremely rare case of internal penile fracture presenting with scrotal hematoma and review of the literature. *Asian Journal of Andrology*. 2021; 23: 116–117.
- [5] Hughes WM, Natale C, Hellstrom WJG. The management of penile fracture: a review of the literature with special consideration for patients undergoing collagenase clostridium histolyticum injection therapy. *Current Urology Reports*. 2021; 22: 13.
- [6] Horiguchi A, Edo H, Shinchi M, Ojima K, Hirano Y, Ito K, *et al*. Role of magnetic resonance imaging in the management of male pelvic fracture urethral injury. *International Journal of Urology*. 2022; 29: 919–929.
- [7] Klemm J, Marks P, Dahlem R, Riechardt S, Fisch M, Vetterlein MW. Contemporary management of pelvic fracture urethral injuries. *Urologie*. 2022; 61: 602–608. (In German)
- [8] Yusuf M, Yogiswara N, Soebadi MA, Duarsa GWK, Wirjopranoto S. Long-term outcomes comparison of immediate and delayed surgical intervention for penile fracture: a systematic review and meta-analysis. *Sexologies*. 2022; 31: 453–460.
- [9] Falcone M, Garaffa G, Castiglione F, Ralph DJ. Current management of penile fracture: an up-to-date systematic review. *Sexual Medicine Reviews*. 2018; 6: 253–260.
- [10] Garaffa G, Raheem AA, Ralph DJ. Penile fracture and penile reconstruction. *Current Urology Reports*. 2011; 12: 427–431.
- [11] Sarıkaya K, Senocak Ç, Sadioglu FE, Bozkurt ÖF, Çiftçi M. Early surgical repair or conservative treatment? Comparing patients with penile fracture concerning long-term sexual functions. *Turkish Journal of Trauma and Emergency Surgery*. 2021; 27: 249–254.
- [12] Vance K, Howe W, Dellavalle RP. Social internet sites as a source of public health information. *Dermatologic Clinics*. 2009; 27: 133–136.
- [13] Miller LMS, Bell RA. Online health information seeking: the influence of age, information trustworthiness, and search challenges. *Journal of Aging and Health*. 2012; 24: 525–541.
- [14] Drozd B, Couvillion E, Suarez A. Medical YouTube videos and methods of evaluation: literature review. *JMIR Medical Education*. 2018; 4: e3.
- [15] Madathil KC, Rivera-Rodriguez AJ, Greenstein JS, Gramopadhye AK. Healthcare information on YouTube: a systematic review. *Health Informatics Journal*. 2015; 21: 173–194.
- [16] Sancı A, Özcan C. Evaluation of the quality and reliability of YouTube video resources on microdissection testicular sperm extraction. *Andrology Bulletin*. 2022; 24: 186–190.
- [17] Silberg WM, Lundberg GD, Musacchio RA. Assessing, controlling, and assuring the quality of medical information on the Internet: caveat lector et viewer—let the reader and viewer beware. *JAMA*. 1997; 277: 1244–1245.
- [18] Bernard A, Langille M, Hughes S, Rose C, Leddin D, Van Zanten SV. A systematic review of patient inflammatory bowel disease information resources on the World Wide Web. *The American Journal of Gastroenterology*. 2007; 102: 2070–2077.
- [19] Zhong B. Going beyond fact-checking to fight health misinformation: a multi-level analysis of the Twitter response to health news stories. *International Journal of Information Management*. 2023; 70: 102626.
- [20] Taştemur S, Şenel S, Kasap Y, Uzun E, Ölçücüoğlu E. Quality analysis of the YouTube videos on kidney transplantation. *Cumhuriyet Medical Journal*. 2022; 44: 98–103.

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