The Reliability and Quality of Short Videos as a Source of Dietary Guidance for Acute Pancreatitis: Cross-sectional Study

Chuanchao Xia, Zhenhuan Wang, Yue Xu, Guoqiang Xu

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Abstract

Background: Acute pancreatitis (AP) is one of the most prevalent gastrointestinal diseases in clinical practice. In addition to essential medication therapy, a nutritional diet also plays a vital part in the treatment. People are increasingly using online short video platforms to look up health-related information with the widespread use of smartphones. However, the quality and reliability of health content on these platforms remain unknown.

Objective: This study aimed to assess the quality and reliability of the information in AP diet–related videos on Chinese short-video-sharing platforms.

Methods: A total of 147 videos were included to analyze from three of the most widely used short-video sharing platforms in China, TikTok, BiliBili, and WeChat channels. Each video was assessed by two physicians separately for content (by content score), quality (by Global Quality Score), and reliability (by an adjusted DISCERN tool). Poisson regression and correlation analysis were used to explore the variables that might affect the quality of the video.

Results: videos from TikTok had the most likes and comments than videos from TikTok and WeChat channels, and videos from BiliBili were longer in duration and in days since published than other videos (all p<.001). However, there was no significant difference in the GQS, content score and the DISCERN score among videos from TikTok, BiliBili, and WeChat channels (p>.05). The overall quality of the videos was poor. videos from medical professionals had a relatively greater advice value than those from non-medical professionals in the field of content trustworthiness, quality, and comprehensiveness. The subsequent variables were correlated positively: likes and shares (r=0.326, p<.001), likes and comments (r=0.439, p<.001), comments and shares (r=0.337, p<0.001). DISCERN scores and days since published were found to be negatively correlated (r=-0.259, p<.001).

Conclusions: The findings showed that these videos' quality was inadequate and varied greatly based on the kind of source. In general, videos uploaded by medical professionals were proved to be more reliable, comprehensive, and high-quality than non-medical professionals' videos in content quality. these platforms were not a suitable source of information for patient education. But given the rise in popularity of video-sharing platforms, necessary regulations and restrictions should be taken.

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Abstract

Background: Acute pancreatitis (AP) is one of the most prevalent gastrointestinal diseases in clinical practice. In addition to essential medication therapy, a nutritional diet also plays a vital part in the treatment. People are increasingly using online short video platforms to look up health-related information with the widespread use of smartphones. However, the quality and reliability of health

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Conclusion: The findings showed that these videos' quality was inadequate and varied greatly based on the kind of source. In general, videos uploaded by medical professionals were proved to be more reliable, comprehensive, and high-quality than non-medical professionals' videos in content quality. these platforms were not a suitable source of information for patient education. But given the rise in popularity of video-sharing platforms, necessary regulations and restrictions should be taken.

Keywords: acute pancreatitis, short videos, dietary guidance.

Introduction

Acute pancreatitis (AP) is one of the most prevalent gastrointestinal diseases in clinical practice, and often develops locally and involves systemic organs to become severe acute pancreatitis. The three most frequent etiological causes, known for a long time, are drinking, gallstones, and hyperlipidemia[1]. Risk factors include drugs, iatrogenic factors, tumors, and genetic predisposition[2]. The etiology of acute pancreatitis is still poorly understood, and effective treatment is deficiency besides symptomatic treatment, fluid resuscitation, nutritional support, et.al[3]. Acute pancreatitis is caused by the digestion of pancreatic and surrounding tissues after pancreatic enzyme is activated in the pancreas, consequently, the prevention of continued pancreatic enzyme activation following the onset of pancreatitis represents a pivotal aspect of pancreatitis treatment[4]. Research has shown that maintaining intestinal barrier integrity, promoting crucial immunomodulatory and antioxidant effects, and restoring energy balance depends on nutrition and nutritional supplements[5]. Thus, nutritional therapy should play a vital part in the treatment of acute pancreatitis in addition to essential medication therapy. There are three ways to give nutrition: enteral feeding, oral feeding, and total parenteral nutrition. Decades of dispute have surrounded the best dietary support for AP, and clinical guidelines discuss various nutritional solutions for individuals with AP[6].

The clinician will determine either enteral or parenteral nutrition, but patients would make their own choices about what and when to eat during the recovery time of AP, which would affect the recovery. Online short video platforms, like TikTok and BiliBili, have been more prevalent in recent years. When it comes to communicating health information, these mediums appear to have an unbeatable edge. People are increasingly using these mediums to look up health-related information with the widespread use of smartphones since visual information is easier to understand and recall than written information[7]. Consequently, after learning from their physician how important diet is, people with AP are more inclined to look up diet plans online to enhance their nutritional intake. However, because of the variety of online videos, patients cannot accurately judge the authenticity and reliability of online videos about dietary guidance, nor can they judge whether the content of the videos is useful or misleading. Additionally, there is no quality evaluation of internet video information related to nutritional therapy for AP. Therefore, assessing the quality of online short videos about food therapy for patients with AP is imperative for medical professionals.

In China, short-video sharing apps like TikTok, BiliBili, and WeChat channels have drawn over 200 million users and offer a wealth of information resources due to convenience, diversity, and interactive nature. By entering keywords relating to their interest, patients with AP can access many health videos on these platforms, including those offered by specialized doctors without registering or paying. However, it appears that the quality of dietary-related information provided to patients with AP on short videos has not been sufficiently evaluated. In this study, quality information evaluation of short videos on the AP diet on BiliBili, TikTok and WeChat channels have been conducted to close this information gap.

Methods

Data Collection

The search was conducted across three of the most widely used short-video sharing platforms in China, TikTok, BiliBili, and WeChat channels, and finished between July 1 and July 3, 2024. The search keywords were described in Chinese as “acute pancreatitis” or “pancreatitis” combined with “diet”, “eating” or “nutrition”. Videos that mostly concerning the AP diet were enrolled in. Videos that were duplicates, unintelligible or of low quality, for commercial purposes, from unknown identity authors, unrelated to the subject matter, or which were not in Chinese were all eliminated. Basic data about the videos were collected, including the uploader's identity, video duration, the number of likes, comments, shares, saves, and days since published (Figure 1). All collected information was entered into Excel (Microsoft Corp).

Classification of Videos

Based on the source, videos were classified into two groups: medical professionals and non–medical professionals. The former was further separated into doctors and medical organizations, while the latter into media, individuals, and patients (those suffering from acute pancreatitis, either past or present).

Evaluating Methodologies

Scores were to assess the videos' dependability, content, and overall quality. According to guidelines and research, the following six factors were used to summarize dietary recommendations for patients with AP[8–10]: Alcohol and smoking, Fats, Proteins, Fruits and vegetables, Carbohydrates and diet process. With a maximum score of 6, the overall count of accurate suggestions for every category was used to calculate the video content score. The details are shown in Table 1. The video receives one point for each item mentioned and receives 0 point otherwise. For assessing health-related

information on video-sharing sites, the DISCERN tool has received extensive validation and application[11,12]. Thus, we evaluated the content's reliability using an adjusted version of the DISCERN tool, which is shown in Table 2. The reliability improved with a higher score. The Global Quality Score (GQS), a frequently used 5-point scale from 1 to 5 was used to assess the quality of short videos[13,14](Table 3).

Table 1. Detailed content scores of diet recommendations on Internet videos for patients with acute pancreatitis.

Aspects of diet	Recommendations
Alcohol and smoking	Absolute prohibition of alcohol and smoking
Fats	Low-fat diets
Proteins	Moderate intake of high-quality proteins,
Fruits and vegetables	Proper amounts of fruits and vegetables.
Carbohydrates	Adequate daily intake of carbohydrates.
Prohibition	Overeating is strictly prohibited at any time

Table 2. Details of adjusted DISCERN quality criteria for evaluating the reliability of videos.

DISCERN Score
1. Is the video clear, concise, and understandable?
2. Is it balanced and unbiased?
3. Is it clear when the information used or reported in the publication was produced?
4. Is it clear what sources of information were used to compile the publication?
5. Does it provide details of additional sources of support and information?
6. Does it refer to areas of uncertainty?

Table 3. Details of the global quality score (GQS) for assessing the overall quality of videos on Internet videos for patients with acute pancreatitis.

GQS Definition	**Score**
Poor quality, poor flow of the video, most information missing, not at all useful for patients	1
Generally poor quality and poor flow, some information listed but many important topics missing, of very limited use to patients	2
Moderate quality, some important information is adequately discussed	3

Good quality good flow, most relevant information is covered, useful for patients	4
Excellent quality and flow, very useful for patients	5

To reduce the bias caused by personal recommendation algorithms, new accounts were created and logged in for every video platform. And every video was only viewed without downloading, liking, or commenting. Two physicians assessed each video separately, and any discrepancies were discussed and resolved. Additionally, they reviewed the DISCERN and the GQS grading rules before evaluating the videos. Discussion was conducted on how to use the tool for assessing video-based content and made the necessary adjustments. κ values were used to calculate inter-rater reliability, which is classified as follows: a number above 0.8 is deemed "excellent" agreement, a number between 0.6 and 0.8 is deemed "substantial", a number between 0.4 and 0.6 is deemed "moderate", and a number below 0.4 is deemed "poor"[15].

Statistical Analyses

The Kruskal-Wallis H test was used to compare groups of three, whereas nonparametric Mann-Whitney tests were used to compare two groups. SPSS software and GraphPad were used for data analysis. Statistical significance was defined as $p<0.05$.

Ethical Considerations

This investigation refers to no human specimens, clinical data, or lab animals. No personal privacy concerns were raised by any of the data, which was all gathered from publicly accessible TikTok, BiliBili, and WeChat channel videos. Furthermore, no user involvement occurred throughout this investigation, so no ethics approval was required.

Results

Video Characteristics

147 short videos were included for further information collection and analysis after applying the inclusion and exclusion criteria: 90 from TikTok, 24 from BiliBili, and 33 from WeChat (Figure 1). Table 4 lists the general characteristics of the videos. The results showed that videos from TikTok had the most likes and comments than videos from TikTok and WeChat channels, and videos from BiliBili were longer in duration and in days since published than other videos (all $p<.001$), while there was no significant difference in saves and shares (all $p>.05$). Moreover, the GQS, content score, and the DISCERN score did not significantly differ from one another. ($p>.05$).

Table 4. Characteristics of the videos from TikTok, Bilibili and WeChat channels

Variables	TikTok (n=90)， median (IQR)	BiliBili (n=24), median (IQR)	WeChat (n=33)， median (IQR)	P value
Duration(s)	111.5，72.75-210，	120 ， 79.75-218.25，	66(41-96)	P=.002(**)
Likes	272，152.25-615，	169.5，47.25-322，	99(61-279)	p<.001(***)

Comments	42□20.25-95.75□	18□5-41.25□	19(14-41)	p<.001(***)
Saves	65.5□20-209.25□	69□35.50-265.25□	92(53-220)	p=.399
Shares	62.5□19-259□	53.5(24-91.25)	119(59-211)	P=.07
Days since published	210□124.5-400□	697.5(360-835)	375(188-720)	p<.001(***)
Content score	3□2-5□	4(2-5)	4(3-4)	p=.288
Global quality score	3(2-5□	4(2-5)	4(3-5)	p=.618
DISCERN score	3(2-5□	4(2-5)	4(2-5)	P=.407

According to the identity of the uploaders, 147 videos were divided into 2 groups: two groups: medical professionals and non–medical professionals. The former was subdivided into doctors and medical organizations, while the latter was further subdivided into media, nonprofessional individuals, and patients.

Table 5 shows the general characteristics of the videos. Among all the videos, doctors contributed the majority of the videos (n=55, 37%), followed by media (n=26,18%), medical organizations(n=25,17%), individuals(n=22,15%) and patients(n=19,13%). Of all the enrolled videos, the median duration was 97(IQR,66-197), and the median likes, comments, saves, shares, and days since published were 202(IQR 100-529.5), 30(IQR 15.5-71.5), 71(IQR 27.5-211.5), 69(IQR 21-235), and 300(IQR 150-720), respectively. Notably, videos uploaded by medical professionals received more likes (Median 308.5, IQR 128.25-687.5), comments (Median 40, IQR 19.75-83.75), saves (Median 107.5, IQR 42.75-290.5), and shares (Median 115.5, IQR 42-326.25) than videos from non–medical professionals.

Table 5. Characteristics of the videos across sources

Variables		Duration(s), median (IQR)	Likes, median (IQR)	Comments, Median (IQR)	Saves, Median (IQR)	Shares, Median (IQR)	Days since published, median (IQR)	Content score, median (IQR)	GQS, Median (IQR)	DISCERN score, median (IQR)
Video Sources										
Medical Professionals	Doctors (n=55,37%)	96 (68-207.5)	390 (177-934.5)	44 (68-307.5)	144 (68-307.5)	156 (59.5-384)	240 (127.5-760)	4 (3-5)	4 (4-5)	2(2-3.5)
	Medical Organizations (n=25,17%)	76(48-111)	186(80-450)	25(14-50)	44(16-92)	73 (19-180)	300 (180-545)	4(4-5)	4(3-5)	3(2-4)
	Overall (n=80,54%)	95(64.25-195)	308.5 (128.25-687.5)	40 (19.75-83.75)	107.5 (42.75-290.5)	115.5 (42-326.25)	259 (147.5-742.5)	4(3-5)	4(3-5)	2(2-4)
Non-medical Professionals	Media (n=26,18%)	105 □67.25-176.75□	169.5 □84.5-26.5□	17□10-48□	80.5 (42.75-132.35□	59.5 □32.5-164.75□	395 □288.25-715.75□	2□1-2□	2□2-2□	3(2-4)
	Individuals (n=22,15%)	165.5□88-250□	176.5 □74.75-580.5□	31□12-50.5□	27.5 □15.25-73.75□	21.5 □11.2-73.8□	382.5 □186.25-730□	1□1-2□	2□1-3□	2(2-3)

Patients (n=19,13%)	104□70-154□	61□40-213.5□	21□13-98□	25□16.5-55□	24□9.5-61.0□	150 □120-285.5□	2□2-3□	2□2-3□	2(1-2)
Overall (n=67,n=46%)	111(72-204.5)	153 (54.5-277.5)	21(11-54)	49(18-102.5)	46(11-115.5)	331 (162.5-615)	2(1-2)	2(2-3)	2(2-3)
Overall(n=147)	97(66-197)	202 (100-529.5)	30 (15.5-71.5)	71 (27.5-211.5)	69(21-235)	300(150-720)	3(2-4)	3(2-4)	2(2-3)

Video Content

The content score was used to evaluate the content involved in the short videos. While the content score of videos from doctors and medical organizations was higher than that from others (p<.001) (Figure 2, Table 5), the content of video from medical professionals was still not comprehensive enough. Among all the videos uploaded by non-medical professionals, the content score of videos from individuals was the lowest. There was no significant difference in the content score between the doctors and the medical institutions (p>.05). And the content scores of videos from doctors were higher than those from media, individuals or patients. (p<.001, Figure 3A).

Information Quality and Reliability

The GQS was used to evaluate the general quality of each video. The median GQS value for all videos was 3(IQR 2-4). Compared to videos from non-medical professionals, the GQS values of videos from medical professionals were much higher (median 4, IQR 3-5 vs median 2, IQR 2-3, p<.001) (Figure 2, Table 5), while there was no significant difference in the GQS values between the doctors and the medical institutions (p>.05). And the GQS values of videos from doctors were higher than those from media, individuals or patients. (p<.001, Figure 3B. Among the videos from non–medical professionals, the GQS values of videos from patients got the highest score.

The DISCERN score was used to evaluate the reliability of the videos, and the median score for all videos was 2(IQR 2-3). Corresponding with the GQS results, the median DISCERN score of videos from medical professionals was higher than that from non-medical professionals(p<.001) (Table 5, Figure 3C). Further analysis showed that the median DISCERN score of videos from doctors was higher than that from patients(p<.001). However, the median DISCERN score did not significantly differ between doctors and media, and between doctors and individuals (p>.05). Similarly, there was no significant difference among the non-medical professionals (p>.05) (Figure 3C).

Correlation Analysis

Spearman correlation analysis was used to evaluate the relationships between different video variables according to the not normally distributed data, which showed the subsequent variables were correlated positively: likes and shares (r=0.326, p<.001), likes and comments (r=0.439, p<.001), comments and shares (r=0.337, p<.001) (Table 6). DISCERN scores and days since published were found to be negatively correlated (r=-0.259, p<.001), and shares were positively associated with content scores (r=0.247, p<.001) (Table 7).

Table 6. Spearman correlation analysis between the video variables

Variables	likes	Comments	Shares	Saves	Days since published	Duration
Likes						
r value	1	-	-	-	-	-
P value	-	-	-	-	-	-
Comments						
r value	0.439	1	-	-	-	-
P value	□.001	-	-	-	-	-
Shares						
r value	0.326	0.337	1	-	-	-
P value	<.001	<.001	-	-	-	-
Saves						
r value	-0.140	-0.730	-0.109	1	-	-
P value	.086	.382	.189	-	-	-
Days since published						
r value	-0.108	0.070	0.008	-0.094	1	-
P value	.193	.392	.919	.257	-	-
Duration						

r value	0.043	-0.030	0.012	-0.023	0.047	1
P value	.610	.723	.879	.778	.053	-

Table 7. Pearson correlation analysis among video variables and the content score, the global quality score and the DISCERN scores.

Variables	Content score	Global Quality Score	DISCERN score
Likes			
r value	0.093	0.117	0.061
p value	.264	.158	.458
Comments			
r value	0.043	0.033	-0.039
p value	.604	.690	.063
Shares			
r value	0.247	0.159	0.044
p value	<0.001	.055	.593
Saves			
r value	-0.148	-0.138	0.011

p value	.072	.090	.886
Days since published			
r value	-0.078	-0.142	-0.259
p value	.341	.091	<0.001
Duration			
r value	-0.022	-0.088	0.050
p value	.976	.026	.548

Discussion

Principal Findings

The present cross-sectional study analyzed feature information regarding videos for AP diet from 3 popular Chinese popular video platforms: TikTok, BiliBili, and WeChat channels. The DISCERN, the adjusted GQS instruments and the content score were used to evaluate the quality, reliability and content of the videos. Though doctors posted the most videos among all the videos (37%), and medical organizations (17%) in the third, generally, these videos lacked sufficient quality, most likely because health-related content is not reviewed or approved before being uploaded. Meanwhile, it is important to note that these platforms do not strictly authenticate identities claiming to be doctors, so there's a chance that the claims are false—for example, bloggers may pose as doctors to increase the number of views on their videos.

The General Quality of the Videos

The median DISCERN score, content score, and the GQS of all 147 videos are 2(IQR 2-3), 3(IQR 2-4), and 3(IQR 2-4), respectively. Previous research has shown that the author's identity impacts the overall quality of health education videos[16]. And in this study, the median DISCERN score, content score, and GQS scores of videos from medical professionals are 2(IQR 2-4), 4(IQR 3-5), and 4(IQR 3-5), respectively, and from non-medical professionals are 2(IQR 2-3), 2(IQR 1-2), and 2(IQR 2-3). videos from medical professionals had a relatively greater advice value than those from non-medical professionals in the field of content trustworthiness, quality, and comprehensiveness. This could be explained by the reality that healthcare professionals, especially doctors, are more aware of new information and have a thorough understanding of pertinent AP dietary guidelines, the literature, and the current consensus, while non-medical professionals, like individuals, patients with AP, rely

more on their own experiences and subjective opinions, which may be somewhat biased[17]. The median length of videos is 97 seconds (IQR 66-197), and there is no significant difference between video duration and video quality, indicating that longer videos do not improve video quality, which was inconsistent with previous research[18].

Factors that influence the popularity of videos

The popularity of videos was reflected by video characteristics, such as the number of likes, comments or shares[19]. In general, videos from TikTok were more popular than those from BiliBili and WeChat channels with more likes and comments. Likes, comments, and shares all showed a positive association, suggesting that popular videos received more attention and were shared more frequently according to Spearman correlation analysis. However, there was no correlation between video duration, days since published and video popularity, which, surprisingly, contradicted what some previous studies had found[20].

Relationship Between Video Quality and Video Characteristics

In this study, we were surprised to find that shares were positively correlated with content scores, suggesting that viewers were more likely to share videos with high content scores. However, there was no significant difference between shares and GQS score or DISCERN score, indicating that the ability of viewers to choose high or low-quality video content is questionable, which may be other underlying factors. In addition, the result demonstrated that the DISCERN score was negatively associated with the days since published. The quality of the videos uploaded earlier may be less reliable. With the spread of information and the deepening understanding of medical diseases, the quality of videos has gradually improved. Certainly, further subgroup analysis is needed to confirm.

High-Quality Health Education is Necessary for Patients with AP

The World Health Organization states that the goal of health education is to assist patients in acquiring or maintaining the skills necessary to effectively manage their lives while living with illness. Patients who receive high quality health education are better able to collaborate with one another, comprehend their conditions, and take control over their medical care, making them fully engaged in the management of their health. Dietary therapy has been long recognized as a traditional kind of treatment, especially those with digestive disorders[21]. Energy needs can be noticeably higher in AP due to the increased metabolism brought on by the inflammation and septic consequences, particularly in moderately severe and severe cases of the disease[22]. Nutritional support is necessary for all AP patients as they are at risk of malnourishment[9]. However, the NCEPOD report illustrates that a large number of patients do not obtain appropriate nutritional assessment, and nutritional intervention is insufficient[23]. Comprehensive health education can successfully help patients supplement nutrition correctly, and enhance their understanding of the disease, in addition to lower the incidence of complications to some extent[8,24].

Practical Significance

The internet has transformed patients from a passive information user to an active searcher due to a boom in interest in internet-based health promotion brought about by breakthroughs in the internet and people's desire for health. Compared to text or voice, videos are typically thought to convey complex health information in a more stunning and understandable style. Consequently, patients are increasingly turning to social media with visual content as a major source of information. At the same time, medical workers also set up accounts on video platforms to release some health information. Convenient access to medical information is made possible by a variety of social media platforms. For these platforms seem to have become a bridge for patients and medical workers to communicate with each other. In actuality, there is increasing evidence to support the beneficial

effects of video instruction. In a randomized controlled experiment, online video-based education significantly improved patients' understanding of the disease and their clinical results when compared to paper pamphlets[25]. However, restrictions on identity on these platforms are lacking, which may cause many problems: some videos mislead viewers or provide false information. For viewers to have access to reliable information, video quality needs to be evaluated. The government has just released the health promotion guidelines, outlining criteria for the publication and sharing of scientific health-related information via various media channels. Digital health has enormous promise for the treatment of diseases including AP. This requires platforms to upload more detailed and higher-quality videos, and to conduct more professional and detailed reviews of the content.

Strengths and Limitations

The internet-based health information is receiving more and more attention. Our research is the first to assess the content and quality of videos about diet guidance for AP on popular short video platforms using score tools (DISCERN and GQS). Further analysis is conducted to explore the association between the video quality and video characteristics.

However, there are still some restrictions on this study that musted be noted. First, only Chinese video-sharing platforms were enrolled, therefore, the results might not apply to other language platforms, such as YouTube. Further multi-platform and multi-language research is needed to solve this problem. Second, there is less cross-study comparability and greater subjectivity in the assessment instruments we selected. Though separate evaluation was conducted by two scholars in the field, and Cohen κ was used to quantify the agreement between them, subjective variations are nevertheless unavoidable. Third, uncertainties in this study existed because of the limited quantity of videos. The majority of videos on these platforms right now are meant for amusement purposes, medical videos only make up a small portion, therefore, high-quality videos of health information should be encouraged. And encouragement should be given to the platforms to create distinct health sections from other video content. Videos created by certified medical practitioners or evaluated by experts should be the only ones permitted to be uploaded in this area.

Conclusion

In our study, 147 short videos about diet guidance for AP from TikTok, BiliBili, and WeChat channels were assessed for content quality and reliability. The findings showed that the quality of videos on these platforms was insufficient and varied greatly according to different sources. In general, videos uploaded by medical professionals were proved to be more reliable, comprehensive, and high-quality than non-medical professionals' videos in content. Because the content was of poor quality and unreliable, these platforms were not a suitable source of information for patient education. But given the rise in popularity of video-sharing platforms, necessary regulations and restrictions should be taken.

Authors' Contributions

GX and CX conceived and designed the study. CX and ZW were responsible for reviewing and scoring the videos. ZW and YX collected and analyzed the data. CX wrote the original draft. GX reviewed and edited the manuscript. All the authors contributed to the manuscript and approved the submission.

Conflicts of Interest

None declared.

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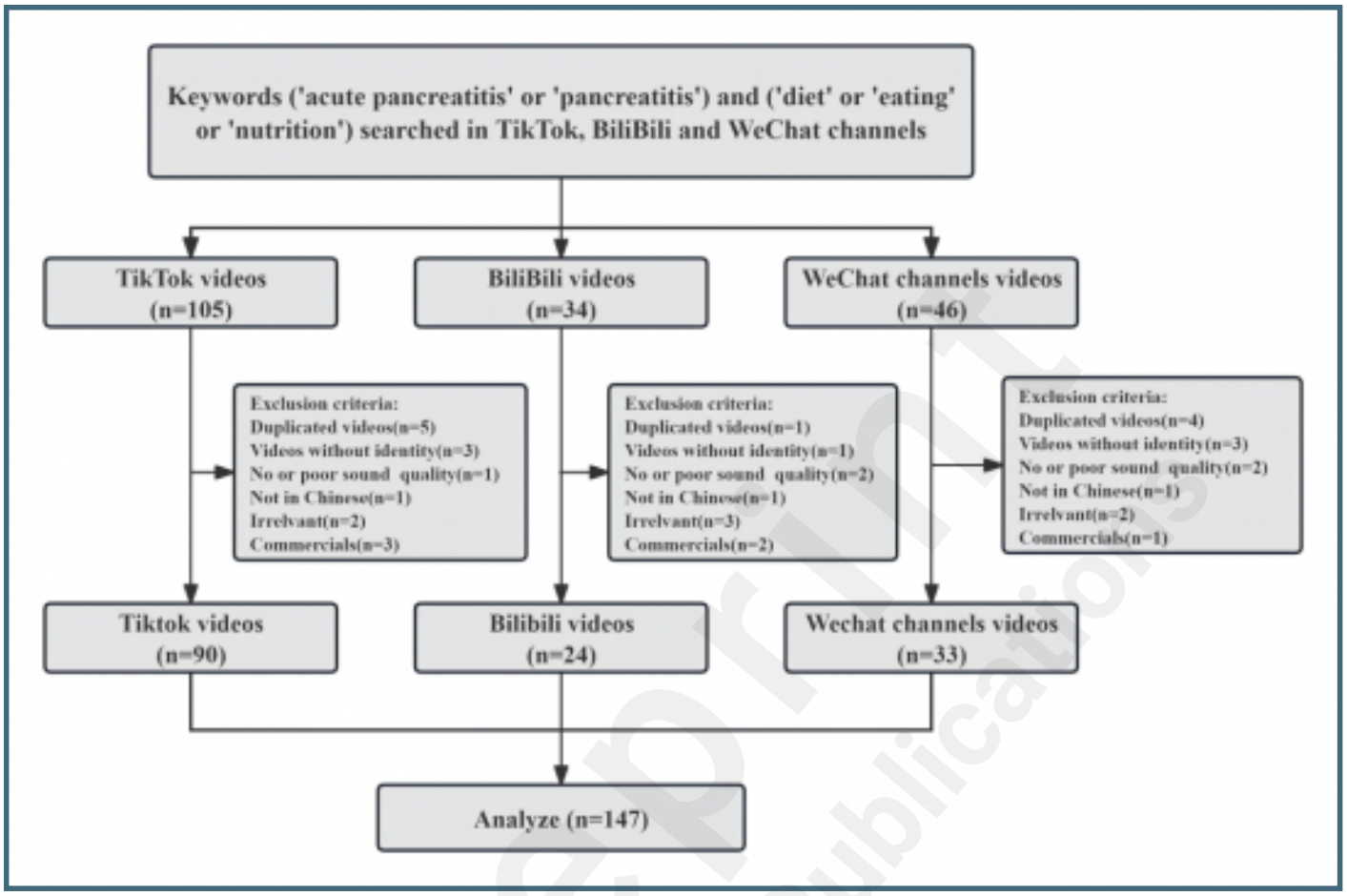
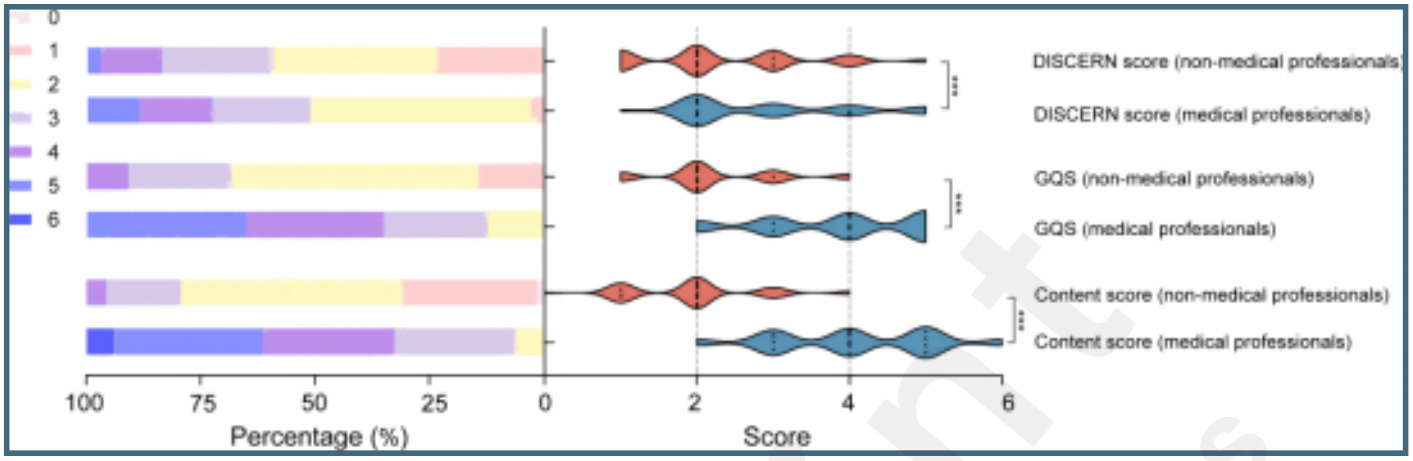
Supplementary Files

Figures

Search strategy for short videos focused on an AP diet.





Comparison of the content score, the GQS, and the DISCERN score of videos between different sources. The left shows the percentage of scores; Violin plots show the total content scores. A, Comparison of the content score of videos between different sources; B, Comparison of the GQS of videos between different sources; Comparison of the DISCERN score of videos between different sources.***P.05, nonsignificant.