

The Popularity, Quality, and Reliability Analysis of Youtube Videos on Cataract and Cataract Surgery

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ABSTRACT

Purpose: To evaluate the popularity, quality, and reliability of the Youtube videos about cataract.

Materials and Methods: The video search on Youtube (<http://www.youtube.com>) was conducted on the 26th of December 2020. The keywords (“cataract,” “cataract surgery,” and “Phacoemulsification.”) were separately searched without any user login, and the search history log was cleaned before the beginning of each search. The videos were also categorized according to the publisher and its content. Video popularity was assessed with the video power index (VPI). The video’s educational quality and reliability were scored using the Journal of the American Medical Association (JAMA) score, Global Quality Score (GQS), and the DISCERN questionnaire by two independent graders.

Results: A total of ninety-five videos were qualified for the study. The quality and reliability scores were found significantly correlated with each other ($p < 0,001$). However, the popularity index did not associate with the quality and reliability of the included videos. The most popular videos were published by a Tv Show or Youtube channel, while the videos with the best quality and reliability were published by ophthalmologists and academic institutions. The least popular videos were uploaded by private hospitals and Ophthalmologists as well.

Conclusion: The overall video content quality and reliability were rated as fair or suboptimally sufficient. Besides, despite the satisfying level of video content uploaded by the private hospitals and ophthalmologists, these videos’ popularity was poorly scored. We have found an inverse relationship between the popularity and the reliability of the video.

Keywords: Cataract surgery; Phacoemulsification; internet; Youtube; Video popularity, Cataract.

INTRODUCTION

The loss of transparency of the crystalline lens due to various situations is called cataract.¹ The second leading reason for preventable visual impairment is reported to be cataract in the world.² The World Health Organization emphasizes that nearly 65.2 million people have bilateral visual impairment due to cataract development and compose the reason for approximately half of the blindness worldwide.² The precise treatment of cataract is still surgical intervention.¹

The decrease in contrast sensitivity and unilateral double vision and blurred colors are commonly seen signs in cataract formation. Due to restrictive effects of visual impairment on personal and social life-related activities (reading, writing, housework, bath, shopping, facial recognition, etc.), the elderly aged individuals have to suffer from the physical, social and psychological burden of the cataract.³⁻⁷ These life-changing effects of cataract

and the reality that surgery is the only treatment option for the patients suffering from cataract attract the curiosity of patients and relatives willing to learn about the situation itself and the treatment options.

The most preferred method of sharing information is currently through a website. Youtube is the most commonly used website in the world in terms of multi-media sharing.⁸ Youtube is becoming more and more popular among patients, patient relatives, and doctors by providing free video sharing on the internet.⁹⁻¹¹ Although many people can easily access Youtube videos, the quality, reliability, and individual effect of their information can be misleading. It should be kept in mind that incorrect and incomplete information may damage the relationship and trust between the physician and the patient, especially regarding treatment options. It is always a rule that should be kept in mind that the treatment is specific to the person, not the disease.

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In recent years, it has become popular to evaluate, quality and accuracy of the information in the video contents on Youtube about common diseases and their treatments in different disciplines.^{9,12-17} Our aim in this study is to investigate the quality, reliability, and popularity of Youtube videos on cataract and cataract surgery and evaluate whether there are sufficient resources to inform patients about the subject.

MATERIALS AND METHODS

Study Design

The Institutional ethics review was not required for the study. The video search was conducted on the 26th of December 2020. In this study, the keywords used in the Youtube search (<http://www.youtube.com>) were “cataract,” “cataract surgery,” and “Phacoemulsification.” The keywords were separately searched without any user login, and the search history log was cleaned before the beginning of each search. The preference of search was selected as “search videos by view count.” The emerged videos after each keyword search were screened in a separate tab. Due to the fact that 95% of people doing web searches will not look beyond the first three pages of output, we have selected the top 50 videos arranged according to the view count.¹⁸ The same videos that appeared in a keyword search were excluded from the study. Additionally, the videos nonrelated to cataract had a shorter duration (≤ 1 minute), and the videos in a different language rather than English were excluded. All videos were analyzed by two independent researchers (M.S and M.D.O). The first researcher analyzed the video content and saved the video URL (uniform resource locator). The second researcher, who is blind to the previous evaluation of videos, studied the same video by accessing the saved URL address. Additionally, the first researcher who was blind to her previous scores analyzed the same videos two weeks after the initial assessment.

The following features of the videos were noted and further analyzed; the title of the video, duration of the video (seconds), the elapsed time since upload date (days), the number of total views along with view ratio (number of views per day), number of likes and dislikes, number of comments, and like ratio (like \times 100/[like + dislike]). The videos were also categorized according to the publisher and its content. The publishers were divided into eight categories: academic institution, private hospital, advertising, trade company, youtube user, patient, ophthalmologist, and tv show/youtube channel. The videos' content is also divided into six categories comprised of; medical education, patient experiences, patient information, parent experiences, entertainment, and surgical treatment procedures.

The popularity, quality, and reliability scoring of the videos

We have utilized a well-established method, the video power index (VPI), reported in previous studies to score the video's popularity. It was first described by Erdem et al. to evaluate the video popularity and calculated as the like ratio percentage per views (Ratio of likes \times ratio of views/100).⁹

The Journal of the American Medical Association (JAMA) scoring system and The Global Quality Score (GQS) method were used to assess video content^{10,19,20}. The JAMA scoring system comprises four components (authorship, attribution, disclosure, and currency) with one point each.^{10,19} The GQS system allows viewers to rate the quality of the video content, with a score of one to five on each criterion, and the format of increasing quality concurrent with the score achieved.²⁰

The reliability and quality of shared information were assessed using DISCERN system, which contains 15 questions that score from one to five points in each and the scoring system ranges from 15 to 75 points.^{14,21,22} The questions are divided into two sections. The first section with eight questions makes to score the reliability of the video content. The second section with seven questions evaluates the treatment-related information in video.²³

Statistical Analysis

The statistical analyses were performed using IBM SPSS Statistics program version 21.0. The normally and non-normally distributed parameters were expressed as mean \pm standard deviation and as percentages, respectively. The comparison analysis among the groups was conducted using one-way ANOVA or Kruskal-Wallis test in normally and non-normally distributed parameters, respectively. Before the comparison tests, the homogeneity of variances in both normally and non-normally distributed parameters was analyzed using Levene and Mann-Whitney U test, respectively. The Spearman correlation analysis was also performed to reveal intervariable associations. As mentioned earlier, two independent graders analyzed the same videos. The first-grader has also evaluated the same videos two weeks after the first evaluation in a blind manner. The intra-inter observer reliability analysis of the acquired data was measured. The p-value lower than 0.05 was defined as statistically significant.

RESULTS

The Descriptive and Frequency analysis

A total of ninety-five videos were qualified for the study. The same videos (n=16), the unrelated videos (n=6), the

videos with another language rather than English (n=15), the videos shorter than sixty seconds (n=8), the soundless videos (n=1), the videos closed to comments (n=4) and fade the values of other parameters (n=5) were excluded. The descriptive parameters were summarized in Table 1.

The country of origin was USA in the majority of published videos (n=42, 44,2%). The remainin videos were originated from India (n=35, 36,8%), UK (n=10, 10,5%), Australia (n=5, 5,2%), Japan (n=1, 1,1%), South Korea (n=1, 1,1%) and Canada (n=1, 1,1%). The majority of the video publishers were ophthalmologists (n=43, 45,3%). The private hospitals came second in the ranking (n=15, 15,8%) (Table 2). When the videos were classified according to their content, the majority of the videos were about surgical procedure itself (n=50, 52,6%). The second most common content was related to patient information (n=21, 22,1%) (Table 3).

The distribution of VPI, JAMA, GQS, and DISCERN scores and comparison analysis among groups

The intra-observer and inter-observer analyses of the quality and reliability scores of videos were measured and summarized in table 4. The intra-inter observer reliability was found highly reliable. The distribution of VPI, JAMA, GQS, and DISCERN scores with descriptive values, and the comparative analysis of these parameters among video publishers and video categories were summarized in Tables 2 and 3. The quality and reliability scores were found significantly correlated with each other (p<0,001). However, the popularity index did not associate with the quality and reliability of the included videos. The most

popular videos were published by a Tv Show or Youtube channel (VPI score: 4359,3), while the videos with the best quality and reliability were published by ophthalmologists (DISCERN score: 47,6 “fair”) and academic institutions (DISCERN score: 53,1 “good”).

DISCUSSION

As a global eye health problem, cataract and its treatment are quite frequently searched topics on Youtube that; in our study, the total mean view rate was found at 942456. It is hard to detect the number of views made by patients or relatives in these statistics. On the other hand, it was evident that the difficulty of educational materials provided by the healthcare professionals in terms of understandability leads the patients into a tendency on multimedia website searches.²⁴ It is crucial to educate patients with their condition and surgical procedure to increase satisfaction rates.²⁵

Besides the information about the ocular condition itself, one of the patients' significant desires in searching Youtube was to find and acquire reliable information about the appropriate treatment options. In particular, for our study, we have also searched the keywords of cataract surgery and phacoemulsification. Our study revealed that 33,6% of the videos were related to patient information or patient experience. Additionally, 54,7% of the videos directly provided information related to cataract surgery procedure. Interestingly, there were no videos about parent's experiences. In contrast to Mangan et al. study in which the evaluated videos were primarily related to patient information and parent's or patient's experience

Table 1: The descriptive parameters and the popularity, quality, and reliability scores of the included videos.

| Descriptive Statistics | |
|--|-------------------------------------|
| | Mean±SD (Min-Max) |
| VIDEO DURATION (seconds) | 528,84±570 (21 - 5065) |
| TIMES SINCE UPLOAD DATE (days) | 2434±1466 (111 - 5190) |
| NUMBER OF TOTAL VIEWS | 942456±2233479,7 (14082 - 15108325) |
| NUMBER OF VIEWS PER DAY | 934,39±3600,8 (3,35 - 33574) |
| NUMBER OF LIKES | 10137,07±38415,89 (3 - 338000) |
| NUMBER OF DISLIKES | 419,11±1245,9 (2 - 10000) |
| NUMBER OF COMMENTS | 1033,82±3456,5 (0 - 27000) |
| LIKE RATIO | 90,64±8,49 (60 - 99,2) |
| VPI SCORE | 873,27±3521,3 (2 - 32979) |
| DISCERN SCORE | 43,20±12,41 (15 - 75) |
| JAMA SCORE | 2,48±0,77 (1 - 4) |
| GQS SCORE | 3,28±0,94 (1 - 5) |
| Abbreviations: VPI: The video power index, JAMA: The Journal of the American Medical Association, GQS: The Global Quality. | |

Table 2: The distribution of popularity, quality, and reliability scores with the mean descriptive values which were classified according to the video Publisher and the comparison analysis of VPI, JAMA, GQS, and DISCERN scores with descriptive values among video publishers.

| | | VIDEO PUBLISHER | | | | | | | | | | | | | | | |
|--|----------------|------------------------|-----------------------|-------------------------|-----------------|--------------------|--------------------|-------------------|--------------------|--------------------|------------|-----------|---------------|-----------------|-----------|----------------------------|-------|
| | | ACADEMIC INSTITUTION | | PRIVATE HOSPITAL | | ADVERTISING | | TRADING COMPANIES | | YOUTUBE USER | | PATIENTS | | OPHTHALMOLOGIST | | TV SHOW OR YOUTUBE CHANNEL | |
| | | Mean | Count | Mean | Count | Mean | Count | Mean | Count | Mean | Count | Mean | Count | Mean | Count | Mean | Count |
| VIDEO DURATION (seconds) | | 1039 | | 345,6 | | 531 | | 212,7 | | 419 | | 666 | | 570,4 | | 448 | |
| TIME SINCE UPLOAD DATE (days) | | 2428,5 | | 3042,9 | | 111 | | 2410,1 | | 1438,4 | | 2025,4 | | 2572,5 | | 1961,9 | |
| NUMBER OF TOTAL VIEWS | | 1877048 | | 355806,4 | | 256589 | | 1569943 | | 980762,4 | | 1214059 | | 348173,4 | | 3143703,3 | |
| NUMBER OF VIEWS PER DAY | | 1414 | | 153,9 | | 2311,6 | | 1374,5 | | 1548,1 | | 611,3 | | 188,3 | | 4451 | |
| NUMBER OF LIKES | | 10884 | | 2080,4 | | 6500 | | 11445 | | 13100,2 | | 6700 | | 1619,1 | | 58699,1 | |
| NUMBER OF DISLIKES | | 1548 | | 101,2 | | 274 | | 500,6 | | 571,4 | | 464 | | 136,1 | | 1172,4 | |
| NUMBER OF COMMENTS | | 377,8 | | 206,6 | | 320 | | 1147,1 | | 2036,8 | | 884,3 | | 198 | | 5923,1 | |
| LIKE RATIO | | 83,9 | | 92,1 | | 95,9 | | 89,3 | | 94,3 | | 91,9 | | 89,9 | | 93,8 | |
| VPI SCORE | | 1173,3 | | 140,5 | | 2218,1 | | 1319,6 | | 1428,6 | | 560,8 | | 173,8 | | 4359,3 | |
| DISCERN SCORE | | 53,1 | | 41,9 | | 18 | | 37,2 | | 37,8 | | 37,4 | | 47,6 | | 31,7 | |
| JAMA SCORE | 1 | | 0 | | 2 | | 1 | | 2 | | 1 | | 1 | | 0 | | 3 |
| | 2 | | 1 | | 3 | | 0 | | 4 | | 3 | | 4 | | 15 | | 5 |
| | 3 | | 5 | | 8 | | 0 | | 1 | | 1 | | 2 | | 25 | | 2 |
| | 4 | | 1 | | 2 | | 0 | | 0 | | 0 | | 0 | | 3 | | 0 |
| GQS SCORE | 1 | | 0 | | 1 | | 1 | | 0 | | 0 | | 0 | | 0 | | 2 |
| | 2 | | 0 | | 1 | | 0 | | 3 | | 1 | | 2 | | 0 | | 4 |
| | 3 | | 3 | | 7 | | 0 | | 3 | | 4 | | 3 | | 21 | | 2 |
| | 4 | | 2 | | 6 | | 0 | | 1 | | 0 | | 2 | | 15 | | 2 |
| | 5 | | 2 | | 0 | | 0 | | 0 | | 0 | | 0 | | 7 | | 0 |
| Test Statistics^b | | | | | | | | | | | | | | | | | |
| | VIDEO DURATION | TIME SINCE UPLOAD DATE | NUMBER OF TOTAL VIEWS | NUMBER OF VIEWS PER DAY | NUMBER OF LIKES | NUMBER OF DISLIKES | NUMBER OF COMMENTS | NUMBER OF LIKES | NUMBER OF DISLIKES | NUMBER OF COMMENTS | LIKE RATIO | VPI SCORE | DISCERN SCORE | JAMA SCORE | GQS SCORE | | |
| Chi-Square | 19,184 | 9,989 | 22,014 | 25,545 | 21,406 | 22,495 | 23,617 | 21,406 | 22,495 | 23,617 | 5,140 | 25,556 | 22,689 | 24,706 | 24,973 | | |
| p-value | 0,008 | 0,189 | 0,003 | 0,001 | 0,003 | 0,002 | 0,001 | 0,003 | 0,002 | 0,001 | 0,643 | 0,001 | 0,002 | 0,001 | 0,001 | | |
| a. Kruskal Wallis Test | | | | | | | | | | | | | | | | | |
| b. Grouping Variable: VIDEO PUBLISHER | | | | | | | | | | | | | | | | | |
| Abbreviations: VPI: The video power index, JAMA: The Journal of the American Medical Association, GQS: The Global Quality. | | | | | | | | | | | | | | | | | |

Table 3: The distribution of popularity, quality, and reliability scores with the mean descriptive values which were classified according to the Video category and the comparison analysis of VPI, JAMA, GQS, and DISCERN scores with descriptive values among video categories.

| VIDEO CATEGORY | | | | | | | | | | | | |
|--|-------------------------|-----------------|--------------------|--------------------|---------------------|-----------|---------------|------------|--------------------|-------|--|--|
| | Medical Education Video | | Patient Experience | | Patient Information | | Entertainment | | Surgical Procedure | | | |
| | Mean | Count | Mean | Count | Mean | Count | Mean | Count | Mean | Count | | |
| VIDEO DURATION (seconds) | 1187,7 | | 585,6 | | 298,1 | | 859,3 | | 475,9 | | | |
| TIME SINCE UPLOAD DATE (days) | 2761,7 | | 1503,5 | | 2259 | | 1234 | | 2719,5 | | | |
| NUMBER OF TOTAL VIEWS | 1966598,9 | | 1114098,5 | | 856525,2 | | 9784598,7 | | 239961,5 | | | |
| NUMBER OF VIEWS PER DAY | 1250,5 | | 1369,3 | | 514,7 | | 14.031,4 | | 187,2 | | | |
| NUMBER OF LIKES | 10308,3 | | 13581,8 | | 4046,9 | | 187333,3 | | 1448,3 | | | |
| NUMBER OF DISLIKES | 1333,7 | | 459,1 | | 314,2 | | 3533,3 | | 109,1 | | | |
| NUMBER OF COMMENTS | 497,4 | | 1780,6 | | 473 | | 18000 | | 200,3 | | | |
| LIKE RATIO | 90,7 | | 94,3 | | 91,5 | | 98,1 | | 89 | | | |
| VPI SCORE | 1052 | | 1316 | | 473,8 | | 13776,2 | | 170,4 | | | |
| DISCERN SCORE | 63,9 | | 39,7 | | 41,8 | | 20,3 | | 42,2 | | | |
| | 1 | 0 | | 1 | | 5 | | 2 | | 2 | | |
| | 2 | 1 | | 5 | | 11 | | 1 | | 17 | | |
| | 3 | 4 | | 5 | | 4 | | 0 | | 31 | | |
| | 4 | 4 | | 0 | | 1 | | 0 | | 1 | | |
| | 1 | 0 | | 0 | | 1 | | 2 | | 1 | | |
| | 2 | 0 | | 3 | | 4 | | 1 | | 3 | | |
| | 3 | 0 | | 5 | | 9 | | 0 | | 29 | | |
| | 4 | 3 | | 3 | | 6 | | 0 | | 16 | | |
| | 5 | 6 | | 0 | | 1 | | 0 | | 2 | | |
| Test Statistics^b | | | | | | | | | | | | |
| | NUMBER OF VIEWS PER DAY | NUMBER OF LIKES | NUMBER OF DISLIKES | NUMBER OF COMMENTS | LIKE RATIO | VPI SCORE | DISCERN SCORE | JAMA SCORE | GQS SCORE | | | |
| Chi-Square | 15,775 | 38,728 | 33,806 | 40,422 | 9,509 | 40,340 | 21,451 | 21,089 | 23,144 | | | |
| p-value | 0,003 | <0,001 | <0,001 | <0,001 | 0,050 | <0,001 | <0,001 | <0,001 | <0,001 | | | |
| a. Kruskal Wallis Test | | | | | | | | | | | | |
| b. Grouping Variable: VIDEO CATEGORY | | | | | | | | | | | | |
| Abbreviations: VPI: The video power index, JAMA: The Journal of the American Medical Association, GQS: The Global Quality. | | | | | | | | | | | | |

Table 4: The summary of Intra-Interobserver Reliability Analysis.

| Intraclass and Interclass Reliability Analysis | | | | | | | |
|--|------------------------|-------------------------|-------------|------------------------|-------------------------|-------------|---------|
| | Intraclass Correlation | 95% Confidence Interval | | Interclass Correlation | 95% Confidence Interval | | p-value |
| | | Lower Bound | Upper Bound | | Lower Bound | Upper Bound | |
| DISCERN Score | 0,990 | 0,984 | 0,993 | 0,976 | 0,964 | 0,984 | <0,001 |
| JAMA Score | 0,942 | 0,914 | 0,961 | 0,866 | 0,805 | 0,909 | <0,001 |
| GQS Score | 0,940 | 0,911 | 0,960 | 0,945 | 0,918 | 0,963 | <0,001 |

Abbreviations: JAMA: The Journal of the American Medical Association, GQS: The Global Quality.

(65,3%), the majority of our videos were associated with the surgical procedure itself rather than the ocular condition in our study.¹⁹

Various methods and scoring systems were used to analyze the video contents' reliability and accuracy.²⁶⁻²⁹ A recently published study about the evaluation of video content quality and reliability about strabismus showed that only moderate information was provided for strabismus in the included videos.¹⁹ Previous research on the satisfaction rates of Youtube video content about cataract surgery showed inadequate educational quality.²⁶ However, the authors used an insufficient criterion during the evaluation of the video contents compared to our study in which well-established popularity (VPI), quality (JAMA and GQS), and reliability (DISCERN) scores were measured. According to our results, the quality and the reliability degree of the uploaded content on Youtube about cataract was graded as fair and suboptimal ($2,48 \pm 0,77$, $3,28 \pm 0,94$, and $43,20 \pm 12,41$ in JAMA, GQS, and DISCERN, respectively).

Additionally, there was no correlation between the accurate information indicator scoring systems and the video's popularity (VPI score: $873,27 \pm 3521,3$). These results showed us that the more popular the video is, the more misleading information the video would provide. Somewhat similar results have been found for refractive surgery, strabismus, retinitis pigmentosa, and neurological eye movement disorders.^{16,19,30,31} Kucuk et al. evaluated the videos related to refractive surgery and found poor results (DISCERN score: 33,2). Mangan et al. also assessed the videos related to strabismus and concluded that the video contents on Youtube were moderately informative (DISCERN score: 42,2).¹⁹ A sufficient understanding of the procedure and condition itself was crucial; thus, the higher understandability level of the strabismus compared to refractive surgery positively affects the patient's desire to share their experiences on Youtube. An indirect sign of this interpretation was that the number of videos related to patients' experience in the latter study multiplied the former

study's percentage by nearly six times (40,2% vs. 6,9%). We have found a fair and suboptimal knowledge level in the video contents about cataract, and similar to Kucuk et al.'s study, the percentage of videos related to patient experience composed only 7% of the all-included videos.¹⁶ Thus we concluded that the level of information provided by Youtube videos was inadequate to fulfill patient needs. Guthrie et al. also evaluated the informative content of Youtube videos about Retinitis pigmentosa and found misleading content in 50% of the videos.³⁰ Another study evaluating the video content accuracy about neurological eye movement disorders found satisfying information in only 23% of videos.³¹

We have also classified the videos according to the uploader and their content. The DISCERN score of the videos uploaded by an academic institution was found highest as 53,1. However, a more recent study about strabismus showed a paradoxical relation between the DISCERN score and the popularity of the videos published by academic institutions. Additionally, they stated that TV Show/Youtube channel videos had the highest popularity compared to their poor reliability and lowest DISCERN scores¹⁹. Similarly, TV Show/Youtube channel videos also had the highest popularity in our study. Other studies have also reported an inverse relationship between video quality scores and the popularity of videos.^{12,16,17,19}

The least popular videos were uploaded by private hospitals and Ophthalmologists in our study. Interestingly, these two video uploaders had the second and the third highest reliability (DISCERN score: 47,6 and 41,9, respectively). We have interpreted these results as the private practice in ophthalmology was perceived as a trust breaker condition due to the financial priority rather than providing accurate information. However, it is evident that the video content of these publishers constituted two of the three most reliable video uploaders. So contrary to expectations, the publishers related to private practice provided videos with higher quality content.

The videos are also classified according to their contents. The highest DISCERN score was obtained from medical education videos (63,9), and the lowest DISCERN score was found for entertainment videos (20,3). In contrast, the lowest DISCERN score was found for entertainment/comedy videos, but the VPI score (13776,2) was the highest. Our results have found a negative correlation between the content quality and the video popularity in this classification, similar to other reports.^{12,16,17,19} The entertaining videos in which the content reliability was the lowest were found more impressive by the Youtube viewers. This paradoxical relation between the popularity and quality is related to various factors such as the low percentage of health professionals among the Youtube viewers, due to the study design in which the searched keywords did not contain for health professionals or for patients phrases, and the lack of habit of liking or clicking thumbs up icon in the majority of people especially elders. Multiple researchers were also indicated that the video source is the most essential factor in obtaining quality information.^{9,16,19} We agree with them and concluded that the quality does not always accompany popularity on Youtube.

There are limitations in our study. The inclusion of the first 50 videos in each keyword search and strict inclusion criterion made the sample size limited. Another limitation was the categorization problems of the videos that might be overlapped. However, our study was the first in the literature evaluating cataract-related Youtube videos in terms of popularity, reliability, and quality with established scoring methods. Additionally, the evaluation of videos by two blinded graders was also a strength of our study. The overall video content quality and reliability were rated as fair or suboptimally sufficient. Thus Youtube seems to offer a low level of knowledge about cataract and its treatment. Besides, despite the satisfying level of video content uploaded by the private hospitals and ophthalmologists, these videos' popularity was poorly scored. Additionally, we have found an inverse relationship between the popularity and the reliability of the videos, which was in line with the previous reports. It is essential to direct the patients to high-quality videos with accurate information to prevent patients and their relatives from misleading information and high expectations.

DECLARATION

Conflict of interest

The authors declare that they have no conflicts of interest

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Authors' Contributions

All authors performed the data collection, were involved in all parts of the production of the paper.

Data Availability

The data supporting our findings will be participated upon request

Ethics approval and consent to participate

The ethical approval is not required due to the nature of the study

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