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RESEARCH ARTICLE

Analysis of Urostomy Bag Care Training Videos on Youtube

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ABSTRACT

Objective: Our study aims to evaluate the content, reliability, and quality of the videos on urostomy bag care training on YouTube.

Materials and Methods: This study was conducted in descriptive English language to evaluate the content, reliability, and quality of the Internet videos about urostomy education. A video search was performed on YouTube with the terms "urostomy, bladder ca, and ileal loop". The contents of the selected videos were analyzed by 2 independent experts in the field. The DISCERN questionnaire was used to analyze the reliability of the video, and the global quality score (GQS) was used for the quality of the video.

Results: As a result of the search with keywords, 41 videos were examined. Of these, 28 (68.3%) were useful and 13 (31.7%) were misleading videos. When the videos were examined, the mean score of intelligibility of useful videos was 7.61±1.36, the mean DISCERN score was 4.18±0.78, and the mean GQS was 4.23±1.12. The mean comprehensiveness scores, average DISCERN scores, and average GQS of the helpful videos were found to be statistically significantly lower than the useful urostomy videos.

Conclusion: It has been seen that many YouTube videos for urostomy education are useful videos and are created by urostomy companies.

Keywords: Bladder cancer, comprehensiveness, urostomy, YouTube

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INTRODUCTION

Bladder cancer ranks 11th among the most frequently diagnosed cancers worldwide for both gender.[1] The age-standardized incidence rate (per 100,000 persons/year) is 9.0 for men and 2.2 for women. Cystectomy and urinary diversion are the gold standard surgical method for localized muscle-invasive bladder cancer. Types of urinary diversions: (1) ureterocutaneoustomy, (2) ileal conduit, (3) continent cutaneous urinary diversion, (4) colonic conduit, and (5) orthotopic neobladder. The ileal conduit, or urostomy with its general use, is one of the most used diversion types.

Today, the Internet has become a part of daily life and has made it easier to access information. In recent years, video-assisted education has been frequently used in clinical and patient education.[2] It is seen that these programs, which present information and skills in audiovisual, are mostly broadcast on YouTube in the form of videos.[3]

YouTube was created in 2005 and is one of the most frequently used social media sites. With over a billion monthly users, YouTube is a unique visual resource for its visitors in almost every area.[4] Especially in recent years, problems related to the accuracy of videos in the field of health have started to attract attention, and the reliability of YouTube videos has been questioned in some studies. There is not much research into the coverage and consistency of health-related topics in YouTube videos. When the literature on urostomy care videos was examined, no study was found on the subject.

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A variety of training methods are used in urostomy training, including hands-on training, written material/brochure, online patient organizations, and video-assisted training.[5] Video-assisted education, which includes visual and auditory materials, provides individuals with ease of learning.

Our study aims to provide standardization in the preparation of videos about urostomy bag care training by evaluating the content, reliability, and quality of the videos on urostomy bag care training on YouTube. In addition, it is thought that it will contribute to the increase of training videos that will provide accurate information to patients and their relatives.

MATERIALS and METHODS

Ethics committee approval of the study was accepted on September 22, 2020 with the number 365/2020. The study was designed in accordance with the Declaration of Helsinki. All videos published on YouTube (http://www.youtube.com) until October 01, 2020 were viewed as a result of a search with the words "urostomy, bladder ca, and ileal loop" in English. Inclusion criteria: (1) English videos, (2) urostomy application videos, and (3) recently updated from recurring videos. Exclusion criteria: (1) videos with irrelevant content, (2) videos not in English, (3) videos that are not visual or audio (50 videos that do not show the urostomy application and are informative only, 8 videos that are not in English, and 18 repetitive videos). A total of 41 English videos were analyzed.

Evaluation of Videos

The evaluation of the videos was made by 2 independent individuals, one by an urologist dealing with urological oncology and the other by a care nurse.

Videos that have scientifically correct information about the urostomy application are defined as useful videos. Misleading videos are videos that contain scientifically unproven information.

Videos are grouped according to broadcast sources as (1) government/news agencies, universities/professional organizations/non-profit physician/doctor groups, (2) private websites containing health information, (3) medical advertising/non-profit companies, and (4) personal experiences. Information about video attributes (viewer engagement, time since the video was uploaded, the duration of the video, and the number of views, likes, dislikes, and comments for each video) was recorded. The reliability of the videos included in the study was evaluated with the DISCERN questionnaire,[6] and the quality was evaluated with the global quality score (GQS).[7] Its comprehensiveness was assessed by a skill list created by the researchers in line with the international guidelines and containing urostomy practice steps.

It was used for comprehensiveness with an 8-item skill list prepared in line with the European association of urology nurses. For each item, "yes" answer was calculated as 1 point and no as 0 point. The points that can be taken from the talent list are between 0 and 8. High overall score was considered equivalent to high quality.

Statistical Analysis

The data of the study were evaluated with SPSS 25.0 (IBM, NY, USA). Independent sample t-test, Chi-square test, and Mann–Whitney U test were used. Significant p-value was determined as <0.05.

RESULTS

As a result of the search with keywords, 41 videos were examined. Of these, 28 (68.3%) were useful and 13 (31.7%) were misleading videos. The kappa value among the observers was found to be 0.95. The duration of useful videos on YouTube was 35.22±22.55 months, the total length was 318.41±255.61 s, the number of views was 30,661.03±90,926.32, the number of likes was 42.51±91.41, the number of dislikes was 10.11±8.54, and the number of comments was 3.38±5.54. 32/41 of the videos were for male patients and 9/41 were for both male and female patients. The characteristic findings of the videos are given in Table 1.

When the videos were examined, the mean score of intelligibility of useful videos was 7.61±1.36, the mean DISCERN score was 4.18±0.78, and the mean GQS was 4.23±1.12. On the other hand, the mean score of intelligibility of the misleading videos was 2.55±0.88, the mean of DISCERN score was 1.75±0.70, and the mean of GQS was 1.63±0.78 (Table 2). Video features of helpful videos and misleading videos were similar (p>0.05). At the same time, the inclusiveness scores, DISCERN and GQS scores of the helpful videos were found to be significantly higher than the misleading videos (p<0.001).

Individual videos constituted 61.5% of the misleading videos (Table 3). Quality of videos from medical advertising/non-profit companies DISCERN and GQS scores was found to be statistically significantly higher than videos from other broadcast sources.

DISCUSSION

At the end of the study, it was determined that most of the videos about urostomy training were useful and sufficient in terms of comprehensiveness and intelligibility. In addition, it was seen that individual video uploaders uploaded useless and misleading videos.

Table 1. Demographics

Characteristic	Useful video (n=28)	Misleading video (n=13)	p
Duration (month)	35.22±22.55	34.61±25.92	0.881
Video length	318.41±255.61	311.45±238.63	0.663
Total views	30,661.03±90,926.32	10,261.63±15,305.03	0.552
Likes	42.51±91.41	21.63±21.04	0.281
Dislikes	10.11±8.54	6.12±5.61	0.335
Comments	3.38±5.54	4.14±6.66	0.671

Table 2. Comparison between useful and misleading videos

Characteristic	Useful video (n=28)	Misleading video (n=13)	p
Reliability score	4.18±0.78	1.75±0.70	<0.001*
Global quality score	4.23±1.12	1.63±0.78	<0.001*
Comprehensiveness score	7.61±1.36	2.55±0.88	<0.001*

*: p<0.001

Table 3. Comparison by source of upload

Source of upload	Useful video (n=28)		Misleading video (n=13)		p
	n	%	n	%	
Universities/professional organizations/ nonprofit physician/physician groups	9	32.1	2	15.4	<0.001
Stand-alone health information websites	5	17.9	3	23.1	
Medical advertisement/for profit companies	14	50	0	0	
Individual	0	0	8	61.5	

Various techniques are applied for urinary diversion after cystectomy, which is a curative treatment for muscle-invasive bladder cancer.[8] The ileal loop is most used and, in this procedure, the ileal segment of approximately 15 cm is anastomosed with the ureters and brought into the skin. After this stage, patients use a urostomy bag to protect the incoming urine from their body and clothes.[9] The quality of life of the individuals is affected due to the stress and embarrassment caused by the urostomy bags that need to be placed and replaced in the lower quadrant of the abdomen almost every day.[10] For this reason, the presence of helpful resources such as articles, brochures, and videos that inform the use of urostomy and the points to be considered provides convenience for the person.

Materials containing health-related information are widely available on the Internet. The useful ones of these materials are used by health-care professionals and are becoming increasingly common.[11] YouTube is an open access video sharing site and information and educational videos for individuals are also available on this site. YouTube is becoming more and more popular among patients because of its easy access to information due to its contents.[12] The fact that anyone can easily upload videos and post-content descriptions has led to an effort to research the accuracy and comprehensiveness of the videos. The effectiveness of YouTube videos on subjects such as many diseases and treatment methods has been researched.[13,14]

In our study, it is a handicap that urostomy does not have enough video content. Most of the videos reviewed contain useful information. Most of the videos containing useless information were uploaded by individual users. Uploading video content by health professionals and health-related associations that can be used more widely about the use of urostomy will increase the chance of patients to learn more accurate information from authorized places.

The study has some limitations. The first of these is that there is no demographic data (age, gender, etc.) of the people who upload the videos. In addition, the fact that the videos in other languages were not evaluated is another limitation.

CONCLUSION

Many YouTube videos for urostomy education are useful videos and are published by medical advertising/profit companies. There is a need for more instructional videos on urostomy training, and government agencies, universities, and associations need to play a more active role for these trainings to be accurate and reliable.

Disclosures

Ethics Committee Approval: The study was approved by the Prof. Dr. Cemil Taşçıoğlu City Hospital Ethics Committee (No: 365/2020, Date: 22/09/2020).

Informed Consent: Written informed consent was obtained from all patients.

Peer-review: Externally peer reviewed.

Authorship Contributions: Concept: B.E., F.A.; Design: M.G.Ç., A.S.G.; Supervision: F.A.; Materials: B.E., M.G.Ç.; Data Collection or Processing: B.E., A.S.G.; Analysis or Interpretation: B.T., M.G.Ç.; Literature Search: M.G.Ç., B.T.; Writing: M.G.Ç., B.E.; Critical review: B.E., F.A.

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