

## Peer Review File

Article Information: <https://dx.doi.org/10.21037/tau-23-394>

### **Reviewer #1:**

#### **Comment 1:**

The topic is new and interesting

#### **Reply 1:**

Thank you for your recognition of my research, and thank you for reviewing it!

#### **Changes in the text:**

None.

#### **Comment 2:**

The introduction must be implemented.

#### **Reply 2:**

Thank you for your suggestions. In response to your request for revisions, we have taken your opinions into consideration after discussions among the authors. Finally, we have added the definition, representative symptoms, epidemiological data, and economic and social impact of BPH. At the same time, we also mentioned the current shortcomings of the surgical videos on YouTube and the aim of the research.

#### **Changes in the text:**

We added “Benign prostatic hyperplasia (BPH) refers to the proliferation of smooth muscle and epithelial cells in the transition zone of the prostate, and it is one of the most common diseases causing urinary obstruction in middle-aged and elderly men. BPH is a benign and progressive disease, and its incidence increases with age. The incidence of BPH increases with age, with more than 50% of men over the age of 60 and as high as 83% in men over 80. BPH is the leading cause of lower urinary tract symptoms (LUTS), and approximately one-fourth of men worldwide suffer from LUTS. LUTS mainly manifests as hesitancy, difficulty, reduced urine flow, prolonged voiding time, post-void dribbling, or incomplete emptying, often accompanied by frequency, urgency, and nocturia as lower urinary tract symptoms. According to statistics, over 15 million men in the United States aged 30 or older are affected by BPH/LUTS, and 45% of men over the age of 45 will develop BPH, reaching 80% in men over 70.” And “YouTube video upload has low entry barriers and lacks a comprehensive supervision and evaluation system, resulting in varying quality of existing teaching videos on TURP surgery, and the overall quality level is yet to be determined.” “Therefore, this study aims to evaluate the quality of existing YouTube videos on TURP surgery teaching, select high-quality surgical teaching videos, and identify the main

shortcomings of existing videos, providing references for subsequent video production for teaching purposes.” (see Pages 2-3, lines 30-41, 47-51, 55-58)

**Comment 3:**

In the methods please specify how you selected or not the videos.

**Reply 3:**

Thank you very much for your suggestion. We have supplemented our criteria to include the videos.

**Changes in the text:**

We added “Videos were included if they met these criteria: 1) The title or video should describe the procedure. 2) Videos recorded complete main steps, not a partial segment. 3) Videos were annotated with audio or text. Beyond that, other videos were excluded, such as commercial advertisements and promotional videos. During the process, if there were any disagreements or doubts between the two authors, a joint decision would be made with the help of the third author.” (see Page 3, lines 65-70)

**Comment 4:**

In a way, this is a kind of systematic review of surgical video. Were all videos seen by different urologists from your department? How many? Please rate the experience of these urologists with the TURP procedure.

**Reply 4:**

Thank you for your suggestion. We have briefly described that 2 urologists with 25 TURP operation experience view the videos in our original paper and we supplemented the detail that different urologists are from the same medical center to show that our researchers responsible for the assessment are on the same academic level.

**Changes in the text:**

We added “from the same medical center” (see Page 4, line 84)

**Comment 5:**

You should implement the discussion. Similar, 9 references are really too low!

**Reply 5:**

Thank you very much for your suggestion. We have implemented the discussion and added some references about the role of surgical video for patients in the discussion part.

**Changes in the text:**

We added “There are two major limitations in our research. Firstly, while our analysis is based on a relatively small number of videos, all of which focused on a single surgical procedure, it suggests the need for a more extensive investigation on the educational quality of medical resources online

and the standardization of criteria for producing such resources. Our quality checklist may provide a starting point for developing such standards. Secondly, we found that YouTube is just one of the resources for medical students to learn new surgical techniques and patients to assess some information of a certain disease. Nowadays, there is a way combining conventional education with VR videos to educate outpatients for bowel preparation before colonoscopy. This example suggests that exploring the value of the new techniques used in medical education is a topic for future researchers to pay attention to.” (see Page 6, lines 138-147)

We also added some references, now there are 11 references in the discussion part.

**Comment 6:**

You may also write something on the role of surgical video also for patients.

**Reply 6:**

Thank you very much for your suggestion. We have discussed the role of surgical video for patients according to your advice to show the fact that online surgical videos are applied in many ways.

**Changes in the text:**

We added “Secondly, we found that YouTube is just one of the resources for medical students to learn new surgical techniques and patients to assess some information of a certain disease. Nowadays, there is a way combining conventional education with VR videos to educate outpatients for bowel preparation before colonoscopy” (see Page 6, lines 142-146)

**Comment 7:**

You also should cite some potential problems with this type of training: all YouTube surgical videos are made by experienced surgeons? How many of these are released by universities? Are all of these videos checked by some societies or similar?

**Reply 7:**

Thank you very much for your suggestion. Considering many videos are just some steps of the surgery and without obvious signs to show the uploaders’ information, it is quite hard to judge how many of these are released by experienced surgeons or universities. Due to the lack of a checklist to assess the quality of the surgical videos on YouTube, we believe that the videos are not checked by the societies.

**Changes in the text:**

We added “YouTube video upload has low entry barriers and lack a comprehensive supervision and evaluation system compared with the official surgical videos with strict access permission provided by some medical schools, resulting in varying quality of existing teaching videos on TURP surgery, and the overall quality level is yet to be determined.” (see Pages 2-3, lines 47-51)

**Comment 8:**

Are there other libraries where students and residents can watch surgical videos? Any difference with YouTube?

**Reply 8:**

Thank you very much for your suggestion. We know that some medical schools like Harvard have some surgical videos online but with very strict access permission. On the contrary, the surgical video resources on YouTube are easy to get but lack a comprehensive supervision and evaluation system.

**Changes in the text:**

We added “YouTube video upload has low entry barriers and lacks a comprehensive supervision and evaluation system. The official surgical videos provided by some medical schools have strict access permission so they are hard to get which means the educational value is limited, resulting in varying quality of existing teaching videos on TURP surgery, and the overall quality level is yet to be determined.” (see Pages 2-3, lines 47-51)

**Comment 9:**

In the discussion you should insert and declare all the limitations of the study.

**Reply 9:**

Thank you very much for your suggestion. We have declared two major limitations of our work in the discussion. We have modified our discussion’s ending with a much more specific explanation of two major limitations.

**Changes in the text:**

We added “There are two major limitations in our research. Firstly, while our analysis is based on a relatively small number of videos, all of which focused on a single surgical procedure, it suggests the need for a more extensive investigation of the educational quality of medical resources online and the standardization of criteria for producing such resources. Our quality checklist may provide a starting point for developing such standards. Secondly, we found that YouTube is just one of the resources for medical students to learn new surgical techniques and patients to assess some information about a certain disease. Nowadays, there is a way to combine conventional education with VR videos to educate outpatients about bowel preparation before colonoscopy [18]. This example suggests that exploring the value of the new techniques used in medical education is a topic for future researchers to pay attention to.” (see Page 6, lines 138-147)

**Reviewer #2:**

**Comment 1:**

This review provides interesting insight into the quality of YouTube videos available for TURPs, a resource young clinicians/residents are turning to more and more frequently.

**Reply 1:**

Thank you for recognizing my research and for reviewing it!

**Changes in the text:**

None.

**Comment 2:**

Amend the terminology in the methods from "just a part of the operation" to "some steps of the operation". Given the mean duration of the video was 16.7 minutes, all of the videos were likely showing "part" of the operation in a sped-up or truncated manner

**Reply 2:**

Thank you very much for your suggestion. We have modified our criteria to include the videos in the text as advised.

**Changes in the text:**

We modified our second criterion to "Videos recorded complete main steps, not just some steps of the operation. " (see Page 3, lines 66-67)

**Comment 3:**

I am not sure Figure 2 provides significant contribution to the manuscript in its current design. Consider reconstructing the components of the pie chart to more clearly show a difference in the time frame of posting (smaller intervals by single year components rather than biyearly components).

**Reply 3:**

Thank you very much for your suggestion. Our pie chart tends to show the post time of the videos to reflect the attention people pay to the topic we are discussing. The intervals of the post time currently are half the year and it clearly shows a difference in the time frame of posting. To make it show the information above more clearly, we adjusted the pie chart to the bar chart inspired by the PubMed/

**Changes in the text:**

We changed the pie chart to the bar chart in the figure part.