

## Peer Review File

Article Information: <http://dx.doi.org/10.21037/gc-20-734>.

### **Reviewer A**

In my opinion no revision required. The paper is fully suitable for publication.

The authors present a very interesting review of the videos on You Tube concerning robotic thyroid surgery and transoral thyroid surgery with the aim of testing the quality and reliability of these videos as a source of patient education.

Correct evaluation methods were used for Popularity Analysis, Quality and Reliability Assessment and the correct statistical tools to analyze the results.

The conclusions demonstrate how YouTube videos are at risk of delivering outdated or inaccurate information regarding certain diseases and surgical procedures to viewers. Despite its global audience and popular usage, YouTube videos may not be adequate patient education material for new surgical techniques.

I consider the work very well conceived and conducted. The mean interval since upload ( $3.6 \pm 2.6$  years) shows that often the informations displayed by patients are years old and that in the meantime the scientific data reported in the literature may have disavowed the informations present in the video.

The prevalent geographical location of these two techniques is often not considered by patients and the message that is received is that they can always be used instead of traditional techniques, also due to the falsely triumphal tones used by some medical reports and above all by the media. The habit of using the web for self-diagnosis and the choice of therapies is unfortunately an everyday history and therefore contributions like this are welcome. This paper demonstrate, with a scientific method, how it is necessary to reiterate that patients must contact specialists, possibly in centers of excellence, to find the right answer to their medical problems.

Reply: Dear Reviewer A, we appreciate the time and efforts you have taken with our paper. We are very pleased regarding your comments.

### **Reviewer B**

Dear Author, the topic of the manuscript is very interesting. Video educational are very important to spread knowledge in surgical procedure. I suggest you to revise english language. Statistical analysis must be explained well.

Comment 1: Dear Author, the topic of the manuscript is very interesting. Video educational are very important to spread knowledge in surgical procedure. I suggest you to revise english language.

Reply 1: Dear Reviewer B, we appreciate the time and efforts you have taken with our paper. Thank you for pointing this out, we have reviewed the manuscript thoroughly and have made the changes accordingly.

Comment 2: Statistical analysis must be explained well.

Reply 2: We completely agreed with you. We added more clarification in our methods.

Changes in text: Added text (see page 8, lines 6-7).

### **Reviewer C**

Dear. Authors

Your article is very impressive. I always am interested in operative video on Youtube.

I have some questions.

Comment 1: View power index : like ratio\* view ratio/100.

'Like' and 'dislike' are a subjective factor. This may cause bias.

What do you think?

Reply 1: Dear Reviewer C, we appreciate the time and efforts you have taken with our paper. The VPI is a tool for assessing popularity and interaction--whether positive or negative--of a video publication. We do not specifically weigh likes and dislikes into our analysis for quality and reliability.

Changes in text: No changes added.

Comment 2: Medical professionals, post-medical students, and graduate researchers scored each video using the GQS and DISCERN scoring system criteria.

I think that patients should score each video using the GQS and DISCERN as well. What do you think?

Reply 2: Patients reviewing the material may pose inaccuracies in medical information if they are not well-versed on the subject(s), hence, why they are searching. Medical researchers have the correct information to analyze the videos in both quality and reliability. However, if perhaps, we could acquire a group of patients who also happen to be endocrine physicians, we would further the study in another article. Very nice insight for a future study.

Changes in text: No changes.

Comment 3: You analyzed 50 videos on Youtube. Among 50 videos, medical professionals uploaded videos about 75%. Did you analyze videos except for videos which were uploaded by medical professionals? I think this analysis will be needed.

Reply 3: Yes, we included videos in our analysis which were not uploaded by medical professionals.

Changes in text: No changes.

Comment 4: Graudate in 17 lines in Material and methods must be changed 'Graduate'

Reply 4: Thank you.

Changes in text: Revised text (see page 6, line 17).