

Searching for wisdom online



BACKGROUND

The internet is full of false information or disinformation largely because it is not regulated for the reliability of its content. The European Commission set up a High-Level Expert Group (HLEG) to address this problem and established 5 pillars to combat this disinformation based on enhanced transparency, the promotion of media and information literacy, empowering users to address disinformation, safeguarding the diversity and sustainability of the news media ecosystem, and promoting continued research on how disinformation impacts society. Dental students expect to access not only lectures but also other digital content at their convenience. However, much of the content they access online is not peer-reviewed. The YouTube platform is the most popular of the online video sharing platforms and can also be referred to in Google searches. Anyone, including experts, companies, and laypeople, can publish content and classify that content into categories, such as education and science, with no peer review. An evaluation of the reliability of dental education content found on YouTube was undertaken, with the secondary aim of determining if users' engagement with these videos is affected by how the content is offered.

METHODS

A YouTube search for dental content was conducted using the following keywords: restorative dentistry, pediatric dentistry, orthodontics, and oral surgery. The first 10 results of each search were divided by publisher. In addition, an analysis was done of the number of views, length, category, retention index, and date of publication of the content.

RESULTS

Two of the 40 videos were posted by an American dental school, but had been produced in the 1970s and were outdated. The content of the 40 videos was evaluated for value in terms of education, science, people/blogs, comedy, film/animation, how-to/style, and sports. Seventy-five percent of the videos were posted by individuals not connected to any university, 20% by companies, and 4% by a single American university.

Average video length was 9.22 minutes, and the average number of views per month was 21,593, for a total of 25 million views. The videos averaged a lifespan of 48 months on YouTube.

Videos published as educational or educational/scientific were older than those in the other categories. Videos with the highest interaction indexes were 76% older than those with the lowest interaction indexes. Longer movies had 44% more views than shorter ones. The interaction index for the oldest movies was 264% higher than that for the most recent videos.

User retention was also evaluated. Just 55% of the videos had user retention data available. These data indicated that the average video user retention was inversely related to viewing rate through time. User retention was better with shorter videos.

DISCUSSION

This review indicated that free online dental information is outdated and not provided by a reliable academic source. As a result, the 40 videos evaluated provided unreliable information, yet they received 25 million views. This seems to indicate that users have little ability to find trustworthy information online.

Clinical Significance

Universities need to consider how their student use YouTube and incorporate such findings into their educational efforts. Student retention and learning appear to be influenced by the length of the video and the more recent publication of the video. Dental education providers need to advise students on how to search for reliable content or provide more open source content that is current and peer-reviewed.

Da Silva MAD, Pereira AC, Walmsley AD: Who is providing dental education content via YouTube? *Br Dent J* 226:437-440, 2019

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