

Editorial Commentary: YouTube Videos Provide Poor-Quality Medical Information: Don't Believe What You Watch!



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Abstract: Providing accurate information to patients regarding health conditions, treatment options, and prognosis is a crucial aspect of medical management and an ethical obligation. Office visits may be limited due to time constraints imposed by scheduling, which may result in missed opportunities to provide extensive information when history, physical examination, review of diagnostic testing, and planning is required. As the Internet is now an established platform and easily accessible, patients are increasingly seeking information from websites out of curiosity and for additional questions pertaining to their health condition. However, the reliability and accuracy of anterior cruciate ligament videos on YouTube are of evidence-based very low quality and reliability.

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The Internet has become increasingly accessible in recent years, with estimates projecting that more than 50% of the global population now engages in regular Internet use.¹ In the United States, 97.5% of young adults reported regular use of at least one Internet site in 2016.² Websites use a variety of approaches to convey information, including text, video, and dialogue, with some websites specializing in one specific approach. YouTube is an online video-sharing platform in which users from around the world can upload and watch videos—and they do. In fact, YouTube accrues more than 1 billion users per month and it is accessed by one-third of all Internet users.³ Although YouTube is accessed for a variety of reasons, procuring information as it relates to health information is a major use.⁴⁻⁶

Despite the potential benefits of providing health information on a video-sharing platform that is freely accessible to patients, the majority of literature on the topic has suggested that YouTube is everything but appropriate to this end. In their article entitled “YouTube Videos Provide Poor Information Quality, Reliability and Accuracy Regarding Rehabilitation and Return to Sport

After Anterior Cruciate Ligament Reconstruction,” Springer, Bechler, Koller, Windhager, and Waldstein investigated the quality and reliability of YouTube videos pertaining to rehabilitation and return to sport (RTS) after anterior cruciate ligament reconstruction.⁷ The authors analyzed 140 YouTube videos and used 3 separate scoring systems to evaluate the reliability, accuracy, and educational content of these videos. Unsurprisingly, the authors determined that the average quality and reliability of rehabilitation videos were low, with a mean Journal of the American Medical Association score of 1.32 (of 4), mean Global Quality Scale of 1.95 (of 5), and mean “Rehab-Score,” a self-created survey based off of American Academy of Orthopaedic Surgeons guidelines, of 5.0 (of 20). Similarly, they reported the mean Journal of the American Medical Association, Global Quality Scale, and “RTS-Score” for RTS videos were 1.6, 1.6, and 3.1, respectively.

It is imperative that patients access accurate and reliable health information both in terms of making medical decisions and addressing questions that may prevent unnecessary outpatient or emergency department visits. Disappointingly, one of the most highly accessed resources—YouTube—has failed to serve as this information source. The majority of studies that have investigated the ability to provide high-quality medical information have highlighted this shortcoming and reported that YouTube provides poor-quality information for their specific medical discipline

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or topic of interest.^{1,5-12} Although the majority of these studies only analyze a limited subset of these videos out of an extensive selection, the consistency in findings is supporting evidence of this trend. In the defense of YouTube, it is unlikely that its creators established this platform with the use of conveying accurate and reliable medical information in mind. Nonetheless, this is an important problem that needs to be addressed to avoid patient expectation mismatch, inaccurate information and potential disease progression, and excessive time spent in office-based settings attempting to debunk misleading information.

Rather than continuing to denounce YouTube as a platform for medical information, it may be of more benefit to proactively address this limitation. YouTube must be informed of the ever-growing body of literature and reports of poor information and understand their far-reaching implications in the medical setting. As they currently have no peer-review process for medical videos and screening process for video upload source, this may be one area of intervention to impart change. This is likely quite time consuming and not in the interest of YouTube, so we as physicians, surgeons, and health care providers must proactively mitigate this phenomenon by directing our patients toward accurate and reliable sources of information when they seek additional resources. Although we will remain the primary source of information for our patients, we must caution our patients not to believe everything they watch.

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