

Editorial

The detrimental effect of unprescribed web-based videos on exercise for low back pain: YouTube as a case study

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INTRODUCTION

Low back pain (LBP) causes a lot of disability and limitations to activities of daily living which brings a huge direct and indirect cost to the population and health systems around the world.^[1] It is a public health concern and prevalent worldwide, with about 540 million people suffering from this health condition at any time.^[2] In search of relief or cure from pain, difficulties with activities, burden on caregivers, and other medico-social issues associated with this condition, patients and their families tend to seek information, advice, and treatment from almost any available source regardless of its credibility.^[3,4]

Since the launch of the World Wide Web in 1990, the number of internet users has increased significantly^[5] as well as the prevalence of web-based health information seekers.^[6] Social media has now become an effective, easiest, and universal means of obtaining information on health by patients.^[4] Notable is that sharing some sensitive information on clinical intervention through web-based channels is becoming more prevalent, making it important to explore if such information available on social media aligns with the current scientific evidence^[7] available in the clinical guidelines for assessing and treating different forms of LBP.^[8]

YouTube which is a video-sharing platform has increasingly become a way to obtain healthcare information.^[9] As the most common channel of web-based health-seeking behavior, it has added advantages over other forms such as ability to see what is been done as such patients tend to watch it regularly. Due to how patients trust online information on their health,^[4] it might be very detrimental to the health of patients with low back problems to practice the exercises being posted on YouTube. One of the earlier systematic reviews of health-care information on YouTube found that a large amount of health-related information is searched on the platform, and some information is misleading or incorrect.^[9] Despite the fact that, exercise plays a major role in the management of LBP both acute and chronic,^[10] some factors (such as associated comorbidities, fitness level, specificity, and individual difference) need to be considered before practicing it. Therefore, taking into consideration the health impact, LBP has on people suffering from it and the widespread access to health information through social media platforms such as YouTube; it will be of great benefit to discuss the inappropriateness of using YouTube videos on exercise without prescription by an appropriate authority.

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MAIN BODY

It was shown that the mean view of a YouTube videos on LBP exercises is slightly above 2 million^[11] and if taken the lifetime prevalence of LBP of 540 million and that anybody that watched the videos is a low back patient, it means that one in every 270 patients has watched the videos. This simply highlights how viral the videos have gone through, which does not show its adoption in self-management. To add to this, the videos recorded 537 likes and 283 dislikes^[11] which show that majority of the viewers are satisfied with the content of the video. However, there is a greater tendency that any LBP patients that watched the videos, whose symptoms were mentioned in the videos, will likely try it to get relief. Luckily, if the relief is gotten or not, the patient may continue to practice the exercise for self-management without proper diagnosis. This is a risky and unhealthy behavior as it has been established that treating symptoms without knowing the diagnosis are detrimental to health.^[12]

In addition, the videos do not in any way recommends patients to get diagnosed, rather they demonstrated treatments in these videos.^[11] The fact about LBP treatment is that even if the diagnosis is established for a patient, the exercise must be prescribed based on individual conditions, presence or absence of comorbidities, and exercise tolerance level obtained through proper assessments.^[10] Simply put, considering an exercise program for two different patients with spinal stenosis, an exercise program for patient A may not work or may not be appropriate for patient B and *vice versa*. It may even be detrimental to the other person despite having the same condition due to individual differences and other factors. Therefore, there is a need for patients to meet physiotherapists as an expert in exercise prescription, get assessed, diagnosed, and prescribed with an appropriate regimen as exercise is meant to be carefully prescribed, carefully progressed, and closely monitored based on individual peculiarity and this could be only achieved by consulting an expert.

Another point of concern is the source of all these web-based videos in terms of the production and quality. Unlike scholarly articles from peer-reviewed journals that were screened and scrutinized for quality, beneficence, and non-detrimental to patients before being released. YouTube videos are released without peer review and, hence, can be called predatory publications. Although, there are recent videos that are peer-reviewed before being released on YouTube. This is a good step in ensuring only good quality information is released. However, not all of the uploaded videos are peer-reviewed. In support of the ambiguity of the sources of the videos, Maia *et al.*^[11] found out in their study that majority of the articles are from unknown sources. The fact that the videos are not evidenced based as indicated by the study also proved

that the uploaded videos were not peer-reviewed since peer review ensured only qualitative evidence is published.

Finally, there is shift to an evidence-based management of patients in this era for betterment of patients. One of the components of evidence-based physiotherapy is quality research. Unfortunately, the videos being uploaded on LBP exercises are not evidenced based.^[11] And as such, it may carry potential dangers to the patients.

In conclusion, it is not unusual for patients to make use of web-based channels to get health information because telemedicine and web-based patient education have come to stay due to the technological advancements. Furthermore, the COVID-19 pandemic has highlighted the potential benefits of telemedicine and web-based patient education and a fast means of getting health information. However, it is not advisable for LBP patients to adopt YouTube as their exercise prescriber. YouTube videos can be used if recommended by the therapist or licensed healthcare providers to serve as a guide to the patients or an adjunct to the ones prescribed by the expert. Furthermore, the production of videos with health benefits should be monitored and validated by the board of experts in the medical field who are directly involved in patient care.

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