Is it possible to teach good health practices using social media?

É possível ensinar boas práticas de saúde utilizando as mídias sociais?

¿Es posible enseñar buenas prácticas de salud a través de las redes sociales?

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Abstract
Social media represents a powerful weapon to promote health education. The aim of the present study was to investigate how health information is discussed and disseminated by people who do not have specific academic certification but are legitimized due to their experiences. We conducted a narrative review of the literature published from 2016 to 2021 in PubMed, using the search terms “Social Media”, “Health” and “Education”, and their variations according to MeSH. Randomized controlled trials (RCTs) which evaluated the use of social media to disseminate health information content were included in the analysis. Despite the undeniable role of social media in disseminating content concerning health practices, the use of these platforms without proper scientific support or academic certification by so-called health influencers can promote questionable content. A number of studies demonstrate that content published on social media can negatively influence the health of users. Greater scientific rigor and professional training could contribute to guarantee reliability of data regarding health information shared on social media. More studies must assess the relevance of using virtual tools for sharing content aimed at improving health and scientific reliability.

Keywords: Distance education; Health education; Hybrid teaching; Social media; Teaching.

Resumo
A mídia social representa uma arma poderosa para promover a educação em saúde. O objetivo do presente estudo foi investigar como as informações em saúde são discutidas e divulgadas por pessoas que não possuem formação acadêmica específica, mas são legitimadas por suas experiências. Foi realizada uma revisão narrativa da literatura publicada de 2016 a 2021 no PubMed, utilizando os termos de busca “Social Media”, “Health” e “Education”, e suas variações de acordo com o MeSH. Ensaios clínicos randomizados (RCTs) que avaliaram o uso de mídia social para disseminar o conteúdo de informações de saúde foram incluídos na análise. Apesar do inegável papel das mídias sociais na disseminação de conteúdos relativos às práticas de saúde, o uso dessas plataformas sem o devido suporte científico ou certificação acadêmica dos chamados influenciadores da saúde pode promover conteúdos questionáveis. Vários estudos
demonstram que o conteúdo publicado nas redes sociais pode influenciar negativamente à saúde dos usuários. Conclusão: Maior rigor científico e formação profissional podem contribuir para garantir a confiabilidade dos dados sobre as informações de saúde compartilhadas nas redes sociais. Mais estudos devem avaliar a relevância do uso de ferramentas virtuais para compartilhamento de conteúdo que visa melhorar saúde e confiabilidade científica.

Palavras-chave: Educação a distância; Educação saudável; Ensino híbrido; Mídia social; Ensino.

1. Introduction

The search for theoretical support, orientation, and social recognition induces a sense of belonging and acceptance of a particular group that aims lifestyle change, and whose currency of exchange often exceeds the simple feeling of health improvement. Individuals also seek aesthetic success, increased affective and sexual desire by peers, job opportunities and financial enrichment. In this scenario, as much as social media can be used in favor of health, the information posted must have professional and mainly scientific support (Gesser-Edelsburg et al., 2019; Jenkins et al., 2020).

In the new era of social media, the public seeks health information both online and offline. However, some factors are considered capable of leveraging the visibility and interactivity of health information posted by digital influencers, such as content obtained automatically, suggested or recommended by users who share the same desires, and that is reliable and attractive. As a consequence, the user tends to like the posted information (Goodyear et al., 2018; Jenkins et al., 2020).

Although content consumers read and are able to understand this information, few users investigate, or are capable to judge whether the information posted is of quality or not (Gesser-Edelsburg et al., 2019). The fact that they are better acquainted with the covered topics may be one of the reasons why professional health readers consider academic articles more reliable than the general public content, even though they are not the only sources of information available (Gesser-Edelsburg et al., 2019).

2. Methodology

This research comprises a narrative review of the literature published from 2016 to 2021 in PubMed, using the search terms “Social Media”, “Health” and “Education”, and their variations according to MeSH. Randomized controlled trials (RCTs) which evaluated the use of social media to disseminate health information content were included in the analysis. Two researchers independently searched for literature, selected studies, assessed quality, and extracted data from articles. Any disagreement was resolved by consulting a third reviewer.

3. Results and Discussion

One of the most discussed topics within the universe of posts on health refers to the contents regarding nutrition tips and physical exercise, respectively (Muralidhara & Paul, 2018; Al-Eisa et al., 2016). Within the universe of social media, the...
experiences lived by people, as well as the aesthetic results presented by self-prescribed dietary and physical training behaviors, induce a feeling that they are capable of teaching others how to achieve weight loss, muscle mass gain or health improvement.

In this context, the idea that food consumption is inherent to human life may lead individuals to believe they are qualified to elaborate diets or guide healthy eating practices, even in the absence of an academic certification (Muralidhara & Paul, 2018).

It is eminent to discuss the role of the media in teaching healthy practices, however it is of paramount importance, if not urgent, that there is a thorough analysis of the content posted, so that the information is not distorted nor there are health problems among users who consume this type of content (Jenkins et al., 2020), even when the intention is only to increase motivation regarding practices aimed at improving nutrition or adherence to physical exercise (Al-Eisa et al., 2016).

It is a matter of major importance to investigate the influence of social media in healthy practices, including a thorough analysis of the content posted. This measure may be necessary to evaluate the reliability of the shared information, contributing to prevent possible health problems among users who consume this type of content (Jenkins et al., 2020).

Due to the greater content associated with photos and videos rather than scientific content and greater reading content, Instagram seems to be the least researched platform for this purpose, unlike Facebook and Twitter. However, several studies indicate that content posted on Instagram can negatively influence the health of users (Holland & Tiggemann (2017); Turner & Lefevre, 2017; Slater et al. 2017; Tiggemann et al., 2018; Hanley et al., 2019; Pilgrim & Bohnet-Joschko, 2019; Fioravanti et al., 2020). It is known that longer exposure to content published on Instagram is directly associated with higher levels of body dissatisfaction, depressive symptoms and mood, paradoxically reinforcing the need for content aimed at healthy eating and diets to have greater scientific rigor regarding reliability of data (Turner & Lefevre, 2017; Muralidhara & Paul, 2018; Engeln et al., 2020; Prichard et al., 2020).

In light of the greater volume of photos and videos rather than scientific content, Instagram seems to be the least searched platform for this purpose, unlike Facebook and Twitter. In addition, several studies indicate that content posted on Instagram can negatively influence the health of users (Holland & Tiggemann, 2017; Turner & Lefevre, 2017; Slater et al. 2017; Tiggemann et al., 2018; Hanley et al., 2019; Pilgrim & Bohnet-Joschko, 2019; Fioravanti et al., 2020), and long exposure to content published on Instagram is directly associated with high levels of body dissatisfaction and depressive symptoms. This data reinforces the need for greater scientific rigor regarding diet and healthy eating content.

Several healthcare professionals have already understood that, given the new digital age of access to information, it is necessary to use social media as a way of raising awareness and disseminating knowledge (El Bialy & Jalali, 2015; Pizzuti et al., 2019; Alanzi & Al-Habib, 2020; Carpenter et al., 2020). For this, science needs a language accessible to users and that can translate robust scientific information in health into a technical language that is simple and that the texts attributed to the posted content are succinct and easy to understand for the lay public. That is, most health professionals agree that social media can be a great ally in public health education and also in improving audiovisual communication skills regarding health content (Alanzi & Al-Habib, 2020).

Several healthcare professionals have already understood that, given the new digital era of access to information, it is necessary to use social media as a way of raising awareness and translating knowledge (El Bialy & Jalali, 2015; Pizzuti et al., 2019; Alanzi & Al-Habib, 2020; Carpenter et al., 2020). Most health professionals agree that social media can be a great ally in public health education and also in improving audiovisual communication skills regarding health content (Alanzi & Al-Habib, 2020). For this, professionals must be able to translate robust scientific health information into simple and succinct texts, accessible to users, and easy to comprehend.

It is important to emphasize that every paradigm shift and cultural rupture requires time and familiarization with the new reality, so the age group with the highest concentration of professionals who believe that social media can be a great effective educational tool in health revolve around 20 to 40 years (Pizzuti et al., 2019). In addition, the use of other social media (e.g.,
Youtube) for educational purposes including classes, lectures, meetings and symposia on topics associated with improving health and quality of life is already a reality in several countries. This scenario confirms the need to look at these tools as a didactic and pedagogical alternative for training both the lay public and the professionals themselves, evidently in the light of science and scientific foundation (Alanzi & Al-Habib, 2020).

Medicine seems to be one of the prominent areas to use these tools as a way of training students and updating professionals who have already graduated. That is, telemedical education or e-medicine is already a reality and has ramifications beyond the limits of the classroom, which makes social media a link between formal and informal learning, given the great capacity to maintain the engagement and involvement of students with educational content outside the classroom (El Bialy & Jalali, 2015).

However, it is necessary to reformulate the teaching methods and also the messages aimed at learning content posted on social media, whether by professionals or influencers, as there are persistent sociocultural differences among users regarding the assimilation of these contents. The users diversity is associated with different age groups, socioeconomic and geographic aspects, which reinforces the reality of digital exclusion for those who do not have access to technological resources or have difficulty dealing with the internet.

For this reason, it is necessary to encourage discussions that investigate how social media and online resources can be appropriately used for teleconsultations and health education, stimulating healthy habits and lifestyle change (Carpenter et al., 2020).

4. Final Considerations and Future Perspective

It is undeniable that the internet has become the main instrument to obtain health information. Social media has contributed to the dissemination of encouraging messages and strategies to improve body composition, health, and quality of life, especially in terms of food choices, types of diet, physical exercise, and physical training methods, that promise to drive social media users to the expected results.

However, the use of these platforms without proper scientific support or academic certification by the so-called health influencers may, unlike the proposed benefits, lead to health problems. Thus, although the use of social media is an important ally for instruction, professional training and dissemination of knowledge, some caveats should be taken into account, such as: professional training of digital influencers, foundation scientific information posted and level of evidence from sources cited by influencers, especially information on food, diet and physical exercise.

Therefore, more studies must assess the relevance of using virtual tools for sharing content aimed at improving health and scientific reliability. Also, there are many different ways to use social media for formal education with various applications in the classroom, as a way to help promote schools and universities. Nonetheless, it is important to understand the impact of social media in formal education before using it, but there is reason to believe that it will help advance students and professionals in technology. Social media and technology are integral parts of everyday modern life. Integrating their use into the classroom and in the professional practice is more natural than before, given how adapted many students are with them. Health education is an important variable in maintaining the population's health and quality of life. We believe, as exposed, that the use of technology and social media can represent powerful weapons in education regarding health practices. Concerning the use of these tools in formal education for students or professionals, we suggest further discussions on this topic.
