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EDITORIAL COMMENT

Social media use by cardiovascular healthcare professionals: Exploring a challenging and ever evolving frontier

Uso de redes sociais pelos profissionais de saúde cardiovascular: explorando uma fronteira desafiante e em constante evolução

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Over the years, major technological improvements from a range of different fields have had a profound effect on various areas, including healthcare, which has been continuously affected by these factors.[1,2] Importantly, this dynamic interaction has also more recently been substantially modulated by the COVID-19 pandemic, which accelerated and expanded this complex relationship.[2,3] Of the many tools heralded as being of potential relevance in diverse settings, ranging from telemedicine applications to the incorporation of artificial intelligence and virtual reality, social media (SoMe) use has been at the forefront of this transformative process.[1–3] In this regard, the utilization of SoMe platforms (personally and professionally) has been a focus of increasing interest.[2–4] Notably, cardiovascular (CV) medicine has been an area in which these platforms, particularly Twitter, have had a progressive impact in academic and clinical settings.[2,5] Indeed, studies have suggested the role of SoMe in improving access to scientific content as well as increasing the possibilities for discussion and interaction with different elements on a global scale, transforming the paradigm for prior traditional conveyors of these topics such as in-person congresses and scientific journals.[2,4] It is noteworthy that both scientific societies and several journals have incorporated SoMe into communicating with their target audiences, further highlighting these concepts.[2,5] Interestingly, contemporary data show that SoMe use could lead to increased article visibility as well as citation rates, as recently reported in the European Society of Cardiology Journal's randomized study, thus illustrating its breadth.[5] Albeit this, optimal SoMe utilization and its overall impact, encompassing hindrances such as information accuracy, communication, timing, as well as privacy issues, has not yet been fully understood.[2,3,6]

Against this background, Esteves-Pereira et al. provide interesting and relevant data concerning the use of SoMe by CV healthcare professionals in Portugal.[4] This study derived from a voluntary anonymous survey conducted in 2021, with a structured questionnaire being sent to the mailing list of the Portuguese Society of Cardiology, aimed at assessing both personal and professional patterns of the use of SoMe.[4] A total of 206 valid answers (corresponding to a response rate of 16%) were obtained, with most participants being physicians (65%; mostly cardiologists, with most

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Table 1 Overview of some of the potential benefits and drawbacks concerning social media use in medicine.

Benefits	Drawbacks
Community building/professional networking	Cybersecurity issues
Improved accessibility and new tools for continuous education (lifelong learning)	Decreased tolerance to public dissent
Increased interaction between researchers and clinicians	Ethical issues (namely related to confidentiality and the patient–physician relationship)
Increased access to scientific information and discussion forums	Privacy issues
Increased post-publication scrutiny	Possibility of psychological distress in healthcare professionals
Public peer review	Reduced control and potential decrease in the quality of information

physicians represented being specialists), under 45 years-old (58%), with more than half of individuals (52%) being female. Most of the participants in the study (92%) reported currently using SoMe.[4] In terms of professional use, the main reasons for this were personal academic development and interaction with colleagues and other professionals in the cardiology field, with myocardial infarction and heart failure being the most searched for as well as the most frequently shared CV terms. These usage patterns resonate with some of the abovementioned positive features ascribed to SoMe in terms of providing an ancillary channel for scientific dissemination as well as to the exchange of ideas, thus having the potential to impact medical education.[2,7] It should be noted, however, that while most participants reported a positive impact of this information on clinical practice, less than half described changing their therapeutic decision regarding a specific case. As discussed by the authors, several factors such as the notion that inaccurate or biased information might be present could be related to this finding.[2,4] Interestingly, in terms of professional use, LinkedIn and Facebook were the most frequently used platforms (51.5 and 41.7%, respectively), whereas only 34.0% (ranking fourth overall) of participants reported using Twitter. As acknowledged by the authors, it should be underscored that Twitter is currently one of the most used SoMe outlets in CV medicine.[2,4] Nonetheless, and as alluded to, other studies have also shown diverging trends in terms of platform use, a fact that should be considered when addressing these data, while also considering differences in terms of designs as well as populations under study.[4,8] Moreover, geographical as well as cultural differences may also affect SoMe usage patterns.[3,8]

As expertly discussed by the authors, some pitfalls should be considered when analyzing the data. Although the design aimed at a representative cross-sectional study, the fact that those who responded to the questionnaire may be more inclined to use SoMe should be noted, as also described in another survey in this field.[4,8] Furthermore, more than half (58.7%) of participants reported privacy concerns and cybersecurity issues in terms of hesitation to use SoMe.[4] In an age of fast-paced and more liberal access to information (in various forms of content), these data are reflective of some of the myriad challenges previously mentioned concerning SoMe, including issues related to the delicate balance between professional and personal spheres across digital settings[3,6] (Table 1). As elegantly discussed in the article, the possible presence of ''filter bubbles'' and inaccuracies in information should also be considered. Notably, the former may impact some of the putative beneficial hallmarks of SoMe utilization in terms of improving access to information and discussion forums, by affecting the presence of diverse viewpoints and discussions.[2] In terms of limitations related to information accuracy, a recent survey by the European Heart Rhythm Association encompassing respondents from thirty-five countries has also depicted this issue, as 37.1% of individuals reported that issues relating to control over quality of scientific information presented a potential drawback concerning SoMe use.[8] Despite these limitations, the data from the current survey could provide a highly useful framework for future studies in this field, aimed at addressing tailoring strategies in the use of SoMe, especially in a European setting.

The integration of SoMe has impacted different facets of daily living.[2,6] Medicine, a field in which innovations coupled with developments in social interactions and technology (both specifically related to this field per se, as well as those that stemmed from other areas) have, over the ages, had a profound and protean impact on medical education as well as clinical practice, has also been progressively and greatly influenced by them[2,9,10] (Table 1). As the shifting role concerning the use of SoMe in Medicine evolves, it is of paramount importance to reflect on current paradigms including present necessities as well as unmet issues, so as to harness the potential benefits of these platforms, while mitigating their shortcomings, to continuously improve accessibility to relevant and updated information against a background of multidimensional viewpoints aimed at advancing the comprehensive care of complex CV patients.

Conflicts of interest

The authors have no conflicts of interest to declare.

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