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Social media are ‘interactive computer-mediated technologies that facilitate the creation and sharing of information’ [1]. Social media (SoMe) and the medical-scientific community began their journey together about 10 years ago when the major scientific Journals tested the waters of the Twitter river. SoMe is a disruptive innovation in healthcare education, but SoMe and healthcare are on a journey of discovery into uncharted waters.

This journey has been brilliantly described by Dr Søreide [2] in his recent manuscript titled ‘Numbers needed to Tweet: social media and surgery’. Dr Søreide, a leader and a student of the interaction between Healthcare and SoMe, is able to define and highlight one of the most challenging, potentially explosive/implosive working-relationships of our current times.

There is no doubt about the incredible benefits that the engagement between SoMe and Healthcare are currently bringing to the table in terms of ability to diffuse clinical and research innovation and collaboration. At the same time there are many questions raised in the manuscript that are left unanswered and deserve further discussion.

Twitter among other SoMe offers cancer surgeons the ability to keep them ‘connected’ to their scientific community and updated about recent publications or surgical events. As an example, the GOSAFE study (@GOSAFEstudy), that is about to conclude an 800 + elderly cancer patients’ prospective accrual in a record-fast 18-month period, significantly benefited from Twitter exposure during the time of enrolment of centers. Clearly there is a huge advantage for collaboration and recruitment to clinical trials and studies.

This being said, we should always ask what is the ultimate goal of posting scientific content on SoMe. ‘Spreading knowledge’, ‘networking’, ‘advertising scientific events’ have all been listed in the *Pros* column already, but Dr Søreide also describes what could be considered the ‘ultimate sin’, in the SoMe era: trading our role of surgeons to become ‘influencers’ who manufacture ‘a large group of followers based on SoMe activity alone, despite having no or very little substantial contributions to the science or topic discussed’. SoMe challenges the boundaries between the noble desire to communicate, debate and share knowledge versus the egotistical desire for self-promotion and propagation of one’s own ideas. The SoMe paradox is the ability to rapidly communicate evidence-based medicine, but also the risk of “eminence-based” ideas

spreading rapidly in the “echo chamber” of SoMe.

As a surgeons and scientists, there are two ways this could be recognized. First by verifying the quality of the source (the twitter account owner him/herself) and second by testing the quality of scientific content promoted by the tweets.

Dr. Søreide reports that there is currently no data linking the number of times a research/paper has been visualized, liked or re-tweeted and the number of times the same manuscript will be referenced by other authors. On top of this, there is currently no established connection between number of Tweets and citations or impact factor, for those Journals that have an official account. At present, there is no hard data connecting SoMe success with editorial/research achievements.

Someone may argue that only a limited amount of scientific contents becomes relevant for another authors’ research (citations). The majority of papers promoted with the help of SoMe could fuel, instead, fruitful discussions at journal clubs, spark a debate between specialists and even determine changes in clinical practice with more rapid dissemination of knowledge. Unfortunately, none of this is currently clearly proven, while our mission, as scientists, is perhaps to be able to quantify and describe tangible outcomes before jumping to any conclusion.

Dr. Søreide reports that the use of *visual abstracts* promotes a higher rate of article visits. What is this translating to after the article visit still remains unclear but at least it allows a measure of one piece of ‘SoMe-promoting’ flow.

Is “Twitter oversimplification” detrimental in delivering a more complex scientific content? Or maybe, is this a generational shortening of attention spans in a digital age, with the traditional approach to slowly grind into complex study designs and methodologies to finally appreciate the results and their implications too slow for the 21st century surgeon. All of these steps require time and effort, while it seems easier, and effective, to ‘put a little heart’ on a side of a message, and then send it over to the next inhabitant of the Twitter-sphere. By doing so, we risk missing the point of appreciating other people’s work and eventually of sparking our own ideas.

Dr Søreide’s article goes a step further, and suggests that academic appointments and promotion might be based on SoMe activity rather than actual scientific achievements [3]. It seems hardly possible to accept that Scientific Societies would value more the instantaneous, and impalpable, success of some SoMe exposure over the hard work of assembling a 5-year prospective study that generates 1 or 2 publications. Scientific achievements and SoMe successes can run close and parallel but can not be confused one another. Or, is being active on SoMe a key performance indicator of academic collaboration and a modern form of “peer review”-indeed, do we have an ethical responsibility to take our scientific

discussions to the Twittersphere?

SoMe is certainly playing an important role in promoting, networking and facilitating research activities but it could be argued that few original ideas emerge directly from SoME. Original ideas, at every level, most likely generate from the collision between a thinking mind and the reality of one's clinical practice, rather than the shaking and twisting of social media messages. SoME provides an opportunity to harness these collective questions though, as evidenced by the recent SoME campaigns which encouraged surgeons at all levels to contribute their top research priorities for an international meetings, e.g. Tripartite 2020.

To researchers who are well equipped with strong scientific foundation, Dr Søreide's work provides the perfect opportunity to better understand the potential roles and the purposes of social media exposure. It helps identifying how the implementation of both original and scientifically grounded research studies, together with the disruptive communicative potential of SoMe, can be of benefit to translate an original idea of an EJSO authors into an added value for both the writers and our surgical oncology community.

Conflict of interest statement

Dr Mohan has nothing to disclose.

Dr Montroni has nothing to disclose.

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