Social media friend or foe?

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In the right hands, a scalpel is a life-saving surgical tool; in the wrong hands, that same blade could become a deadly weapon. 'Technology is neutral,' so the old wisdom goes; it is merely the intent of the user that determines whether its effects are fair or foul [1]. While superficially appealing for its 'the world is what you make it' sentiment, this view is glib and unhelpful when it comes to understanding social media from a medical perspective. Technology is not 'neutral' if it is inherently unfit for its intended purpose. As we will see, many apparent positives of social media evaporate under robust analysis. The result, I shall argue, is that social media dilutes the science of academic clinicians, compromises patient safety, eliminates the nuance of medical practice and threatens to erode the mental and physical health of future generations.

One of the most attractive arguments for academics taking to Twitter is that social media effectively levels the playing field [2]; the clarity and quality of one's thesis should be sufficient to 'win' a debate. In an extremely hierarchical sector like medicine, Twitter theoretically provides the lowly medical student with a platform equal to that of the revered professor. Ideas are exchanged in a meritocratic forum, in which robust debate should allow sound research to permeate the mainstream more quickly. Unfortunately, Twitter plays host to a warped hierarchy; high-status users are frequently able to shout down grounded and balanced arguments in favour of comforting simplifications or distortions. The complexity and balance of medical research is unhelpful to individuals who build their audience through entertaining brevity.

Indeed, social media is not the place to express reasoned impartiality or doubt; it is the place where Deepak Chopra and Ben Goldacre face off, while their armies of die-hard followers shout slogans at each other. This is a platform that rewards virtual loudmouths and polarised views. Another favourite among academic Twittophiles is the use of social media to share infographics, slides and sound bites from conferences. At best, social media transcends borders, disseminating evidence-based medicine (EBM) to an international community. However, wrenching a few Powerpoint bullets from their caveats and qualifiers allows users to select whatever conclusion best supports their own agenda. If posted by a social media user of sufficiently high status, points may be accepted as fact without the usual rigour of questioning and appraisal. Compressing the process of empirical enquiry into 140 characters may appeal to busy clinicians, but this reductionist approach can corrupt the messages conveyed by even the most balanced academics. In fact, cherry-picking from academic literature is a practice that leading figures in EBM actively campaign against [3]; ironically enough, often on Twitter.

If social media are flawed for use by trained clinicians, then what of the patient experience? Suffering from a rare and debilitating condition can be a singularly isolating experience. Social networking offers an attractive solution, with the potential to create therapeutic communities on a global scale. Young females, in particular, often turn to platforms such as Instagram for inspiration and support [4]. However, an unfortunate consequence of seeking help online is to open oneself up to approaches by unscrupulous advertisers. By virtue of cookies stored on their browsing devices, patients unwittingly invite intrusive and unhelpful marketing spam. Social media creates no barriers to entry when it comes to dishonest marketing; as a result, the safety of patients and vulnerable individuals is compromised. Problem gamblers, for example, are targeted on social media by gambling promotions and report an increase in gambling as a result [5]. Celebrity endorsement adds the sucker punch to social media campaigns, with recommendations from bloggers and YouTube personalities perceived as more credible than those of untouchable 'A-listers' [4].

Of course, the scope of social media extends far beyond clinicians and their patients. Social media has been embraced globally and across generations. Internationally, users devote an average of 1.77 hours per day to its use [6]. This represents almost two hours of relative physical inactivity, with Facebook replacing the bicycle as a means to visit school friends. Child obesity is now a worldwide phenomenon [7] and the ability to 'sofalise' rather than socialise may have far-reaching consequences. Research has identified a positive association between hours of screen time per day and prevalence of childhood obesity [8]. The widespread use of social media must take its share of the blame.

At the other end of the spectrum, exercise addicts from the 'selfie' generation have created an Instagram and Pinterest revolution. Gyms around the developed world are bursting with fitness enthusiasts sharing filtered selfies of their sculpted physiques. Incentives to exercise should be welcomed, but the compulsive and extreme exercise routines championed by some Instagram users can be punishingly unhealthy [9]. In addition, there is something insidious about the Instagram view of reality. Filters and editing software are intrinsic to the platform. 'The Instagram look' encourages extreme weight-loss behaviours [10]; users risk comparison with an unrealistic ideal and the attendant body dissatisfaction that can follow [11].

Instagram is not alone in presenting a risk to mental health. Bullying itself is nothing new, but social media has allowed cyberbullies to make their attacks simultaneously more personal and more public. Attacks can be public on a Facebook comment thread, or private via a medium such as Snapchat. Again, screen time has been identified as an important risk factor [12]. In a cruel twist, selfie-posters who proclaim their body satisfaction actually increase their risk of being targeted [13].

So is social media friend or foe? Undoubtedly society has embraced it as a friend, but in its current incarnations, social media is an untrustworthy friend indeed. This friend has the outward appearance of reliability but will let you down; discourse on Twitter seeks entertainment over truth. This friend looks supportive but will abuse your trust; seeking guidance on social media risks exploitation by dangerous marketing. This friend looks attractive but their beauty is contrived; augmented Instagram reality promotes the unhealthy and unattainable. This is a friendship built on entertainment, but not all entertainment is good for your health.

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