Are surgery and social media incompatible?

The impact of Social Media on Surgery in our Brave New World.

Social media (SM) is no longer just "for socialising". SM sites such as Facebook, Twitter, and YouTube have revolutionised the way we conduct our day-to-day lives. In fact, almost nine in 10 people in Australia have a SM profile and nearly 60% of people cite that accessing SM is the first and last thing they do every day.[1] The pervasiveness of SM has also penetrated healthcare, where estimates of SM usage by doctors has risen from 41% to 90% from 2010 to 2011, with even higher rates for medical students.[2] In parallel, a growing majority of patients are searching online sources including SM to acquire health information, connect with support communities, and undertake a more active role in healthcare decision-making.[2] Likewise, the future of surgery is also predicted to change substantially with the advent of 3D printing, minimally invasive surgery including robotic surgery, augmented reality, big data and genomics.[3] However, the polarising cultures of surgery, which values privacy, confidentiality, one-on-one consultations, and formal behaviour, in contrast to SM which promotes sharing with the public, and informality- has introduced profound questions about whether surgery and social media are compatible in the rise of SM influencing professional environments.

The uptake of SM extends from individual healthcare professionals to large professional organisations, medical centres and hospitals. Providers are making their presence known on SM through healthcare branding and providing public health messages.[4] SM allows current and prospective patients to be educated about health promotion, an example being the Cancer Council Victoria campaign that puts the spotlight on the link between sugary drinks and obesity, where laparoscopic camera footage demonstrates how toxic fat increases the risk for "thirteen types of cancer".[5] Furthermore, SM has been utilised to advocate for

wellbeing within the profession, with the #DoYouHaveaGP campaign by Royal Australian College of Surgeons (RACS), encouraging surgeons to engage in self-care.[6] Additionally, initiatives such as the annual #Movember campaign by the Movember Foundation, and the ALS Association 'Ice Bucket Challenge'[7]- all demonstrate the power of SM as a medium for word-of-mouth marketing and agent for health advocacy.

SM can also provide rapid access to the latest evidence-based research worldwide, encourage meaningful discussions, collaboration across borders and further clinical care. In particular, SM groups such as the International Hernia Collaboration on Facebook, has allowed surgeons to learn and adopt novel surgical methods in their own practice to "lower rate of skin infections".[8] Furthermore, educational opportunities for SM can lessen the divide in rural healthcare, allowing clinicians in remote settings to access expert opinions and tertiary-care centers via telemedicine.[9] There is also scope for SM to improve research by enhancing study recruitment, through reaching broader audiences and delivering targeted strategies for recruitment.[10]

Additionally, SM has become a powerful tool to challenge stereotypes and initiate cultural change. Beginning from a single "tweet", the #NYerORCoverChallenge and #ILookLikeASurgeon movements on Twitter (Figure 1) drew attention to the inequality and underrepresentation of women and minority groups in surgery, to break down preconceived notions and build a better workplace environment.[11]

Figure 1: #ILookLikeASurgeon movement on Twitter[11]

Thus, SM when harnessed a new instrument to "operate with respect", may not only help achieve the "Vision and Strategic Objectives" of the RACS,[12] but to improve patient-care delivery as a whole.

Despite the "world wide web" of opportunity that SM offers, concerns of becoming "entangled" by litigation, liability, lack of time/compensation and privacy are valid and shared across the spectrum of healthcare professionals. In response, AHPRA has released a "Social Media Policy" emphasising our professional obligations and obligations in relation to advertising.[13] However, cases locally and internationally, illustrate that the interplay between SM and surgery necessitates greater safeguards to protect our profession, patients and the public.

Cosmetic surgery is one field that has been transformed dramatically by SM. With tags like #glowup trending, plastic surgeons have experienced "a 30 percent rise in of clients interested in cosmetic surgery".[14] To that end, Sydney plastic surgeon, Dr. Dona, has opened the operating room doors through his "educational Snapchat channel".[15] This uncensored surgical channel has drawn controversy with concerns over breaching patient privacy and confidentiality, marketing and advertising for potentially dangerous operations, inherent power imbalances between doctor and patient, and voyeurism with intimate procedures.[15] While this may be viewed as "unprofessional", for some patients, the transparency that SM can provide has given them "more confidence" in their surgeon's ability to "do a good job".[15] Indeed, the boundaries have become blurred between what should remain public and private, as well as the line between education and advertising.

SM has also transformed the way people "shop for surgeons" through online reviews. In times where self-diagnosis and "Googling" doctors is the norm, one's digital Footprint can make-or-break their reputation. Dr. Quarrie, a cardiothoracic fellow at Yale New Haven Hospital was falsely accused of lying to a patient to "cover up a surgical mistake", and stories of this went viral.[16] Thus, the unregulated nature of SM and online sites, can lead to wrongful defamation, affect employment and potentially- cyberbullying. Conversely, misleading claims may be made by doctors on SM. Dr. Duntsch, now known as "Dr Death" had "glowing reviews" on Facebook- claimed to be the "best spinal surgeon in the state of Texas"- was ultimately found guilty of gross malpractice.[17] This serves as a reminder that portrayals on SM may be "filtered", and therefore not reflect reality.

The near ubiquitous uptake of SM by the healthcare industry, along with the presence of patients on these platforms, demonstrate that these technologies will invariably be a part of modern medicine. Hence, the real question is not whether or not SM and surgery are compatible- but how the "viral" power of SM can be utilised by surgeons and healthcare professionals alike, to be "influential" rather than "influenza". While SM will never completely replace face-to-face interactions in surgical practice, SM's current limitations need to be addressed to ensure that engagement with SM does not contravene our duty of care, in an increasingly digital world.

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