Innovations in Educating and Building the Paediatric Theatre Team. The use of Social Media

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Abstract

The use of social media around the world has exploded in recent years, with the number of monthly active users of Twitter estimated to be one quarter billion in 2015 and as such is becoming a useful tool for communication and education. It can be a way of asking questions pertinent to medical education, research, clinical practices and guidelines bringing the global medical community together. It enables an immediate exchange of information and ideas around shared areas of interest. Good ideas can be dissipated, allowing amendments of services and quality improvement. Human resource departments and team leaders should be encouraging the use of social media as a productive way of engaging/educating employees and providing positive feedback to teams. Organisations should strive to successfully integrate social media into their internal communications. Twitter feeds provide alternative solutions to tired intranets, message boards and newsletters and keep team members current, up to date and improve team performance.

Keywords: Education; Learning; Social Media; Twitter; Surgery

Teamwork

The Oxford English dictionary defines a team as "people working together to achieve a common goal". In theatre our common goal is effective collaboration, to deliver evidence based best practice and high quality patient care, in a timely fashion.

Team members involved in this process include point of care referral staff (A&E/GP), anaesthetists, surgeons, and nurses. They include staff in recovery and post-operative care environments, including ward-level and ICU settings. Teams must be able to adapt to the changing environment/emergency caseload of an operating theatre, anticipate the needs of other team members, have a shared understanding of the processes, strive for good communication and distribute workload appropriately.
With the emergence of evidence supporting of the benefits of multi-disciplinary care and enhanced-recovery it is vital that teams function well, that members feel empowered to speak up and share knowledge in their pursuit of the delivery of the best possible care.

Trauma care in particular can create the perfect storm for errors; unstable patients, incomplete histories, time critical decision making, concurrent tasks, MDT involvement and junior personnel out of hours. Teams as a whole are shown to make fewer mistakes than individuals, especially when all team members know both their individual responsibilities as well as those of the other members. One way to improve this is shared MDT training. However, it is challenging to maintain high levels of performance and group training with the frequent turnover of staff due to rotating trainees.

Shared learning through social media is one way to connect with different members of the teams and different specialties to gain an appreciation of their role and critical thinking.

**Introduction to Social Media**

The use of social media around the world has exploded in recent years, with the number of monthly active users of Twitter estimated to be one quarter billion in 2015. Social media accounts are used by 65% of Americans and 90% of young adults and as such is becoming a useful tool for communication and education. It can be a way of asking questions pertinent to medical education, research, clinical practices and guidelines bringing the global medical community together. It enables an immediate exchange of information and ideas around shared areas of interest. Good ideas can be dissipated, allowing amendments of services and quality improvement.

Students and more junior staff can feel empowered to engage with discussion in a low-pressure environment. This leads to shared learning; allowing lessons to be gleaned from larger cohort of cases than would be assessable from one unit alone. Social media can also be used to extend one’s own professional network. It allows users to add and connect with other like-minded users and thus build virtual professional learning networks.

**Twitter**

Twitter is an online social networking platform that allows users to post concise 140-characters. "tweets." Users may also tweet photographs and links to websites, including academic journals. Users can "follow" other users and engage with their tweets, which appear in a list known as a "Twitter Feed". ‘Hashtags’ are user-generated tags that organise and aggregate content on social media networks and can be used to search a particular topic making them easy to access as a free search service. Users can create, share and interact with posted content.

Relationships on Twitter do not have to be reciprocal, meaning that account holders may interact with professionals and institutions, eradicating hierarchy and making it attractive for users. This can be empowering for junior staff members – who have the ability to ask questions whilst keeping a degree of anonymity if they wish. As a tool for education it can be both motivating and engaging to see how other units run things and allow good ideas to spread within our own teams.

The number of physicians using social media in a professional capacity is increasing, averaging 1 in 8 medically related tweets (13%). A 2011 survey of physicians found that 24% of respondents used social media daily and 61% weekly to explore online medical information. By selecting a medically and educationally focused list of people and
organizations to follow on Twitter, one can quickly glean the most discussed topics and quickly and efficiently communicate and engage with their own team.

Using Twitter hashtags is a very effective way to build up a filter for all of the information coming in about new concepts in paediatric emergency medicine and critical care. It has taken off with conferences, enabling people on the other side of the world to follow the events live using a hashtag. Twitter brings together participants with diverse experiences and perspectives, bridging geographic barriers. It has the capability to help create a global medical community where high-class institutions can share their resources freely with less advantaged medical communities/teams.

Of relevance to the upcoming generation of theatre team members, Twitter can allow students to stay up to date with relevant advances regardless of which placement or hospital they are in. Furthermore, the fact that Twitter posts are limited to a ‘bite-sized’ 140 characters can be used to make research more accessible and applicable to the students and easier to follow. It enables the easy advertisement of educational events and research opportunities. Users can directly ask questions on a transparent platform and all who are following can see the response, benefitting the entire team.⁶

**Educational Tool**

FOAMed is ‘free open-access medical education’⁹,¹⁰ an online tool for lifelong learning in medicine, as well as a community and an ethos. FOAM is a useful way of disseminating, discussing, dissecting and deliberating over the products of that research – as well as exploring issues where research findings do not apply, or simply do not exist. This forced brevity ensures users must ‘cut to the chase’ when getting points across or sharing resources. FOAMed tweets can be labelled with a hashtag, allowing them to be rapidly identified by a search for #FOAMed. This enables others to connect to that conversation.

The global connectivity, can allow millions of interactions over hours, days weeks or months, with contemporary analytical tools providing information about the number and nature of these interactions. In the world of research it allows immediate post publication peer review. These bite-sized reviews are easy to digest take home points that are educationally accessible to everyone within the team, regardless of seniority.

Social Media can be an easy and effective way to keep your team motivated, though it’s benefits are potentially overlooked.

**Relationships**

We need to build a culture and environment where employees are happy and satisfied at work. Employees need autonomy, they want to be able to use their strengths and improve their knowledge/skills and they need to feel a part of the team. Social media as a tool connects and engages people. Happy employees are: less absent from work, more productive and more engaged at work.⁵

One way to boost happiness *and promote teamwork is to cultivate an environment where workplace friendships can thrive*. On social media, employees can interact with managers, senior staff and colleagues, engage in instant messages and discuss non-patient identifiable clinical content with other employees. They can exchange and communicate ideas.
It also provides the opportunity to engage socially through team bonding, allowing staff to feel closer to each other by following colleague's online profiles and facilitating the formation of new friendships. A friendly working atmosphere empowers employees' engagement and can potentially result in better teamwork and synergy between departments. 89% of workers say work relationships matter to quality of life.¹⁰

**Communication**

"Informal" communication on social media leads to better understanding of team members needs and motivations. 53% of workers state, "A job where I can make an impact is very important or essential to happiness." Engaged employees want to see the benefits of their work, they want to know they are making a difference.

Work-related announcements and praise on social media, demonstrates and values hard work. They also send a strong message about management’s interest and investment in its people. Positive encouragement from workplace friends can strengthen relationships within the team. Similarly it can provide someone to talk to in difficult situations through direct messaging, offering a support network for staff.

Work communication can significantly improve if team members have additional opportunities to communicate on a personal level. A survey of 1,500 UK employees conducted between May and June 2012, into the use of social media in the workplace, showed that there is a desire among employees to engage with managers/leaders via social media channels.¹¹ ¹²

Over two-fifths (42.3%) would be happy to converse directly with their line manager or team lead via Facebook/Twitter and a fifth (20%) would be content tweeting the head of department.¹¹ ¹² Likewise, nearly two-fifths (39.2%) of managers would be happy to reciprocate. With the right parameters in place, there is opportunity for employers to communicate with their employee’s online; facilitating effective employee engagement at all levels of the organisation and improved team dynamics.

**Paediatric Surgery**

The research and development of drugs and devices for paediatric patients is complicated due to small patient populations, paediatric physiology/pathophysiology as well as practical/ethical difficulties in designing clinical trials. In the absence of evidenced based medicine governing practice, consensus is important. Solutions for these issues require creativity in designing studies through collaboration between teams, academia, industry and government. Social media can aid these partnerships by allowing instantaneous messaging, ease of personal searches and high volume viewing of content; this ultimately benefits our patients.

Paediatric patients are a particularly emotive cohort for care providers. Emotionally distressing situations arising in the care of critically ill patients can leave staff members feeling emotionally low, especially when cases have a negative outcome. The support network of social media friends and colleagues online can provide a valuable outlet for staff members to be open about their feelings. Social media provides a non-judgemental environment where it is accepted to talk about negative outcomes, and the subsequent effects on us as care givers. This support network can provide advice on how to cope from people who have been through similar experiences.

Paediatric surgery creates some unique challenges for the team, particularly in relation to trauma. Haemodynamically unstable code-red patients are fortunately a rarity in comparison to adult practice, however as
such the team may be less experienced at dealing with these sorts of cases in comparison to adult teams. Shared learning from case based discussion, research and FOAMed allows teams to increase their exposure, learn from the experience of others to build upon their own experience.

**Research / collaboration**

To highlight the point that "social media provides a valuable online networking tool for research and multidisciplinary team engagement", I conducted my literature review for this article using Twitter as my sole resource.

By tagging/highlighting just 4 cross speciality doctors well known for their social media presence and enthusiasm for medical-education, it allowed me to contact and request help with a literature review using a single tweet. By using certain well-known hashtags I increased the tweets exposure to my target audience.

My recruited online team consisted of 1 referral GP, 1 retrieval doctor, 1 ED/ICU Consultant and a Plastic Surgeon. This team spanned 3 continents in both hemispheres (Europe, USA and Australia).

The tweet was distributed at 23:30 on a Sunday evening GMT, allowing peak viewing on Monday across all time zones. Total views reached a plateau at 72 hours with 5814 impressions (number of twitter streams delivered to), 136 people actively engaged with the tweet, 25 people were inspired to click on my profile based on this tweet alone with 14 likes and 11 re-tweets (direct copies) all of which increased the audience further.
Take Home Messages

Human resource departments and team leaders should be encouraging the use of social media as a productive way of engaging/educating employees and providing positive feedback to teams.

Organisations should strive to successfully integrate social media into their internal communications.

Twitter feeds provide alternative solutions to tired intranets, message boards and newsletters and keep team members current, up to date and improve team performance.

Notes On Contributors

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Appendices
Declarations

The author has declared that there are no conflicts of interest.

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