Editorial

Social Media: An Emerging Tool in Medical Education

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Introduction

Social Media are "all websites and applications that enable users to create and share content, to interact with other users or to find people with similar interests to one's own".[1] Students of twenty first century are "digital natives" and use social media daily necessitating the need for its incorporation in teaching and learning in medicine. Furthermore, global interconnectivity means future doctors need to learn and master the skill of social media use.

Social media broadly encompasses multiple platforms, including social networking sites [SNS] like Facebook, Twitter, LinkedIn; Media sharing sites [MSS] like YouTube; blogs; Wikis; video and text messaging services such as Skype, WhatsApp; and Learning management systems [LMSs] (including Moodle, Blackboard) etc.

Incorporation of social media in medical curriculum is a growing trend. Social media has remarkable potential to help both educators and learners in medicine. Connectivism and constructivism are the two key learning theories underpinning use of social media in medicine.[2] In connectivism, social media by connecting students and teachers lead to sense of community, which enhances collaboration, networking and knowledge transfer. Faster feedback, better speed of access to information, and better student satisfaction are added advantages.[3] Free Open Access Meducation (FOAM) is a well-known example of such virtual community. In constructivism, students construct knowledge themselves. Importance of social development theories, communities of practice and zone of Proximal development have been the various constructivism theories highlighted in connection to social media use in medical education.[2]

Despite positive aspects, there are some concerns about social media use in education. Privacy and negative impact on medical professionalism are considered as the biggest hurdles.[3,4] However there are various guidelines safeguarding patient privacy, confidentiality and online friendship boundaries etc.[5] Another concern is quality and standardization of social media resources as information may be misleading or false due to it not being peer reviewed. Recently there is a movement towards evaluating various resources for credibility, quality and impact; which in turn will encourage development of reliable content for use in education online. Technical challenges, expertise of faculty and students in use of social media also hinders incorporation of social media in day-to-day learning and teaching. Teachers may need IT training as misuse of social media has potential to distract and can negatively impact student learning.[2,6]

Amongst the most popular social media platforms currently used by the medical community are Facebook and Twitter but the trend is increasing.

Facebook is one of the most common social media platforms used by medical students. Integrating familiar tools like Facebook in learning and curriculum makes learning enjoyable and efficient in line with Knowles 'andragogy' theory. Facebook is a multifunctional tool, which educators and learners can adapt according to their needs. It is used in medical

education as a communication tool for better contact with students, interactive learning activities, to post videos and links for enhancing learning, and as an assessment method.[7,8] Facebook as a "suitable learning environment" was endorsed by majority of medical students in literature.[8]

Blogs are the most widely used form of social media within medical education according to Cheston et al.[3] Blogs are like online diaries where the author or authors posts in chronological fashion. Videos, podcasts, links can be embedded in blogs and readers can comment and reply to posts. Blogs have benefits of being easy to use requiring no specific IT skills, less intimidating and can be done for free with no need to tie to host organizations. Blogs is among the ideal platforms in encouraging students engagement through collaborative learning, facilitate formative learning, reflective writings, providing feedback, and generating group discussions.[9,10] Challenges of using blogs in medical education are mainly linked to students regulating their own learning and needing support from the faculty particularly when being used as a formative assessment tool.[9] Academic Life in Emergency medicine (ALiEM), Dr. Amal Mattu's EKG videos, are some examples of blogs in medicine.

Twitter is microblogging platform, with character limit of 140 characters. Integration of twitter into curriculum has shown better exam results for students due to better engagement and as a useful adjunct to existing medical curriculum and as a tool for ongoing dialogue.[11] Hashtags (#) may precede a word or phrase in order to allow for searches for Examples FOAMed, #MedEd in emergency medicine. There are however concerns regarding need for regular input and time by teachers, unregulated information, possibility of poor writing habits due to brief style of communication and breach of confidentiality.

WhatsApp is a messenger application that has variety of functions, like text messages, images, audio files, video files, and links to web addresses. A unique feature of this application is the option to create a group.

A study of MBBS students showed that 55% of the learners were using WhatsApp for medical education and 69% of these learners ranked it -highest among various social media tools.[12] It creates a virtual learning environment, where even the shy students have chance to interact with the faculty members. Moreover, it breaks boundaries of time, as the learning interaction can start anytime of the day. The teachers can share images, tables, graphs, algorithms, MCQs and SEQs. Another advantage is that there are no advertisements and admin can restrict irrelevant posts. Other resources like books or notes can be shared.

It can be used to learn basic sciences by animated videos and 3-D animations. There is a very useful tool in learning basic to complex procedures. Hassanien & Abou-Kamer have published use of VBL (Video Based Lectures) on Youtube for Faculty Development of health professionals.[13] It has become a useful educational tool providing digestible information and possibility of feedback. However, there are questions regarding the authenticity of the material. Rabee proposed that the medical institutes should endorse use of regulated videos by the learners.[14] A survey of US plastic & reconstructive surgeons revealed that 64.1% had used online media at least once to learn new surgical techniques.[13] Several online free resources have developed that provide excellent information. Lecturio Medical Education is an example providing lectures for medical learning.[15]

In conclusion it can be said that the Social Media is providing a lot of information to the medical learners. Its use is bound to increase in future. Hence, we recommend that the Medical Universities may develop their common e-portal for authentic knowledge sharing, which may be supervised by a board of experienced medical educationists and subject specialists.

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