

Social Media Paediatrics: Enhancing WhatsApp use in Paediatrics Specialty Training

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ABSTRACT

There is a significant focus on social and other forms of digital media at present revolutionising learning and teaching methods; however, other traditional forms such as printed media are well known in assisting educators. Social media applied within medical education is an example of the application of educational media in practice. Instant messaging application has the inherent capacity to facilitate communication within the hospital community and therefore enhancing learning opportunities. WhatsApp has become very popular in some aspect of medical education and clinical practice; however, in paediatrics and child health, dedicated WhatsApp use is still emerging. This narrative review examines enhancing WhatsApp use in paediatrics speciality training. While the innovative technology of WhatsApp social media platform is a highly impressive tool to motivate, augment learning, also applaud as evidenced by its use in our paediatric unit as educational and communication tool ultimately impacting on patients care and healthcare delivery but in its current form WhatsApp is said to be unsafe to handle patient data and is inappropriate for use in a clinical environment.

KEYWORDS social media, whatsapp, paediatrics

Introduction

There is a significant focus on social and other forms of digital media at present revolutionising learning and teaching methods; however, other traditional forms such as printed media are well known in assisting educators [1]. Social media applied within medical education is an example of the application of educational media in practice. Digital social media platforms, including Facebook and Twitter, encourage learners to contribute content and develop virtual communities of practice [2]. M-learning applications in mobile devices have uses which vary from drug calculations to checklists and score systems for a diagnosis. Social media is a constellation of web-based technologies and its application for the facilitation of ideas and information creation and sharing of people of like interest through discus-

sion, interaction and strong collaboration even in health care delivery and medical education through social media platforms [2]. Social media platforms include social networking sites like Facebook and instant message app (WhatsApp), microblogs like Twitter, wikis, Youtube and blogs. The most widely used social platforms in medical education are the blogs [2], furthermore social media platform has positively and hugely influenced the domain of medical education and healthcare delivery evidenced by ways trainees communicate, exchange ideas, interact, learn evidenced-informed practice and promote healthy scholarship and result-oriented clinical practice [3,4]. Effective communication is the life wire of good clinical practice; hence, social media facilitate instant communication and prompt feedback and reply from colleagues and tutors, thereby improving productivity in the clinical arena (5, 6). The speed of feedback and response is said to be the power of social media, as reported by Hennessy et al. 2016 [7], complementing existing tools.

Social media has transformed the dimension of online interaction and communication for all doctors, including paediatricians and our patients who have access to these platforms through their mobile devices. Despite the introduction of social media use in healthcare delivery and medical education, there have been little studies on the effect and outcome of social media in-

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DOI:10.5455/IJMRCR.Social-Media-Paediatrics

First Received: May 06, 2019

Accepted: July 10, 2019

Associate Editor: Ivan Inkov (BG);

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tervention in paediatrics. This narrative review aims to analyse the use of social media in a recent learning intervention and its attendant outcome. WhatsApp has become very popular in some aspect of medical education and clinical practice; however, in paediatrics and child health, dedicated WhatsApp use is still emerging.

Discussion

Currently, smartphones have become an essential tool for doctors facilitating prompt access to the internet through 3G or 4G with enormous ability to share pictures, video clips and printed information on instant message app like WhatsApp. There has been an increase in the use of Smartphone in the UK significantly from 76% of adults owning a smartphone to 90% when considering the 16–24-year-old age group [8]. WhatsApp was founded in 2009 and currently approaching one billion users worldwide and in 2014 was acquired by Facebook in a USD 19Bn acquisition with significant multiple security concerns with flawed and inadequate initial encryption attempts but latter in April 2016 WhatsApp introduced end-to-end encryption of all messages which ensures that neither WhatsApp themselves or third parties can read any message sent by the user. The constant key challenges of patient confidentiality and strict patient data protection are a daunting task, especially in teaching clinical scenarios and displaying the images.

WhatsApp Group use by paediatric Trainees

Organizational

The hospital environment can be very busy, and tasking and communication is key to effectiveness and efficiency, instant message app like WhatsApp is very handy, easy to use and most importantly, almost all doctors possess a smartphone.

Educational

This includes a variety of educationally driven discussion and instant dissemination of learning resources including a short video about procedures, specific clinical skills, recent guidelines or evidence. Furthermore, this may be organised appropriately and goal-directed having a specific outcome in view during the duration of the training. The various group with common learning goals and communities of practice and further be formed. This can also be a great platform for teaching for pre and post teaching feedback.

Social

Positive and conducive social atmosphere that facilitate social and informal interaction involving the use of emojis.

Research

WhatsApp can be a tool and platform for dissemination of research information, prompts and links.

WhatsApp facilitates online community relationship among Paediatric trainees, improving patient treatment and monitoring and facilitating prompt discussion of care plans, especially in emergency and where distance is a problem. Regular significant clinical scenarios highlighted without patient details and generated discussion with strong learning point, for example, case of necrotising colitis flag a few weeks ago but with no images or video clips posted. In my experience as paediatric trainee, we founded WhatsApp community consisting of about twenty trainee with common interest of robust community communication with regards to training, patient care and sharing of relevant information including rota changes, MDT meetings and training or courses information with huge premium and focus on safe, clear, effective and efficient communication swiftly and clearly at all times. Over the period, this has strengthened the relationship

of trainees in the department, facilitate prompt dissemination of information with significant on-time turn up for handover, departmental teaching and above all prompt response to patient care. Furthermore, training information shared encourages early enrolment for future planned courses and easy swapping of rota changes, thereby ensuring continuity of care.

Critical Appraisal of WhatsApp by Paediatric Trainees

Two basic learning theories are underpinning the use of WhatsApp in medical education, including paediatrics, which are connectivism and constructivism [7,9]. This is essential to a full understanding of operational dynamics of social media platforms including WhatsApp instant messenger app, connectivism theory describes how new and innovative opportunities are created for people to learn and share through web-based technologies [10]. Constructivism theory is a constellation of other sub-theories where users subjectively construct knowledge as information for purposeful consumption and use; this is linked to social development theory and communities of practice theory with social media like WhatsApp as a tool for expression of this theory as educational tools to facilitate learning and experience [7]. These theories were evident in the use and interaction with the WhatsApp group in our paediatric department. We build our knowledge process by planning what paediatric teaching needs to be disseminated with active discussion with a senior consultant during the face to face meeting. Also, most of the clinical scenarios teaching are not well structure depends on any interesting clinical encounter. Despite the impressive outcome of effective communication and community cohesion in the WhatsApp group, the challenges of ethics bordering dedicated use of WhatsApp in patient's care, confidentiality and online data sharing including patient's clinical information, images and care plan. Level of online lack of security in the age of hacking and counter-hacking despite end-to-end encryption further studies required to ascertain safe use in a clinical setting. We very cautious with patient details when communicating with a fellow trainee on the WhatsApp group.

National Health Service (NHS) Britain in 2014 highlighted shortcomings with the clinical use of an instant messaging app like WhatsApp messenger and advised that it should never use for exchange of clinical information because of lack of relevant data security certification [11]. The NHS code of practice indicates that all communications must comply with the 1998 Data Protection Act.13 WhatsApp contravenes this, and has violated both Dutch and Canadian copyright laws, and been accused of violating international copyright law [12]. In the United States, federal Health Insurance Portability and Accountability Act of 1996 is in place to protect and secure confidential health care information. This is a huge challenge to the use of WhatsApp instant messenger, especially when it involves patient details and images; hence its currently licenced to use this social media network as on-call paging tool or app.

WhatsApp has been proven to be a cost-effective, user-friendly and hassle-free in usage compared to the conventional practice of SMS and group chat allows for group communication up to about 50 members and presentation and share images and videos followed by purposeful discussion. Also, it allows for prompt and quick cases discussion with senior colleagues and can make multidisciplinary consultations more efficient and complete. Considering its advantages, I believe that WhatsApp may be considered a global inter-health care institutional communication system in the future, maybe reducing telemedicine costs and extending worldwide network connections.

Conclusion

While the innovative technology of WhatsApp social media platform is a highly impressive tool to motivate, augment learning, also applauded as evidenced by its use in our paediatric unit as educational and communication tool ultimately impacting on patients care and healthcare delivery but in its current form WhatsApp is said to be unsafe to handle patient data and is inappropriate for use in a clinical environment, but a more secure alternative approved by health care governing council is needed to communicate effectively, efficiently and safely in clinical setting, further research needed to ascertain its safety in a clinical environment.

Competing Interests

The authors declare that there is no conflict of interest in this study.

Funding

All funds in this study were covered by the personal fund of the authors.

References

1. Eady MJ, Lockyer L. 'Tools for learning: technology and teaching strategies', *Learning to Teach in the Primary School*, Queensland University of Technology, Australia. 2013; 71.
2. Cheston CC, Flickinger TE, Chisolm MS. Social media use in medical education: A systematic review. *Academic Medicine*. 2013; 88: 893–901.
3. McGowan BS, Wasko M, Vartabedian BS, Miller RS, Freiherr DD, Abdolrasulnia M. Understanding the factors that influence the adoption and meaningful use of social media by physicians to share medical information. *J Med Internet Res*. 2012; 14: e117
4. Choo EK, Ranney ML, Chan TM, et al. Twitter as a tool for communication and knowledge exchange in academic medicine: A guide for skeptics and novices. *Med Teach*. 2015; 37: 411–416.
5. Ekarattanawong S, Thuppia A, Chamod P, Pattharanitima P, Suealek N, Rojpibulstit P. Perception of social networking benefits in the support of a PBL module according to students' performance levels. *J Med Assoc Thai*. 2015; 98(2): S77-S83.
6. Usher K, Woods C, Casella E, Glass N, Wilson R, Mayner L, Jackson D, Brown J, Duffy E, Mather C, Cummings E, Irwin P. 'Australian health professions student use of social media', *Collegian*. 2014; 21(2): 95–101.
7. Hennessy CM, Kirkpatrick, E., Smith CF, Border S. 'Social media and anatomy education: Using Twitter to enhance the student learning experience in anatomy', *American Association of Anatomists*, 2016
8. Ofcom. The UK is now a smartphone society. <http://media.ofcom.org.uk/news/2015/cmr-uk-2015/>. 2015. Accessed 13 April 2019.
9. Flynn L, Jalali, A, Moreau KA. 'Learning theory and its application to the use of social media in medical education', *Postgraduate Medical Journal*. 2015; 91(1080): 556–560.
10. Siemens G. Connectivism: A learning theory for the digital age. *International Journal of Instructional Technology and Distance Learning*. 2005; 2(1): 3-10.
11. NHS England. Risk alert using apps to share data, *NHS Engl Inf Gov Bull*. Leeds: NHS England, 2014
12. NHS England. WhatsApp "to be encrypted," *NHS Engl Inf Gov. Bull*. Leeds: NHS England, 2015.