

Experience in the use of Social Media in Medical and Health Education

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Abstract: We are all aware of what the social media is and we are using it in our daily routines very effectively. This article is not to elaborate what social media is, but to testify its use and applications in medical and health education. Out of all branches of medical education, *Ayurveda* is most emerging branch in terms of modern sciences. *Ayurveda* is an ancient life science. The knowledge of *Ayurveda* is in the form of Sanskrit texts. Many *Ayurveda* students find it difficult to grasp many terminologies and procedures explained in literature of *ayurvedic* science. Using social media tools can enhance the teaching – learning qualitatively. Moreover, when we look up at the practicing *ayurvedic* physicians, one should accept that the myths and tricks of practical *Ayurveda* is concentrated in some parts of India like, Pune, Kerala, etc. And with increased use of social media, through various groups over social media, this ancient and applied wisdom is available on fingertips to the students of *Ayurveda*. An important intervention would be to provide formal education to a cohort of medical educators and students on these communication tools. They could then spread on these theories in a more deliberate fashion to the use social media in learning.

Methods: The concept of social media and its applications was studied from various databases like PubMed, google scholar and other research articles.

Conclusion: *Ayurveda* medical universities should include learning information and communication technologies right there in first year of curriculum and familiarize the students with the social media applications in developing their own methods of applying these tools in study pattern.

Keywords: Social media, medical education, *Ayurveda* medical sciences

Introduction

We are all aware of what the social media is and we are using it in our daily routines very effectively. This article is not to elaborate what social media is, but to testify its use and applications in medical and health education.

Present-day medical students are born and brought up in internet era. Social media have made its growth and become enormously popular among this generation. Present day medical students have strong affection towards use of social media, and that's why they expect their teachers to involve such tools in the teaching modules. Similarly, the medical education fraternity and its associated literature increasingly hold the same expectation of the medical educator. Repeatedly it is identified that, given the nature of the learners and their abundant use of social media, social media should be incorporated into teaching and learning in medical education. However, although medical science teachers have realised the need of using social media in the teaching module, they don't have enough knowledge and database to apply such communication technologies, the protocol for using such tools in medical education should be provided to teachers in a structured manner. ^[1]

At the same time we should observe that like modern-day education in other subjects, medical education has recently experienced an evolving shift from "teaching" to "learning" which has been strongly related to an growing use of information and communication technologies. During past two decades, learning methods have transformed into services and applications provided by gadgets and communication tools, collectively known as "Web 2.0" or "Social Media". These modalities emphasize on collaboration of students and teachers, also sharing knowledge has become easy, both among humans and applications over the gadgets. Moreover, advances in the understanding of learning processes suggest that learning should evolve from "learning by acquisition" to "learning by participation". Thus, testifying various learning approaches, have given rise to the concept of active learning, which includes engaging students in learning activities which will make them understand the basic concepts and their application in medical practice. Such new educational approaches are usually referred to as student centred, and include problem based or case-based learning (PBL/CBL); as well as collaborative and interactive learning of all kinds. These methods are believed to address not only explicit knowledge (conveyed by books, lectures and scientific documents) but also unspoken knowledge (directly related to experience and practice, as shared by interaction and collaboration). ^[2]

One of the most important aspects of social media applications is its ability to connect peoples far from each other. It is stated in a systematic review that the use of social media in education enhances knowledge, student attendance, feedback, professional development, and cooperation. ^[3]

This also contributes, in particular, to the professional development of students and teachers who have limited resources and who live in geographically distant regions, and naturally to the improvement of the service that the teachers are offering by allowing them to access information. ^[4]

Encouraging educators to look at and consider the wireless, mobile learning experiences in higher education like medical fraternity in order to stay abreast of the latest technologies affording students' heightened learning and understanding. It is well known that students are using mobile wireless technology in the physical classroom to text one another about what the teacher is presenting or about what is going on outside the classroom. Some institutes do not allow such activities and request classrooms having no internet access or ban the use of gadgets devices during classtime. But using such tools in teaching process would ease the work of teachers. Currently, the handy gadgets like tabs and smart phones are being explored as an avenue to enhance learning in the classroom and at home. Today's medical education students have different style of learning than students of two decades ago. 'Smart' phones and portable media players (e.g. Apple iPods) are being used to taper the communication gap between patients and healthcare providers, as well as between educators and learners.^[5]

Out of all branches of medical education, *Ayurveda* is most emerging branch in terms of modern sciences. *Ayurveda* is an ancient life science. The knowledge of *Ayurveda* is in the form of Sanskrit texts. Many *Ayurveda* students find it difficult to grasp many terminologies and procedures explained in literature of *ayurvedic* science. Using social media tools can enhance the teaching – learning qualitatively.

Moreover, when we look up at the practicing *ayurvedic* physicians, one should accept that the myths and tricks of practical *Ayurveda* is concentrated in some parts of India like, Pune, Kerala, etc. And with increased use of social media, through various groups over social media, this ancient and applied wisdom is available on fingertips to the students of *Ayurveda*.

Nowadays, *Ayurveda* is re-evolving and modernising as per demand of patients of present era. And to make such practice easier, students should be taught to use communication technologies right from first year of the course.

With every technology there are benefits with few drawbacks, likewise social media too has its good and bad perspectives. Such outcomes are completely user based.

Also, it is debatable if social network tools are truly equally or even more effective than other educational tools used for educational purposes.^[6]

Actually, the usefulness of these communication tools is not clear yet, and there use has increased enormously in the field of medical science education. "The use of social media applications and its benefits are not completely affirmed". Further, a review of the published literature on social media use in medical health education led to the conclusion that there is "a lack of high-quality data, infrequent assessment of expertise or behaviour-based outcomes, and no assessment of patient-based outcomes in the studies". More concerning is the finding that "without structure, social media can negatively influence student learning", and yet "it is the mentor who must lead effective ways to implement devices in learning".^[7]

Materials and Methods

The concept of social media and its applications was studied from various databases like PubMed, google scholar and other research articles. The applications of communication tools

and technologies were collected from personal experience of teachers in *ayurvedic* medical sciences and renowned practitioners.

Discussion

Conventionally, learning theories tend to be clustered in three large categories: behaviourist, cognitivist and constructivist. In short, behaviourist theories are those that recommend that perceptive is the result of objective experience; cognitivist theories are those that recommend that perceptive is the outcome of mental processing; and constructivist theories are those that recommend that perceptive is subjectively constructed. In the era of technology, learning theories have moved from behaviourist to constructivist. The teacher's duty is to ease the understanding process. This is achieved through the properly designed curriculum and learning activities. The structure of learning module should have constructivist approach, in which students are given the tools, resources and support needed to create their own knowledge.^[8]

Connectivism and Constructivism are closely related. Connectivism is more appropriate learning theory to explore the use of social media in medical education since it is a theory that has evolved to define the learning process in view of communication technology. It therefore also holds strong implications for teaching during a technological era. The concept that is quite unique to Connectivism is that how people learn, work and performance is altered by the technology that's getting used. Therefore, educators from *Ayurveda* fraternity must recognize the power of digital media applications so as to adequately prepare tomorrow's *Ayurvedic* physicians to establish themselves in this internet era and eventually popularize this ancient science in the society. Use of communication tools allow teachers to apply constructivist and connectivist learning approaches in a new manner as compared to traditional methods. Medical professionals can use this social media to get connected with each other to increase the communal potential for learning, enhance learning from peers, share case studies, connect outside the classroom, easily exchange applied principles, create a community of specialized practitioners and connect with content experts.^[9]

Thus, using social media in teaching module have proven simpler in terms of data sharing. *Ayurveda*, being a life science, has equal importance to practical knowledge as compared to the idea.

One way to describe how social media impacts live classrooms is that it engages students in novel ways, and overall extends the amount of interaction with teachers. Sharing practical knowledge has become easier to the vast number of scholars. In old days, students would get clinical exposure only they attended the postings physically. But, watching the increasing number of scholars per batch, it's become difficult to let all them to interact with every patient. That too in *Ayurvedic* case taking, which is sort of lengthy in format. In such scenario, social media tools have come to assist the teachers of *ayurvedicscience*, letting those broadcast case studies along with patient-doctor interaction, procedures, follow-ups and improvements within the diseased.^[10]

Also, it's become simpler to attach the classroom with speakers located geographically far apart. Conferencing or live meetings over Social media indicate a shift towards more participatory and open ways of medical teaching.

While in the old days, participant interaction started with the primary day of the conference, and ended with the last day. Due to the ease of availability provided by social media, we will start engaging students long before the particular face to face meeting and lets the conversation continue for month or maybe more to unravel and take follow from all their queries, through social networking sites, twitter streams, and other social media.

The traditional way on conducting such conferences consists of many closed, in-transparent, and processes, for instance closed peer-review of research papers to be presented, and it was not possible for participants to connect to other registrants and speakers before the meeting. These “traditional” processes affects the level of involvement of participants, their co-operation, interaction and knowledge sharing. Many of these closed and non-participatory processes are “historic” traditions from the pre-Internet age, where more open and participatory workflows weren't feasible. In contrast, social media can open up and fundamentally transform many of those processes. The next-generation technology supports medical students being mobile and in demand for current information while on the go, for instance, progress of any case study, patient reports, changes made in treatment protocol, etc.
[11]

The use of communication technologies will assist teachers of Ayurveda fraternity in designing effective learning events, curricula and assessment practices and hence to improve learning. An important intervention would be to provide formal education to a cohort of medical educators and students on these communication tools. They could then apply these theories in a more deliberate fashion to the use of social media.^[12]

A prime application of social media in *ayurvedic* medical education is that, it makes tomorrow's physicians more participatory and open up their approaches to the applied knowledge, as being “participatory” and “open” is directly related to success in student's engagement and learning.^[13]

A training for “how to create” a blog, podcast and educational wiki, etc. should be provided by the institutions of Ayurveda, so that students will get encouraged to use mHealth during the course of an academic semester and also in their future professional practice.

Conclusion

Thus we can say that using social media approaches in Ayurveda learning can

- ✓ improve student attentiveness and presence,
- ✓ increase learner's communication among themselves and with teachers,
- ✓ promote sharing of applied knowledge,
- ✓ help to build a lasting social media groups for problem based learning,
- ✓ used to assess level of student participation and mark out their weak points
- ✓ Demonstrating practical or procedure session is much simpler
- ✓ Understanding many Sanskrit texts gets easier

Ayurveda medical universities should include learning information and communication technologies right there in first year of curriculum and familiarize the students with the social media applications in developing their own methods of applying these tools in study pattern.

References

1. Flynn, Leslie, Alireza Jalali, and Katherine A. Moreau. "Learning Theory and Its Application to the Use of Social Media in Medical Education." *Postgraduate Medical Journal* 91, no. 1080 (October 1, 2015): 556. <https://doi.org/10.1136/postgradmedj-2015-133358>.
2. Paton, Chris, Panagiotis Bamidis, Gunther Eysenbach, Margaret Hansen, and Miguel Cabrer. "Experience in the Use of Social Media in Medical and Health Education," January 1, 2011; 04.
3. Cheston CC, Flickinger TE, Chisolm MS. Social media use in medical education: a systematic review. *Acad Med*. 2013; 88:893e901.
4. Cevik, Arif Alper, Gokhan Aksel, Haldun Akoglu, Serkan Emre Eroglu, Nurettin Ozgur Dogan, and Yusuf Ali Altunci. "Social Media, FOAMed in Medical Education and Knowledge Sharing: Local Experiences with International Perspective." *Turkish Journal of Emergency Medicine* 16, no. 3 (September 1, 2016): 112–17. <https://doi.org/10.1016/j.tjem.2016.07.001>.
5. Paton, Chris, Panagiotis Bamidis, Gunther Eysenbach, Margaret Hansen, and Miguel Cabrer. "Experience in the Use of Social Media in Medical and Health Education," January 1, 2011; 06.
6. Arnbjörnsson, Einar. "The Use of Social Media in Medical Education: A Literature Review." *Creative Education* 5 (December 1, 2014): 2057–61. <https://doi.org/10.4236/ce.2014.524229>.
7. McGee JB, Begg M. What medical educators need to know about "Web 2.0". *Med Teach* 2008;30:164–9.
8. Flynn, Leslie, Alireza Jalali, and Katherine A. Moreau. "Learning Theory and Its Application to the Use of Social Media in Medical Education." *Postgraduate Medical Journal* 91, no. 1080 (October 1, 2015): 558. <https://doi.org/10.1136/postgradmedj-2015-133358>.
9. Flynn, Leslie, Alireza Jalali, and Katherine A. Moreau. "Learning Theory and Its Application to the Use of Social Media in Medical Education." *Postgraduate Medical Journal* 91, no. 1080 (October 1, 2015): 559. <https://doi.org/10.1136/postgradmedj-2015-133358>.
10. Alexander B. Going Nomadic: Mobile Learning in Higher Education. *Educause Review*. 2004:6.
11. Billings DM. From teaching to learning in a mobile, wireless world. *The Journal of nursing education*. 2005; 44(8):343.
12. Popoiu, Marius Călin, Gabriela Grossec, and Carmen Holotescu. "What Do We Know about the Use of Social Media in Medical Education?" *Procedia - Social and Behavioral Sciences*, 4th WORLD CONFERENCE ON EDUCATIONAL SCIENCES (WCES-2012) 02-05 February 2012 Barcelona, Spain, 46 (January 1, 2012): 2262–66. <https://doi.org/10.1016/j.sbspro.2012.05.466>.
13. Paton, Chris, Panagiotis Bamidis, Gunther Eysenbach, Margaret Hansen, and Miguel Cabrer. "Experience in the Use of Social Media in Medical and Health Education," January 1, 2011; 09.