



## Letters to the Editor

To cite this article: (2010) Letters to the Editor, Medical Teacher, 32:7, 618-620, DOI: [10.3109/0142159X.2010.497719](https://doi.org/10.3109/0142159X.2010.497719)

To link to this article: <https://doi.org/10.3109/0142159X.2010.497719>



Published online: 23 Jul 2010.



Submit your article to this journal [↗](#)



Article views: 1555



View related articles [↗](#)



Citing articles: 1 View citing articles [↗](#)

## LETTERS TO THE EDITOR

Pathology education,  
Wikipedia and the Net  
Generation

Dear Sir

The time allocated to Pathology teaching in medical schools has decreased in recent years due to changes in medical curricula and also as a result of additional pressures, such as of lack of time and resources, felt by Pathology teachers (Domizio & Wilkinson 2006).

The internet is an important learning tool for students of the 'Net Generation' and E-learning is an innovative modern technology which can support and enrich medical education (Smothers et al. 2008). Net Generation students are familiar with using Wikis and expect to utilize them for future learning (Sandars & Morrison 2005).

Wikis are part of the Web 2.0 network and can be defined as 'a type of word processor that allows multiple authors and editors to contribute simultaneously to a document' (McGee & Begg 2008).

We were interested to survey the medical educational content of the popular website Wikipedia ([www.wikipedia.org](http://www.wikipedia.org)) and assess whether it could contribute to Pathology teaching.

We were interested to see if the entries were accurate, whether they contained any obvious mistakes, and whether they were useful for undergraduate or postgraduate Pathology teaching. The entries were examined by a Pathology ST2 (Kate Struthers) and the information contained therein compared to a standard pathology text (Kumar et al. 2010).

We performed a search reflecting the author's preferences for subjects in medical education (December 2009). We searched for the following respiratory diseases: sinusitis, rhinitis, nasal polyps, pharyngitis, acute epiglottitis, pneumonia, TB, COPD, bronchitis, lung cancer, sarcoidosis, interstitial lung disease, idiopathic pulmonary fibrosis, asthma, occupational lung disease and cystic fibrosis.

All the conditions selected had entries in Wikipedia. The entries were generally informative, accurate, comprehensive and useful resources for medical education. In particular, the entry on cystic fibrosis demonstrates the strength of Wikipedia with an accurate clinical description of the disease linked with the fundamental sciences.

The entries are generally well referenced (11–160 references per entry) and provide external links to other good

resources. Many of these external references are relevant journals, databases and textbooks as well as organizations such as WHO and the Mayo clinic. One good feature of Wikipedia is that it warns readers when information is not referenced.

Helpfully, the entries also possess links to other relevant wiki pages. For example, the link for 'granuloma' leads to a page containing an accurate histological description with photos and further links to pages about the causative diseases.

It is disappointing that only four of the entries, e.g. pneumonia, TB, sarcoidosis and idiopathic pulmonary fibrosis included histology photos, although histology may be available from external links.

There was a tendency in the entries to use rather colloquial language, somewhat detracting from the professional educational value of the material. Some of the entries, e.g. asthma, are too detailed for the general public, yet too extensive for undergraduate medical education.

Some minor inaccuracies were identified in the material presented, for example in the description of pleural plaques and asbestosis. Some entries provided a limited overview of the topic, e.g. bronchiectasis.

We have identified Wikipedia as an informative and accurate source for Pathology education and believe that Wikipedia is potentially an important learning tool for students of the 'Net Generation'.

It is clear that caution must be advised with regards to the medical information presented. Despite this, the authors feel it remains a useful learning resource – particularly if used in combination with other learning materials.

Andrew Wood  
University of St Andrews  
Bute Medical Building  
Fife KY16 9TS, UK  
E-mail: [aw104@st-andrews.ac.uk](mailto:aw104@st-andrews.ac.uk)

Kate Struthers  
Department of Pathology  
Edinburgh Royal Infirmary  
Edinburgh, UK

## References

- Domizio P, Wilkinson M. 2006. Pathology teaching in the twenty-first century. *Clin Teach* 3:53–59.
- Kumar V, Abbas AK, Fausto N, Aster JC. 2010. Robbins and Cotran Pathological Basis of Disease. 8th ed. Saunders: Elsevier.
- McGee JB, Begg M. 2008. What medical educators need to know about 'Web 2.0'. *Med Teach* 30:164–169.
- Sandars J, Morrison C. 2005. What is the Net Generation? The challenge for future medical education. *Med Teach* 29:85–88.
- Smothers V, Ellaway R, Greene P. 2008. The E-learning evolution—leveraging new technology approaches to advance healthcare education. *Med Teach* 30:117–118.

## Factors influencing the knowledge of 'evidence-based medicine' in sixth-year medical students

Dear Sir

Although teaching methods and systems in medicine vary among Western countries, medical practices have become more homogeneous in recent years due to the rapid spread of scientific medical information. The development of Evidence-Based Medicine (EBM) was a major evolution in medicine and has led to changes in medical education. It has been shown that students embrace EBM if they see these practices modeled daily in medical decision-making. If EBM is taught as a theory and not seen in clinical practice, students may believe that EBM is unimportant in their own practice.

To this end, we have evaluated the level of assimilation and knowledge of EBM concepts in a sample of French medical students in their sixth year of training. An 'electronic-questionnaire' was proposed to 3125 sixth-year students from all 39 French medical schools in 2009. Overall, 1870 students (58.2% response rate) completed the questionnaire (women = 1168; 63%). The concept of EBM was known by 1716 students (92%). Just over half of the students (1030; 55%) knew of web-based medical information databases. Treatment guidelines were considered to be important by most students (97%). Only 24.3% and 29% of students said that they write or speak English. Only the most successful students showed interest in obtaining more knowledge of EBM.

Most students are instructed in EBM concepts and techniques early in medical school. However, only the most successful of our sample of students developed an interest in using these techniques, and understanding of EBM appeared to be limited in the majority of our sample. This limited understanding and interest in application suggests that there is a lack of effectiveness in the current heterogeneous EBM teaching programs. Although we have found that the majority of students understand the basic concepts of EBM, we believe that there is an urgent need for an evaluation instrument to assess scientific knowledge, work habits, and reasoning skills required in the practice of EBM. Our research suggests that there is a need for a common and efficient teaching program that could be disseminated throughout the western medical community. We suggest that an international think tank be constituted to evaluate this problem and advise changes, as medical education is a general concern that goes far beyond national borders. Even though the medical community has been widely adopting EBM concepts, there is still a need for accurate and adequate instruments for the evaluation of education in evidence-based practice.

Morgan Roupret  
Academic Urology unit

Hopital Pitié-Salpêtrière  
Assistance Publique Hopitaux de Paris (AP-HP)  
Paris, France  
Faculté de Médecine Pierre et Marie Curie  
University Paris VI  
Paris, France  
E-mail: morgan.roupret@psl.aphp.fr

Laurent Karila  
Academic Addiction Medicine Center  
Hopital Paul-Brousse  
Assistance Publique Hopitaux de Paris (AP-HP)  
Paris, France  
Faculté de Médecine Paris Sud  
University Paris XI  
CEA- INSERM U797  
Paris, France  
Jérémie H. Lefevre  
Department of Digestive Surgery  
Hopital Saint-Antoin  
Assistance Publique Hopitaux de Paris (AP-HP)  
Paris, France  
Faculté de Médecine Pierre et Marie Curie  
University Paris VI  
Paris, France

## References

- Guyatt G, Cairns J, Churchill D, Cook D, Haynes B, Hirsh J, Group ATEBMW. 1992. Evidence-based medicine. A new approach to teaching the practice of medicine. *JAMA* 268:2420-2425.
- Holloway R, Nesbit K, Bordley D, Noyes K. 2004. Teaching and evaluating first and second year medical students' practice of evidence-based medicine. *Med Educ* 38:868-878.

## Webinar: Free international distant real time interactive tutoring

Dear Sir

We report the first tutoring program for Japanese medical students (MS) using Web-based 'Webinar' (contraction web and seminar). In 2009, two undergraduate Japanese MS invited an English-speaking general internist in North America to tutor them in the broad area of clinical medicine. Their aim was to introduce clinical reasoning and supplement their currently unstructured clinical curriculum at their Japanese universities (Rao 2006). Recently, the Ministry of Health, Labor and Welfare has mandated 2 years of postgraduate clinical training (Teo 2007). In this tutoring program, we used Skype (Available: <http://www.skype.com>), a web-based application that allowed Japanese MS and an American tutor, who were located distantly from one another, to participate interactively in real time.

Using their own computers in their residence, the American tutor and six MS from five Japanese medical universities prearranged by emails logged on simultaneously to Skype for twelve 1 h webinars. Four sessions were led by the American tutor, and eight sessions were led by students themselves. In the tutor-led sessions, the tutor presented problem-based learning clinical cases; students participated in case discussion with the tutor in English. In the student-led sessions, students discussed clinical topics and related differential diagnosis in Japanese. No outcome measures were collected; no syllabus was used.

To assess the efficacy of the Webinar program, the next phase of our project is to develop a syllabus and administer pre- and post-tests with the aim of measuring the clinical reasoning skills among the Japanese MS. We have identified clinical faculty in each of the five Japanese medical universities to coordinate this phase of our tutoring project. We recruited Japanese physicians who were trained in general internal medicine in North America; they will tutor the Japanese MS in their native Japanese language.

Gerald H. Stein  
Department of Medicine  
University of Florida  
Gainesville, FL, USA

Ayako Shibata  
Gumna University School of Medicine  
Maebashi  
Gumna, Japan

Miho K. Bautista  
Geriatric Research, Education, and Clinical Center (GRECC)  
VA Medical Center  
Gainesville, FL, USA  
Department of Aging and Geriatrics  
University of Florida,  
Gainesville, FL, USA  
E-mail: jerrydoc@ufl.edu

## References

- Rao RH. 2006. Perspectives on medical education. 1. Reflections on the state of medical education in Japan. *Keio J Med* 55:41–51.  
Teo A. 2007. The current state of medical education in Japan: A system under reform. *Med Educ* 41:302–308.

## Parents as practitioners in pediatrics

Dear Sir

It is common in pediatric medical settings, as in the broader culture of medicine, to understand the healthcare disciplines as modes of professional practice, but uncommon for *parenting* to be acknowledged as a practice. Even in healthcare systems that routinely proclaim their family-centeredness, it is unusual

for the knowledge and expertise of parents to be granted the moral weight and cultural respect connected to practice.

Yet, parenting is indeed a practice, drawing from a rich storehouse of learning that includes observation, experiential learning, and the generational transfer of knowledge. Parents invest in their practices by adopting a range of learning strategies – seeking out mentors, learning collaboratively with peers, and reflecting upon their accumulated tacit knowledge. This investment is heightened in families of children with chronic illnesses and disabilities, given the higher stakes involved. These parents routinely become skillful at advocating for their child, navigating complex medical systems, and making complex, ethically challenging healthcare decisions.

The strength and depth of this kind of parental practice is captured in the following account by a parent from our faculty team (MC), whose daughter recently graduated from high school.

When my daughter was one year old, I was told she would never have children of her own, go to college or live independently. All my dreams were destroyed in a twenty-minute office visit. That conversation was also the beginning of my becoming an expert, both in terms of understanding my daughter's physical and developmental disabilities, and in terms of knowing her as a unique human being – a funny and courageous kid, talented artist, lover of animals, and the foundation of our family. Our clinicians understand some pieces of the puzzle; I understand many others. More and more, our relationships with the medical team are fueled by mutual respect. When that happens, I can relax a bit, knowing that my daughter will get what she needs from all of us.

In our work developing educational programs focused on difficult conversations in pediatric settings (Browning et al. 2007; Meyer et al. 2009), we have been committed to highlighting parental knowledge in a number of ways, including employing parents as medical educators. As a result, our thinking has changed markedly about the ways in which healthcare practitioners and parent practitioners can learn from each other and how to craft robust educational approaches to address the chronic and complex healthcare needs of children in the twenty-first century.

D. M. Browning, M. Comeau, S. Kishimoto  
P. Varrin, E. Ward, A. Rider, & E. C. Meyer  
Institute for Professionalism and Ethical Practice  
Children's Hospital Boston  
One Autumn Street, Suite 416  
Boston, MA 02215, USA  
E-mail: david.browning@childrens.harvard.edu

## References

- Browning DM, Meyer EC, Truog RD, Solomon MZ. 2007. Difficult conversations in health care: Cultivating relational learning to address the hidden curriculum. *Acad Med* 82:905–913.  
Meyer EC, Sellers DE, Browning DM, McGuffie K, Solomon MZ, Truog RD. 2009. Difficult conversations: Improving communication skills and relational abilities in health care. *Pediatr Critical Care Med* 10:352–359.