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James P. Meza MD, PhD
Wayne State University School of Medicine, jmeza@med.wayne.edu

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EDITORIAL:

Differing cognitive strategies between evidence-based medicine and evidence-based practice

JAMES P. MEZA, MD, PhD, Wayne State University School of Medicine

The aims and scope of this journal focus on education of physicians, both young and young-at-heart. With the tumult of change in healthcare in the United States, it is important to return to core values—how to educate competent doctors.

I've talked with many medical students during the first two years of basic science learning. They focus on cramming, then regurgitating, the answers on the test, often forgetting everything later the same day. Students live from test to test. The sheer volume of information is overwhelming.[1] As an anthropologist, I understand this as enculturation—learning a new language, being set apart from society to prepare for a new social role, and affiliating with new colleagues, all of which are necessary for practicing their future profession. Medical school is a rite of passage.[2,3]

The clinical years of medical school are akin to an apprenticeship.[4] The Accreditation Council for Graduate Medical Education (ACGME) requires learners to become competent in medical knowledge, patient care, and a range of other requirements.[5] Again, the changes in and amount of information can be overwhelming. Measuring these competencies still depends on multiple-choice questions on a standardized test. To manage the volume of knowledge required, many practicing clinicians depend on guidelines. Guidelines are not evidence. They become obsolete and vary widely in validity.[6]

In order to practice quality medicine, doctors need an evidence-based diet, a term I coined for habitual review of relevant research related to our patients. Additionally, doctors need to master another ACGME competency, practice-based learning. We need to educate ourselves specifically to the individual needs of our patients.

In this issue of *Clinical Research in Practice: The Journal of Team Hippocrates*, we have examples of both these habits. Nicholus Yee's *Evidence-based practice in the new millennium*[7] presents a perfect example of an evidence-based diet. The emphasis is on finding quality evidence and information learned earlier in medical education for service to our patient at the point of care. This is classical evidence-based medicine (EBM). It is abstract, not applied, knowledge. It shares a paradigm with the pre-clinical and clinical years of medical school. The traditional assumption is that doctors know everything, and use this knowledge to care for patients. This pattern of thinking works most of the time. While knowledge is necessary, doctors also need supplementary cognitive skills.

Also in this issue is an example demonstrating how the process of care is reversed.[8] It starts with an individual patient and that specific patient's concerns. It requires an intimate knowledge of the patient as well as an ability to ask a question relevant to that patient's concern. Asking important questions is the definition of critical thinking. These questions are only relevant within the context of the patient's experiences, so one size does not fit all. Only after getting the right question does the doctor seek evidence related to that patient's individual needs. This is classical evidence based practice (EBP).[9] An example in this issue (by Christina Benkert, et al.) is *Extrapolating evidence about preventing recurrent cellulitis for an individual patient concern.*[8] Our journal's critical

Clinical Research in Practice Faculty Editor *JAMES P. MEZA, MD, PhD* teaches Translational Medicine and Evidence Based Practice at Wayne State University School of Medicine. He is also the Director of Research at Oakwood Annapolis Hospital Family Medicine Residency.

appraisal manuscript instructions include a clinical context describing a real patient, asking a question relevant to that patient, critical appraisal of evidence, and clinical application. I'm proud that patients are integral to the scholarly work we publish—only if the patient is included can one call it evidence-based practice.

Employing the cognitive strategies of both EBM and EBP is the only way an apprentice becomes a master. We sincerely hope to encourage these types of learning—that is the aim of this journal.

References

1. Becker H, Geer B, Hughes E, Strauss A. *Boys in white: student culture in medical school.* New Brunswick, NJ: Transaction Publishers; 2007.
2. Turner VW. *The ritual process: structure and anti-structure.* Chicago, IL: Aldine Publishing Company; 1969.
3. Meza J, Provenzano A. Understanding pimping as a rite of passage: an enduring cultural practice in medical education, *MedEdPublish,* 2015;4(9):Epub 2-17-2015. http://dx.doi.org/10.15694/mep.2015.004.0009
4. Meza J, Provenzano A. Power, competence, and professionalism in medical education. *MedEdPublish*, 2015;5(13):Epub 6-30-2015. http://dx.doi.org/10.15694/mep.2015.005.0013
5. *ACGME program requirements for graduate medical education in family medicine.* Accreditation Council for Graduate Medical Education website. https://www.acgme.org/acgmeweb/Portals/0/PFAssets/ProgramRequirements/120_family_medicine_07012015.pdf. Accessed December 4, 2015.
6. Simmer S. Intravenous estrogen is not proven effective for abnormal uterine bleeding: guidelines are based on flawed evidence. *Clinical Research in Practice: The Journal of Team Hippocrates*. 2015;1(1): eP1003. http://digitalcommons.wayne.edu/crp/vol1/iss1/3/
7. Yee NH. Evidence-based practice in the new millennium. *Clinical Research in Practice: The Journal of Team Hippocrates.* July 2015;1(2):eP1032. http://digitalcommons.wayne.edu/crp/vol1/iss2/2/
8. Benkert CL, Basi AK, Bahrou KL, Cherri CR, Azom SK, Yee NH. Extrapolating evidence about preventing recurrent cellulitis for an individual patient concern. *Clinical Research in Practice: The Journal of Team Hippocrates*, July 2015;1(2):eP1074. http://digitalcommons.wayne.edu/crp/vol1/iss2/9/
9. Meza J, Passerman D. *Integrating narrative medicine and evidence-based medicine: the everyday social practice of healing.* New York: Radcliffe Publishing; 2011.