If the primary goal of undergraduate education is aimed at teaching students how to think then the primary goal of medical school is to teach students where to look for information. In both environments you must develop a base of knowledge, but in the broad scope of medicine there is bound to be a situation that you are unfamiliar with. For an overview of information, UpToDate can be a great resource and the citations at the bottom of each webpage can help you narrow your focus. Podcasts such as EM:RAP can help you re-familiarize yourself with concepts and can be a great way to learn about new papers in the field of emergency medicine.

The art of medicine stems from the many options that we have access to. Deciding what treatment is best for which patient is often more complicated than a one-drug-fits-all approach. PubMed is a phenomenal database for a literature review aimed to answer a specific question. Finding an article is a great first step, but recognizing how it applies to your patients can be a challenge. Are the findings clinically significant or are they only statistically significant? Does the test have enough power or is the sample size so small that any findings can be explained by random chance? What biases are you bringing to the table and what biases exist in the field of medicine? It is important to be a skeptic, because articles can be misleading regardless of the intentions behind them.

Ironically, I’d like to direct you to an article. “A Decade of Reversal: An Analysis of 146 Contracted Medical Practices,”1 takes a look at studies that assess old standard practices and comparative therapies. Results were broken down into four categories: replacement, reaffirmation, reversal, and inconclusive. One result that I found fascinating was that of the 363 articles testing standard of care practices, 40.2% reversed that practice whereas 38.0% reaffirmed it. We like to believe that our standards of care are based on facts, which come from the conclusions we draw from the raw data. How can it be possible that scrutiny to these standards can illuminate so many inaccuracies? I’ll once again refer you to the original manuscript rather than have you rely on my summary.

Despite all this, the study is not without limitations itself. I do believe it brings up a great point in that we must work to understand our biases. There are standards of care that we are taking for granted, and these innate biases affect our patients. Whether you are looking up tPA use in strokes or Tamsulosin use for kidney stones, I have full confidence that you can find arguments both for and against the treatment. This can frustratingly create a gray area, however, an instant counterpoint is that knowing where your practices are coming from as well as the limitations to those studies is what will make you an adaptable physician. For those of us still in our training, I encourage us to not only read around our patients, but also to read around our reading so that we can truly provide the best evidence-based medicine to our patients.

Reference