LETTER

We Need to Be Smarter Than Our Smartphones

To the Editor: We would like to thank Fjortoft, Gettig and Verdone for their relevant and insightful commentary in the April 2018 issue of the *American Journal of Pharmaceutical Education* entitled, "Smartphones, Memory, and Pharmacy Education."¹ The authors remind us of a frequently asked question posed by students, "Why should I memorize this if I can look it up?"¹ Smartphones can provide immediate answers, but students will struggle to understand the rationale for the answer without first appreciating the foundational knowledge. It is essential for learners to acquire an initial baseline knowledge before they can successfully build their clinical expertise.

Conversely, if applied correctly, learners can employ smartphones as an effective tool to expand their knowledgebase. Student pharmacists can also use them as tools of efficiency to quickly answer complex questions in critical and emergent situations. Rather than hindering students, proper introduction of smartphones in a curriculum can enhance the efficiency and efficacy of learning; all while preserving the necessity of foundational knowledge. There is a time and place for smartphones in health care and education. This time is becoming more prevalent as medicine and technology continue to advance.

In a study from 2011, 85% of medical professionals and students indicated they used their smartphone to aid them in their evidence-based medical decisions.² We can only assume that the percentage of smartphone users in the medical field has continued to increase since the publication of that study seven years ago. Fjortoft and colleagues concluded, "Smartphone technology is here to stay...this technology could affect how we teach and how we assess learning in the future."¹ It is imperative that we take this thought beyond future classroom experiences and ask ourselves to improve our current practice.

Smartphones provide an opportunity to be creative and to find innovative ways to enhance education and clinical practice. Research has demonstrated the ability of smartphones to improve medical care.^{3,4} With this technology, providers both improved the speed and accuracy of prescribing medications, and they reported increased confidence in their medical decisions. If we want health care to be safe, effective, and timely, then we must not ignore the powerful utility of this instrument.

Future academic research should focus on the effect smartphones can have on improving a student's clinical knowledge and abilities.

My fear as a practitioner and educator is that student pharmacists are not being trained to identify valid and reliable drug information in a timely and efficient manner. Studies have revealed that select online medical resources and smartphone apps may have inconsistencies and inaccurate information.^{3,5} It is expected that both student and practicing pharmacists only utilize online resources and smartphone apps which contain reliable and valid clinical information. It is prudent for academic professors to educate student pharmacists on the most appropriate online sources of medical information to use in academia and practice. If smartphone technology is here to stay, then this can only be done by incorporating the use of smartphones into pharmacy education curriculums.

American educator Reed B. Markham once said, "If you are standing still, you are also going backwards." After deep contemplation about smartphone usage in the academic arena, we need to ask ourselves, "As pharmacy educators, are we standing still?"

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