Research Report

Preference and Frequency of Mobile Phone App Use for Drug Information Among Student Pharmacists

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Abstract

Background: Health care professionals commonly use mobile devices to retrieve drug information (DI) in clinical practice. The preference and frequency of such use by student pharmacists are not well understood. **Objective:** To investigate the preference and frequency of mobile phone application (app) use for retrieving DI among student pharmacists. **Methods:** DI specialists from 3 pharmacy schools generated a 13-question survey relating to students' preference and frequency of DI app use via their mobile phone. The survey was tested and electronically disseminated to all current P1 through P4 students from all 3 schools. Data were collected for student demographics, availability of mobile phone and DI apps, frequency of using DI apps, and whether DI apps were purchased. Data were analyzed descriptively and statistically. **Results:** About 74% (n = 221) of students reported using their mobile phone apps for retrieving DI. About 95% of the students used 1 to 3 apps for DI purposes and more than 85% used them a few times a week or more. About 17.6% of the students reported purchasing apps for the purpose of finding DI and that purchased apps are more accurate (27.6%), more comprehensive (36.2%), and more current (26.2%), compared with free apps. **Conclusions:** Student pharmacists used 1 to 3 mobile apps, at least a few times a week for DI. Some students purchased apps for DI use in addition to free subscriptions from their school. Students perceived purchased DI apps being more accurate, more comprehensive, and more up to date than the free apps.

Keywords

drug information, clinical decision making, databases, education, electronic information, evidence-based practice, medical informatics, quality assurance, teaching/training

Introduction

The use of mobile technology (eg, smartphone, tablet, personal digital assistant) is widespread. According to the Pew Internet Project's research, 64% of American adults owned a smartphone in 2015, and 42% owned a tablet computer; 62% of smartphone owners have used their phone in the past year to find health information.[1] Pharmacists also use mobile devices for professional purposes, which include accessing drug information (DI) sources.[2]

Several studies exist that examined the use of mobile devices by health care professionals for patient care and information retrieval. Power et al[3] determined that pharmacists who had iPhones located answers for DI questions significantly faster than those who did not have the technology (48 minutes 15 seconds for pre-iPhone vs 42 minutes 18 seconds for post-iPhone; $P = .039$). At one institution, student pharmacists and faculty preferred computer (laptop or desktop) capabilities, followed by smartphone access; Lexicomp Online was chosen as the preferred DI database.[4] Mobile devices are also commonly used by medical students, residents, and physicians; Wallace et al[5] found that approximately 85% of Canadian medical students at one medical school owned smartphones and used them regularly for information retrieval, communication, time management, and more.

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The mobile devices may provide faster and more convenient access to information for answering DI questions by increasing accessibility of information at the point of care.[6,7] They can also help clinicians access information via downloadable mobile application (app) instead of relying on the access to the Internet since a large number of mobile apps for medical information exists with a simple download on to the mobile device (eg, Android, Apple), either freely or with subscription. Davies et al[8] investigated the preferences of community pharmacists using mobile apps in the United Kingdom; approximately 80% of participants (n = 211) felt confident when using medical apps and found it useful with patient consultations (55%) and health care education (80%). Another study found that pharmacy preceptors and faculty most frequently used mobile apps of Lexi-Drugs (43%), Epocrates (32%), and mobileMicromedex (12%) to retrieve DI.[9] Medical students tended to use apps for references for disease diagnosis and medications, and physicians tended to use the apps for medical calculators.[10] Payne et al[10] envisioned that mobile devices will soon be ubiquitous in clinical environments and medical education. There are medical and DI apps that are currently available freely via each school's subscription or via a free download via the respective operating system (eg, Android, iOS). However, the quality, usability, and amount of content vary among these apps regardless of their status of school subscription.[7,11,12]

Not much is known about the role and effects of these mobile apps, especially smartphone apps, in pharmacy education and how student pharmacists are using them. Currently, there is a lack of data explaining the extent to which student pharmacists use smartphone apps for retrieving DI or answering DI questions. Furthermore, it is unknown whether student pharmacists use multiple apps for the same purpose and whether their decision to use one app versus another is driven by cost, convenience, perceived accuracy, or other factors. Student pharmacists may be given mobile access to certain DI databases based on their institutional subscription (eg, Micromedex, Lexicomp, Clinical Pharmacology) or via additional, individual purchase via Google Play or App Store, for example. While it does not seem necessary that student pharmacists should purchase or use mobile apps other than those provided by their school or those freely available, their decision and motivation to use other mobile apps are unknown. Given that mobile technology is rapidly evolving and so is access to clinical information, the current study posited to determine student pharmacists' preference and frequency of smartphone app use.

Therefore, the purpose of this cross-sectional, descriptive study was to (1) evaluate the preference and frequency of smartphone apps use for DI retrieval among student pharmacists at 3 schools of pharmacy and (2) determine the students' perception of the quality of free apps versus individually purchased apps.

Methods

Survey Development

Investigators from 3 different pharmacy schools (Notre Dame of Maryland University [NDMU], Samford University, and University of Maryland Eastern Shore [UMES]) generated a 13-item survey using SurveyMonkey (see the appendix). The survey included questions related to students' demographics, the year of graduation, use of mobile device (specifically smartphone), the type of smartphone operating system (iOS or Android) on the device, the number of apps used to retrieve DI, the frequency of app use, whether the students purchased the apps, and their perception regarding the accuracy of the purchased apps versus free apps. The survey incorporated a list of top 20 DI apps that were chosen based on the number of downloads for each app from the app store (ie, iTunes, Google Play), and included entries for free texts for students to enter an app that they used but was not listed on the survey. The survey did not include the students' names, but a feature within the survey tool allowed investigators to send and track surveys using e-mail addresses specific to each student. The final survey questions were tested by 2 student pharmacists and 2 faculty pharmacists not involved in the research, for the reliability and construct validity. Multiple revisions were made to enhance the readability and interpretation of the survey questions based on the feedback. The research protocol including the survey was submitted and approved by the institutional review boards of all 3 pharmacy schools.

Survey Administration

An e-mail that described the study purpose, a link to the survey, and consent (or opt-out) to the survey was sent to all students from P1 to P4 currently enrolled in the 3 pharmacy schools, directly from SurveyMonkey, Inc (SurveyMonkey.com). To encourage participation, an online randomization tool (random.org) was used to select 5 students to receive a $10 gift card after the survey was closed. Once the original e-mail was sent, reminder e-mails were sent out 3 times through SurveyMonkey to all the students who did not submit their response. SurveyMonkey has functionality that enables reminders to be sent to e-mail addresses from which a response had not been received; multiple reminders were necessary because investigators were informed that some of the e-mails from SurveyMonkey were sent to the Junk mail folders of students' e-mail accounts. Information technology (IT) specialists from the 3 schools were consulted for troubleshooting the receipt of e-mails containing the survey request. Due to the e-mail filters at Samford University, the survey link reminding students to participate was sent to junk mail. As a result, one additional reminder was sent directly from the investigators at each school approximately

4 weeks after the survey was launched. The investigator at Samford University sent out the survey link directly from her e-mail address to solicit additional responses since the original e-mail was sent to students was not received. The survey remained open for a total of 5 weeks.

Data Analysis

After the survey was closed, data were collected via SurveyMonkey and analyzed using Microsoft Excel 2013 (Microsoft, Inc, Redmond, WA). The collected data did not include the e-mail addresses to ensure the anonymity of the students. Descriptive statistics were used to analyze the frequency in categorical data. Free text responses were also collected for qualitative data to determine if any additional apps were entered by the students. Categorical variables were analyzed using χ^2 and Fisher's exact tests with a significance level <.05, via Stata 13.1 (StataCorp, LLC, College Station, TX).

Results

Demographics

A total of 298 students responded to the survey from all 3 schools, resulting in a 33% response rate (n = 298/904; Table 1). The response rate was similar among the 3 schools, NDMU (35.6%), Samford (33.9%), and UMES (30.5%; all 3 schools $P = .56$). Thirty-one percent of students were in their final year of pharmacy school. The majority of students that responded to the survey were female (n = 197/298, 66%) and between the ages of 21 and 30 years (n = 247/298, 83%), followed by 31 to 40 years (n = 47/298, 15.8%).

Table 1. Response Rate per School and Graduating Year.

Respondent	All students, n (%)	Class of 2018	Class of 2017	Class of 2016	Class of 2015
NDMU	106 (35.6)	35	20	24	27
Samford	101 (33.9)	4	19	41	37
UMES[a]	91 (30.5)	0	29	34	28
Total, n (%)	298	39 (13)	68 (23)	99 (33)	92 (31)

Abbreviations: NDMU, Notre Dame of Maryland University; UMES, University of Maryland at Eastern Shore.
[a]This school has a 3-year Doctor of Pharmacy Program and did not yet have the class of 2018 enrolled at the time of survey.

Table 2. Drug Information Mobile Phone Applications (Apps) Most Commonly Used by Student Pharmacists.

Mobile App	n (%)[a]
Lexicomp	128 (57.9)
Epocrates	103 (46.6)
Micromedex	79 (35.7)
Medscape	44 (19.9)
Drugs.com	38 (17.2)
WebMD	27 (12.2)
Clinical Pharmacology	24 (10.9)
UpToDate	14 (6.3)
Sigler Top 200 Drug Cards	10 (4.5)
Pharmacy-Drug Guide & Pill Identifier	6 (2.7)
Pocket Pharmacist	5 (2.3)

[a]The percentages were calculated from a total number of 221 students who used mobile phone apps for finding drug information. The percentage does not equal to 100% because multiple apps may be chosen.

Frequency of Mobile Phone Use

More students owned and used an Apple device (eg, iPhone, iPad) than an Android device such as Galaxy (n = 199/298, 67%, vs n = 93/298, 32%). Three students (1%) chose "other" (eg, Blackberry) and another 3 students chose "none." Seventy-four percent (n = 221) of students reported using their mobile phone apps for retrieving DI and 24.2% (n = 72/298) did not. About 40% of students (n = 89/221) used mobile phones multiple times a day for finding DI, followed by 28.1% of students (n = 62/221) who used a few times a week, 17.6% of students (n = 39/221) who used a few times a month, 10% of students who used once a day (n = 22/221), and 6.8% of students (n = 15/221) who used once a week for the purpose of finding DI. Overall, 188 students (85.1%) used apps on their phone a few times a week or more to retrieve DI.

Preference of App Use

The majority of students (n = 211/221, 95.5%) who use mobile phone apps for DI used between 1 and 3 apps, followed by 11 students who use 4 to 6 apps (5.0%). Students obtained free apps through a subscription paid for by their institution (n = 128/221, 57.9%) or by finding and downloading them from an app store (n = 79/221, 35.7%). About 17.6% of students (n = 39/221) reported purchasing apps for the purpose of finding DI; 74.4% of those students purchased 1 app (n = 29/39), followed by 23.1% of students (n = 9/39) who purchased 2 apps and 5.1% (n = 2/39) who purchased 3 apps. No one purchased 4 or more. Students perceived that purchased apps are more accurate (n = 61/221, 27.6%), more comprehensive (n = 80/221, 36.2%), and more up to date (n = 58/221, 26.2%), compared with free apps. From the students who purchased apps, 37 students reported that purchased apps were easier to use than free apps. The most frequently used mobile apps are listed in Table 2. The top 3 apps used were Lexicomp (57.9%), Epocrates (46.6%), and Micromedex (35.7%).

App Use by Gender

There was no statistical difference in the age of men (77.2%) compared to women (72.6%) who used mobile phone for finding DI. However, significantly more women compared

Table 3. Mobile Phone App Use for Drug Information, by School.

Item	NDMU (%)	Samford (%)	UMES (%)
Lexicomp	27.4	85.2[a]	19.8
Epocrates	29.3	40.6	35.2
Micromedex	32.1	29.7	19.8
Free app available via school's paid subscription	42.0[b]	94.7[a]	10.3
App available as free download	53.6[c]	3.2	60.3[c]

Abbreviations: NDMU, Notre Dame of Maryland University; UMES, University of Maryland at Eastern Shore.
[a]$P < .05$ compared to NDMU and UMES.
[b]$P < .05$ compared with UMES.
[c]$P < .05$ compared with Samford.

with men used Apple mobile devices (71.1% vs 58.4%, $P < .05$). Additionally, statistically significant differences were noted in the number of apps used by each gender. While the majority of both genders used between 1 and 3 apps, more women than men reported using between 1 and 3 apps (97.2% vs 87.2%, $P < .05$). Conversely, more men than women were noted as having used 4 to 6 apps for DI (10.3% vs 1.4%, $p < .05$). There was no difference between men and women with regard to which apps were used most frequently.

App Use by School

More students from Samford University (79.2%) used Apple phones than the students at NDMU (64.2%) and UMES (56.0%, $P < .05$). A significantly larger percentage of students from Samford (93.1%) used mobile phone apps for DI compared with NDMU (65.1%) and UMES (63.7%, both $P < .05$). Samford students were also more likely to use DI apps multiple times a day and more likely to use Lexicomp ($P < .05$). NDMU students frequently listed Clinical Pharmacology in the "other" comment field for this question, while UMES students listed Sigler's Drug Cards most frequently. Significantly more UMES students (36.2%) compared with NDMU (13.0%) and Samford students (8.5%) purchased apps for DI ($P < .05$). More Samford students obtained apps through a subscription paid for by their institution (94.7%) compared with the other 2 schools ($P < .05$), whereas NDMU and UMES students were more likely to obtain free apps from the app store (Table 3).

Discussion

The study results suggest that student pharmacists frequently use mobile phone apps for retrieving DI and that they predominantly use those that are provided at no cost to them, either through a school-paid subscription or free download. The study also found that the 3 most frequently used mobile DI apps among student pharmacists across different studied schools are Lexicomp, Epocrates, and Micromedex; this result replicated the findings of another study assessing personal digital assistance (PDA) use by pharmacy faculty.[9] It is interesting to note that Epocrates, which the schools neither promoted nor subscribed, was one of the most commonly used apps by the students.

There are various factors that influence the students' selections of mobile phone apps. Those factors may include but are not limited to free mobile access through a school-paid subscription, ease of use, recommendations from faculty and other professionals in the health care field, and apps required for academic purposes (eg, Advanced Pharmacy Practice Experience [APPE]). In our study, students' access to mobile DI apps through a school-paid subscription varied across institutions; UMES had the least access compared with the other 2 schools. This result may be influenced by institution-type and school funding. NDMU and Samford are private, suburban institutions, whereas UMES is a public, rural institution. NDMU students used the top 3 apps at a similar frequency compared with Samford students who predominantly favored using Lexicomp (85.2%). This may be because Samford students had access to the mobile app version of Lexicomp available as part of the school subscription. It is interesting to note that the mobile phone version of Micromedex was available as part of school's subscriptions in all 3 schools but was not the most frequently used by the students.

School-specific requirements can affect the mobile DI apps that the students use the most. UMES students listed Sigler's Drug Cards most frequently in the "other" comment field of the survey. Students at this institution were required to purchase either the physical drug cards or the mobile app on matriculation for a first-year course. A possible explanation for this result would be that students misunderstood the survey question, referring to their institutional online access rather than via mobile. Students at Samford are highly encouraged to use apps during lectures and other activities to facilitate active learning strategies throughout the curriculum. As a result, the usage for Samford was greater than the other institutions.

Surprisingly, the students perceived that purchased apps are more accurate, more comprehensive, and up to date than free mobile phone DI apps. Several factors may have contributed to this result; some students may have mistaken the "purchased apps" to include those that are purchased by their schools despite the fact that the survey question prompted with "if you have purchased an app for finding DI . . ." Another reason may be that the students' experience with a free trial of purchasable DI apps may have persisted to perceive them to be better than what the students already had freely available. Some students may have extrapolated one aspect of their experience with purchased apps (eg, ease of use) to dictate other aspects of the apps.

While accurate and complete information is essential to the clinical care that pharmacists provide, the literature regarding the quality of DI mobile apps present some concerns related to the consistency and reliability of information across those apps. Clauson et al[13] evaluated the performance of PDA versus online DI databases according

to their scope, completeness, and ease of use. Several databases were evaluated including Lexi-Drugs, Clinical Pharmacology OnHand, Epocrates Rx Pro, mobileMicromedex, and Expocrates Rx free version. The majority of online databases were found to have a significantly greater scope than mobile platforms and the majority of the PDA databases were easier to use ($P < .01$). In another study by Clauson et al[14] comparing DI databases for information on complementary and alternative medicine, the authors found that there were significant variability in the scope, completeness, and ease of use among different databases as well as between their online versions and mobile versions.

In addition, Haffey et al[15] evaluated opioid dose conversion apps from major online app stores to determine the variability between the apps with respect to dose calculation and the level of professional medical involvement in the development of the app. The majority of the apps had no medical professional involvement (n = 12/23, 52%) and only 11 (48%) had references for opioid conversion ratios. Although medical calculators appear to have an acceptable accuracy profile (98.6%), the majority of errors identified could lead to clinically significant change in prognosis for Child-Pugh scores and Model for End-Stage Liver Disease (MELD) scores.[16] In addition, apps may not be updated on a continuous basis, which may affect how the information should be used in practice; some apps are developed without sophisticated experimentation; and the quality of the app may not be what is desired in the current evidence-based environment.[11]

Recently, Johnson et al[17] evaluated 6 mobile point-of-care tools (Mescape, UpToDate, DynaMedPlus, EvidencePlus, DynaMed, and Epocrates) for breadth of coverage, ease of use, and quality; they found that Epocrates and DynaMed ranked significantly lower for breadth of coverage, EvidencePlus ranked the lowest for ease of use, and Medscape was rated significantly lower for quality. Wiechmann et al[18] studied the characteristics of existing medical apps in the iTunes App Store (Apple, Inc) for 21 items representing core content areas of emergency medicine; from a total of 7699 apps from the 21 search terms, 64.9% of the apps were considered not relevant to medical professionals and only 6.9% of the apps in the "medical" category were clinically relevant. Aungst et al[7] tried to define existing market factors relevant to selection of medical apps, in order to describe a framework for clinicians to identify medical apps relevant and useful for them. They found that the app stores (eg, iTunes, Google Play) were not effective means of identifying mobile medical apps and recommended a careful evaluation of each app before downloading. Therefore, it may be a challenge to identify an appropriate and useful app for clinical use, without adoption of standardization of such apps.

Not much is known about the use of such apps by student pharmacists or faculty in pharmacy education. Wallace et al[5] conducted a survey with medical students, residents, and faculty to examine their attitudes about the current and future use of mobile devices in medication education and practice. They found positive attributes such as portability, flexibility, access to multimedia, and ability to find information quickly; however, they also noted challenges such as superficial learning, lack of skills in finding good learning resources, distraction, inappropriate use, and concerns about access and privacy. The authors urged that leadership in medical schools and health care organizations to recognize and act on these issues early on.

More than 30% of the surveyed students were in their last year in the program and on APPE rotations during the survey. When permitted on their rotations, their use of such apps to answer clinical questions increases accessibility and timeliness of information at the point-of-care situations. These students may recognize different levels of accuracy, comprehensiveness, and clinical usefulness of various apps more acutely than junior students. However, caution should be exercised when using various mobile apps during clinical learning. Yang and Silverman[19] discussed legal implications of the expansion of mobile health apps, and they cautioned users of policies regarding patient privacy and security as well as malpractice liability when an adverse patient outcome occurs as a result of inaccurate information supplied by a mobile app. Due to a lack of oversight and regulations over medical- and health-related mobile apps, clinician must be vigilant at choosing and using high-quality apps for patient care.

There are several limitations to this study. First, the response rate was lower than initially expected (33%) despite multiple reminders and provision of a small incentive. However, the survey was sent to more than 900 students across 3 pharmacy schools and nearly 300 students (n = 298) responded. The lack of students' responses may be due to "survey fatigue," "e-mail fatigue," or e-mail delivery; some students were not able to access the e-mails that were sent via SurveyMonkey (eg, spam or junk folders) and this may have affected the response rates. As a result, the investigator from Samford sent out e-mail notifications to obtain a better response rate. Therefore, this does not describe the trend or experience of the entire cohort of student pharmacist's use of mobile phone DI app. Rather, it describes a cross-sectional snapshot of the use and preference. Second, the accuracy of students' responses may have depended on their current knowledge of the availability of various DI mobile phone apps. Although the survey clearly presented questions only regarding mobile phone DI apps, results indicate that students could have referred to their online access to databases instead. The study was unable to assess how frequently students updated their mobile phone DI apps. Outdated apps affect the accuracy of the information provided and compromise app performance, negatively influencing student preference.

Last, we preselected a list of apps for the survey, based on the highest of number of downloads from the app stores; however, this list may have been misled by the "popularity" and preferences by non–health care professionals and thus may have biased the selection by the surveyed students. Pharmacy schools subscribe to DI databases that may or may

not include the respective mobile versions as part of the subscription. For example, NDMU did not provide the mobile version of Lexicomp to its students; however, some students had access to the mobile app via their employers (eg, hospitals). While Clinical Pharmacology and Micromedex had mobile versions available as part of the subscription, not all students took advantage of those before downloading other apps. This may be due to their lack of awareness of such resources which are freely available at no cost to them.

Despite the limitations, the results of this study are relevant and timely because of the increasing use of mobile technology among health care professionals; mobile DI apps enable health care professionals to quickly and conveniently locate DI resources. With the advancement of mobile technology in health care, students are at the forefront of utilizing and developing many of the available apps for clinical purposes. For this reason, the perspective of students is invaluable when assessing the accessibility and usefulness of DI apps. This study contributes to the current speculation regarding the frequency of access and type of mobile phone apps used by student pharmacists, by incorporating student perspectives and surveying students from multiple schools of pharmacy. Nevertheless, this study also demonstrated that there is a lack of standardized teaching of such resources and technology across different schools and not all students used or were aware of all of the important resources at their disposal before making decisions on purchasing additional ones.

Conclusion

Student pharmacists used 1 to 3 mobile apps, at least a few times a week for retrieving DI either in didactic or clinical settings. There was a lack of awareness or use of mobile phone DI apps freely available to the students via school's subscription. Some students purchased apps for DI use in addition to free subscriptions from their school. Students perceived purchased DI apps being more accurate, more comprehensive, and more up to date than the free apps. Further research is needed to correlate students' preference with the accuracy of DI on the apps.

Appendix

Student Use of Mobile APPs for Drug Information

***1. Which school do you attend?**

- Notre Dame of Maryland School of Pharmacy
- Samford University McWhorter School of Pharmacy
- University of Maryland Eastern Shore School Pharmacy

***2. What year will you graduate from Pharmacy School?**

- 2015
- 2016
- 2017
- 2018

***3. What is your gender?**

- Female
- Male

***4. What is your age?**

- 20 or less
- 21-30
- 31-40
- >40

***5. What type of mobile device do you primarily use?**

- None (Please select N/A for the remainder of the questions)
- Apple devices (e.g. iPhone, iPad)
- Android (e.g. Galaxy, Nexus)
- Other (please specify)

***6. Do you currently use an app on your mobile phone for finding drug information?**

- Yes
- No (Please select N/A for the remainder of questions)
- N/A (I do not have a mobile device)

Student Use of Mobile APPs for Drug Information

***7. If you use a mobile phone to find drug information, how often do you use it for that purpose?**

- multiple times a day
- once a day
- once a week
- a few times a week
- a few times a month
- N/A

***8. If you use a mobile phone to find drug information, how many drug information apps do you use?**

- 1-3
- 4-6
- 7-9
- 10 or more
- N/A

***9. Have you purchased mobile apps for the purpose of finding drug information?**

- Yes (Go to #10)
- No (Go to #11)
- N/A

***10. If you answered yes to #9, how many mobile apps have you purchased?**

- 1
- 2
- 3
- 4
- 5 or more
- N/A

***11. If you have not purchased an app for this purpose, how did you obtain them for free?**

- I was able to download them for free from an app store
- They were available for free because a subscription was paid for by my institution
- Other (e.g. awarded prize, purchased with personal funds)
- N/A

***12. If you have both free and purchased apps for this purpose, do you find that the purchased apps are (Check all that apply):**

- More accurate than free apps
- More comprehensive than free apps
- More up to date than free apps
- Easier to use than free apps
- N/A

Student Use of Mobile APPs for Drug Information

***13. Which of the following apps (listed alphabetical order) do you currently have on your mobile phone (Check all that apply)?**

- Davis' Drug Guide
- Delmar's Nurse's Drug Handbook Application-Lite Version
- Drug and Prescription Medication Reference Guide
- Drugs.com
- Drugs & Medications
- Epocrates
- Hello Doctor-Medical Information
- Lexi-Comp
- Medscape
- Micromedex
- Mobile PDR Prescriber's Edition
- Monthly Prescribing Reference
- Nursing Drug Handbook
- Omnio: Your personalized, all in one clinical resource
- Pepid Pharmacist Pro
- Pharmacy-Drug Guide & Pill Identifier
- Pocket Pharmacist
- Tarascon Pharmacopeia
- Up to Date
- WebMD
- N/A
- Other (please specify)

Authors' Note

At the time of writing, Drs. Varga and Reese were students at Notre Dame of Maryland University and University of Maryland Eastern Shore, respectively.

Declaration of Conflicting Interests

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