Assessing Information Resource Access and Habits Among Pharmacists

Franklin Sayre, MLIS, Shannon Reidt, PharmD, MPH, BCPS , Eileen M Harwood PhD, Christene Jolowsky, MS, RPh, FASHP, Scott Lunos, MS, Raquel Rodriguez, PhD

University of Minnesota

Background

Pharmacy students are taught how to find, use, and evaluate information in order to answer clinical questions, yet little is known about which resources they will have access to once they are working and how those resources align with what they were exposed to during the curriculum. This study is meant to identify gaps between the resources taught in pharmacy programs and those available in practice. By better understanding what resources pharmacists have access to, curriculum can be better aligned to support evidence-based practice.

Objectives

To determine what information resources pharmacists have access to in their workplace and what factors influence which resources they choose to use.

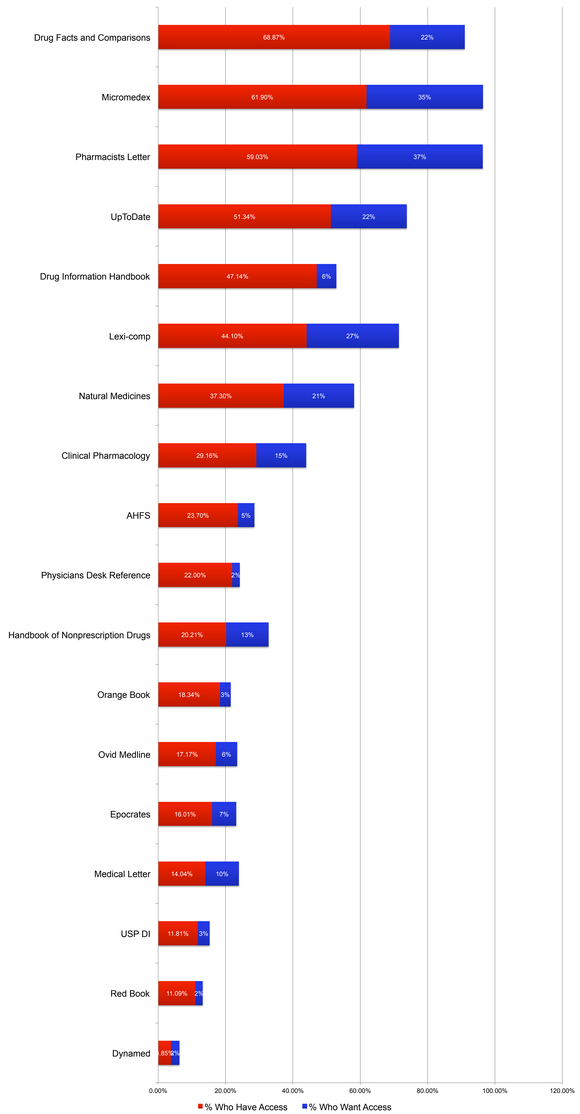
Methods

A 16 item survey created by the authors was administered electronically to all pharmacists with valid e-mails registered with the Minnesota Board of Pharmacy. The questions related to access to information resources, frequency of resource use, and factors impacting use, including who pays for access. Demographic information collected included practice setting, education, years in practice, and precepting activities.

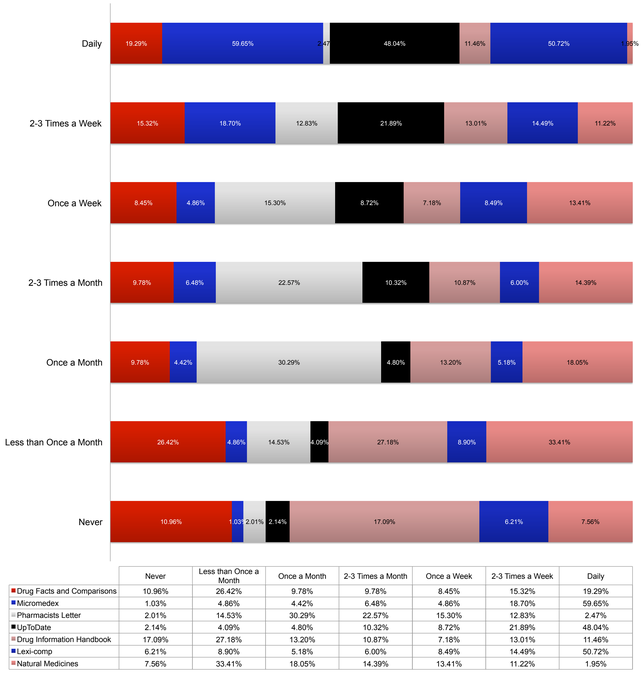
The survey response rate was 21.2% (n=1118 /5270). Descriptive statistics were used to summarize the survey responses. Fisher's exact tests were used to test for associations between categorical survey questions and demographic information. Wilcoxon rank sum tests were used to compare the cost factor between urban and rural locations. Analysis of variance (ANOVA) models were used to compare the mean confidence level between locations, practice setting, residency, precept status, and years of practice. P-values less than 0.05 were considered statistically significant. SAS V9.3 was used for the analyses.

Results

Resources Accessibility Among Pharmacists

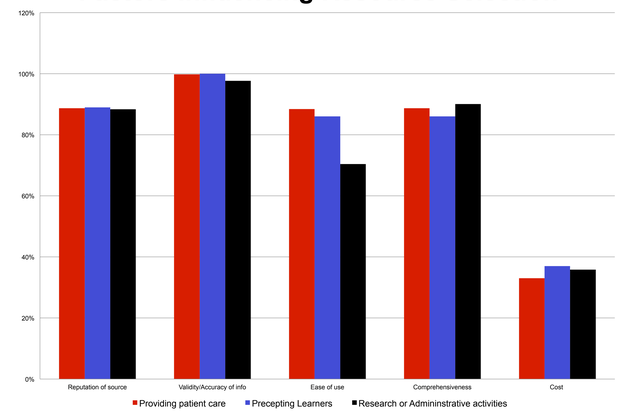


Frequency of Use of Most Common Resources



	Never	Less than Once a Month	Once a Month	2-3 Times a Month	Once a Week	2-3 Times a Week	Daily
Drug Facts and Comparisons	10.96%	26.42%	9.78%	9.78%	8.45%	15.32%	19.29%
Micromedex	1.03%	4.86%	4.42%	6.48%	4.86%	18.70%	59.65%
Pharmacists Letter	2.01%	14.53%	30.29%	22.57%	15.30%	12.83%	2.47%
UpToDate	2.14%	4.09%	4.80%	10.32%	8.72%	21.89%	48.04%
Drug Information Handbook	17.09%	27.18%	13.20%	10.87%	7.18%	13.01%	11.46%
Lexi-comp	6.21%	8.90%	5.18%	6.00%	8.49%	14.49%	50.72%
Natural Medicines	7.56%	33.41%	18.05%	14.39%	13.41%	11.22%	1.95%

Factors Influencing Resource Selection



Demographics

71% of respondents identified as practicing in urban settings versus 29% reporting being from rural settings. The majority of respondents practice in Community (37%), and Hospital (36%) with Other (12%), Ambulatory Care (7%), Managed Care (4%), Long-term Care (3%), and Academic settings (2%) also responding.

Conclusion

To our knowledge this is the first survey of what information resources pharmacists have access to in their workplace. As a next step to this survey, we will compare resource use by practicing pharmacists with what students are taught. This will identify gaps between education and practice; we will need to determine how to best work both within the curriculum and with practitioners to better align the two. This does not necessarily mean teaching to the resources available to the majority; rather, it could also mean teaching a rational and methodical approach by which pharmacy students evaluate and select information resources among the free and paid options available to them (see poster: Instilling a rational and methodical approach to acquiring information to answer well-constructed clinical questions. Reidt, Shannon, et. al.).

Finally, differences in access to resources for rural and urban pharmacists suggest that it may be necessary to target practitioners in rural settings with interventions targeted at broadening their access to information resources that support evidence-based practice.