More Knowledge On The Go: A Survey of Mobile Device Usage in Pharmacy

Authors: Trish Chatterley, Vicky Duncan, Ann Barrett, Patrice Dupont, Shannon Gordon, Kelly Hatch, Melissa Helwig, Sherri Vokey

Presented at the May 2013 Canadian Health Libraries Association (CHLA) Conference in Saskatoon, SK
Background

- Rapid adoption of smartphones and tablets by healthcare professionals, associated rapid development of medical content/apps (1)

- Research on Canadian medical student and faculty use of mobile devices and resources conducted 2012 by Dale Storie, Jill Boruff and colleagues (2)
Research Questions

- What resources, if any, are pharmacy students and faculty using on their mobile devices when answering drug questions?

- What barriers prohibit pharmacy students and faculty from using their mobile devices to find information related to their studies and work?
Methods

- Electronic distribution of survey (max. 20 questions), open for 2-3 week periods at each participating institution during February-April 2013

- Follow-up interviews with volunteers to be conducted May-June 2013.
Results

- 741 responses collected from 7 institutions (Dalhousie University, Memorial University, University of Alberta, Université de Montréal, University of Manitoba, University of Saskatchewan, University of Waterloo)

- Population size estimate: ~3350

Response Rate = 22%
Do you have a mobile device?

- Yes: 95%
- No: 5%

n=491
Demographic

- Year 1 & 2 undergraduate pharmacy student: 44%
- Year 3 & 4 undergraduate pharmacy student: 41%
- Graduate Student: 8%
- Faculty Member: 3%
- Other: 3%

n=526
Device type

- iPhone: 259
- iPod touch: 124
- iPad: 140
- Other tablet computer: 35
- Android phone: 126
- Blackberry: 43
- Other phone with...: 14

n=466
Do you use your mobile device(s) to find health or drug information?

- Yes: 81%
- No: 19%

n=466
How frequently do you use your mobile device to find information on...?

- Side effects: 87%
- Dosage: 84%
- Interactions: 82%
- New drugs: 62%
- Calculations: 54%
- Identification: 50%
- Natural products: 48%
- Formulary status: 27%
How frequently do you use your mobile device to access these products?

- Lexi-comp: 67%
- Micromedex: 60%
- eCPS: 57%
- Therapeutic Choices: 37%
- Natural Medicines...: 26%
- Dynamed: 24%
- Natural Standard: 16%
- PEPID: 10%
Other DI resources

- Medscape (10 participants)
- Canadian Pharmacist’s Letter (7 participants)
- Epocrates (3 participants)
- UpToDate (2 participants)
What do you like about using drug or health information resources on your mobile device?

- Mobile/portable nature
- Convenience
- Easy to use

“Ease of use”
“Easy to navigate”
“Easy and quick to access”
Clinical perks

- “Can have it with you in the aisles counselling patients – makes it very easy and helpful to answer questions.”

- “…it is easy to show patients information rather than showing them a textbook or turning around a computer monitor.”

- “Useful for OTC recommendations when not in the dispensary where the computers are if something needs to be checked.”

- “Fast and can use during patient interactions to give almost-immediate answers.”

- “You have all the information you need on one device that you can access quickly in practice.”
What do you **dislike** about using drug or health information resources on your mobile device?

- Cost
- Wireless connectivity
- Small screen & font
Professionalism

- “Sometimes I feel like professors don't like us using our mobile devices.”
- “The fact that I’m on the device while talking to a patient doesn’t look professional.”
- “Frowned upon by most chain pharmacies.”
- “Difficult to read some online resources if using the browser as opposed to a specifically-designed app. Don't want to appear unprofessional if anyone is unsure why I am using my phone in a meeting, etc.”
- “Don't want it to look like I am playing or texting on my phone”
Are you aware that your library provides access to health information resources for your mobile device?

If yes, have you used any of those information resources?

- Yes: 51% (n=339)
- No: 49% (n=339)

- Yes: 90% (n=172)
- No: 10% (n=172)
## Which ones?

### Top 10

<table>
<thead>
<tr>
<th>Lexicomp (88)</th>
<th>Natural Medicines Comprehensive Database (6)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Micromedex (44)</td>
<td>UptoDate (6)</td>
</tr>
<tr>
<td>eCPS (28)</td>
<td>STAT!Ref (6)</td>
</tr>
<tr>
<td>Dynamed (18)</td>
<td>RXFiles (5)</td>
</tr>
<tr>
<td>PubMed (7)</td>
<td>PEPID (5)</td>
</tr>
</tbody>
</table>
Reasons why they have not used the Library resources

“Time. We (faculty and students) will only get going on this if we have an in-class tutorial in which we bring our devices and get the software, log-ins, accounts, and preferences set up in real time as a group. Having individuals do it on their own initiative is a recipe for low uptake.”
Reasons why they have not used the Library resources

- Unaware of what resources the Library offers
- Would like to see lists of apps that are available
- Help with installation, preferably a hands-on workshop
Discussion

- There is a need to identify free and subscription apps relevant to Pharmacy
- There is a need to keep this list up to date and very “findable”
- There is a need to provide hands-on sessions assisting students with installation
- Wireless access in hospitals and clinics remains a barrier to use
Next Steps

- Further data analysis
- Conduct follow-up interviews
- Explore opportunities to work collaboratively to create lists, guides, and tutorials
Acknowledgements

- CHLA/ABSC Research Grant
- MLA Research, Development, and Demonstration Project Grant
- University of Saskatchewan Dean’s Research Fund
References


Contact Information

- Trish Chatterley
  trish.chatterley@ualberta.ca

- Shannon Gordon
  shannon.gordon@uwaterloo.ca

- Vicky Duncan
  vicky.duncan@usask.ca