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

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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
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 Comprehensive: 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>
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</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
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References


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