Mobile Device and App Use in Pharmacy: a Multi-University Study

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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 were conducted June and October 2013.
Results

- 488 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: ~3300

  \[ \text{Response Rate} = \sim 15\% \]

- 8 interviews conducted
Demographic

- Year 1 & 2 undergraduate pharmacy student: 44%
- Year 3 & 4 undergraduate pharmacy student: 41%
- Graduate Student: 8%
- Faculty Member: 4%
- Other: 3%
- Total: n=488
Do you have a mobile device?

- Yes: 95%
- No: 5%

n=488
Device type

- iPhone: 259
- iPod touch: 124
- iPad: 139
- Other tablet computer: 35
- Android phone: 125
- Blackberry: 43
- Other phone with...: 14

n=463
Do you use your mobile device(s) to find health or drug information?

- Yes 81%
- No 19%

n=463
How frequently do you use your mobile device to find information on...?

- **Side effects**: 62.5%
- **Drug dosage**: 60.5%
- **Interactions**: 59.1%
- **New Drugs**: 34.7%
- **Calculations**: 30.1%
- **Identification**: 25.6%
- **Natural products**: 20.2%
- **Formulary status**: 16%
How frequently do you use your mobile device to access these products?

- Lexicomp: 54.5%
- Micromedex: 41.3%
- eCPS: 36.5%
- Therapeutic Choices: 24.2%
- Dynamed: 14.3%
- Natural Medicines: 12.39%
- Natural Standard: 8%
- PEPID: 5.6%
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”
What do you **dislike** about using drug or health information resources on your mobile device?

- Cost
- Wireless connectivity
- Small screen & font
- Perceived lack of professionalism
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”
Challenge: Awareness

- A need to promote:
  - mobile apps offered through the Library’s subscribed resources;
  - free or inexpensive quality apps that may be available independent of library subscriptions.
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)
Challenge: Collections

- Desire for vetted lists of available apps
- Need to keep list up to date and very “findable”
- Discovering and promoting non-iOS options in an iOS market
Challenge: Support

- Expectations about level of support provided by the Library vs vendor
- Help with installation
- “Can you do it for me?”
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.”
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
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References


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