

Free Full Text from Publisher

Look Up Full Text

Full Text from Publisher

Find PDF

Export...

Add to Marked List

Mobile applications in clinical practice: What is needed in the pharmacy scenario

By: [Elnaem, MH](#) (Elnaem, Mohamed Hassan)^[1]; [Jamshed, SQ](#) (Jamshed, Shazia Qasim)^[1]

[ORCID and ORCID](#)

ARCHIVES OF PHARMACY PRACTICE

Volume: 8 Issue: 1 Pages: 3-7

DOI: 10.4103/2045-080X.199619

Published: JAN-MAR 2017

Document Type: Review

Abstract

Pharmacy informatics is demonstrated to have a positive effect on pharmacy practice. The incorporation of pharmacy informatics in academic programs is a common feature in the pharmacy curriculum. This work aims to provide an overview of the current and potential role of mobile applications (apps) in pharmacy education and practice. Mobile apps are the most common informatics tools used by medical and pharmacy practitioners as well as students. Both students and practitioners have overall positive perceptions toward using mobile apps in their daily clinical training and practice although the fact that the number of pharmacy apps is still small relatively in comparison with other medical-related apps. There are many potential roles for mobile apps in pharmacy practice and education. The future efforts of educational uses of mobile apps in pharmacy should target playing a role in the provision of customized tools for clinical pharmacy education.

Keywords

Author Keywords: Clinical practice; mobile applications; pharmacy education; pharmacy informatics and smartphones

KeyWords Plus: NURSING-EDUCATION; INFORMATICS EDUCATION; MEDICAL APPLICATIONS; SMARTPHONES; DEVICES; APPS; INTEGRATION; TECHNOLOGY; IMPROVE

Author Information

Reprint Address: Elnaem, MH (reprint author)

+ Int Islamic Univ Malaysia, Dept Pharm Practice, Kulliyah Pharm, Kuantan, Pahang, Malaysia.

Addresses:

+ [1] Int Islamic Univ Malaysia, Dept Pharm Practice, Kulliyah Pharm, Kuantan, Pahang, Malaysia

E-mail Addresses: drmelnaem@gmail.com

Publisher

WOLTERS KLUWER MEDKNOW PUBLICATIONS, WOLTERS KLUWER INDIA PVT LTD , A-202, 2ND FLR, QUBE, C T S NO 1498A-2 VILLAGE MAROL, ANDHERI EAST, MUMBAI, 400059, INDIA

Categories / Classification

Research Areas: Pharmacology & Pharmacy

Web of Science Categories: Pharmacology & Pharmacy

See more data fields

Citation Network

In Web of Science Core Collection

0

Times Cited

Create Citation Alert

35

Cited References

[View Related Records](#)

Use in Web of Science

Web of Science Usage Count

0

Last 180 Days

0

Since 2013

[Learn more](#)

This record is from:

Web of Science Core Collection

- Emerging Sources Citation Index

Suggest a correction

If you would like to improve the quality of the data in this record, please [suggest a correction](#).

Cited References: 35

Showing 30 of 35 [View All in Cited References page](#)

(from Web of Science Core Collection)

1. [Design and evaluation of the pharmacoinformatics course at a pharmacy school in Malaysia](#)

By: Ab Rahman, AF; Ibrahim, MIM; Bahari, MB; et al.

Times Cited: 4

2. **Mobile Applications in Nursing Education and Practice** Times Cited: 10
By: Airth-Kindree, Norah; Vandenbark, R. Todd
NURSE EDUCATOR Volume: 39 Issue: 4 Pages: 166-169 Published: JUL-AUG 2014
3. **Smartphones and the plastic surgeon** Times Cited: 22
By: Al-Hadithy, Nada; Ghosh, Sudip
JOURNAL OF PLASTIC RECONSTRUCTIVE AND AESTHETIC SURGERY Volume: 66 Issue: 6 Pages: E155-E161 Published: JUN 2013
4. **How to identify, assess and utilise mobile medical applications in clinical practice** Times Cited: 48
By: Aungst, T. D.; Clauson, K. A.; Misra, S.; et al.
INTERNATIONAL JOURNAL OF CLINICAL PRACTICE Volume: 68 Issue: 2 Pages: 155-162 Published: FEB 2014
5. **How mobile devices are changing pharmacy practice** Times Cited: 3
By: Aungst, Timothy Dy; Miranda, Aimon C.; Serag-Bolos, Erini S.
AMERICAN JOURNAL OF HEALTH-SYSTEM PHARMACY Volume: 72 Issue: 6 Pages: 494-500 Published: MAR 15 2015
6. **Medical Applications for Pharmacists Using Mobile Devices** Times Cited: 50
By: Aungst, Timothy Dy
ANNALS OF PHARMACOTHERAPY Volume: 47 Issue: 7-8 Pages: 1088-1095 Published: JUL-AUG 2013
7. **The regulation of mobile health applications** Times Cited: 63
By: Barton, Amy J.
BMC MEDICINE Volume: 10 Article Number: 46 Published: MAY 8 2012
8. **Technology-enabled practice: A vision statement by the ASHP Section of Pharmacy Informatics and Technology** Times Cited: 7
By: Bobb, Anne M.; Fox, Brent I.; Gumpfer, Karl; et al.
Group Author(s): ASHP Section Pharm Informatics Tec
AMERICAN JOURNAL OF HEALTH-SYSTEM PHARMACY Volume: 66 Issue: 17 Pages: 1573-1577 Published: SEP 1 2009
9. Title: [not available] Times Cited: 3
By: BRESLOW MJ
SEMIN ANESTH PERIO M Volume: 24 Pages: 59 Published: 2005
10. **Mobile Applications in Dermatology** Times Cited: 57
By: Brewer, Ann Chang; Endly, Dawnielle C.; Henley, Jill; et al.
JAMA DERMATOLOGY Volume: 149 Issue: 11 Pages: 1300-1304 Published: NOV 2013
11. **Medical apps for smartphones: lack of evidence undermines quality and safety.** Times Cited: 103
By: Buijink, Arthur Willem Gerard; Visser, Benjamin Jelle; Marshall, Louise
Evidence-based medicine Volume: 18 Issue: 3 Pages: 90-2 Published: 2013-Jun (Epub 2012 Aug 25)
12. **Mobile Phones to Improve the Practice of Neurology** Times Cited: 25
By: Busis, Neil
NEUROLOGIC CLINICS Volume: 28 Issue: 2 Pages: 395+ Published: MAY 2010
13. **Smartphones in clinical pharmacy practice: Is it evidence-based?** Times Cited: 5
By: Cartwright, Andrea L.; Spina, Sean P.
HEALTH POLICY AND TECHNOLOGY Volume: 3 Issue: 2 Pages: 85-89 Published: JUN 2014
14. **Smartphones in ophthalmology** Times Cited: 35
By: Chhablani, Jay; Kaja, Simon; Shah, Vinay A.
INDIAN JOURNAL OF OPHTHALMOLOGY Volume: 60 Issue: 2 Pages: 127-131 Published: MAR-APR 2012
15. **Mobile medical applications in neurology.** Times Cited: 3
By: Cohen, Adam B; Nahed, Brian V; Sheth, Kevin N
Neurology. Clinical practice Volume: 3 Issue: 1 Pages: 52-60 Published: 2013-Feb

16. **Pharmacists' utilization and interest in usage of personal digital assistants in their professional responsibilities** Times Cited: 10
 By: Dasgupta, Anandaroop; Sansgiry, Sujit S.; Sherer, Jeff T.; et al.
 HEALTH INFORMATION AND LIBRARIES JOURNAL Volume: 27 Issue: 1 Pages: 37-45 Published: MAR 2010
17. **Pharmacy Apps: a new frontier on the digital landscape?** Times Cited: 10
 By: Davies, Michael J; Collings, Matthew; Fletcher, William; et al.
 Pharmacy practice Volume: 12 Issue: 3 Pages: 453 Published: 2014-Jul (Epub 2014 Sep 04)
18. **The future at hand: Mobile devices and apps in clinical practice** Times Cited: 3
 By: Dunham, G.
 The ASHA Leader Volume: 16 Pages: 4 Published: April 2011
19. **The use of medical and drug information software programs for personal digital assistants among pharmacy students in a Malaysian pharmacy school** Times Cited: 3
 By: Elsayed, Tarek Mohamed; Jamshed, Shazia Qasim; Elkalmi, Ramadan Mohamad
 CURRENTS IN PHARMACY TEACHING AND LEARNING Volume: 7 Issue: 4 Pages: 484-491 Published: JUL-AUG 2015
20. **Health Information Technologies in Cardiology: Mobile Devices, Home Monitoring, and E-Prescribing** Times Cited: 2
 By: Figge, Helen L.
 US PHARMACIST Volume: 40 Issue: 2 Pages: 58-60 Published: FEB 2015
21. **Knowledge, Skills, and Resources for Pharmacy Informatics Education** Times Cited: 16
 By: Fox, Brent I.; Flynn, Allen J.; Fortier, Christopher R.; et al.
 AMERICAN JOURNAL OF PHARMACEUTICAL EDUCATION Volume: 75 Issue: 5 Article Number: 93 Published: 2011
22. **Pharmacy informatics syllabi in doctor of pharmacy programs in the US** Times Cited: 20
 By: Fox, Brent I.; Karcher, Rachel Bongiorno; Flynn, Allen; et al.
 AMERICAN JOURNAL OF PHARMACEUTICAL EDUCATION Volume: 72 Issue: 4 Article Number: 89 Published: 2008
23. **What Nurse Educators Need to Know About the TIGER Initiative** Times Cited: 19
 By: Hebda, Toni; Calderone, Terri L.
 NURSE EDUCATOR Volume: 35 Issue: 2 Pages: 56-60 Published: MAR-APR 2010
24. **The Integration of Informatics Content in Baccalaureate and Graduate Nursing Education A Status Report** Times Cited: 13
 By: Hunter, Kathleen; McGonigle, Dee; Hebda, Toni
 NURSE EDUCATOR Volume: 38 Issue: 3 Pages: 110-113 Published: MAY-JUN 2013
25. **Mobile Apps in Cardiology: Review** Times Cited: 36
 By: Martinez-Perez, Borja; de la Torre-Diez, Isabel; Lopez-Coronado, Miguel; et al.
 JMIR MHEALTH AND UHEALTH Volume: 1 Issue: 2 Article Number: e15 Published: JUL-DEC 2013
26. **Use of Medical Mobile Applications Among Hospital Pharmacists in Malaysia** Times Cited: 5
 By: Ming, Long Chiau; Hameed, Mohammed Abdul; Lee, Denlee David; et al.
 THERAPEUTIC INNOVATION & REGULATORY SCIENCE Volume: 50 Issue: 4 Pages: 419-426 Published: JUL 2016
27. **The use of smartphones in clinical practice.** Times Cited: 12
 By: Moore, Sally; Jayewardene, Dharshana
 Nursing management (Harrow, London, England : 1994) Volume: 21 Issue: 4 Pages: 18-22 Published: 2014-Jul
28. **A Systematic Review of Healthcare Applications for Smartphones** Times Cited: 405
 By: Mosa, Abu Saleh Mohammad; Yoo, Illhoi; Sheets, Lincoln
 BMC MEDICAL INFORMATICS AND DECISION MAKING Volume: 12 Article Number: 67 Published: JUL 10 2012
29. **Development and Progress of Pharmaco-informatics in Pharmaceutical and Health Sciences** Times Cited: 9
 By: Neoh, Chin Fen; Zainal, Imas Nur Amelia; Hameed, Mohammed Abdul; et al.
 JOURNAL OF YOUNG PHARMACISTS Volume: 7 Issue: 3 Pages: 155-163 Published: JUL-SEP 2015
30. **Smartphones in Nursing Education** Times Cited: 44
 By: Phillippi, Julia C.; Wyatt, Tami H.
 CIN-COMPUTERS INFORMATICS NURSING Volume: 29 Issue: 8 Pages: 449-454 Published: AUG 2011

Clarivate

Accelerating innovation

