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

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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.

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1. Design and evaluation of the pharmacoinformatics course at a pharmacy school in Malaysia
By: Ab Rahman, AF; Ibrahim, MM; Bahari, MB; et al.
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   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
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   Group Author(s): ASHP Section Pharmacy Informatics Tec
   AMERICAN JOURNAL OF HEALTH-SYSTEM PHARMACY Volume: 66 Issue: 17 Pages: 1573-1577 Published: SEP 1 2009

9. Title: [not available]
   By: BRESLOW MJ
   SEMINAR ON PHR TOX M Volume: 24 Pages: 59 Published: 2005

10. Mobile Applications in Dermatology
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    NEUROLOGIC CLINICS Volume: 28 Issue: 2 Pages: 395+ Published: MAR 2010

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    HEALTH POLICY AND TECHNOLOGY Volume: 3 Issue: 2 Pages: 85-89 Published: JUN 2014

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    INDIAN JOURNAL OF OPHTHALMOLOGY Volume: 60 Issue: 2 Pages: 127-131 Published: MAR-APR 2012

15. Mobile medical applications in neurology.
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    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
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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?
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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
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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
By: Elsayed, Tarek Mohamed; Jamshed, Shazia Qasim; Elkalmi, Ramdan 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
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US PHARMACIST Volume: 40 Issue: 2 Pages: 58-60 Published: FEB 2015

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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
By: Fox, Brent I.; Karcher, Rachel Bangierno; Flynn, Allen; et al.
AMERICAN JOURNAL OF PHARMACEUTICAL EDUCATION Volume: 72 Issue: 4 Article Number: 89 Published: 2008

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24. The Integration of Informatics Content in Baccalaureate and Graduate Nursing Education A Status Report
By: Hunter, Kathleen; McGonigle, Dee; Hebd, Toni
NURSE EDUCATOR Volume: 38 Issue: 3 Pages: 110-113 Published: MAY-JUN 2013

25. Mobile Apps in Cardiology: Review
By: Martinez-Perez, Borja; de la Torre-Diez, Isabel; Lopez-Coronado, Miguel; et al.
JMIR MHEALTHAND UHEALTH Volume: 1 Issue: 2 Article Number: e15 Published: JUL-DEC 2013

26. Use of Medical Mobile Applications Among Hospital Pharmacists in Malaysia
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.
By: Moore, Sally; Jayewardene, Dharmshana

28. A Systematic Review of Healthcare Applications for Smartphones
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BMC MEDICAL INFORMATICS AND DECISION MAKING Volume: 12 Article Number: 67 Published : JUL 10 2012

29. Development and Progress of Pharmacoinformatics in Pharmaceutical and Health Sciences
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JOURNAL OF YOUNG PHARMACISTS Volume: 7 Issue: 3 Pages: 155-163 Published: JUL-SEP 2015

30. Smartphones in Nursing Education
By: Phillips, Julia C.; Wyatt, Tami H.
CIN-COMPUTERS INFORMATICS NURSING Volume: 29 Issue: 8 Pages: 449-454 Published: AUG 2011