

Practicing evidence-based pharmacy

Tommy Eriksson

Pharmacists and all other healthcare professionals need to identify and optimally use their most important and trusted sources for improving health outcome for patients and customers. This means using different information sources based on the type of question; that is, does it concern selection of medication, route or dose individualisation based on physiological or medication-dependent factors, preparation of medication, or follow-up of effects. This requires navigating local, national and international information sources from local or regional healthcare providers, authorities, professional associations and commercial sources, written publications, support systems, databases, internet and smartphone applications (Apps).

In this issue of *EJHP*, Maria Rosa Cantudo Cuenca and coworkers present a study on the 'availability and medical professional involvement in mobile healthcare applications related to pathophysiology and pharmacology of HIV/AIDS'.¹ Of course, this is important to assess but it is only a very small part when practicing evidence-based medicine (EBM) and pharmacy. According to David Sackett, practicing EBM is about 'integrating individual clinical expertise and the best external evidences'.² It also concerns 'the responsible

provision of drug therapy for the purpose of achieving definite outcomes that improve a patient's quality of life, according to the Hepler and Strand definition of Pharmaceutical care'.³

The study¹ is about looking for the best external evidence and the conclusion was that the current availability of HIV/AIDS applications is limited, the number of downloads is low and more than half of them have no scientific backing from healthcare professionals. This is not surprising and a previous study has shown that the number of Apps for health-related information is rapidly growing, as is the number of users, including healthcare professionals.⁴ It is important to state that these studies do not assess in detail whether the Apps are reliable and usable. So, can we use Apps to improve patient care?

For all EBM sources we first need to know whether we can trust the source; that is, is it up to date, is the content based on best available evidence, is the preparation process fully described and transparent, are important experts, users and customers involved, are conflicts of interest declared and taken into account? The second step is to assess whether we can use the source; that is, is it easy to find, read, understand and apply, and does it give us information to improve patient care? An App or any other source is useless or even dangerous unless these questions are assessed with a positive result.

Although some functions in some Apps might be of value, the general assumption

from the studies and from my own experience and research is that Apps cannot be trusted and are of no value for practicing EBM and pharmacy. Instead pharmacists and others need to identify and assess their own EBM sources and learn to use them wisely.

In the previous issue,⁵ in this issue⁶ and in several forthcoming issues of *EJHP* we will try to help you as a pharmacist to improve your general and specific knowledge of EBM and to give you the tools to practice it.

Competing interests None.

Provenance and peer review Commissioned; internally peer reviewed.

To cite Eriksson T. *Eur J Hosp Pharm* 2013;20:323.



► <http://dx.doi.org/10.1136/ejhp-2013-000384>

Eur J Hosp Pharm 2013;20:323.
doi:10.1136/ejhp-2013-000384

REFERENCES

- 1 Cuenca C. insert correct reference details.
- 2 Sackett DL, Rosenberg WMC, Gray JAM, et al. Evidence based medicine: what is it and what it isn't. *BMJ* 1996;312:71–2.
- 3 Hepler CD, Strand LM. Opportunities and responsibilities in pharmaceutical care. *Am J Hosp Pharm* 1990;47:533–43.
- 4 Mosa AS, Yoo I, Sheets L. A systematic review of healthcare applications for smartphones. *BMC Med Inform Decis Mak* 2012;12:67.
- 5 Wiffen P, Eriksson T, Lu H. CHAPTER 1 Ensuring pharmacy practice is fit for purpose in *Evidence-based Pharmacy* 2nd edition. *Eur J Hosp Pharm* 2013;20:308–12.
- 6 Wiffen P, Eriksson T, Lu H. CHAPTER 2. *Eur J Hosp Pharm* 2013;20.

Correspondence to Dr Tommy Eriksson, Department of Clinical Pharmacology, Laboratory Medicine, Lund University, Lund 221 00, Sweden; tommy.eriksson@med.lu.se