



Evidence Based Pharmaceutical Care

Kazem Heidari^{1*}

¹ MD, PhD Candidate for Epidemiology, Research Center for Rational Use of Drugs, Tehran University of Medical Sciences, Tehran, Iran.

ARTICLE INFO

Article type:
Editorial

J Pharm Care 2014; 2 (4): 140-141.

► Please cite this paper as:

Heidari K. Evidence Based Pharmaceutical Care. J Pharm Care 2014; 2 (4): 140-141.

More than 20 years ago, Hepler and Strand defined pharmaceutical care as “the responsible provision of drug therapy for the purpose of achieving definite outcomes that improve a patient’s quality of life” (1). This process needs involving patients and providers of drug in the decisions.

Although there are differences in pharmacy services and medication management issues, there are always some decisions to be made in all functions of pharmaceutical care which consists of identifying, resolving and preventing drug related problems. A question that arises in this situation is “How the decisions should be made in order to achieve better outcomes?”

Health care professionals experience or expert opinions are not enough to support health care decisions. This issue has been shown in different health care fields (2). High quality research is the most accurate source of scientific evidence that can be used to identify and meet the patient health needs. The approach which uses best evidence is called evidence based approach.

The term “evidence based medicine” was originally used to describe an approach to teaching the practice of medicine and improving decisions by individual physicians (3). Use of the term rapidly expanded to

design of guidelines and policy making subjects (4). It has subsequently spread to broader term evidence-based practice, which describes an approach to decision making that is used at every level of health care as well as other fields. Evidence based practicing is the use of the best available evidence from systematic research together with a clinician’s expertise and a patient’s values and preferences in making health care decisions (5).

Concerning making the most effective decisions, evidence based decision making is similarly defined as “the formalized process of using the skills for identifying, searching for and interpreting the results of the best scientific evidence”, which is considered in conjunction with the clinician’s experience and judgment, the patient’s preferences and values, and the clinical/patient circumstances when making patient care decisions (2).

The use of evidence based approaches also proceeded toward other health care fields including pharmacy and pharmaceutical care. Evidence based pharmaceutical care, like other health care disciplines, mainly has four sequential steps: formulating a clear question based on a clinical problem; searching for relevant evidence in the literature; critically appraising the validity of the found evidence and finally applying the findings to patients’ pharmaceutical care (6).

In order to effective working and updating pharmaceutical care services, there is a need to apply an evidence based practice system. Pharmacists must accept and actively participate in the research needed to establish

* Corresponding Author: Dr Kazem Heidari

Address: Research Center for Rational Use of Drugs, Tehran University of Medical Sciences, Tehran, Iran. 584775311. 4th floor, NO.92, Karimkhane Zand Street, Tehran, Iran. Tel/Fax: +982188814157.
Email: K_heidari@razi.tums.ac.ir

the required evidence-based pharmaceutical care that improve a patient's quality of life' and the quality of provided services (7).

Achieving to the goal of good evidence based pharmaceutical care needs the pharmacists to be trained and be followed well to develop and improve their practical skills. When the majority of pharmacists use this approach in their daily work, it can change the patients' condition to a better one. Many barriers may limit the implementation of evidence base pharmaceutical care. Evidence-based pharmaceutical care is a dynamic practice that is updated in a feedback loop according to new and emerging high quality evidence. Research and development of better methods especially in the related research centers can gradually solve the barriers (8, 9).

In the undergraduate education setting, pharmacy students should be exposed to the concept of evidence-based pharmaceutical care. They should learn how to find and use evidence, how to appraise it and how to implement it in their patient care practice. The topics for training should also include biomedical research principles, literature review and evidence based pharmacy principles as prerequisite skills in their core curriculum for training them to be not only having the knowledge, but also being scientists and efficacious care providers (10).

References

1. Hepler CD, Strand LM. Opportunities and responsibilities in pharmaceutical care. *Am J Hosp Pharm* 1990; 47(3): 533-43.
2. Hunink MM. Decision making in health and medicine: integrating evidence and values. 2014: Cambridge University Press.
3. Evidence-Based Medicine Working Group. Evidence-based medicine. A new approach to teaching the practice of medicine. *JAMA* 1992; 268(17):2420-5.
4. Eddy DM. Practice policies: where do they come from? *JAMA* 1990; 263(9): 1265-75.
5. Melnyk BM, Fineout-Overholt E. Evidence-based practice in nursing & healthcare: A guide to best practice. 2011: Lippincott Williams & Wilkins.
6. Weng YH, Kuo KN, Yang CY, Lo HL, Chen C, Chiu YW. Implementation of evidence-based practice across medical, nursing, pharmacological and allied healthcare professionals: a questionnaire survey in nationwide hospital settings. *Implement Sci* 2013;8:112.
7. Roughead L, Semple S. The value of pharmacist professional services in the community setting: A systematic review of the literature 1990-2002. 2003; Adelaide, Quality Use of Medicines and Pharmacy Research Centre, School of Pharmaceutical, Molecular and Biomedical Sciences, University of South Australia.
8. Farris KB, Kirking D.M. Assessing the quality of pharmaceutical care I. One perspective of quality. *Ann Pharmacother* 1993; 27(1):68-73.
9. Farris KB, Kirking DM. Assessing the quality of pharmaceutical care. II. Application of concepts of quality assessment from medical care. *Ann pharmacother* 1993;27(2):215-23.
10. Al-Quteimat OM, Amer AM. Evidence-based pharmaceutical care: The next chapter in pharmacy practice. *Saudi Pharmaceutical Journal* August 2014: In Press.