Pharmaceutical care was defined by Hepler and Strand in the early 1990s as the responsible provision of drug-related care for the purpose of achieving definite outcomes that improve patients' quality of life. Since that time, pharmaceutical care has evolved and is currently being applied in many countries around the world. Medication therapy management represents some addition to the paradigm but is based mainly on the concept and principles of pharmaceutical care.

Evidence-based medicine was introduced at approximately the same time as pharmaceutical care. Evidence-based medicine is the conscientious, explicit, and judicious use of current best evidence in making decisions about the care of individual patients. The practice of evidence-based medicine means integrating individual clinical expertise with the best available external clinical evidence from systematic research.

Both concepts are currently well defined and implemented in many practice settings around the world. Any one who is expert in the field of clinical pharmacy and pharmaceutical care will find an important connection between the two concepts. In pharmaceutical care, as well as in medication therapy management, our major functions as practitioners are to identify, resolve, and prevent drug-related problems and to improve patients' health-related quality of life. Traditionally, in pharmaceutical care, we identify drug-related problems by analyzing patient data and comparing patient treatment and doses with what we know from peer-reviewed literature and disease management guidelines. We may also use drug information resources, drug interactions software, and any other relevant resources. At the University of Jordan, we initiated the Pharmaceutical Care Project in 2003; and since that time we have encountered many situations that are difficult to answer using traditional pharmaceutical resources. For one, many of the books and guidelines upon which we rely are outdated. Moreover, thousands of articles and research papers are published monthly with new evidence, making it difficult for practitioners to remain abreast of current developments. On several occasions, we have uncovered disease management guidelines that are not evidence based. Compounding this problem is that many disease management guidelines are directed toward the treatment of one patient with one disease, and not always helpful for population-based decisions and for patients with multiple comorbidities. It has also been frustrating to observe apparent disagreements in the literature or among guidelines or between physicians on proper treatment protocols. Many of our physicians do not accept current guideline recommendations, particularly from texts or other tertiary sources, and are more convinced when they read research papers and read the results. Clinical examples of these situations are as follows:

1. Does use of low-dose aspirin require prophylaxis against nonsteroidal anti-inflammatory drugs-induced ulcer in high-risk patients?
2. Can selective beta-blockers be used safely in patients with chronic obstructive pulmonary disease?
3. When is the appropriate time to initiate angiotensin converting enzyme inhibitor therapy in diabetic patients?

At some point during the Pharmaceutical Care Project, when we have realized the above-mentioned
problems, we have leaned more on an evidence-based approach to solve these problems. We have integrated this approach within our systematic pharmaceutical care practice, “Evidence-based pharmaceutical care.” Evidence-based pharmaceutical care is not a new concept or a new invention, as it is currently being practiced by experienced clinical pharmacists in hospital and community pharmacies and other settings. Nevertheless, it may not yet as well a defined concept as possible, which thus may inhibit its further inculcation into practice lexicons in a systematic way.

Through searching PubMed, we did not identify any research paper or editorial that addresses this concept. Using a Google search, we identified evidence-based pharmaceutical care as the title of the European Symposium on Clinical Pharmacy in 1998; however, no further mentioning of this term was identified. We did not identify any paper or letter that address the definition and application of this important concept. We can easily define evidence-based pharmaceutical care as “the responsible provision of evidence-based medication-related care for the purpose of achieving definite outcomes that improve patients’ quality of life” (a slight modification of Hepler and Strand’s definition of pharmaceutical care). The traditional steps (principles of practice) for pharmaceutical care can also be slightly modified to incorporate evidence-based medicine, as follows:

2. Analyze data to identify drug-related problems.
3. Convert clinical problems into questions followed by systematic search and critical appraisal to identify the best available evidence to solve medication-related problems or to help identify other problems.
4. Develop a patient’s care plan.
5. Provide patient education and counseling.
6. Implement care plan, monitor patients, and modify care plan accordingly.

Proper pharmaceutical care practice requires evidence-based medicine, and better patient outcomes require evidence-based pharmaceutical care. Further research is needed to corroborate the positive implications for patient outcomes.

References