Introduction to Evidence-based Family Practice

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While the definition of EBM can be straightforward in other medical field, family and community medicine practitioners take on very different roles in different health systems. Despite the challenges presented, EBM is still necessary in family and community practice. Family and community medicine practitioners must be able to obtain, assess, apply and integrate new knowledge based on available evidence throughout their professional life. From the definition of EBM and the nature of family practice described previously, we propose to define "Evidence-based Family Practice as the conscientious and judicious use of the current, relevant, applicable and best available evidence in making shared clinical decisions for patient care. Such decisions must account for the capacity and setting of the family practitioner and patient preference". The proposed steps are: 1) Framing the Clinical Problem, 2) Searching for the Evidence, 3) Critical Appraisal, 4) Informing the Patient About the Evidence, 5) Shared Decision Making, and 6) Evaluation of the Decision.

Key words: Evidence-based family practice, Evidence-based medicine, Evidence-based practice

Definition of Evidence-based Medicine

Evidence-based medicine (EBM) is the conscientious, explicit, and judicious use of current best evidence in making decisions regarding the care of individual patients. This concept promotes the use of research findings in the way that we make decisions for diagnosis, prognosis, and treatment of diseases. It also promotes the ability to track down, critically appraise for its validity and usefulness the available evidence and incorporate this into clinical practice.[1] The term "evidence-based" has been used with other terms like evidence-based practice, evidence-based health care and in other health-related decisions like evidence-based policy.[2] However, a single definition is insufficient to explain the underlying processes of EBM and its application in different settings, especially in the context of family and community practice. Differences in setting and social context where the evidence was generated will influence the application of the evidence.

Nature of Family Medicine and Family Practice

While the definition of EBM can be straightforward in other medical field, family and community medicine practitioners take on very different roles in different health systems. The main components of the practice have always included comprehensive care at all life stages and the management of the common illnesses prevalent in the community. In many countries family medicine competes with other disciplines for primary care service while in others they perform a "gate-keeping" role. Aside from competency for providing primary care, there is also emphasis on responsiveness and social accountability to their patients in performing these roles.[3] In the Philippines, we are promoting the concept of patient-centered, family-focused and community-oriented health service. Because of the complex nature of this type of health service, the straightforward application of EBM will face some challenges. The balance between the value of scientific evidence, the capacity and setting of family and community practice and the social and cultural preferences of the patient will not be easy to achieve. Regardless of how the definition EBM in the practice of family medicine will evolve, developing it and its attributes is one of the keys to achieving population health.[4]

Current Research in Family Practice

Another challenge of EBM in family practice is the availability of evidence generated in family and community practice setting. Clinical trials are done mostly in secondary care facility under well-controlled

trial environment with incentive mechanisms for monitoring and follow-up. While the evidence on effectiveness of drugs or accuracy of diagnostic tests may be generally applicable, much of the health care interventions that have social and cultural context have not been subjected to rigorous testing in family and community practice setting. There are interventions in this setting that cannot be tested on randomized controlled trials, thus some decisions may have to be made with different type of evidence or the best evidence conducted in primary care setting. Family medicine has matured as scientific discipline with its own core concepts, knowledge, skills, and research agenda. Its' main expertise includes studying common illnesses; the integration of medical, psychological, social, and behavioral knowledge and skills; patient-centered care; and health services delivery in the community.[5] Unfortunately, the conduct of research for this kind of interventions has been slow.[6]

What is Evidence-based Family Practice

Despite the challenges presented, EBM is still necessary in family and community practice. Family and community medicine practitioners must be able to obtain, assess, apply and integrate new knowledge based on available evidence throughout their professional life.[7] From the definition of EBM and the nature of family practice described previously, we propose to define "Evidence-based Family Practice as the conscientious and judicious use of the current, relevant, applicable and best available evidence in making shared clinical decisions for patient care. Such decisions must account for the capacity and setting of the family practitioner and patient preference". The main objective is to make a "shared clinical decision" that is based on a combination of the best available scientific evidence, the family practitioners' capacity and setting and the preference of the patient and/or family. While this definition may have been elucidated in the past, the process of EBM practice has been focused so much on critical appraisal of the evidence. In EBFP, we emphasize the balance of critical appraisal, conveying the evidence information to the patient and making a shared clinical decision.

Steps in Evidence-based Family Practice

1. Framing the Clinical Problem

The first step is to frame the clinical decision a clinical question. The question usually includes the population-intervention-comparator-outcome (PICO) elements: 1) the patient or the clinical condition, 2) the drug or intervention, or exposure (risk or prognostic factor) or diagnostic test or other management contemplated to be given to the patient, 3) the comparator if possible and 4) clinically relevant outcomes preferred by the patient. While in some a general question that at least include the patient or clinical condition and the drug/intervention, or exposure (risk or prognostic factor) or diagnostic test or other interventional management contemplated to be given to the patient will do. This step will efficiently guide the next step – literature search.

2. Searching for the Evidence

Once the question has been framed, the next step is to identify the key terms in the clinical question. Then, the family practitioner will search relevant databases like PubMed or the grey literature like Google Scholar. To avoid reliance on unvalidated evidence, we recommend PubMed to be the main source of evidence. This will be expounded in another section since this is an important skill in EBFP.

3. Critical Appraisal

The first step in the critical appraisal is to determine whether the study is relevant to answer the clinical problem. This can be done by checking the objective of the study, by identifying the population, intervention/exposure and the outcome. If the objective seems to answer your clinical problem, then you can proceed with appraisal of the quality of the study. The second step is determining the study quality, which refers to how the researchers tried to minimize bias. This can be evaluated from the methodology and results of the study. This will also be elaborated in the section on critical appraisal Once the reader has established the quality of the study and consider it to be acceptable, the next step is to determine the benefits and harms of the results. If the intervention provides more benefit than harm, its applicability must then be determined. If the patient characteristic in the clinical problem fit into the inclusion criteria, the study was conducted or the intervention can be done in family practice setting, the results of the study can then be applied.

4. Informing the Patient About the Evidence

Interpreting the results and conveying the information to the patient is the next step. When there is comparison between the two interventions, the information can be expressed as relative risk, odds ratio or relative risk reduction. Conveying this information in a manner that is understandable to the patient is important.

5. Shared Decision Making

With an understandable result and expected outcome of the intervention presented to the patient, a shared decision making is made. In this process, the values and preferences of the patient must be balanced with the recommendation of the family practitioner. This process is complex and will also be discussed in another section.

6. Evaluation of the Decision

Continuing care is an important characteristic of family practice. Every evidence-based decision can be evaluated and improved during the next visit. In this context, EBFP becomes a tool for continuous quality improvement in health care.

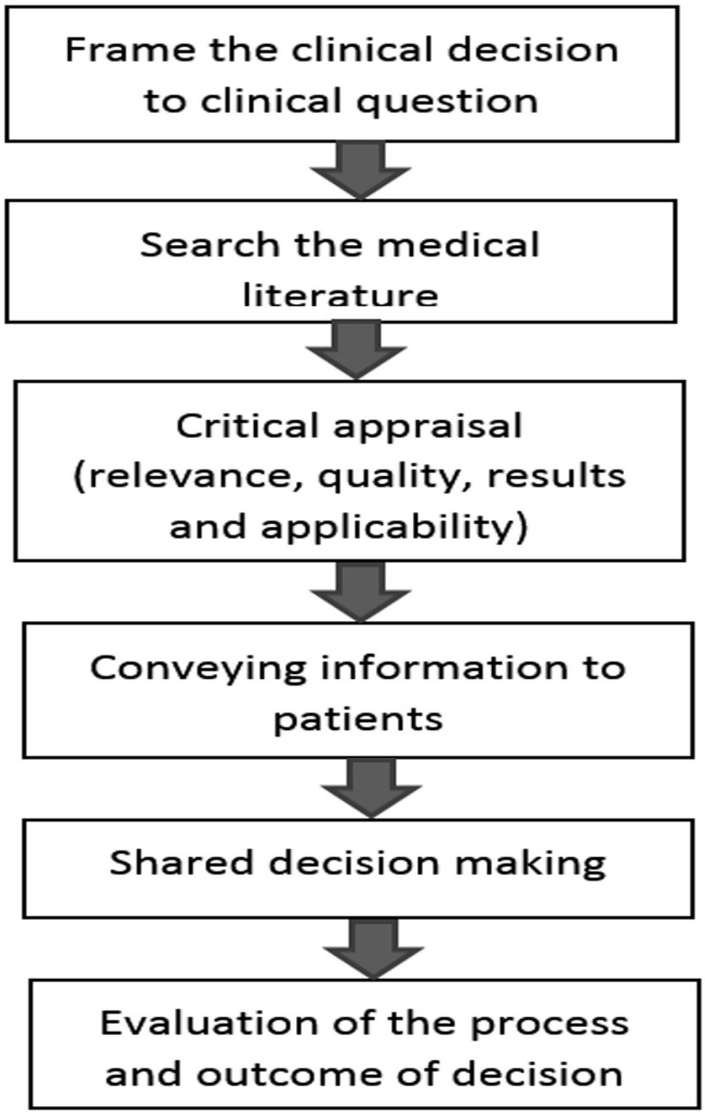

Figure 1. Steps in evidence-based family practice

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