## EVIDENCE BASED MEDICINE: AN UNFULFILLED AGENDA IN PAKISTAN

"Conflict" has been a part of human nature since Man was created. "Whether to eat the Apple or not?!" was the first "conflict" posed to Man. Man has been gifted with the ability to "think". The ability to weigh the pros and cons of a situation, and then come to a conclusion. However, it is this very ability of Man that often leads to "conflict". Each individual assesses the same situation differently. And each individual will come to a separate conclusion regarding it. Clinicians are no different. It is said that "Two heads are better than one"! But: What if the two heads disagree! It is this conflict that led to the birth of Evidence-Based Medicine. And it has revolutionized medical science ever since.

The most appropriate definition of EBM was given by Dr. David Sackett in 1996, who said that "EBM is the conscientious, explicit and judicious use of current best evidence in making decisions about the care of the individual patient. It means integrating individual clinical expertise with the best available external clinical evidence from systematic research." Simply put, Evidence Based Medicine (EBM) is the "practice of medicine, on the basis of supportive evidence".

Evidence of the existence of EBM can be traced back not only to ancient Greece<sup>2</sup>, but also to ancient China as well.<sup>3</sup> Over the centuries, many scientists have emphasized the importance of conducting medical interventions on the basis of sound proof and to treat patients on the basis of mutually accepted, statistically proven guidelines. However, it was in the 20<sup>th</sup> century that a Scottish epidemiologist, Professor Archie Cochrane, through his book *Effectiveness and Efficiency: Random Reflections on Health Services* (1972) and subsequent advocacy, caused increasing acceptance of the concepts behind evidence-based practice. Many more renowned epidemiologists have followed in his footsteps. The terms "evidence based" was first used in 1990 by David Eddy<sup>4,5</sup> and "evidence-based medicine" first appeared in the medical literature in 1992 in a paper by Guyatt *et al.*<sup>6</sup>

With the advancement in medical science, the discovery of new diseases and drugs, the addition of new minds in the field, there has been a constant conflict regarding patient treatment. Many clinicians wish to follow their own personal experiences pertaining to particular problems, whether their decisions are critically approved or not. It is here that EBM strives to provide a guideline to practicing clinicians about patient care and management. It incorporates individual clinical expertise and best available external clinical evidence. It starts with a patient and his/her medical presentation. On this basis, a question is formulated regarding the treatment. Extensive literature review follows, and previously conducted randomized control trials, meta-analysis and systematic reviews are considered. Only those conclusions with extensive supportive evidences are selected. The evidence is judged (a process called "critical appraisal") and finally, in lieu with clinical expertise, guidelines for patient management for that particular presentation are laid down. And this process is repeated over and over again.

As can be seen, the basic role of EBM is to provide the best possible care to the patients. It provides a platform for all the clinicians to refer to regarding patient treatment. Instead of blindly following local hospital protocols, or mindlessly following peer advice, doctors are now encouraged to follow evidence supported and critically approved guidelines for the management of their patients. Many journals have now been founded that deal only with the publication of articles that fully comply with the prerequisites of Evidence-Based Medicine. These journals provide the clinician a selected number of articles to review, instead of thousands, and to obtain the maximum and most accepted knowledge in the least amount of time.

In Pakistan, EBM is still in its infancy. The concept of EBM must be inculcated in our doctors from the time they start medical training. Group discussion is an integral part of EBM, where 10-12 students are led by a facilitator. They are taught how to read articles from a critical point of view, determine the validity of an article and the value of implementing it in their practice. Students must be taught from the very beginning to only consider fully determined evidence based guidelines, and not to follow blind instruction.

We, at Sheikh Zayed Medical College Rahim Yar Khan are trying to change the trend and to free ourselves from the vicious circle we find ourselves stuck in. An article, published in this issue of JSZMC, shows a small, but none-the-

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less significant, attempt made by Amir and colleagues to determine how vehemently we follow guidelines for the management of myocardial infarction in our tertiary care hospital.

This study is unique as it brings to light the current situation in following EBM protocols in Pakistan, although at a smaller level. The review of literature reveals that those hospitals that are diligent in following recommended guidelines in patients management, have a better outcome as far as mortality and mobidity is concerned.<sup>8</sup> And that the under use of evidence- based guidelines may in fact lead to adverse outcomes.<sup>9</sup> The compliance to guidelines should not be restricted only to acute settings, but pain must be taken to ensure adherence in home setting and subsequent follow-ups, as that too leads to a decline in mortality.<sup>10</sup> Another study by Zulfiqar and colleagues, shows the importance of TRISS scoring system in the evaluation of surgical trauma patients and how beneficial this system can be in assessing the prognosis of such patient; with favorable results.

To conclude we can say that although a lot of work is still required in this area in Pakistan, change is possible. Currently, EBM is an unfulfilled agenda in Pakistan. But with better training and increasing awareness of doctors towards EBM, we CAN bring about this change. We need to adopt a slightly more rigid approach towards patient management as far as following the evidence based guidelines are concerned. Blind following *MUST* be discouraged. Senior clinicians must be willing to accept change as well and show flexibility towards EBM. In fact, they must propagate EBM among their junior doctors and show intolerance to ignorance.

After all, in the end, it's all about the welfare of the patients!

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