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## **SHOEMAKER PROTOCOL: WHAT IS EVIDENCE BASED MEDICINE?**

April 20, 2018

Timeline of Evidence Based Medical Thought:

1747 Dr. James Lind – conducted the first recorded clinical trial while attempting to cure scurvy. He gave one group of men citrus fruits and one group of men received nothing. This was the first recorded randomized control study.

1760 Dr. Thomas Beddoes recognized that medical facts needed to be collected and stored in an understandable manner. He encouraged his colleagues to submit any data from experimental studies to him to record. Because of his pursuit of knowledge he is credited by many with the birth of evidence based medicine.

1818 Dr. Ignaz Semmelweis notices that changes in behavior of physicians leads to reduction in infant mortality. This leads to a policy change where handwashing is the new standard.

1834 Dr. Pierre Charles publishes an essay about bloodletting not leading to cure in diphtheria.

1916 ACOEM – American College of Occupational and Environmental Medicine is founded to protect the health of workers.

1937 Dr. Austin Bradford Hill publishes a paper demonstrating the superiority of antibiotics in the treatment of bacterial infections specifically pulmonary tuberculosis.

1955 Dr. Tom Chambers published a randomized factorial trial of bedrest in the treatment of hepatitis that changed the future of medical research publication.

1972 Dr. Archie Cochrane Effectiveness and Efficiency is published which details the need to base practice on prevailing research.

1981 Dr. David Sackett penned the term critical appraisal in Canadian Medical journal discussing the use of valid methods to form a conclusion.

1989 AHRQ Agency for Healthy Research and Quality formed to provide evidence to make healthcare safer. They work with US department of Health to make sure that diagnoses are based on the appropriate evidence.

1989 Oxford Database of Perinatal Trials

1990 Dr. Gordon Guyatt becomes director of Internal Medicine Residency program at McMaster's University

1993 The Cochrane Collaboration – organize medical research and facilitate decision making using evidence based medicine<sup>1</sup>

The phrase EVIDENCE BASED MEDICINE or EBM was initially coined in the early 1990s by a team of investigators at McMaster's University led by Dr. Gordon Guyatt who

encouraged physicians to treat based on what the evidence shows not what they were taught. EBM was then defined as “a systemic approach to analyze published research as the basis of clinical decision making.”<sup>2</sup> The evolution continued in 1996 when the phrase was redefined by Sacket et al, “The conscientious and judicious use of current best evidence from clinic care research in the management of individual patients.”<sup>3</sup>

Evidence based medical practice has five steps.

Step 1 – Ask a question

Step 2 – Track down the information/evidence to answer such question

Step 3 – Critically appraise the information/evidence for validity

Step 4 – Integrate evidence with one’s own clinical expertise

Step 5 – Evaluate the performance of the practitioner

Evidence based medicine is the new norm in medical practice today. It means taking one’s own clinical knowledge base and combining it with external clinical evidence in order to come up with the best treatment plan for an individual patient. The key to the best practice of evidence based medicine is determining whether the research is sound, replicable and just. This takes conscious thought and deliberate intention.

The Shoemaker Protocol is an example of exemplary evidence based medicine in practice. Dr. Shoemaker saw a need for a new treatment paradigm in his practice in Maryland in the early 1990s after seeing a surge of patients exhibiting similar symptom profiles. Luckily Dr. Shoemaker is at heart an academic and research based family practice doctor (aka geek, nerd, etc.) and after extensive research into existing treatment and finding none that pertained to his patients took it upon himself to determine a treatment protocol. Physicians now have the benefit of the extensive research and documentation that Dr. Shoemaker has compiled over the past thirty years and we can continue to add to this exemplary base of knowledge.

Evidence based medical practice will continue to evolve and grow as time goes on. Clinicians will be held to the standard of evidence based medicine. Malpractice cases are based on evidence based medical standards. As a group we must continue to uphold the highest standards as we review articles and new research paradigms.

## REFERENCES

1. UR Nation: Robinson, Lisa (Jule 14, 2014). Evidence-Based Medicine. Retrieved from URL
2. Guatt, G.H. (1991). Evidence-based medicine. *ACP J Club*, 114, A-16.
3. Sackett, D.L., et al. (1996). Evidence based medicine: What it is and what is isn't. *BMJ*, 312 (7023), 71-72.