Knowledge, Attitudes and Practices of Evidence-Based Medicine among Family Physicians in Menoufia Governorate, Egypt

Thesis
Submitted for Fulfillment of Master Degree
in Family Medicine

By
Diana Abd Al-Rouf Abd AL-Magied
MBBCH, Faculty of Medicine

Under Supervision of
Prof. Dr. Wagida Abd El-Rahman Anwer

Professor of Community, Environmental and Occupational Medicine Faculty of Medicine, Ain Shams University

Dr. Khaled Mahmoud Abd El-Aziz

Assistant Professor of Community, Environmental and Occupational medicine Faculty of medicine Ain Shams University

Dr. Ghada Essam El-Din Amin

Lecturer of Community, Environmental and Occupational medicine Faculty of Medicine Ain Shams University

Faculty of Medicine
Ain Shams University
2013

سورة البقرة الآية: ٣٢

Contents

List of Abbreviations

Abb.	Meaning
AAMC	Association of American Medical Colleague
BMJ	British Medical Journal
CAT	Critical Appraisal topic
CD	Compact Disk
CEE	Central and Eastern Europe
CER	Control group Event Rate
CI	Confidence Interval
CME	Continuing Medical Education
CT	Computerized Tomography
EBM	Evidence Based Medicine
EBP	Evidence Based Practice
EMHJ	Eastern-Mediterranean Health Journal
FHC	Family Health Center
FHU	Family Health Unit
FM	Family Medicine
GP	General Practitioner
ICU	Intensive Care Unit
IMG	International Medical Graduate
KAP	Knowledge, Attitude and Practice
MOH	Ministry Of Health
NHS	National Health System
NNT	Number Needed to Treat
PHCPs	Primary Health Care Physicians
PICO	Patient Interval Comparison Outcome

Abb.	Meaning
RCTs	Randomized Clinical Trials
SD	Standard Deviation
SPss	Statistical Package for Social Sciences
USA	United State of Americans
WWW	World Wide Web

List of Figures

I- List of Figures of Review of the Literature

II- List of Figures of Results

List of Tables

I- List of Tables of Review of the Literature

II- List of Tables of Results

Introduction

Evidence-based medicine (**EBM**) has emerged as a new paradigm for medical practice. It involves integrating individual clinical expertise with the best available external clinical evidence and compassionate use of individual patients' rights and preferences in making clinical decisions about their care. Awareness of the latest scientific evidence and the ability to critically appraise literature and assess its applicability has been identified as integral to the practice of **EBM** ***(Claridge and Fabian, 2005)***.

Evidence-based medicine (**EBM**) is defined as:

The integration of the best research evidence with clinical expertise and patient's unique values and circumstances ***(Straus et al., 2005***).

There are other definitions for Evidence –based medicine such as:

Evidence-based practice is "a process of care that takes the patient and his or her preferences and actions, the clinical setting including the resources available, and current and applicable scientific evidence, and knits the three together using the clinical expertise and training of the health-care providers ***(Haynes et al., 2002).***

The main cornerstone of evidence –based medicine is the use of randomized clinical trials to determine the safety and efficacy of the intervention taking into account clinical status of the patient and the physician experience ***(Oxford University center of EBM, 2010.)***

EBM requires that healthcare decisions should be based on the best available evidence. To achieve this, it is necessary to impress the principles of EBM, which starts with **a**sking a clinical question at the point of care (most commonly the physician-patient encounter), **a**cquiring evidence by literature research, **a**ppraising evidence on rigorous principles**, a**pplying valid evidence to patient care incorporating patient values and preferences. These (4As) are the pillars of practicing EBM ***(Guyatt et al., 2000)*.**

Situations of EMB in some countries:

In a study done in Saudi Arabia in 2002 among primary health care physicians positive attitude toward **EBM** was 68%, the highest percentage of knowledge was 67.6% ***(Al-Ansary La et al., 2002)***.

In another study in 2009 in Jordan 95% of family physicians had positive attitudes toward **EBM**. The highest percentage of knowledge was 29% for knowledge about absolute risk and also for systematic review. Lack of personal

time was reported by 68.8% as a barrier against practicing EBM. Also 9.9% of the studied sample reported using **EBM** in 75%-100% of their clinical practices ***(Farihan Barghouti et al., 2009)*.**

A study done in Sri Lanka in 2010 showed that 75.8% of primary health care physicians had positive attitudes, 86% heard of **EBM** phrase, 53.6% currently use **EBM** in the management of patients and the most prevalent barrier against practicing EBM in this study was insufficient resources 77.7% ***(Chrishantha Abeysena et al., 2010).***

Menoufia is a governorate in Egypt, it consists of urban and rural communities and is served by strong private and public health care system. Its population has open access to all levels of care without referral. Family medicine training is not a prerequisite to practice in private or public primary care system. Most doctors who offer primary care do not purpose postgraduate training but practices directly after qualifying from medical school. These doctors are known as general practitioners ***(adopted from Central Agency for public mobilization and statistic, 2009).***

Rationale and Justification

Evidence is the basis for almost every human decision and action. Field such as the medical profession that deals with the health and lives of individuals ensure that utmost care in diagnosing and treating a patient. To provide incorrect treatment can be devastating. Evidence-based medicine practice helps ensure that the right treatment is given to the right patient. This does not mean that physicians treat their patients without any foundation. Almost every physician based his/her treatment on the knowledge and experience s/he already gained. But keeping oneself up-to-date on current information and knowledge is indispensable. New disease, new technique and new methods are constantly emerging. Unless physicians keep themselves abreast of the latest development, they may not be in a position to render the most effective and efficient services. The most considerable hallmark of the information revolution in medicine is known as the "basic leap from bedside to computer" ***(Jordan, 2002).***

Recent papers have highlighted the need for evidence-based medicine ***(Radisdale, 1996).***

The use of EBM in clinical practice is a key strategy to improve primary health care services ***(Canberra, 1998).***

Egypt adopted new policy for health care reform by encouraging the family health care system. The new policy necessitates training primary health care physicians and family physicians on methods of diagnosis, treatment and patient care. Nowadays, executive boards stress the use of **EBM** to prevent unsafe practices that lack empirical support to reduce unacceptable variance and ultimately to increase efficiency and health care quality ***(Donald and Greenhalgh, 2000).***