



ORIGINAL ARTICLE

Evaluating factors affecting the implementation of evidence based medicine in primary healthcare centers in Dubai



Ahmed I. Albarrak ^{a,*}, Suhair Aqil Ali Abdulrahim ^b, Rafiuddin Mohammed ^c

^a Health Informatics, College of Medicine, King Saud University, Riyadh, Saudi Arabia

^b e-School of Health and Environment Studies, Hamdan Bin Mohammed e-University, Dubai, United Arab Emirates

^c College of Medicine, King Saud University, Riyadh, Saudi Arabia

Received 7 April 2013; accepted 17 May 2013

Available online 30 May 2013

KEYWORDS

Evidence based medicine;
Barriers;
Attitude;
Behavior;
PHCS

Abstract Objectives: To assess the current evidence based medicine (EBM) knowledge, attitude and perceptions of physicians at Dubai Primary Health Care Sector (PHCS). Further to evaluate barrier and facilitator factors toward implementing the EBM practice.

Methodology: A cross-sectional study, at Dubai PHCS, UAE between June and August 2010. The survey was composed of two phases. The first phase was a self administrated questionnaire employed for data collection and the second phase was qualitative method, which was in the form of individual interviews. Statistical Package for Social Sciences (SPSS) was used for data analysis.

Results: In total 48 participants responded to the survey questionnaire and 13 responded to individual interviews. The response rate was 70.0%. Mean age was 42.18 (SD 10.46). The majority were females (64.6%). The physicians who attended EBM courses reported 70.30% using EBM and showed statistical significance ($p = 0.002$) from those who did not attend the EBM courses. 65.0% believe that 50–75% of the patients are capable of participating in clinical decision while 71.8% disagreed that the concept of EBM is not applicable to their culture. In addition they showed significance ($p = 0.03$) between physician beliefs with regard to patient capacity to take decision. About 67.0% of the family physicians were knowledgeable and followed systematic review as the strongest evidence. They had no access to the EBM resources (37.0%) and had no time to practice

* Corresponding author. Address: Medical Informatics, and E-learning, College of Medicine, King Saud University, P. O. Box 63709, Riyadh 11526, Saudi Arabia. Tel.: +966 554198890; fax: +966 14690798.

E-mail address: albarrak@ksu.edu.sa (A.I. Albarrak).

Peer review under responsibility of King Saud University.



Production and hosting by Elsevier

the EBM (38.0%). Nearly 40.0% interviewees reported lack of encouragement to attend EBM courses. EBM activities (22.0%) and active audit (18.0%) were top rated facilitating factors.

Conclusions: EBM is not fully utilized by indefinite physicians in the Dubai PHC sector. Factors associated with non-utilization of EBM in the PHCS are lack of encouragement to attend EBM courses, senior physicians resist adoption of EBM, lack of time and insufficient dissemination process for implementing the clinical guideline.

© 2013 Production and hosting by Elsevier B.V. on behalf of King Saud University.

1. Introduction

Evidence-based medicine (EBM) is being recognized worldwide as an important clinical skill that aims at improving the way physicians practice medicine, teach medicine, and perform scientific research. EBM was defined as “the conscientious and judicious use of current best evidence from clinical care research in the management of individual patients” (Sackett and Rosenberg, 1996). It was redefined in order to include the patient decision as “Integration of best research evidence with clinical expertise and patients values” (Sackett et al., 2000). EBM is a process for turning the clinical problems to questions, and then systematically apprehending and evaluating the use of the research findings as a basis for making clinical decisions. The practicing the EBM will positively benefit individual, clinical team and patients (Sackett and Rosenberg, 1995).

Different models have been proposed to study the evidence based information. The “4S” model was classified into four layers as studies at base, synthesis at above, synopses and systems next up followed by systems at the top (Haynes, 2001). The same model was modified and a new layer was added as “summaries” and called as “5S” model (Haynes, 2006). Another hierarchy model was proposed to access clinical information similar to the tertiary-secondary-primary literature pyramid (Grandage et al., 2002). Both providers and consumers of evidence-based health care can help themselves to these best current evidence hierarchical models by recognizing and using the most evolved information services for the topics that concern them. These models help for better information and reduce the comprehensiveness.

In the Middle East countries EBM goes back to at least 1999 when pioneers in Oman, Bahrain and Saudi Arabia began to introduce the idea through lectured courses (Ferwana, 2010). In Kuwait the EBM awareness in the primary care physicians was low and the study further recommended training the physicians and access to the EBM resources is a crucial step to practice the EBM (Ahmad et al., 2009). In Bahrain, family physicians are using EBM in their daily work, especially noted among those physicians who took EBM courses (Amin et al., 2006). In Jordan, the study showed positive attitude toward EBM, however it described different personal, interpersonal and organizational barriers that affect the implementation of the EBM, in addition the study also emphasises the importance to develop a national plan to overcome these barriers (Al Omari, 2009).

In most cases, physicians do not have enough time to follow the large quantity of the published research neither have tool to assist the quality of those studies. Skills to criticize the new finding from the published studies, and lack of time to

practice the evidence based medicine are two of many barriers that affect the implementation of the EBM. There are increased calls worldwide for practicing the EBM, but as many studies showed, implementing the EBM is facing barriers in thinking and practicing EBM in health care setting could be related to practitioners, organizational or may be patient related factors (Scott et al., 2000; Freeman and Sweeney, 2001; Young and Ward, 2001). Till today in the Middle East studies were carried out to study the awareness and knowledge of EBM but not the factors affecting the EBM. Therefore the current study was aimed to evaluate the current practice and address the barriers toward implementing the EBM in Dubai Primary Health Care Sector (PHCS).

2. Methods

The present study is a cross sectional study carried out in the Primary Health Care Sector (PHCS) working under Dubai Health Authority (DHA) in Dubai, United Arab Emirates between June and August 2010. PHCS center that belongs to the DHA consists of 12 Health Centers (HC) and peripheral clinics which are located all around the emirate of Dubai, in a ratio of one health clinic for every 30,000 individuals. The study received ethical approval from DHA.

The study was conducted in two phases. The first phase (questionnaire) was the quantitative part which evaluated the current attitude and knowledge of the family physicians and their perceptions of the available barriers against applying the EBM in their daily clinical practice. The second phase (individual interviews) was a qualitative method, by conducting a structural individual discussion with the family physicians.

In the first part a self-reported questionnaire consisting of 13 questions was adopted similar to the previous literature study (Amin et al., 2006; Al Omari, 2009; Scott et al., 2000; Freeman and Sweeney, 2001; Young and Ward, 2001; Fedorowicz et al., 2004). It consists of different variables which are related to implementing the EBM in daily practice. The questionnaire was distributed to practicing family physicians who were randomly selected from HC. In the second part, individual interview questionnaire was prepared and validated by panel of expert professors. It consists of variable barriers toward implementing the EBM practice. The barrier was divided into three groups; Organizational, Personal and Patient related barriers in order to have a clear identifiable factor. The candidates selected for the interviews were based on criteria set by Spain study (Alonso-Coello et al., 2009). The interview was run in the lecture hall in the health centers. The individual interviews were held for each participant based on a scheduled time and the availability of the participant. All interviews were

conducted by the investigator. Each interview lasted between half an hour for individual interviews and one hour, depending on the participant schedule and availability.

Statistical package for social sciences Version 13 (SPSS-13) was used for statistical analysis. Chi-square test (χ^2) was used to assess the association between the use of EBM and different socio-economic and other factors. The cutoff value for statistical significance was set as 0.05. For qualitative data collected through in-depth interview with physicians, results were summarized and presented in the form of frequency distribution tables.

3. Results

3.1. Questionnaire analysis

3.1.1. Demographic

In total 68 questionnaires were distributed in five PHCS in Dubai, only 48 were completed and the response rate was 70.0%. Mean age was 42.18 (SD 10.46) with 17 years since graduation (SD 10.14) and represents 42.0% of all age groups. The majority of the respondents were females (64.6%). Almost all of the respondents have experience of more than 10 years (64.6%), while 17.0% have < 6 years.

3.1.2. Attendance of the EBM courses

The finding showed that the participants who attended EBM courses reported 70.30% using EBM. Further there was a statistical relationship between using EBM and attending the EBM course ($p = 0.002$).

3.1.3. Physicians' belief in implementing the EBM

About 84.6% of the respondents perceived that patient is willing to participate in the clinical decision making, while more

than half (65.0%) of the physicians believe that between 50% and 75% of the patients are capable of participating in the clinical decision. Two third (71.81%) of the respondents disagreed with the concept that the EBM is not applicable to their culture. Further they showed statistical significance between physicians' beliefs with regard to patient capability to share in decisions with them and their use of EBM (0.03).

3.1.4. Physicians' knowledge of EBM component

Two questions covered the physicians' knowledge. Only 20.8% were able to identify the two correct answers while majority of the participants (69.2%) gave one correct answer. Concerning the second question, the results indicated that 67.0% of the family physicians were knowledgeable about the strongest studies that are highly recommended to be followed (systemic review), compared to 23.0% of the physicians who said that they are using EBM in their practice but they were not aware about the strongest EBM resource of evidence.

Most of the participants (80.2%) are going to evaluate the EBM if the recent clinical information contradicted with their clinical judgment, while only 19.1% will follow the evidence.

3.1.5. Physicians' opinion regarding different barriers

Around third of the participant reported approximately equally common barriers; no access to the EBM resources (37.0%), and had no time to practice the EBM (38.0%). Almost a quarter of the respondents (27.0%) identified the threat to clinical freedom/judgment was the second most frequent barrier toward implementing the EBM.

3.2. Interview analysis

A total of 13 participants were interviewed among them six females and seven males. Among the total 6 were UAE and 7

Table 1 Types of barriers.

| Types of barrier | Frequency* | % |
|---|------------|-------|
| <i>Personal barriers</i> | | |
| Lack of encouragement to attend EBM courses and to set up EBM practice in their institution | 8 | 40.0 |
| Senior physicians resist adoption of EBM | 6 | 30.0 |
| Lack of EBM education at university level | 3 | 15.0 |
| Misguides by medical representative, they give in accurate information | 2 | 10.0 |
| Weakness in English language communication | 1 | 5.0 |
| Total | 20 | 100.0 |
| <i>Organizational barrier</i> | | |
| Time as factor to practice EBM | 13 | 33.0 |
| Insufficient dissemination process for implementing the clinical guideline | 10 | 25.0 |
| Insufficient system reminder | 6 | 15.0 |
| Limited budget to prepare and implement EBM practice | 5 | 13.0 |
| Unstable organization with no clear responsibilities along with new health priority issues | 2 | 5.0 |
| Unavailability of the medicine affects clinical protocol implementation | 2 | 3.0 |
| Ineffective feedback data lacking data, (survey, questionnaire) | 1 | 3.0 |
| EBM resource are not always accessible | 1 | 3.0 |
| Total | 40 | 100.0 |
| <i>Patient related barrier</i> | | |
| Lack of patient education department | 3 | 75.0 |
| Media is not aware about the PHC program | 1 | 25.0 |
| Total | 4 | 100.0 |

* Most of the interviewers gave more than one opinion.

Table 2 EBM facilitator factors.

| Facilitator factors | Frequency* | % |
|---|------------|-------|
| <i>Personal factors</i> | | |
| Creating teams of young and old practitioners to transfer the practice of EBM from young to old physician's | 3 | 14.0 |
| <i>Organizational factors</i> | | |
| Implementing EBM activities | 5 | 22.0 |
| Active audit | 4 | 18.0 |
| Releasing a new organization structure (creating a clinical effectiveness unit) | 3 | 14.0 |
| The availability of the computer system | 2 | 9.0 |
| Continuous EBM monitoring | 1 | 5.0 |
| Good library services | 1 | 5.0 |
| Guideline characteristics (algorithm availability) | 1 | 5.0 |
| <i>Patient related factor</i> | | |
| Increase patient awareness about his disease managements | 22 | 100.0 |

* Most of the interviewers gave more than one opinion.

were Arab nationality. Most of them have more than 10 years of experience.

3.2.1. Personal barrier

The interviewees (40.0%) verified lack of encouragement to attend EBM courses as a main reason. Senior physicians' resistance to change their practice (30.0%) was the second most frequent reason for not applying and practicing the EBM in clinical practice. While the least personal barriers mentioned by the interviewees were weakness in communication in the English language (Table 1).

3.2.2. Organizational barrier

All of the respondents agreed that lack of time (33.0%) is the top rated barrier to implement and practice the EBM followed by insufficient dissemination process of the guideline (25.0%) as the second most rated organizational barrier (Table 1).

3.2.3. Patient related barrier

Lack of patient education department was the most rated factor related to patient (Table 1).

3.2.4. Facilitating factors

Nine factors were mentioned by the interviewees. EBM activities 22.0% and active audit 18.0% were two of the top most rated facilitating factors (Table 2).

4. Discussion

The concept of the EBM was introduced early in the 90th of last century, and no studies were conducted in UAE to address the current practice of the EBM among physicians and further to find out the barriers toward the implementation. Because of lack of such studies, and due to the multi dimensions of the subject it was decided that a questionnaire is not enough to address EBM implementation subject and to satisfy the study objectives. Therefore forming individuals' interviews was beneficial and the method provided in depth knowledge, perception, beliefs and values of the individuals related to the topic. The study aims to gain a better understanding of which factors affect the implementation of EBM and to gain insight of the current practice in the PHCS/Dubai.

To achieve the first aim, associations between different variables and the use of EBM were studied, these variables are: age, gender, years of experience, attendance of EBM courses, physicians' knowledge, behaviors, beliefs and opinions. Demographic data showed no statistical difference among physicians practicing EBM or not practicing EBM. In contrast previous literature reported that younger physicians or less experienced one would be more adherent to use the clinical guideline than older and experienced one (Francke et al., 2008). However it agreed with the present study in which demographic data cannot predict the physicians' use of EBM in daily practice (McAlister et al., 1999). The absence of statistically significant association in some cases in the present study may be attributed to the relatively small size of the sample.

EBM knowledge composed of three elements; "individual clinical expertise, the best available external evidence and 'patients' predicaments, rights, and preferences in making clinical decisions about their care" (Sackett and Rosenberg, 1996). No association was found between the knowledge of the three EBM component elements and the use of EBM, only few physicians were aware that patient preference is part of the EBM components. A study showed that the majority of the Bahrain's family physicians scored lowest percentage for patients' choice as component elements of EBM (Amin et al., 2006). In a similar study 39.6% of the physicians underlined the two components correctly when they were asked to underline the two components of EBM other than clinical expertise which shows better result comparing to the present study (20.8%) Al Omari, 2009. We believe findings of the current study may be attributed to unavailability of solid fundamental EBM knowledge and practice among the Dubai family physicians.

The present study showed a significant statistical association between physicians' use of the EBM and the EBM course attendance and the knowledge awareness of the hierarchy of evidence. The study showed that there is a strong relationship between practicing the EBM and finding the best references for medicine evidence (Amin et al., 2006; Jette et al., 2003). The EBM concept and attending an EBM course is supported by other study which was carried on to show the relation between teaching EBM Skills and the change in the practice in a community hospital (Straus et al., 2005).

The current study showed a strong association between physicians' beliefs and their opinion with regard to patient capacity to take decisions. However, this positive result is not agreed with the other study results. The Bahraini PHC physicians were underestimating their patients' ability to be involved in making clinical decision (Amin et al., 2006). A physician believes in a patient the capability to manage her/his disease is highly important, good communication enhances patient management especially in chronic diseases.

Furthermore the results of the current study pointed out three main groups of barriers; personal, organizational and patient related factors. Physicians identified one personal factor (no time) to practice (38.0%), as the most significant barrier toward EBM implementation, followed by the unavailability of EBM resources (37.0%). No time and unavailability of access to EBM resources are considered as organizational factors. Both factors alone account for two thirds of identified barriers to EBM. The study showed similar barriers reported in another study (Amin et al., 2006), however this percentage is insignificant being 53.1% for no time and 73.5% for unavailability of EBM resources. It is recommended to develop quality improvement projects to tackle both identified problems in order to improve physicians' use of EBM.

Interviews were conducted to get more in depth clarification of the barriers for EBM implementation with regard to the three barriers. Concerning the personal factors, the study identified five personal factors as shown in Table 1, most cited personal barriers were lack of motivation (40.0%) followed by EBM adoption resistance by senior physicians (30.0%). Other studies identified several personal factors that affect EBM implementation. In another study lack of knowledge and skills and non-motivated general practitioners are the most rated with regard to personal factors (Scott et al., 2000). This was attributed by other study that justifies the non-following of the clinical protocols by physician due to physicians' beliefs of non-applicability of the protocol to the individual patients (Oswald and Bateman, 1999). This study is in agreement with the previous study which denotes the importance of tackling personal factor. In other study it was agreed on physicians' beliefs non suitability of the EBM to every individual patient as well as physicians' beliefs of lowering their valuable experience if they followed such written guideline (Putnam et al., 2002).

The second group is the organizational factor; eight organizational factors were recognized (Table 1). No time to practice EBM (33.0%) and insufficient dissemination process for implementing the clinical guideline (25%) were found in this study as the most stated barriers. Several studies (Scott et al., 2000; Francke et al., 2008; Putnam et al., 2002; Tracy et al., 2003; Al-Ansary and Khoja, 2002) agreed on lack of time as a barrier for EBM use and implementation. They further reported that lack of high quality clinical summaries and slow internet connections might hinder getting focused and quick clinical information (Schwartz et al., 2003).

Insufficient dissemination process for implementing the clinical guideline was found to be an important second organizational factor by other studies. Similar study reported on the inadequate dissemination in which the study recommended to involve the practitioner directly and actively in the implementation process and this could be through written, face-to-face, education material and teaching courses (Francke et al., 2008). Patient related factors are the third group that is categorized in this study. Only 4 out of 13 physicians identified two patient

related factors (Table 1). Due to the small sample size it was difficult to make conclusion related to those factors. According to Hannse et al. patient plays a key role in making clinical decision (Hannse et al., 2005). Patient comes to the clinic with his own expectation on how he wishes to be treated. This makes physicians diverted from following EBM and enforces them toward patient preferences. Many studies declared patients as barriers and noted that patients ask for certain treatments, have specific expectations, and not capable of understanding evidence based messages (Freeman and Sweeney, 2001; Young and Ward, 2001). Further adding more patient related factors such as patients depending on information from non-evidence based sites makes them indifferent to instructions (Putnam et al., 2002). Further studies are recommended to cover the relation between EBM implementation and patient related factors.

The study had some limitations. The interviews were scheduled in summer, where a large number of physicians were on annual leave reducing the number of physicians for interviews. Moreover, those remaining in the duty had to extend and had no time for interviews.

We conclude that EBM is not utilized by many physicians in the Dubai PHCS. Factors associated with non-use of EBM in the PHCS are lack of encouragement to attend EBM courses, senior physicians resist adoption of EBM, lack of time to practice EBM and insufficient dissemination process for implementing the clinical guideline. Facilitator factors that facilitate use of EBM are implementing EBM supporting activities, active audit and releasing a new organization structure of the DHA (Table 2). Based on that an action plan is recommended to eliminate barriers that are affecting the EBM implementation. Further we recommended to conduct the study in a large and more representable sample toward implementation of EBM in whole PHCS in UAE. In addition encourage physicians to involve patient value and preference in their practice through active education.

Acknowledgements

The authors would like to thank Prof. Moustafa M. Hassan Assistant Chancellor for Learning & Academic Development, Hamdan bin Mohammed e University (HBMeU) for his contribution in designing the study and also thank the PHC sector in helping to conduct this study in their facilities, especially, Dr. Alia Rafie the Head of Al Bada'a Health Center and her wonderful team.

References

- Ahmad, A., Al-Mutar, N., Al-Hulabi, F., Al-Rashidee, E., Doi, S.A., Thalib, L., 2009. Evidence based practice among primary care physicians in Kuwait. *J. Eval. Clin. Pract.* 15, 1125–1130.
- Al Omari, M., Khader, Y., Jadallah, K., Dauod, A.S., Al-Shdifat, A.A., Khasawneh, N.M., 2009. Evidence-based medicine among hospital doctors in Jordan: awareness, attitude and practice. *J. Eval. Clin. Pract.* 15 (6), 1137–1141.
- Al-Ansary, L.A., Khoja, T.A., 2002. The place of evidence-based medicine among primary health care physicians in Riyadh region, Saudi Arabia. *Fam. Pract.* 19, 537–542.
- Alonso-Coello, P., Sola, I., Rotaecche, R., Gonzalez, A.I., Marzo-Castillejo, M., Louro-Gonzalez, A., et al, 2009. Perceptions,

- attitudes and knowledge of evidencebased medicine in primary care in Spain: a study protocol. *BMC Health Serv. Res.* 9, 80.
- Amin, F.A., Fedorowicz, Z., Montgomery, A.J., 2006. A study of knowledge and attitudes toward the use of evidence-based medicine among primary health care physicians in Bahrain. *Saudi Med. J.* 27 (9), 1394–1396.
- Fedorowicz, Z., Almas, K., Keenan, J.V., 2004. Perceptions and attitudes towards the use of evidence-based dentistry (EBD) among final year students and interns at King Saud University, college of dentistry in Riyadh, Saudi Arabia. *Braz. J. Oral. Sci.* 3, 470–474.
- Ferwana Mazen, 2010. Evidence-based medicine in the gulf. *Giant Steps on the Road*, Newsletter of the International Society for Evidence-Based Health Care Newsletter 1, October.
- Francke, A.L., Smit, M.C., de Veer, A.J., Mistiaen, P., 2008. Factors influencing the implementation of clinical guidelines for health care professionals: a systematic meta-review. *BMC Med. Inform. Decis. Mak.* 8, 38.
- Freeman, A.C., Sweeney, K., 2001. Why general practitioners do not implement evidence: qualitative study. *BMJ* 323, 1100–1102.
- Grandage, K.K., Slawson, D.C., Shaughnessy, A.F., 2002. When less is more: a practical approach to searching for evidence-based answers. *J. Med. Libr. Assoc.* 90 (3), 298–304.
- Hannse, K., Leys, M., Vermeire, E., et al, 2005. Implementing evidence-based medicine in general practice: a focus group based study. *BMC Fam. Pract.* 6, 37.
- Haynes, R.B., 2001. Of studies, syntheses, synopses, and systems: the “4S” evolution of services for finding current best evidence. *ACP J. Club* 134, A11–A13.
- Haynes, R.B., 2006. Of studies, syntheses, synopses, summaries, and systems: the “5S” evolution of information services for evidence-based healthcare decisions. *Evid. Based Med.* 11 (6), 162–164.
- Jette, D.U., Bacon, K., Batty, C., et al, 2003. Evidence-based practice: beliefs, attitudes, knowledge, and behaviors of physical therapists. *Phys Ther.* 83 (9), 83786–83805.
- McAlister, F.A., Graham, I., Karr, G.W., Laupacis, A., 1999. Evidence-based medicine and the practicing clinician. *J Gen. Intern Med.* 14 (4), 14236–14242.
- Oswald, N., Bateman, H., 1999. Applying research evidence to individuals in primary care: a study using non-rheumatic atrial fibrillation. *Fam. Pract.* 16, 414–419.
- Putnam, W., Twohig, P.L., Burge, F.I., Jackson, L.A., Cox, J.L., 2002. A qualitative study of evidence in primary care: what the practitioners are saying. *CMAJ* 166 (12), 1525–1530.
- Sackett, D.L., Rosenberg, W.M.C., 1995. On the need for evidence based medicine. *J. Public Health Med.* 17 (3), 330–334.
- Sackett, D.L., Rosenberg, W.M.C., Muir Gray, J.A., Haynes, R.B., Richardson, W.S., 1996. Evidence based medicine: what it is and what it isn't. *BMJ* 312, 71–72.
- Sackett, D.L., Straus, S.E., Richardson, W.S., Rosenberg, W., Haynes, R.B., 2000. *Evidence-Based Medicine: How to Practice and Teach EBM*, two ed. Churchill Livingstone, New York.
- Schwartz, K., Northrup, J., Israel, N., Crowell, K., Lauder, N., Neale, A.V., 2003. Use of on-line evidence-based resources at the point of care. *Fam. Med.* 35, 251–256.
- Scott, I., Heyworth, R., Fairweather, P., 2000. The use of evidence-based medicine in the practice of consultant physicians: results of a questionnaire survey. *Aust. N. Z. J. Med.* 30, 319–326.
- Straus, S., Richardson, W.S., Glasziou, P., Haynes, R.B., 2005. *Evidence-Based Medicine: How to Practice and Teach EBM*, third ed. Churchill Livingstone, Edinburgh.
- Tracy, C.S., Dantas, G.C., Upshur, R.E., 2003. Evidence-based medicine in primary care: qualitative study of family physicians. *BMC Fam. Pract.* 4, 6.
- Young, J.M., Ward, J.E., 2001. Evidence-based medicine in general practice: beliefs and barriers among Australian GPs. *J. Eval. Clin. Pract.* 7 (2), 201–210.