

## **Pattern of Reading Journals among Primary Care Doctors in Bahrain**

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**Objective:** The aim of this paper is to measure the frequency of reading medical journals among primary care doctors in Bahrain and their preferences.

**Design:** Questionnaire

**Setting:** Bahrain government health centers.

**Methods:** A self-administered questionnaire was distributed among a sample of primary care doctors, including, family physicians, general practitioners (GP's) and students of family physician residency program (FPRP-Residents). The questionnaire was distributed during the months of March and April 2004. Doctors were requested to answer questions on the frequency of reading medical journals and their preferences.

**Results:** Fifty-four (90%) responded from a total of 60. Thirty-two (59.3%) have subscriptions to journals and 22 (40.7%) have no subscriptions. Number of subscriptions is noticed to increase with age. Thirty (55.5%) of the responding doctors read their last article within the last 6 months, and 15 (27.7%) either did not remember or they read it more than a year ago. Thirty-one (57.4%) favors reading articles on the Internet, while 23 (42.6%) prefer reading print journals. Younger age group tends to prefer using the internet to read articles. Doctors were also found to prefer reading international journals in comparison with local medical journals.

**Conclusion:** Thirty-two (59.3%) of respondents have subscriptions to medical journals whether on the Internet or as hard copy. Number of subscriptions tends to increase with age. Doctors in this sample prefer reading articles on the Internet, and read International more than local Journals.

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It is well known that medical knowledge is increasing at great speed<sup>1</sup>. Therefore it is important for the practicing doctors to update themselves with recent development in medical knowledge and technology. Doctors working in primary care are often blamed for not reading medical journals. A study showed that hospital doctors read more than doctors working outside hospitals<sup>2</sup>. Little is known about the reading habits and preferences of primary care doctors in Bahrain. Medical

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literature is one of the sources for doctors to obtain information, and more specifically they tend to rely on journal articles<sup>3,4</sup>.

Recognizing the need for doctors to continue updating their knowledge, many countries adopted a system of continuing medical education (CME). It consists of educational activities that serve to maintain, develop, or increase the knowledge, skills, and professional performance. The content of CME is that body of knowledge and skills generally recognized and accepted by the profession as within the basic medical science, the discipline of medicine, and the provision of health care to the public<sup>5</sup>.

One of the best systems of CME exists in the USA in which family physicians participate on a large scale. Proof of CME had been a US requirement since the 1970's as part of re-certification and of American Academy of Family Physicians membership (RCGP equivalent). State licensing of family physicians also require CME evidence (often 50 hours per year) to maintain privileges. Therefore CME accreditation became an accepted part of everyday professional practice.

In the USA, there are many external motivators for CME, they include tax benefits for independent family physicians, employment benefits, (financial, leaves, etc) for salaried. However, the evidence is that the stronger motivators are 'internal', for example, personal continuing professional development. CME is the responsibility to stay up to date and getting a break from practice and interaction with colleagues<sup>6</sup>.

CME is becoming an essential part of medical practice as it is considered a tool for quality, a fundamental right for doctors and an ethical obligation.

This study aims to find the frequency of reading medical journals among primary care doctor in Bahrain and their preference.

## **METHODS**

A self-administered, anonymous questionnaire was distributed among FPRP residents, family physicians and general practitioners. It was distributed in seven government health centers. During the months of March and April 2004, sixty copies were distributed. The questionnaire consisted of two parts, the first concerned with some personal characteristics of those surveyed. The second part addressed the frequency of reading medical journals, number of subscriptions and journals preferences.

## **RESULTS**

Out of the sixty questionnaires fifty-four were answered, with a response rate of 90%. The first three questions were concerned with some personal characteristics of those surveyed in the questionnaire. Forty-three (80%) of the sample were female doctors. Fifteen respondents (27.8%) were less than 30 years old. Twenty-eight (52%) fall in the age group of 31 years to 39 years. Eleven (20.4%) were above the age of forty.

Thirty-four (63%) were family physicians, 15 (27.8%) were FPRP residents and 5(9.3%) general practitioners.

The fourth question is: "*How many medical journals you are subscribed to?*"

Twenty-two (40.7%) answered: 'none', while 8 (14.8%) answered: 'one'. 'More than one' 10 (18.5%), 14 (25.9%) were subscribed on the internet.

If doctors were subscribed to a journal or more, they were asked to list them. (Table 1 shows the most frequent subscriptions).

Table 1. **The most frequent subscriptions**

<b>Name of the Journal</b>	<b>Number of subscribers</b>
Bahrain Medical Bulletin	5
British Medical Journal	5
American Academy of Family Physicians Journal	4
Bahrain Medical Society Journal	3
The Practitioner	2
Other Journals	13
Total	32

The number of subscriptions among doctors tends to increase with age especially in the age group above 40 years Fig 1.

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*Figure 1. How many journals you are subscribed to?*

The fifth and sixth questions were "*the last time they read a study*" and "*what the subject was*", they were also asked to mention the "*name of the author*", Fig 2.

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*Figure 2. When was the last study you read?*

Thirty-eight doctors (70%) mentioned the subject of the study they read, while 16 (30%) could not remember. Only 6 (11%) of them mentioned the name of the author, and 48 (89%) could not give the name.

The seventh and eighth questions were about the most interesting study they read in the last 12 months and whether it was on the internet or in a hard copy journal. The answer varied from not remembering the name of the study to mentioning the title, the author and the issue number. Thirty-one (57.4%) who answered this question claim to have read that study on the internet.

The ninth question was about doctors' favorite medical journals and why. The commonest preferred journal was the American Academy of Family Physicians Journal (AAFP), followed by the British Medical Journal (BMJ) Table2.

**Table 2. Doctors' favorite medical journals**

Name of the favorite journal	No.of doctors
AAFP	33
BMJ	18
Australian Family Physician	4
The Lancet	3
Bahrain Medical Bulletin	2
Canadian Family Physician	2

The commonest reasons for preference of these journals were as follows:

- Updated
- Evidence based
- Available on the web
- Free (AAFP)
- Relevant to practice
- Simple and comprehensive
- Providing management guidelines

The last question is "*Do you prefer subscribing to medical journals or reading articles on the internet?*" Results show that 31(57.4%) prefer to read articles on the internet, while 23(42.6%) prefer to subscribe to printed medical journals. Younger age group tends to favor Internet use as seen in fig3.

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*Figure 3. What do you prefer?*

## **DISCUSSION**

Fifty-four out of 60 doctors working in primary care answered the questionnaire of journal reading habits. Thirty-two (59.3%) doctors of respondents were subscribed to medical journals whether on the internet or hard copy journals, while the others were not subscribed to any medical journals 22 (40.7%).

Those who are subscribed were asked to list the name of journals they are subscribed to, only half of them gave names; this makes us suspect how genuine they were in answering this question.

This study shows that Bahraini doctors tend to subscribe more to international medical journals such as BMJ and AAFP Journal and a fewer number subscribe to local journals such as Bahrain Medical Bulletin and Bahrain Medical Society Journal.

As expected, the number of subscriptions among our respondents tends to increase with age of doctors, especially among doctors more than 40 years old.

Thirty doctors (55.6%) read their last study within the last six months, while 15 (27.8%) either did not remember or they read it more than a year ago. Nine doctors (16.7%) read it within 7-12 months. Although, most doctors mentioned the subject of the study, a minority mentioned the author's name, which makes it rather difficult to verify the existence of this study. These results indicate poor reading habits and doctors are not updating themselves with the recent advances as needed by the speed of the growth of information.

The most favorite journal among primary care doctors included in this sample is AAFP journal, which is available free on the internet, evidence based, updated and provides clinical guidelines, which are very useful. Second comes the BMJ as the most favorite journal.

Twenty-three (42.6%) of our respondents prefer to read hard copy journals and 31(57.4%) prefer to read articles on the internet. Comparing this result with a study done in Chicago, seventy one percent of respondents indicated a preference for online than printed journals<sup>7</sup>.

The study showed that younger age group prefers using the internet, while in another study, age of their respondents (medical faculty) did not appear to influence the choice of print or electronic format<sup>8</sup>. Nylenna believes that doctors using Internet professionally had longer working hours, read more medical literature and participated more often in CME activities than did non-users<sup>9</sup>.

Many factors play a role in making online journals more appealing to readers: convenience, full text availability, relevant links and time<sup>3,7,9</sup>. Nevertheless, many doctors are still in favor of hard copy or print journal for the reason of having higher quality text and figures<sup>10</sup>.

Northup conducted a survey, in which he studied information searching behavior of 293 medical students, residents and physicians; he concluded that convenience and habit play the most important roles in the choice of resources for medical information<sup>12</sup>. That is true for most studies in this subject.

Forty-one percent of doctors are not subscribed to any medical journal in a country, which have few lectures, seminars and conferences. This would be considered a high number compared to the availability of facilities.

Because Bahrain has few medical lectures, seminars, and conferences yearly, subscription to medical journals becomes essential for upgrading knowledge of medical doctors.

It is estimated that four seminars in family medicine, very few lectures and one conference a year, are organized as part of continuous medical education in Bahrain. It has been noticed that the attendance is very poor for medical lectures, because there is no enforcement of CME. In general, many regular lecture and seminars were cancelled in Bahrain Medical Society and SMC.

It is important to establish an accreditation system in Bahrain to upgrade the medical knowledge of doctors rather than depending on doctors' goodwill.

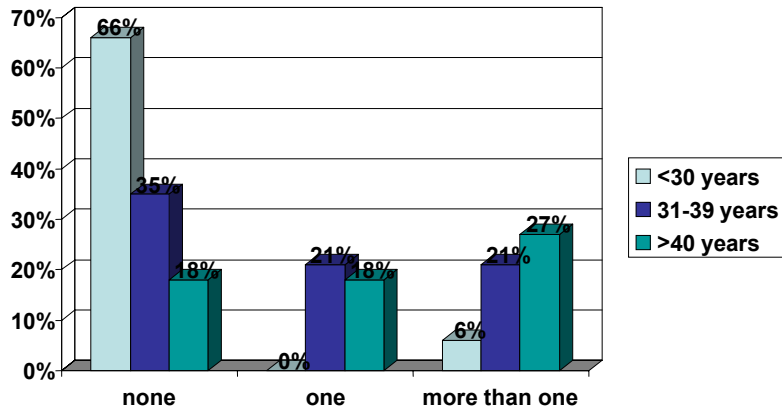
Introducing CME system in Bahrain would be of great importance. Funding should not be considered as an obstacle; in salary-based system the employer should be responsible for allocating the time and money necessary for adequate access to CME. For the self-employed doctors, the cost of CME should be taken into account when deciding the fees for service in their practice. There are many other resources of funding, e.g. pharmaceutical companies, other branches of industry or any external party; provided that the CME is fulfilling the quality standards and that the professional integrity of doctors is maintained<sup>7</sup>.

## CONCLUSION

**In spite of the limitations of this study (small sample size and lack of true randomization), this study provides preliminary data on which further research can be carried out. It was found that 32 (59.3%) of doctors working in primary care in Bahrain have subscriptions to medical journals whether on the Internet or as hard copy. Number of subscriptions tends to increase with age. Doctors in this sample prefer reading articles on the Internet; they read International more than the local Journals.**

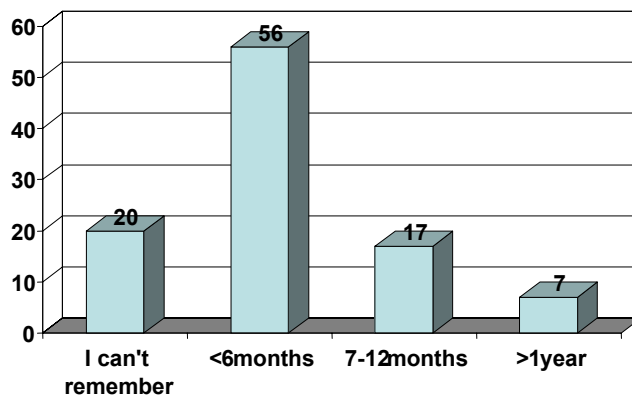
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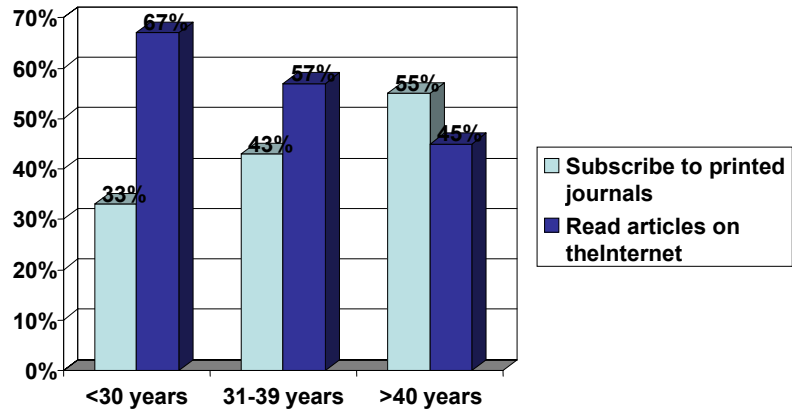
How many journals you are subscribed to?

Fig1



When was the last study you read?

Fig2.



What do you prefer?

Fig 3