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Drug information seeking behaviours of health care professionals in Iran

Drug
information
seeking
behaviours

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Abstract

Purpose – The purpose of this paper is to list the resources that Iranian health-care professionals used to access drug-related information, to know the features and types of drug information resources which were much more important for health-care professionals, the problems they encountered in seeking drug information and the way they organized and re-found the information that they had retrieved. Drug-related queries are one of the most common types of questions in medical settings.

Design/methodology/approach – This was a descriptive-analytical study conducted in Iran during 2014. The data collection tool was a self-designed questionnaire. Data analysis was conducted using Statistical Package for Social Sciences. Descriptive statistics and chi-square test were used to analyse the data and examine the research hypothesis.

Findings – Participants used books, drug manuals, search engines and medical databases more frequently, and less than half of them consulted colleagues to acquire drug-related information for clinical, educational and research purposes. Handheld computers were used by most participants to access and store drug information. Lack of access to drug information and lack of enough time were the main obstacles in seeking drug information. A significant association (p value = 0.024) was detected between organizing and re-finding information for future uses.

Originality/value – This study investigated drug information-seeking behaviours of health-care professionals and the way they managed this information in a developing country that lacks necessary information technology infrastructures. Training programmes are required to help health-care professionals to find and access reliable and up-to-date drug information resources and to more easily re-find the found drug information for future uses.

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Introduction

Seeking drug information properly to answer clinical questions helps to enhance patient care by reducing medication errors. All health-care professionals are usually faced with drug information needs related to the treatment of their patients. There are many ways in which health-care professionals can acquire drug information. They use printed and electronic resources to meet their drug information needs. However, with the emergence of the Internet in 1990s, health-care professionals began using the Internet and medical databases such as Medline to seek drug information (Iyer, 2011). With the advent of point-of-care mobile information technologies in the later decade, physicians preferred to use handheld computers such as Personal Digital Assistants (PDAs), tablets and smartphones to access medical and drug information, as they felt that the use of these tools has reduced medical and medication errors and has improved their clinical decision-making (Tahamtan and Sedghi, 2014; Iyer, 2011; Rothschild *et al.*, 2002). The use of handheld devices has become popular in both industrial and developing countries to access clinical and drug information at the point of care (Sedghi *et al.*, 2012).

Seeking appropriate drug information at the time of need increases clinicians' clinical knowledge and is an important and crucial activity for health-care professionals, as this information keeps them up-to-date on the latest medications available for patients' treatment and patients' care. "Seeking this information is essential for problem-solving and is an important step in the complex process that begins with identifying the question and goes all the way to finding the best possible answer" through the many various resources which are produced for these purposes (Iyer, 2011).

Pharmaceutical-related knowledge is increasingly growing, which has resulted in an ever-increasing variety of medications for health-care professionals to use for patient care purposes. It is difficult for this group to keep themselves up to date on the prescribing requirements of drugs, especially newly produced drugs (Rothschild *et al.*, 2002). Therefore, capturing knowledge about drug information-seeking behaviours, i.e. the best preferred resources and methods of acquiring drug-related information is necessary among different communities to facilitate access to drug information.

Moreover, due to information overload and time limitations in seeking medical information, the two activities of keeping and organizing information are crucial for health-care professionals to more easily re-find the found information when needed in the future. A prime characteristic of human behaviour is to obtain and keep valuable items, which are two sub-activities of Personal Information Management (PIM). PIM is the act of managing personal information and is a term used to describe collecting, storing, organizing and re-finding objects by individuals in their personal settings (Boardman and Sasse, 2004).

Thus, as drug-related queries are one of the most common types of questions in medical settings, the aim of this study is to list the resources that health-care professionals use to access pharmaceutical information to aid their decision-making when prescribing. Moreover, we investigated the way health-care professionals stored and organized the information and their ability to easily re-find the stored drug information for future uses.

Thus, the aim of this study was to:

- identify the resources used by health-care professionals to access drug information;
- recognize the features of drug information resources which were more important for health-care professionals;
- identify the problems that health-care professionals encountered in accessing drug information;
- identify the type of drug information that health-care professionals looked for when prescribing; and
- determine the way health-care professionals stored and organized drug information.

We also tested the following hypothesis:

- H1.* There is a relationship between organizing drug information and re-finding found information for future uses.

Background

Human information behaviour is studying the behaviour of people as they search for information. Studies in this area contribute new knowledge and insights and identify requirements for the design of information systems, which can support the work of different groups (Fidel, 2012). As individuals can now search for large amounts of information via electronic resources, it has become necessary to organize the retrieved information effectively in such a way that they can find it when needed. Furthermore, because of the emergence of new information technologies, and new methods for seeking, acquiring and retrieving information, individuals are today more exposed to irrelevant or unnecessary information. Thus, to deal with information overload, a PIM strategy is necessary (Edmunds and Morris, 2000).

Many systems and tools have been developed to help individuals manage the retrieved information. Individuals use personal computers, handheld computers, smartphones and PDAs to store and manage their personal information. PIM refers to the activities of acquiring, creating, storing, organizing, maintaining, retrieving, using and distrusting the information needs to support personal or work-related roles and tasks. PIM encompasses a wide range of electronic and paper-based materials. The hope is that developing PIM will help individuals to have the right information at hand to get things done (Jones, 2007). Health-care professionals who are busy and deal with a large amount of information can use modern PIM technologies and effective techniques for improving the efficiency of their personal information (Abdollahi *et al.*, 2012).

A number of studies have investigated the information-seeking behaviours of health-care professionals in developing countries. For instance, one study in Bahir Dar, Ethiopia, indicated that only less than half of the health-care workers had access to the Internet when seeking information (Andualem *et al.*, 2013), while another study in a teaching hospital in Ibadan, Nigeria, indicated that the use of the Internet for health information seeking for patient care was popular among physicians (Ajuwon, 2006). Moreover, Mazloomdoost *et al.* (2007) indicated that time limitation and availability of resources were the main obstacles to residents' access to information resources in Iran,

which is a low-income country with limited Internet access. Cost was also reported as a major limitation for accessing electronic resources such as PDAs.

Drug information-seeking behaviours of physicians, nurse practitioners, pharmacists and individuals have been reported in some recent studies (Murphy *et al.*, 2006; Hall *et al.*, 2003; Coleman, 2003; Liu *et al.*, 2005; Sadeghi Ghiasi, 2007; Wong *et al.*, 2009; Thomas *et al.*, 2011; Iyer, 2011; Kjos *et al.*, 2011); however, there is little research on this topic, especially in developing and low-income countries. A number of related research on drug information seeking are summarized in Table I. As this table indicates, drug information is available from a number of different resources including paper-based and electronic resources, pharmaceutical industry representatives and health professionals.

Pharmaceutical information is created and used by different groups including pharmacists, doctors and other health-care professionals, pharmaceutical industries and the general public. (Bawden and Robinson, 2011). Many features of these resources are important for consumers including the currency which is an attribute to be associated with reliable information (Hall *et al.*, 2003). This feature is also important for patients seeking drug information on the Internet (Coleman, 2003).

Previous research indicated that before the advent of Internet and medical and drug databases, health-care professionals usually acquired drug information from printed materials such as books and journals as well as colleagues. However, in recent years, the use of the Internet and medical databases has increased due to easy access to information resources (Iyer, 2011). Many studies indicated that health-care professionals used the Internet for meeting information needs. For instance, a survey indicated that the majority of family physicians used the Internet regularly as an information source. Almost half of family physicians used handheld computers, most often for drug reference (Bennett *et al.*, 2005). Other studies have also reported a rapid growth in the use of PDAs for accessing drug resources for patient care both in developed and low-income countries (Sedghi *et al.*, 2012).

As health-care professionals in different settings may have different information-seeking behaviours, and because there is limited relevant literature about drug information-seeking behaviours in developing countries, we chose a medical university in Iran to conduct this study to fill this gap and add information to the literature. This study provides insights into drug information seeking in a setting that lacks information technology infrastructures and has low Internet access, which is not previously reported. Furthermore, although drug information-seeking behaviours of health-care professionals have been studied, the way they organize, store and re-find the drug information previously found is not as well understood.

Methodology

This was a descriptive-analytical study conducted on 144 health-care professionals in 2014.

Setting

We chose Hormozgan University of Medical Sciences (HUMS) which is located at Hormozgan province at the southern coast of Iran, as the site of the study. Hormozgan is one of the deprived regions in Iran with a lack of necessary information technology infrastructures and with low Internet access which makes it a good setting to conduct

Serial no.	Reference	Participants and setting	Methodology	Important notes
1	Hall <i>et al.</i> (2003)	22 community nurse prescribers and 5 prescribing leads in England	Interview	Printed materials (journals and British National Formulary), professionals, pharmaceutical company representatives, community pharmacists, nurse specialists, colleagues and general physicians were the most used drug information resources There is little pharmacological information in formats that are accessible to nurse prescribers Previous vetting, up-to-date and used by other health-care professionals were the attributes mentioned to be associated with reliable information Doctors, pharmacist, nurse, family/friends and Internet were the most used drug information resources An information leaflet can guide patients through its variable information quality It is essential to educate patients on how to access high-quality drug information from the Internet Directing local patients to high-quality Web sites and providing them with assessment criteria for online information help them meet their drug information needs from the Internet Individuals are more likely to have intentions to seek information from physicians Pharmacists are the most likely suggested source to patients who seek drug information Internet is a source of information which is accessible at any time and is usually used for self-education "The strongest predictors of intention to seek information from various sources were self-identity with respect to physicians, subjective norm with respect to pharmacists, and attitude toward the behaviour with respect to the Internet"
2	Coleman (2003)	25 local patients in UK	Survey	
3	Liu <i>et al.</i> (2005)	607 osteoarthritis patients	Two self-administered mail surveys	

(continued)

Table I.
Studies on drug
information seeking
among health-care
professionals and
individuals

Table I.

Serial no.	Reference	Participants and setting	Methodology	Important notes
4	Murphy <i>et al.</i> (2006)	27 nurse practitioners and physician in Canada	PDA- and Computer-based survey	Printed materials, health professionals (specialties and pharmacists), and online/electronic resources were the most to least preferred means to access drug information Compendium of pharmaceuticals and specialties and pharmacists ranked highly for frequency of use, usefulness, accessibility, credibility and current/timeliness The use of computers and PDAs was limited for accessing drug information Education regarding available drug information resources may facilitate use of computer and PDA resources to access drug information
5	Sadeghi Ghiasi (2007)	100 physicians in Iran	Online survey	Printed resources (textbooks and Iran Generic Drugs), electronic resources (Medline and Medscape), pharmacists and newspapers were most used drug information resources Lack of access to drug information resources and lack of enough time were reported to be the main limitations of accessing drug information Reference texts and search engines were more frequently used for accessing drug information
6	Wong <i>et al.</i> (2009)	156 pharmacists in Singapore	Online survey	Pharmacists preferred to use search engines because these tools were easy and fast to use and provided reliable and up-to-date information Information on illicit drugs should be delivered to athletes in a specific and relevant manner
7	Thomas <i>et al.</i> (2011)	974 Australian elite athletes	Qualitative – quantitative study	Providing reliable information via the Internet may be an effective means by which to educate athletes on the effects of illicit drugs Respondents preferred to use modern sources of drug information than traditional ones
8	Iver (2011)	85 clinicians and pharmacists in USA	Cross-sectional observational survey – an electronic survey tool	
9	Kjos <i>et al.</i> (2011)	40 adult patients in USA	Interview	Health-care professional or lay social network sources were the most used drug information resources Social network contacts are used to acquire medication information, which may play a role in how patients apply this information Lay sources provided patients affective information such as personal experiences and beliefs or attitudes as well as factual information

this study. Data were collected from three main teaching hospitals at the university which were: Shahid Mohammadi, Shariati and the Pediatrics hospitals.

Samples

The questionnaires were sent to a randomly selected sample of users. The study instrument was distributed to 180 health-care professionals including faculty members, pharmacologists, residents, medical interns and physicians. Of those, 151 respondents returned the questionnaires. Seven questionnaires were omitted from the study due to lack of enough information and others (144) were included in our data analysis.

Study instrument and data collection

We used a self-designed survey questionnaire to identify the drug information-seeking behaviours among health-care professionals. This questionnaire included 16 questions (see appendix). We investigated the validity of the study instrument by asking for the viewpoint of two specialists in the field of librarianship and medical information sciences, two pharmacologists and one physician at the HUMS. Minor changes were made accordingly. To calculate the reliability of the instrument, 30 persons of the study population filled the questionnaires. These were a subset of the 144 participants. We used Cronbach's alpha to calculate its reliability, which was indicated to be 0.87.

Data analysis

Data were entered and analysed in Statistical Package for Social Sciences, (SPSS) version 16. Descriptive statistics were used to describe the resources used by health-care professionals and report other findings. Moreover, chi-Square test was applied to analyse the study hypothesis about PIM and re-finding information. The significance level was set at $p < 0.05$.

Findings

One hundred and forty-four health-care professionals, including 64 female (44.4 per cent) and 80 male (55.6 per cent), participated in the study. Participants used drug information resources for clinical purposes, educational purposes and research purposes, respectively. Respondents reported books and drug manuals, drug leaflets and journals as the most to least preferred printed resources to access drug information. Among the electronic resources, search engines such as Google, medical databases such as Medline, websites of drug companies, drug databases and electronic journals were used in the order of decreasing frequency. Furthermore, 46 respondents consulted colleagues, and only 12 health-care professionals accessed drug-related information from drug company representatives. As indicated in [Table II](#), health-care professionals usually accessed electronic resources via handheld computers (73.6 per cent).

Fifty-four participants (37.5 per cent) moderately preferred, 26 (18.1 per cent) highly preferred and 20 (13.9 per cent) very highly preferred to consult other professionals and colleagues when needing drug-related information ([Table II](#)). Fifty-six respondents (38.88 per cent) preferred to ask their drug-related questions from faculty members, 41 respondents (28.5 per cent) preferred to consult residents, 29 (20.1 per cent) preferred to consult physicians and 18 respondents (12.5 per cent) preferred to seek answers to their drug-related questions from pharmacists.

Purposes and resources used for obtaining drug information	Frequency	(%)
<i>Purposes of searching drug information</i>		
Clinical purposes	118	81.9
Educational purposes	49	34
Research Purposes	12	8.3
Clinical and educational purposes	22	15.3
Educational and research purposes	7	4.8
Clinical and research purposes	5	3.5
Clinical, research and educational purposes	4	2.8
<i>Printed resources</i>		
Books and drug manuals	100	69.5
Drug leaflets	22	15.3
Journals	10	6.9
<i>Electronic resources</i>		
Search engines	62	43
Medical databases	42	29.1
Drug databases	30	20.8
Websites of drug companies	24	16.6
Electronic journals	14	9.7
<i>Other resources</i>		
Consultation with professionals	46	31.9
Drug company representatives	12	8.3
<i>Devices used for accessing electronic drug information</i>		
Handheld computers	106	73.6
Personal computers	46	31.9
Personal computers and handheld devices	10	6.9
<i>Consultation with professionals</i>		
Very little	28	19.4
Little	16	11.1
Moderately	54	37.5
Highly	26	18.1
Very highly	20	13.9

Table II.
Resources used for
accessing drug
information and
purposes of seeking
this information

Participants usually preferred to be informed about new pharmaceutical products by e-mail (68 [47.2 per cent]), followed by drug leaflets (48 [33.3 per cent]), continuing education (46 [31.9]), workshops (40 [27.8 per cent]), pharmaceutical exhibitions (32 [22.2 per cent]) and via websites (30 [20.8 per cent]).

Sixty per cent of participants indicated that no access to drug information (41.7 per cent) and not enough time (41.7 per cent) were their major problems in accessing drug information, followed by a lack of search skills (36 [25 per cent]), a lack of skills in evaluating drug information reliability (32 [22.2 per cent]) and a lack of computer skills (28 [19.4 per cent]).

As indicated in Table III, respondents usually needed information about dosage, adverse effects, prescription, drug interactions, drug effects, drug safety, general information and clinical trials of a drug.

Reliability of the information was very important for 76 participants (52.8 per cent) when seeking drug information. Currency and accessibility were very important for 72 (50 per cent) and 64 health-care professionals (44.4 per cent), respectively. The details of drug information were very important for 34 respondents (23.6 per cent). Twenty-six participants (18.1 per cent) mentioned that the form of drug information (printed or electronic) was a feature which was very important for them. Furthermore, the reputation of drug producer and language and drug information was very important for 22 (15.3 per cent) and 20 (13.9 per cent), respectively (Table IV).

Fifty-eight (40.3 per cent) respondents used handheld computers to store drug information and 58 (40.3 per cent) stored drug information in printed format. Furthermore, personal computers (54 [37.5 per cent]), external hard drives (46 [32.4 per cent]), e-mail (28 [19.4 per cent]) and CDs/DVDs (2 [1.4 per cent]) were other tools used for storing drug information. Only 15 participants uniquely used printed and not electronic tools to store drug information.

The majority of respondents (88 [61.1 per cent]) did not organize drug information, and 56 of them organized this information (38.88 per cent). Thirty-two of those 56 health-care professionals organized drug information according to the generic or trade name of drugs, 10 participants according to the name of drugs producers and 14 participants organized this information based on the disease name such as “breast cancer drugs”. Moreover, 96 respondents (67.6 per cent) claimed to be able to find this information again when needed in the future, while, 42 respondents (32.40 per cent) could not re-find this information later.

We tested the study hypothesis to know if there was any relationship between drug information organization and re-finding found information. A chi-square test ($df = 1$,

Table III.
Types of drug
information used by
health-care
professionals

Type of information	Frequency	(%)
Dosing	122	84.7
Adverse effects	121	84.0
Prescription	117	81.2
Drug interactions	114	71.1
Drug effects	96	66.6
Drug safety	85	59
General information	83	57.6
Clinical trials	60	57.6

Table IV.
Features of drug
information
resources which were
important for health-
care professionals
when seeking drug
information

Features	Reliability		Currency		Details		Accessibility		Form		Reputation		Language	
	No.	(%)	No.	(%)	No.	(%)	No.	(%)	No.	(%)	No.	(%)	No.	(%)
Very important	76	52.8	72	50	34	23.6	64	44.4	26	18.1	22	15.1	20	13.9
Important	16	11.1	36	25	28	19.4	48	33.3	38	26.4	28	19.4	40	27.8
Moderately important	40	27.8	24	16.7	52	36.1	12	8.3	34	23.6	18	12.5	44	30.6
Of little importance	10	6.9	4	2.8	16	11.1	4	2.8	18	12.5	28	19.4	12	8.3
Unimportant	16	11.1	8	5.6	14	9.7	16	11.1	28	19.4	20	13.9	28	19.4

$n = 144$, p -value = 0.024) indicated that there was an association between organizing drug information and re-finding the information again.

Data analysis revealed that those health-care professionals who had organised the drug information that was previously retrieved and stored were 2.25 times (odds ratio calculation) more likely to re-find the information successfully than those who did not organise the found information.

Discussion

Drug information-seeking behaviours of health-care professionals and the way they managed this information were assessed in the study. This is one of the first studies to investigate PIM of drug information among health-care professionals in a setting where handheld devices are popular, but access to the Internet and some drug information sources may be constrained. The setting also demonstrated that personal advice depended on the availability of relevant professionals.

Results showed that a variety of resources were used, both paper and electronic. Less than half the respondents consulted colleagues, and most participants preferred to ask faculty members about drug queries. The majority of respondents usually used handheld computers to access and store drug information. Lack of access to drug information and lack of time were the main obstacles in seeking drug information. Respondents usually needed pharmaceutical information about dosing, adverse effects, prescription and drug interactions. Validity, currency and accessibility were the main features of drug information resources, which were very important when seeking drug information. Respondents looked at drug information for clinical, educational and research purposes. Although the majority of participants did not organise the found drug information, those who did organise the drug information were more likely to re-find this information in the future.

In our study, health-care professionals more frequently used drug manuals and text books, search engines and medical databases to access drug information. Another study in Iran also indicated that paper-based drug information resources (89.4 per cent) were the most and pharmacists (33.8 per cent) and newspapers (33.4 per cent) were the least used resources by Iranian physicians. This study also indicated that medical databases were the most used electronic resources. In Total, the use of electronic resources and Internet was lower than 30 per cent in this study (Sadeghi Ghiasi, 2007). Moreover, one study in Singapore indicated that reference texts were the most frequently used type of drug information, and few pharmacists (20) used search engines to seek drug information (Wong *et al.*, 2009). These findings were consistent with our study. The use of printed materials to access drug information in some previous studies was shown to be higher than that of electronic resources. Although a concern about the reliability of Web-based drug information has been raised among users (Menon *et al.*, 2003), search engines such as Google were the most used electronic resources in our study. This might be due to the lack of enough knowledge and familiarity with other reliable and current resources. Moreover, as medical and drug databases such as Up-To-Date database are continually updated and provide users with more reliable information, participants preferred to use these resources to seek drug information. There are many factors, including socio-cultural characteristics of each community, which might influence physicians' decision-making and prescription behaviours. One may argue that the dominant culture in Iranian medical settings is that the drug information needs which

can be accessed via text books and drug manuals are more reliable than medical and drug databases. Moreover, this may also be argued that as developing countries are in the first steps of the integration of health information technologies into medical settings, and due to the low speed of the Internet in developing countries, the use of electronic drug information resources is not very popular in these countries.

Health-care professionals, specifically the pharmacists, are the resources which are frequently used for acquiring drug information. Consulting pharmacists for seeking drug information have been reported popular in the Canadian and American contexts (Murphy *et al.*, 2006, DeLmore *et al.*, 2011). Their advice about the advertised drugs can be viewed as a part of pharmaceutical care. Pharmacists are also the most likely resource for patients seeking drug information. It is suggested that their advice is less costly to patients compared with physicians (Liu *et al.*, 2005). The majority of participants in our study consulted faculty members, while only 12.5 per cent preferred to consult pharmacists, which may be due to the high workload of pharmacists in Iranian medical settings and hospitals, as checking all the given prescriptions is not possible for hospital pharmacists. Maybe, for this reason, it is difficult for health-care professionals to access and contact pharmacists in Iranian hospitals.

The majority of participants used handheld computers to access mobile drug applications. More than 70 per cent of them searched and 40.3 per cent stored drug information via their handheld computers, reflecting research in both developed and low-income countries, specifically for seeking drug information (Iyer, 2011; Sedghi *et al.*, 2012). Handheld computers may influence physicians' practice specifically by improving quality of care and patient outcomes (Murphy *et al.*, 2006). Preferences for using a handheld computer for our respondents seem to be influenced by convenience and availability of mobile drug resources in Iranian medical settings.

Unlike other studies (Murphy *et al.*, 2006; Hall *et al.*, 2003; Prosser *et al.*, 2003), pharmaceutical companies were used by few respondents (8.3 per cent) to acquire drug information. Some health-care professionals may declare that pharmaceutical companies are convenient sources of information and the information provided by them is useful which might influence their prescription, while others may have opposite opinions.

Though lack of skills in evaluating drug information reliability was a limitation in seeking drug information, this feature of drug resources was very important for about half of health-care professionals in our study. Moreover, reliability of drug information resources was very important for more than half of respondents. Currency and accessibility were other features of drug information with very much importance for about half of health-care professionals in the current study. Other features such as the form of information, reputation of drug producer and language were of less importance when they wanted to evaluate the drug information resources. This finding might be considered predictable, as the format (printed or electronic) or language of the information acquired might well be less important than other features. In Iran, like many other countries, physicians prescribe national and foreign drugs which are produced by many different companies and, maybe for this reason, the participants did not trust drug producers as much as other drug information resources.

The majority of participants could re-find the found drug information when needed in the future. Those participants who had organised the drug information they had found, were more likely to re-find the information successfully. People usually seek

information to re-find or check out the information previously acquired. If drug information which is frequently used by health-care professionals at the point of care is not managed in a proper manner, re-finding this information is time consuming and may not be possible in urgent situations. A previous study in Iran indicated that PIM is a missing link in Iranian medical settings in which training programmes are required to help health-care professionals to more quickly and easily re-find the found drug information for future uses (Abdollahi *et al.*, 2012). Because more than half of respondents in our study did not organize the drug information they found, there appears to be a gap in PIM techniques for such information, as electronic access to the required information may not be possible at the time required.

Limitations

The results of our study are difficult to generalise, as only physicians of one university of medical sciences were sampled. Physicians in other settings may have different drug information-seeking behaviours.

Conclusion

Despite the existence of many modern sources of drug information such as mobile applications, many health-care professionals used printed resources to access drug information. Among the electronic resources, the majority of health-care professionals used search engines to seek drug information. Handheld computers were frequently used by participants to seek and store drug information.

Participants had little apparent knowledge about PIM techniques. Thus, information professionals may need to emphasise the PIM techniques in information literacy programmes, particularly in settings where it may be difficult to relocate the electronic information previously retrieved. This would help the health-care professionals to re-find drug information for future use.

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