

Information sources regarding common cold medicines in Latvia

IEVA SALMANE-KULIKOVSKA¹, SIGNE MEZINSKA²,
SIGNE DOBELNIECE³, RITMA RUNGULE³

Department of Doctoral Studies, Riga Stradiņš University, Riga, Latvia

Faculty of Humanitarian Sciences, University of Latvia, Riga, Latvia

Department of Sociology and Psychology, Riga Stradiņš University, Riga, Latvia

E-mail: ieva.salmankulikovska@gmail.com; signeme@hotmail.com; signe.dobelniece@llu.lv; ritma@lza.lv

Changes regarding patient empowerment are taking place nowadays. Users of medicines are becoming more educated, confident and want to be involved in their health-care issues. Cases when users of medicines do not consult medical specialists but take decisions based on their own knowledge or other sources show the global tendency of self-medication. Self-medication is easy to be implemented in cases when illness symptoms are not heavy, e. g., conventional common cold.

A quantitative study in Latvia, examining information sources during the previous common cold episode and the opinion about the availability of non-commercial information for medicine users, showed that “friends and relatives” were consulted most often. Medical specialists took the fourth and the sixth place, respectively. The research data have shown that people feel they lack independent (non-commercial) information about medicines for treating or relieving symptoms of common cold as only less than one fifth of the population consider such information fully available in Latvia.

The global tendency of self-medication needs to be supported by healthcare professionals offering consumers good quality information about medicines. Medical nurses involved into patient consultations about common cold related issues can considerably facilitate the work of physicians. A non-commercial source about healthcare-related issues, including medicines, has to be established.

Key words: medicine information sources, common cold, self-medication, OTC medicines, rational use of medicines

Abbreviations: OTC – over-the-counter, non- prescription (medicines), GP – general practitioner, PHC – primary health care, WMI – written medicines information.

INTRODUCTION

The conventional paternalistic patient–doctor communication pattern is experiencing the process of change. The role of patients in their own healthcare is increasing – patients are becoming more informed, educated and self-confident “experts” (Gabe 2004: 99) willing to take decisions concerning their health. They want to be informed about “their condition and the treatment options, they want clinicians to take account of their preferences [...] and to be actively engaged in the decision-making process or even to take the decision themselves” (Coulter 2005: 1200–1201).

Seeking information, consumers consult different sources – not only medical professionals but also media, internet, pharmacists, friends, relatives, etc. As stated by Conrad, “[...] the “golden age of doctoring” has ended, and a buyer-driven system is developing. Physicians certainly

maintain some aspects of their dominance, but large numbers of patients begin to act more like consumers in seeking medical services and information" (Conrad 2007: 15). Bradley names it a shift from primary health care to "self-care" (Bradley 1996: 837). Self-care is characterized as a process in which "individuals undertake activities with the intention of improving health, preventing disease, limiting illness and restoring health after injury or illness", and the concept of self-medication is encompassed into this broader process (Hughes et al. 2001: 1027).

In cases of self-medication, treatment is performed "with medicines especially designed and labeled for use without medical supervision and approved as safe and effective for such use" (World Self-Medication Industry 2010). This group of OTC medicines (including analgesics) comprises more than a half (52%) of all OTC medicines available in Latvia (Ozolina 2006: 14).

There are many benefits of self-medication. It decreases the workload of the medical staff and improves the overall health level if medicines are used rationally (Coulter 2005: 1200–1201; Ozolina 2006: 28; Wazaify 2005: 170).

The present research focuses on the analysis of the medicine information sources used in cases of common cold, which is a non-heavy, self-limiting illness (Heikkinen 2003: 51) and therefore is often a subject of self-medication.

The present research has also aimed to clarify the opinion of people in Latvia regarding availability of non-commercial (independent) information about common cold treatment or symptom-relieving medicines. An analysis of medicine information sources and suggestions for improving the quality of these sources are presented.

METHODS

A quantitative survey (December 2009) using combined CAWI (*computer-assisted web interviews*) recruiting respondents aged 18–54, and CATI (*computer-assisted telephone interviews*) recruiting aged respondents (age 55–74), containing identical questions without visual aids ensuring equal validity of the results, was performed. A sample ((age 18–74) n = 1 700, statistic error of the sample ±2.38% with the probability level 95%) corresponding to the general set of population was asked to evaluate the possibility to obtain non-commercial, independent information about medicines provided for treating or relieving symptoms of common cold.

An additional sample (n = 851) was selected using the filter question: "Have you experienced symptoms of common cold within the period of the last three months?" This sample consisted of 373 men and 478 women and included 549 Latvians, 233 Russians and 69 persons of other nationalities. The number of respondents with higher education was 397, secondary 400, elementary 54. Respondents of this sample were asked the question about the choice of information sources during the latest case of common cold. The analysis, using SPSS 17.0 data analysis program, included descriptive statistics and non-parametric analysis – the chi-square test and Spearman's rank order correlation test.

RESULTS

As is demonstrated in Fig. 1, the most important information source during the previous illness episode was "relatives and friends" (45.2%). This information source was most frequently used by young (aged 18–24) people (25.7%), male respondents (50.1%) and most often in the group of respondents with elementary education (61.1%). Pharmacists took the second place (37.3%), having been more often consulted by women (65.9%). WMI, including the internet, was in the third place, most often consulted by the age group of 25–35 (25.1%) and by women (67.9%), as well as in the group of respondents of other than Latvian or Russians nationalities

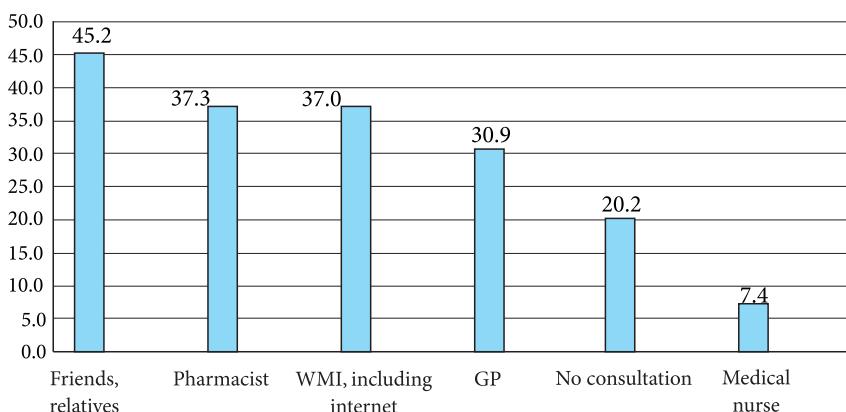


Fig. 1. Information sources in the latest episode of common cold (%), n = 851

(56.5%). WMI and GP were most preferred sources in the group of respondents with higher education (42.3%). GPs and physicians took the fourth place according to the importance and were preferred by women (62.4%). Medical nurse was the least frequently consulted information source (7.4%). From the respondents (n = 679) that had consultations, each respondent selected on average 1.97 information sources.

Spearman's rank order correlation test shows that although there are statistically significant correlations between several information sources, the rho coefficient shows no tendency of correlation among these consultation sources (Table). This gives an evidence that those who have consulted, for instance, GP cannot be claimed to have a tendency of preference of any of the sources. The only case of a negative correlation concerns the sources "friends, relatives" and "WMI, including internet", suggesting that the respondents who have consulted friends and relatives are not likely to have considered "WMI, including internet".

Table. Spearman's rank order correlation of information sources during the latest episode of common cold, n = 851 (rho < 0.25 – weak correlation, 0.25 < rho < 0.75 – medium correlation, rho > 0.75 – strong correlation)

			GP	Nurse	Pharmacist	Friends, relatives	WMI, incl. internet
Spearman's rho	General practitioners	Correlation	1.000	0.180	0.063	0.031	0.156
		Significance	n/a	0.001	0.065	0.373	0.001
	Medical nurses	Correlation	0.180	1.000	0.079	0.032	0.025
		Significance	0.001	n/a	0.021	0.358	0.468
	Pharmacists	Correlation	0.063	0.079	1.000	0.110	0.210
		Significance	0.065	0.021	n/a	0.001	0.001
	Friends, relatives	Correlation	-0.031	0.032	0.110	1.000	-0.457
		Significance	0.373	0.358	0.001	n/a	0.001
	WMI, incl. internet	Correlation	0.156	0.025	0.210	0.139	1.000
		Significance	0.001	0.468	0.001	0.001	n/a

The survey data demonstrated also the overall opinion about the availability of independent (non-commercial) information about medicines used in cases of common cold. Only 19.7% of respondents considered such information as fully available in Latvia (Fig. 2).

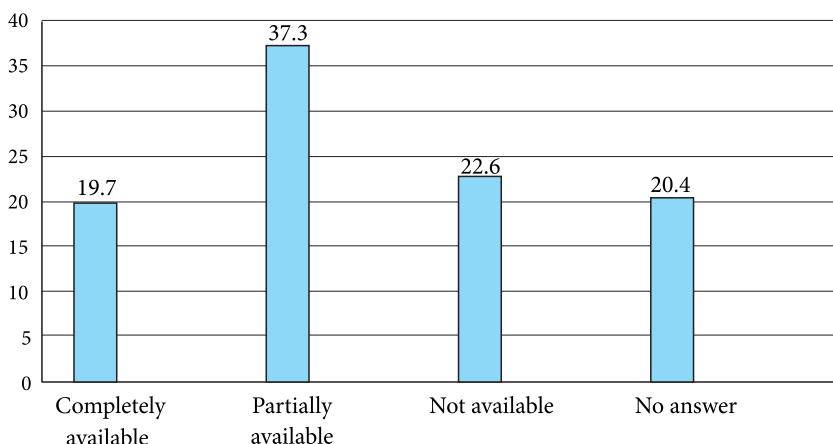


Fig. 2. Availability of non-commercial information about medicines in Latvia (%), n = 1 700

DISCUSSION

As only a relatively small part of respondents (19.7%) have mentioned that independent information about medicines is fully available, there is much space for improving information delivery to medicine users. The further part focuses on the analysis of information sources used by respondents during the last episode of common cold, and examines the possibilities of improving the quality of these sources.

Friends, relatives

This source was consulted most often during the previous episode of common cold. The importance of friends and relatives as an information source is explained by the theory of illness behaviour, stating that it is unusual for a person to seek medical help without first discussing symptoms with at least one lay person. This line of communication about illness was termed “the lay referral system” and has been proven to influence illness behaviour (Gabe 2004: 67; Jones, Creedy 2008: 20).

Friends and relatives may often be a helpful information source, especially in cases when illness symptoms are not severe. However, in cases when there are no medical specialists consulted, the overall knowledge level about medicines and treatment options of the ill person is a key issue. Self-medication can be safe if people are well informed (WHO 2009: 19).

The European Health Consumer Index (EHCI) shows that patient rights to information and availability of information have been defined as 75 points out of 150 (ranks among the second lowest result) (Eisen 2010). The research done in Latvia in 2006 also confirms that the knowledge and information level of people in Latvia is very distinctive and cannot guarantee safe self-medication (Ozolina 2006: 27).

Pharmacists

Currently, there are 787 pharmacies operating in Latvia. The average number of pharmacists per one pharmacy in Latvia is 1.99. About one half of the total number of pharmacies in Latvia are a property of 16 groups of pharmacies, partially owned by medicine wholesalers (State Agency of Medicines 2010). There have been suggestions that the reputation of

pharmacists needs to be improved so that they should be not perceived as sales-persons trying to maximize the profits of pharmacies' owners (Ribkinska 2006). To avoid the domination of commercial interests and to protect medicine consumers, the recently passed amendments to the Pharmaceutical Law stipulate that either at least 50% of the pharmacy should be owned by a pharmacist, or at least half of the pharmacy board members have to be pharmacists (*Amendments to the Pharmaceutical Law, Article 1*) (Parliament of the Republic of Latvia 2010).

The pharmacist's advice takes the second place according to the importance among the population in Latvia. The significance of the pharmacist's advice is proven true also by the previous studies: every third or fourth person was asking pharmacist's advice before purchasing OTC medicines (Ozolina 2006: 23). The pharmacist's role in the self-medication process is evident, especially if PHC specialists are not consulted. Many experts have pointed out the necessity of cooperation among patients, pharmacists and PHC specialists, indicating particularly the need of "greater cooperation between doctors and pharmacists to ensure that patients get the best possible advice, both on diagnosis from doctors and on medication from pharmacists" (Bradley 1996: 312–313), especially in cases when a patient uses different medicines, in order to avoid adverse drug reactions and to be aware of the compatibility of different medicines (Hughes et al. 2001: 1034). It is admitted that there is a lack of motivation in respect to cooperation between medical specialists and pharmacists in Latvia (Ozolina 2006: 27).

Evidence suggests that pharmacists should be more pro-active and patient-centered (Ramstrom et al. 2006: 248). Bradley suggests creating a special mechanism for rewarding pharmacists for their professional advice and patient-centered approach, as well as for their participation "in more joint activities in undergraduate medical teaching, vocational training for general practitioners, and continuing professional development" (Bradley 1996: 836). The training of communication skills for pharmacists has evidenced positive results in respect to consulting patients about OTC medicines (Watson 2007: 450).

Written information on medicines

Written sources of information about medicines for medicine users in Latvia are the following (Ozolina 2010: 73):

- advertising brochures of medicines;
- newspapers, magazines;
- information on the Internet;
- drug labeling and package leaflets included in each packing of medicines, elaborated by the State Agency of Medicines.

In Latvia, written information about medicines is provided to patients mainly by GPs, healthcare-related institutions and the pharmaceutical sector. This information is distributed to medicine users through posters and booklets available in health care facilities.

Other written information on medicines is supplied by different commercially owned magazines and journals, including also advertising material. There is one non-commercial regularly published bulletin ("Cito") oriented rather to healthcare professionals than to consumers.

Different types of information are available on the Internet. It contains both non-commercial information and advertising material. In search of information medicine users have to look through different web pages. As there are no standards in respect to displaying information on the internet, it is difficult for consumers to judge about the quality of the material. "The

internet holds enormous possibilities for the future of on-line health care; however, at present, it should be used as an additional, not as a primary, source of information" (Pandolfini et al. 2000: 1). There is no comprehensive internet source for consumers in Latvia, addressing all the health-related topics, including medicines.

According to the recent research data, a notable part of people in Latvia (61.0%) are willing to read drug labeling and package leaflets, but there is an opinion that they are difficult to be understood due to the complex and specific language (Ozolina 2010). The comprehensibility of information is a key issue in ensuring the rational use of medicines. "Consumers need access to accurate and understandable information about the potential benefits and risks of medicines [...] including side-effects" (Fresle 1997: i).

There are also health-related nongovernmental organizations, societies and associations supposed to protect the interests of patients, to support and educate them. Unfortunately, many of the societies and associations are negatively influenced by the market interests of pharmaceutical and other commercial companies and individuals (Tragakes et al. 2008: 29–49). However, the ability of the non-governmental sector to influence the healthcare policy is quite limited due to the limited financial resources and lack of experience.

Primary health care specialists (GPs and nurses)

Primary health care in its present form, upon undergoing different changes, is being implemented since the year 1999. According to the regulations, the PHC system may comprise GPs (family doctors, paediatricians or internists), doctor's assistants, medical nurses, midwives, dental specialists (*Regulations No. 1046 regarding amendments to the procedures for the organization and financing of health care, Article 20*) (Cabinet of Ministers of the Republic of Latvia 2009). In the context of the present research, PHC establishment is being referred to GPs and medical nurses.

There are currently 1369 PHC establishments in Latvia (Ministry of Finance of the Republic of Latvia 2009: 67). However, according to the statistics in the context of European states, the number of patients in Latvia per one GP is one of the highest, especially outside the capital (1 700–2 100 patients per one GP) (Ministry of Finance of the Republic of Latvia 2009: 68). The recently passed amendments to the Procedures for the Organization and Financing of Health Care by the Cabinet of Ministers provide for easing the process of opening new PHC establishments (*Regulations No. 1046 regarding amendments to the procedures for the organization and financing of health care, Article 70*) (Cabinet of Ministers of the Republic of Latvia 2009).

The number of medical nurses in Latvia (451 nurses per 100 000 population in the year 2009) is lower than the average for the EU Member States (The Centre of Health Economics 2010: 5). This suggests that physicians assume some part of nurses' duties, influencing both the quality of physicians' work and the care of patients. "It is estimated that there is a shortage of approximately 3 000 nurses in Latvia. In total, 99% of nurses are women. They are forced to work extra hours due to low salaries, and many are employed elsewhere simultaneously" (Tragakes et al. 2008: 150).

There is an opinion that if the treatment of non-severe diseases does not include antibiotics and other prescription medicines, like in common cold cases without complications, medical specialists should not bother the patients by asking questions about OTC medicines that are considered a subject of self-medication "[...] because this might be viewed as the physician's attempt to take over and "medicalize" the area that has typically been in the patient's

control" (Sleath et al. 2001: 358). Others argue that physicians have to be informed about the OTC medicines their patients use, in order to avoid "potential drug-drug interactions and therapeutic duplication problems" (Sleath et al. 2001: 358).

What is an ideal scenario? The keywords suggested by the researchers in this respect are "collaborative care", "patient-centered communication". "Doctors are open to self-medication practices while retaining the role of information source [...], a collaborator with patients [...] rather than an exclusive controller of access to medicines" (Bradley 1996: 312). To be good collaboration partners, doctors should be more proactive in providing information about healthcare issues to patients, "especially to those who are less motivated to seek written medicine information" (Koo et al. 2006: 184), to be the main "gate-keepers" (Busfield 2010: 934).

The researchers propose the concept of "patient-centered approach", adapting consultations about the subject of interest to the patient's context. "Information built on the patients' existing knowledge is more effective than information in general [...]. Incorrect existing knowledge can be modified and added upon" (Weel-Baumgarten van 2008: i68).

The patient-centered collaborative approach is likely to benefit in the long run. Although currently it seems to be an additional workload to physicians, there is an evidence to think that the improved knowledge level of the patients will later result in "reduced diagnostic tests and referrals" (Stewart et al. 2000: 796) as well as "prevent much morbidity and confusion and also save time and improve outcomes" (Kennedy 2003: 862–863).

There are, however, obstacles in Latvia to patient-centered care to be introduced. The number of patients is too large per a GP, and the role of nurses as information providers has not been acknowledged so far, as it has been testified by the present research. There is evidence that nurses can be a valuable source of health-related information. Studies (Keleher et al. 2009: 16; Lenz et al. 2004: 332; Laurant et al. 2005) examining the role of primary nursing show that involvement of nurses in patient-centered health care can grant positive outcomes for patients' health, similar to the outcomes provided by doctors. "Nurses are effective in care management and achieve good patient compliance. Nurses are also effective in [...] illness prevention and health promotion" (Keleher et al. 2009: 22).

Experts suggest a special cooperation-training program for nurses, doctors and pharmacists, involvement of nurses into adverse drug reactions so that they could fulfil the role of information source and be trusted by patients (Bradley 1996: 837). Involvement of nurses in patient consultations regarding the treatment or relieving symptoms of common cold would considerably diminish the workload of GPs.

CONCLUSIONS AND RECOMMENDATIONS

Some implications will be provided in order to proceed towards patient empowerment, education and the improvement of the quality of medicine information sources.

Regular learning opportunities have to be ensured for pharmacists, including training of communication skills. Pharmacists should be more proactive in asking questions about the health status of a patient, as well as about medicines the patient is already using. Self-medication can be encouraged by reference materials prepared by pharmacies, containing medicine information. A system of high quality consultations, determined by customers' surveys, should be introduced. Communication between GPs, nurses and pharmacists has to be facilitated in order to obtain information based on the consent of the patient, in cases of necessity, about the patient's health status in the context of medicines the patient already uses and is planning to use.

It is crucial to ensure an adequate access of consumers to independent (non-commercial) information by providing comprehensible, regularly updated and easily attainable Internet source designed for consumers containing all sorts of information regarding healthcare issues, medicines included. Patient organizations should be more involved in the information provision and public education process in cooperation at healthcare management institutions and PHC specialists.

It is essential that PHC specialists support and encourage self-medication in the treatment or reliving symptoms of non-heavy illnesses such as common cold. In order to ensure a rational use of medicines, PHC specialists should provide patients with information about reliable information sources, as well as encourage reporting of adverse reactions. The patient-centered approach can help in building health literacy on the existing knowledge and also awareness of a patient as an active member of the healthcare system.

Involvement of medical nurses in patient consulting about common cold medicines and other OTC remedies can facilitate the work of GPs, as well as strengthen the role of nurses in PHC. Nurses should undergo special training programs and should be provided with additional guidelines. Patients should be informed about the possibility of consulting nurses as regard the use of medicines with the help of written materials distributed in PHC institutions.

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