INFORMATION SOURCES ABOUT MEDICINES USED IN CASE OF CHILDREN'S RHINITIS

INFORMĀCIJAS AVOTI PAR MEDIKAMENTIEM BĒRNU IESNU GADĪJUMOS

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Abstract. Safety and efficiency of common cold medicines, including nasal decongestants, are doubted in respect to small children by a number of countries. In Latvia decongestants can mostlybe obtained without prescription, and patient information leaflets (PILs)generally permit using them for small children. The previous study (2010) in Latvia showed extensive use of decongestants for children and determined the necessity of deeper research. A qualitative study, enclosing 27 semi-structured interviews with caregivers having used nasal decongestants for children under six years of age, was performed in 2011. The decision to use decongestants is mostly made upon the suggestion of a doctor. Perceived information from the doctors is diverse, and does not contain detailed description of possible side-effects. Other information sources are pharmacists, information in media, PILs, lay people, internet and medical nurses. Evaluation of the information sources is distinctive, ranking from trust to the opinion that most information sources about common cold medicines, including nasal decongestants, are commercially-oriented. It is essential to raise a discussion about appropriateness of decongestants for small children in Latvia. Doctors and pharmacists, being extensively used information sources, must educate patients by explaining possible side-effects of decongestants, offering treatment alternatives, as well as other trustworthy information sources for dealing with rhinitis in cases of small children. Involvement of nurses in consultation about common cold diseases can facilitate work of the doctors.

Key words: nasaldecongestants, rhinitis, OTC medicines, common cold, children, information sources

Introduction

Symptoms of rhinitis, a common cold disease, caused by viruses, are frequently handled with over-the-counter (OTC) medicines, including nasal decongestants. Safety and efficiency of a number of common cold medicines, including nasal decongestants, are doubted in respect to small children(Rimsza and Newberry 2008, KinyonMunch 2011, Shefrin and Goldman 2009), andit is suggested toabstain from these medicinesin cases of children's rhinitis(the suggested age limit up to which these medicines should not be used differs depending on the country, though most commonly implied is age limit of six years)(American Academy of Pediatrics 2008, Health Canada 2008, The Medicines and Healthcare products Regulatory Agency 2009).

In Latvia nasal decongestants can mostly be obtained in pharmacies without prescription, and most of the PILs (patient information leaflets) permit use of them for children. The quantitative study in 2010 "Use of medicines in cases of common cold in Latvia" (Salmane- Kulikovska, Mezinska and Rungule 2010) demonstrated excessive use of nasal decongestants for small children - 52.2% of the respondents, who used medicines to treat or relieve common cold symptoms for children (age 0-6), had used decongestants. These results marked out the necessity of more profound qualitative researchin order to clarify information sources and perceived information, as well as the evaluation of the information sources suggesting use of nasal decongestants for children under six.

Research methods and sample

A study enclosing 27 semi-structured interviews with caregivers was performed. The significance of individual experience of respondents and the need to select explanatory-informative cases provided for the qualitative type of study, based on purposive sampling, using snow-ball sampling method. The main sampling parameter was "having used nasal decongestants for a child (children), age 0-6, for relieving symptoms of rhinitis". This type of study is usually applied, when it is important to acquire cases for in-depth investigation, but not a representative sample (Neuman 2003, 213).

Interviews were semi-structured and problem-centered (Flick 1998, 88), with the average length of 20-30 minutes. Interviews were recorded, and each respondent completed and signed an informed consent form prior to the interview.

All of the respondents were females, and almost all- mothers (one respondent was a caregiver of a grandchild). Such sample characteristics is determined by the fact that sick children are mostly taken care of by females in Latvia.

The sample was composed of 22 Latvians, four Russians and one respondent of another nationality, 17 respondents were from Riga and 10 respondents from the surroundings (Riga district, Jurmala). The age of respondents was 25-57 years. Twenty-one respondents had higher education, the rest of the respondents- secondary education. The total number of children (0-6 years) being referred to within the limits of this study was 30.

Analysis, entailing manual coding of transcripts, was performed with the program Nvivo 9.0, and was based on thematic coding procedure, providing for grouping data into categories, corresponding to the "coding paradigm", emerging from the aim, tasks and the content of the study (Flick 1998, 189-190).Transcripts were checked for the presence or absence of categories.

Results

The interviewed caregivers explained how they had obtained information about nasal decongestants for dealing with children's rhinitis, the content of the information they had perceived from these sources, as well as presented evaluation of these sources.

Although rhinitis was perceived as a mild, self-limiting common cold disease, the decision to use decongestants for childrenis very oftenbased upon a suggestion of a doctor - General practitioner (GP), pediatrician, otorhinolaryngologist. It was in several cases stated that decongestants were suggested by a doctor previously, and because of the perceived efficiency, were continued to be used repeatedly. The suggestions perceived from the doctor did not include information about potential side-effects of decongestants. It wasin some cases stated that the doctor had suggested avoiding use of decongestants for more than four to seven days.Respondents perceived the tendency of doctors to favor a particular brand of decongestants, andthat was basedon arguments, like "the doctor said thisis the best", "the most harmless", "very mild". The information, perceived from doctors, contained also delusionabout homeopathic potencies of the decongestants. The opinion regarding cooperation with the doctor was distinctive. It was by a part of respondents evaluated as positive, stating that doctors usually carefully examine problems, are accessible and havea non-commercially oriented opinion: "I can also telephone her and ask for an advice.", or "(..) I have to assume that she is objective. I trust that she is not like..., she has no commercial interests." Opposite accounts included doctors' lack of time and failure to explain issues related to medicines. A doubt about possible commercial interests of a doctor was expressed: "She has no time, she only sits there...","Oh, no, (..) I cannot say that doctors explain, why these medicines, - no!", or "Of course, it is not a secret that doctors have to suggest certain medicines, and they are being reimbursed for that- for the promotion of these medicines".

Just one respondenthad consulted a medical nurse regarding medicines provided for dealing with rhinitis of a child.

The decision to use nasal decongestants was also based upon the suggestion of a pharmacist. There were different opinions –advice of a pharmacistwas evaluated positively by a part of the respondents, mentioning that pharmacists listen in theproblem and offer, for instance, cheaper alternatives (generic medicines) instead of original medicines. Respondents pointed to the importance of personal relationship and attitude from the pharmacist: "*I rely on her. If she is not in the pharmacy, I try not to purchase medicines (...) She is like a member of our family.* "There was however a certain suspect about possible commercial interests of pharmacists:"*I hear only this*

brand (..) also in pharmacies. I think there are good sales representatives, who have convinced everybody that this decongestant is the best, and so."

Lay people (friends, relatives, other caregivers) turned out to be an important information source, not only suggesting medicines, but also the doctor, who had been admitted to be professional, and whose advice had helped. Opinions are exchanged by communicating directly and through internet forums. Discussions with other caregivers, having children with similar health problems, are of high importance. They are characterized by respondents as "*trustful*", "*not commercially oriented*" and "*unbiased*".

The data also show that respondents pay more attention to ailment of children than to their own health problems examining medicines information more carefully in cases of children's illnesses:"(..) *I do not make experiments* [with my child] (..) *I sometimes take the liberty of experimenting with myself, but with a child- no!*"

Patient information leaflets (PILs) are usually considered important and worth to be paid attention to, especially dealing with ailment of a child:"*Concerning medicines for a child- I read everything from A to Z*." However there is a tendency to read PILs when using the medicine for the first time and do not re-read themin cases of repeated use. Generally respondents trust the information provided by PILs, considering it to be objective, understandable and helping: "*Every source has its own opinion, and the information differs, I do not know what or whom I should trust. I trust only the medicines' instruction, or whatever it is called.*" There were however claims that the information provided by PILs is too broad and should be more concise.

The respondents recognized the plenitude of information on the internet, but it turned out that this source is not always used when dealing with children's rhinitis. The reasons for notusing this information source were very often based on the opinion that this information source is not trustworthy enough, particularly dealing with ailment of children. There was an opinion that within the huge amount of information it is difficult to find answers on particular questions:"*It is not enough to read one source. Instead of reading one, it is necessary to read twenty more.*" The most frequently mentioned were portals <u>www.calis.lv</u>, which is frequently double-checked against other opinions. Other mentioned sources include www.saaukstesanas.lv, www.maminuklubs.lv, www.zales.lv, www.arsts.lv, the State Agency of Medicines home page. Respondents also look for information by typing particular key-words in <u>www.google.com</u>.

The consulted periodicals include "Mans Mazais", "Ieva", "Veseliba", "Doctus", being evaluated quite inconsistently- there were opinions that these sources are trustful, if compared to the internet, as well as those characterizing this information as "*superficial*", "*non-professional*",

"outdated", ""with no deeper analysis" and also revealing certain commercial interests.TV and radiowere mostly associated with medicines advertising information.Respondents generally suggested that their decision to buy medicines cannot be influenced by medicines advertisements.

Skeptic opinion about availability of unbiased (non-commercial) information about medicines was dominant :"(..) *I think availability of independent information is limited. Let's say, available is what producers want to be available* (..)".The overall quality of the available information was evaluated distinctively- there were opinions that the available information is too complicated, as well as those stating that it is too primitive.

Discussion

Despite of the perception of rhinitis to be a minor ailment- a non-heavy, self-limiting disease, parents needdoctor's advice in cases of children. The perceived need to consult a doctor about minor ailments is found to be influenced by different factors, including doubt regarding patient's own knowledge, need for reassurance, and does not always depend on the severity of symptoms (Cantrill, Morris and Weiss 2006, 160-162).

It has frequently beenexamined, whether use of OTC medicines has to be discussed with a doctor. There is an opinion that doctors should not ask their patients about OTC medicines use, as it may be perceived as "physician trying to "take over" and medicalize an area that has typically been in the patient's control" (Sleath, et al. 2001, 358). Others argue that advice of doctor is essential in order to avoid possible adverse-effects of different medicines, especially when ailments of children are concerned (Ryan, Brewer and Small 2008, 180). Additional reasons for asking patients about OTC medicines use are "they [physicians] can gain a better understanding of everything their patients are doing to improve or maintain their health" (Sleath, et al. 2001, 358).

How should the optimal scenario look like? Keywords, suggested by the researchers are "collaborative care" (Bradley and Blenkinsopp 1996, 835). Doctors should acknowledge and support a worldwide self-medication tendency (Coulter 2005, 1200-1201, Bradley and Blenkinsopp 1996, 837) by maintaining the role of a good information source. Another keyword is "patient-centered approach"- rising information level of a patient on the basis of the existing knowledge of the patient (Weel-Baumgarten 2008, i68). To be good collaboration partners, doctors should be more proactive in providing information about healthcare issues to patients, "especially for those who are less motivated to seek written medicines information" (Koo, Krass and Aslani 2006, 184), to suggest trustworthy information sources, being "the main gate-keepers" (Busfield 2010, 934). The patient-centered approach has long term benefits. In short term it seems to be additional

workload for the doctors, but the improved knowledge level will result in better health level of the population (Stewart, et al. 2000, 796).

Nurses in Latvia have not gained a status of a widely used information source about medicines, also in cases of common cold. The studies (Keleher, et al. 2009, Lenz 2004), examining the role of primary nursing, testify that involvement of nurses in patient-centered health care can grant positive outcomes for patients' health similar to the outcomes provided by doctors. Best results in patient health care however can be achieved by a successful cooperation and exchange of information among doctors, pharmacists and nurses (Bradley and Blenkinsopp 1996, 837).

Pharmacist is a recognized information source (Hughes, Whittlesea and Luscombe 2002, 245). Other previous studies in Latvia point out that every fourth or third peron, who purchases medicines, asks for pharmacist's advice (Ozolina 2006, 23). There are implications that pharmacists should be more proactive in asking questions about medicines the purchaser already uses and expaining medicines-related information to ensure medicines are used rationally (Ramstrom, et al. 2006, 248).

Importance of lay people as an information source is testified both by empirical studies (Hughes, Whittlesea and Luscombe 2002, 247, Salmane-Kulikovska, Mezinska and Rungule 2010), as well as by the theory of illness behavior (Gabe, Bury and Elston 2004, 67).

Medicines users generally trust PILs, however the evidence suggests that PILs are generally not re-read before the repeated ailments (Hughes, Whittlesea and Luscombe 2002, 245). The quantitative study in Latvia in 2010 suggested that respondents consider themselves to be complied with written medicines information provided by PILs (Salmane-Kulikovska, Mezinska and Rungule 2010). Another study in Latvia suggested that 61.0% of the medicines users read PILs at least once, meanwhile considering the enclosed information to be too complicated and hard to be understood (Ozolina 2010).

Internet can be a useful information source, particularly in case of minor ailments, like rhinitis, though due to plenitude of information, not all the advices found on the internet are trustworthy (Risk and Petersen 2002), therefore it is the task of medical professionals to peer-review the content of information sources and to suggest the trustful ones for medicines users (Pandolfini, Impicciatore and Bonati 2000, 1).

Conclusions

1. Doctors, being an important sourceof information in cases of children's rhinitis, should use the opportunity to raise the level of knowledge of medicines' users by explaining issuesrelated to common cold medicines, including nasal decongestants for children (inefficiency and inappropriateness of these medicines for children, possible side-effects, compatibility of nasal decongestants with other medicines, etc.). Doctors should also dispel erroneous perceptions regarding decongestants (perceived homeopathic properties of some decongestants, etc.) and also offer alternative means of relieving common cold symptoms, including those of rhinitis for children.

- 2. Doctors should support self-medication tendency with OTC medicines by counseling trustworthy and good-quality sources of information that can be used in self-medicating minor ailments like common cold. As there is a suspicion about certain commercial interests having impact on the available information, it is essential to ensure a source of non-commercial and unbiased information for medicines' users.
- Involvement of nurses in patient consultations regarding common cold diseases and medicines would facilitate the workload of doctors and help raise the knowledge level of medicines' users.
- 4. PILs of most frequently used nasal decongestants provide for use of these medicines for small children. Information in PILs has to be revised and amended according to the practice and experience obtained by other countries, like UK, USA, Canada, etc., indicating that use of nasal decongestants is not suggested for small children. "Safety is not simply an intrinsic feature of the drug - it can arguably be achieved by providing better information to the patient" (Bradley and Blenkinsopp 1996, 835).
- 5. Pharmacists should be more proactive and ask purchasers of common cold medicines about symptoms of illness, age of a person, experiencing common cold symptoms, about other medicines used, etc., in order to ensure rational use of common cold medicines and to diminish the tendency to use common cold medicines, like nasal decongestants, in dealing with rhinitis of children.

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