

STUDY ON CONSUMERS' PREFERENCES AND HABITS FOR OVER-THE-COUNTER ANALGESICS USE

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SUMMARY

The aim of the present study was to investigate consumers' knowledge, preference habits and use of the over-the-counter (OTC) analgesics. Our survey indicates the preferences of respondents in consultation with medical specialists (medical doctors and pharmacists) and their sources of information about drugs. A questionnaire survey was conducted during the periods March/April and July/August 2002 in 11 community pharmacies situated in Sofia (capital) and two towns in different regions in Eastern Bulgaria. From 250 questionnaires 222 were filled in correctly and analyzed (response rate 89%). Metamizole (dipyrone) is the most popular OTC analgesic - 35% of the questioned patients prefer it to relieve the pain. In the second place is paracetamole (acetaminophen), but patients prefer to use it mainly for symptomatic treatment of cold/flu and influenza-like symptoms. More than 50% of patients have indicated that medical doctor recommended them the chosen OTC analgesic and in case of health problems during the therapy they prefer to consult him. They had more confidence in medical doctors' than pharmacists' recommendations and consultation. The main conclusion is that the pharmacists do not have the main say in the choice of OTC analgesics and their rational and correct use.

Key words: OTC analgesics, patients' habits, professional consultation, pharmacists' role

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INTRODUCTION

Analgesics are the most widely and frequently used non-prescription medications. There are many analgesic drugs, dosage forms and analgesic therapeutic procedures available today. This will certainly also persist in the future, since there will never be a single analgesic drug suitable for all patients and all types of pain because of considerable inter-individual variability in the effect of analgesics. Even a respected analgesic drug will not relieve pain in all patients (1). It is very important these over-the-counter (OTC) products to be used correctly because like the other medications they may provoke serious adverse drug reactions and interactions. Adequate consumer's knowledge of the OTC analgesics is main premise for the choice of the most suitable product and its correct use, ensuring maximum effect and minimum risk. Pharmacist can play very important and active role in advising and educating consumers on the correct use of OTC analgesics. It is essential that the practicing pharmacists have information about patients' preferences, habits and individual experience in OTC analgesics (2) in order to improve and rationalize their use.

MATERIALS AND STUDY DESIGN

It was a prospective cohort study, without control group. The method was based on individual questionnaire with previously prepared card. We conducted the survey in 11 community pharmacies situated in Sofia (capital), Varna (big city) and Kavarna

(small town), which are in different regions in Bulgaria. The study sample was collected during the periods March/April and July/August 2002 to avoid seasonal differences in drug usage. The questionnaire was applied to every 10th consumer who inquired about and/or bought OTC analgesic in selected pharmacies. In total 250 questionnaires, containing 10 question were returned. 222 questionnaires were filled in correctly and they were analyzed (response rate 89%). To take part in our investigation the community pharmacists were educated how to use and correctly fill in the questionnaire with the patients' information. The questionnaire was preliminarily tested for three days, the collected data were analyzed and consequently the questions and card were corrected.

RESULTS AND DISCUSSION

According to the demographic of the responders' characteristic, women prevail over the men. As can be seen in Table 1, the consumers 50+ years of age and between 31-50 years are the most frequent users of OTC analgesics. 4% of responders asked drugs for children.

Metamizole (dipyrone) is the most widely and frequently preferred OTC analgesic - 42% of responders use products containing metamizole to relieve the pain (Table 2). 17% of them use OTC analgesic once a week and 10% at least once to twice monthly (Table 3). The products containing paracetamole (acetaminophen) are preferred by 34% of respondents

Table 1. Demographic characteristics of respondents

Category	Sub-category	Proportion (%)
Sex	Male	32
	Female	68
Age groups	6-18*	4**
	19-30	25
	31-50	35
	50+	36

*Bulgarian Drugs and Pharmacies Law (2000) prohibited sales of drugs to the persons up to 18 years of age.

**Responders, who asked and/or bought analgesics for their children.

Table 2. Preferences in use of OTC analgesics (%)

ATC code	Preferences of use (%)
N02B B 02 Metamizole sodium	35
52 Combinations with Metamizole	7
N02B E 01 Paracetamole	26
51 Combinations with Paracetamole	9
N02B A 01 Acetylsalicylic acid	14
51 Acetylsalicylic acid + Ascorbic acid	5
N02B B 03 Aminophenazone	2
Other groups	2

Table 3. Frequency of use of OTC analgesics (%)

Frequency of use	AAP*	Metamizole	ASA**	Aminophenazone	Other	Total
Every day	2	6	9	0	1	18
Once a week	4	17	4	0	0	25
Once to twice monthly	7	10	3	0	1	21
Less than once monthly	18	8	3	2	0	31
For the first time	3	1	0	0	1	5
Total	34	42	19	2	3	100

*AAP-Acetaminophen (Paracetamole)

**ASA-Acetylsalicylic acid

Table 4. Patients' preferences in consultation for drug induced problems during the therapy

Age groups	19-30		31-50		50+	
Answers	Men	Women	Men	Women	Men	Women
Medical Doctors	56.3	59.6	53.6	64.8	64.5	62.7
Pharmacists	37.5	28.8	32.2	28.2	22.6	24.0
Relatives/Friends	3.1	9.6	7.1	5.6	9.7	12.0
Other	3.1	2.0	7.1	1.4	3.2	1.3

mainly as antipyretics and for the treatment of cold and flu - like symptoms. That's why the majority of them (18%) use these products less than once to twice monthly. The third place is taken up by products containing acetylsalicylic acid - 19% of responders. 9% of them indicated that they use the products with acetylsalicylic acid every day, because of their cardiovascular protective effects. Totally 64% of responders use OTC analgesic at least once or twice monthly and almost every fifth indicated their use every day. There are not significantly important seasonally determined differences in OTC analgesics use. These facts point out that the high usage of drugs from this pharmacological group needs further study.

One of the major questions concerns the motivation behind the choice of analgesics. 41% of responders indicated that they consult medical doctor before using an OTC analgesic and only 23% consult pharmacist. For 22% more important were the recommendations by family members and/or friends, and 6%

were influenced by the advertisements. 8% made their choice without consulting anyone or their choice was based on their own experience. To sum up great part of the patients believe in physicians' counseling and medical doctors play key role in recommendations and choice of OTC analgesics. Unfortunately the pharmacists' standing was inadequate, as patients do not trust their competencies.

It was interesting for us to study the existing differences between men' and women' preferences in consultation medical specialists and/or relatives and friends, about the correct use of drugs or appearance of drug related problem - adverse drug reactions during the therapy. We present the results separately for men and women. Generally men and women preferred to consult physicians (Table 4). Pharmacists like the first-line alternative were asked for advice about twice less than medical doctors. The comments according to the age groups are as follows:

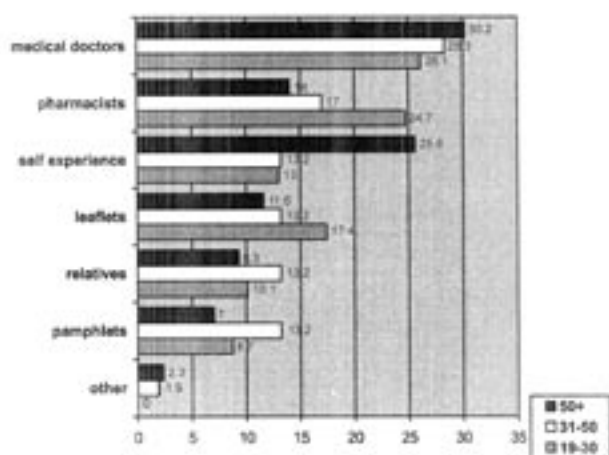


Fig. 1. Information sources for men (%).

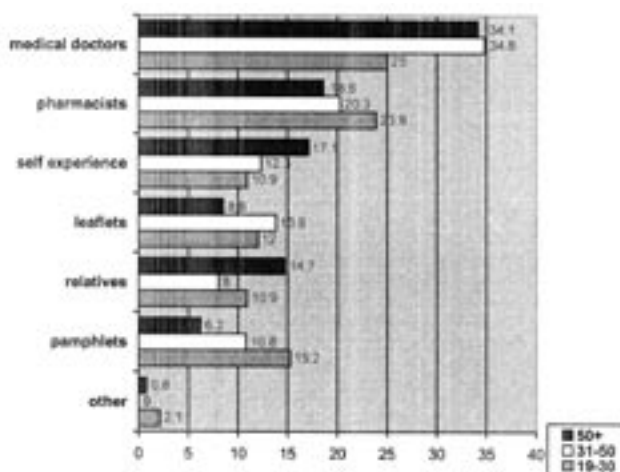


Fig. 2. Information sources for women (%).

1. Age group 19-30 years

56.3% of men and 59.6% of women would consult the medical doctor. 8.7% more of men than women believe in pharmacists and the information given by them. Three times more women compared to men prefer to consult their relatives and friends (9.6%).

2. Age group 31-50 years

64.8% women and 53.6% men in this age group put the advice giving by physician in the first place again. The demand for pharmacists' counseling is twice lower than in previously discussed age group (4%).

3. Age group 50+ years

Men in this age group have much more confidence in medical doctors compared to men in other age groups. Women believe in medical doctors' counseling in 62.7% of cases, 3.1 % greater than age group 19-30 and 2.1 % lower than age group 31-50. The proportion of respondents, who would ask for advice the pharmacist decreases both for men and women. Women over 50 are much more influenced by the information from relatives and/or friends (12%) than the other groups.

The results about the sources of information on drugs show that in the first place both groups (men and women) preferred to receive information from medical doctors. Figures 1 and 2 show the sources of information about drugs according to the respondents' gender and age group. Women in 31-50 age group (34.8% of the cases) and over 50 years (34.1 % of the cases), also the men older 50 years (34.1% of the cases) use the physician's consultation as the main source of drug information. Women (23.9% of the cases) and men (24.6% of the cases) falling in age group 19-30 would approach the pharmacist for advice. The personnel experience is the most important for women and men older 50 years. Advertising materials are also frequently used source of information for drugs. This possibility is the most frequently used by men (17.4%) and women (12%) in the age group 19-30 years, and by women (13.8%) and men (13.2%)

between 31-50 years. The opinion of relatives and/or friends is most important for women over 50 years (14.7% of the cases) and men in age group 31-50 (13.2%).

As a whole advertising materials are mainly read by young persons, men and women in the age group 19-30.

CONCLUSION

The presented data show that the usage of OTC analgesics in Bulgaria is relatively high. Every fifth responder indicated that he/she used OTC analgesic every day and over half of the responders (64%) used analgesic at least once or twice monthly. Metamizole (dipyrone) is the most popular and frequently used OTC analgesic followed by paracetamole (acetaminophen).

Responders prefer medical doctors' consultations and recommendations regarding the right choice and correct use of the OTC analgesics. Pharmacist does not play key role in advising and educating consumers on the correct use of OTC analgesics. Highest proportion of men and women believing in pharmacists' competencies and professional knowledge belongs to age group 19-30.

Our overall suggestion is that the pharmacists have to pay special attention to OTC analgesics consumers (patients) to build habits for their rational use in the future.

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