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television advertisement of OTC  
medicines**

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dozwolonego użytku.

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# Gender and the perception of television advertisement of OTC medicines

**Słowa kluczowe:** opinie, płeć, reklama telewizyjna, produkty lecznicze OTC

**Key words:** Opinions, gender, television advertisement, OTC medicines

## Introduction

The main legislative Act that regulates the pharmaceutical market, including issues of promotion of medicinal products, is the *Pharmaceutical Law Act*<sup>1</sup>. In addition, since 1<sup>st</sup> January 2012 the *Act on reimbursement of medicines, foodstuffs intended for particular nutritional and medical products*<sup>2</sup> is in force. It has introduced many changes in the *Pharmaceutical Law Act*, including the promotion of medicinal products.

Marketing – mix consists of four components: product, price, distribution and promotion<sup>3</sup>. Promotion has three main functions: informative, persuasive and reminding. However, advertising is one of the promotion instruments<sup>4</sup>. Advertisement of medicines, which are available without a prescription known as OTC medicines, is a very common phenomenon. Due to the huge expenditure incurred by pharmaceutical companies and extensive promotional campaigns, medicines' advertising has become almost normality. The medicaments are advertised probably in every TV station, regardless of it's character. The television advertisement is the most cost-effective mean of transmission. It is estimated that pharmaceutical companies spend on average 70% of the expenditure on the OTC medicines' promotion just on television advertisements<sup>5</sup>. This type of advertisement provides the most advantageous relationship between the cost of advertising and financial profits from the pharmaceutical manufacturer's point of view. Pharmaceutical manufacturers spent weekly 80 million polish zloty on television advertising (data from February 2013)<sup>6</sup>. Comparing this information with the expenditure of producers from

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<sup>1</sup> Pharmaceutical Law Act of 6 September 2001 (Dz. U. 2008 No. 45, item 271).

<sup>2</sup> Act on reimbursement of medicines, foodstuffs intended for particular nutritional and medical products of 12 May 2011 (Dz. U. 2011 No. 122 item 696).

<sup>3</sup> A. J. Silk, *What Is Marketing?*, Harvard Business Press, Rebis Publishing House, Poznan 2008, p. 23.

<sup>4</sup> A. Czerw, *Marketing in Health Care*, Publisher Diffin, Warsaw 2010, p. 92.

<sup>5</sup> M. Michalik, B. Pilarczyk, H. Mruk, *Strategic Marketing in the Pharmaceutical Market*, Publishing a Wolters Kluwer business, Warsaw 2011, p. 232.

<sup>6</sup> See [online]<[http://wyborcza.biz/Gieldy/1,114507,13569665,Zalewaja\\_nas\\_reklamy\\_lekow\\_\\_Firmy\\_wydaja\\_miliony\\_na.html](http://wyborcza.biz/Gieldy/1,114507,13569665,Zalewaja_nas_reklamy_lekow__Firmy_wydaja_miliony_na.html)>, accessed: 15.05.2013.

other sectors, it was twice as much as in the financial sector, and six times more than in the automotive industry. The research company operating in the field of monitoring expenditures on advertising – Kantar Media, estimated that in year 2012, seven largest pharmaceutical companies allocated over 3 billion polish zloty net on television advertisements<sup>7</sup>.

Because of the prevalence of this phenomenon, a research concerning the perception of television advertising by consumers is important from the public health point of view. The way in which the society relates to the medicaments' advertising, has an impact on their health attitudes. For purposes of the research, people who were taking part in it, were divided according to four socio-demographic variables: gender, age, level of education and place of residence. The biggest differences in the perception of television advertising of OTC drugs were noted in the division of gender. It can be presumed that the gender predisposes to specific health behaviors and perception of the world through the prism of not only experiences and knowledge but also performing the public functions.

## Experimental

The objective of the research: The first aim of this study was to test the consumers' knowledge on the legislation regulating advertising of medicinal products. Questions which were supposed to verify the knowledge of legal provisions related to:

- persons appearing in television advertisements (Question 4);
- the document containing regulations on advertising of medicines available without a prescription (Question 6).

The second aim of the study was to examine the attitudes and opinions of recipients on television advertisements of OTC medicines. Questions concerning opinion or attitude related to:

- perception of the fact, that OTC medicaments are advertised on television (Question 1);
- suggesting with television advertisements during the selection of medicines (Question 2);
- perception of types of messages contained in television advertisements (Question 3);
- noticing any irregularities in television advertisements of OTC medicines (Question 5).

Material and methods: The research was performed in form of paper and electronic questionnaires. Electronic questionnaire was published on the website: [www.interankiety.pl](http://www.interankiety.pl). Electronic questionnaire was widely available, additionally information about the possibility of filling the questionnaire was

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<sup>7</sup> See [online] <[http://wyborcza.biz/Gieldy/1,114507,13569665,Zalewaja\\_nas\\_reklamy\\_lekow\\_\\_Firmy\\_wydaja\\_miliony\\_na.html](http://wyborcza.biz/Gieldy/1,114507,13569665,Zalewaja_nas_reklamy_lekow__Firmy_wydaja_miliony_na.html)>, accessed: 15.05.2013.

published on the Facebook's profile one of the authors. To limit the people participating in the study to the two voivodships, in the survey's welcome message, was contained a request to fill out the questionnaire only by people living in Mazovia and Podlaskie. The surveys in the traditional paper form were handed out in respondents' study or workplace and successively collected. The research was conducted from April to May 2013. Electronic questionnaire was filled out by 566 people and the paper one by 548.

The questionnaire consisted of six closed questions, of which three were multiple-choice questions and four questions about gender, age, place of residence and educational level. The substantive questions related to knowledge, opinions and attitudes concerning television advertising of OTC medicines.

The research tool was a closed questionnaire in paper and electronic form. In each questionnaire a set of answers was given. Database from all the feedback questionnaires was created in a Microsoft Excel spreadsheet. Calculations were conducted in SPSS Statistic.

The statistical analyzes were performed using the Pearson chi-square test of independence ( $\chi^2$ ). Established level of significance was  $\alpha = 0,01$  (the maximal probability of performing I-type of error, which is rejection of zero hypothesis when it is true), the confidence interval = 99%.

The research included population of 1114 people: women and men, in different age groups, living in various areas and characterized with different educational level. In order to obtain a sample as close as possible to a representative one, questionnaires were distributed in various professional and scientific environments. The survey was conducted among residents of two voivodships: Mazovia and Podlaskie. Respondents came from different work and education environments: medical and non-medical universities, high schools, vocational schools, entities of the health system, local government offices, bank, construction company, building store and others.

1114 respondents participated in this research, including 857 women, who accounted 76.9% of all respondents and 257 men who were 23.1%.

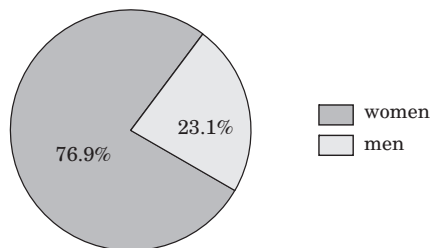


Chart 1. Distribution of respondents by gender

In this study were involved people in the age from 18 years to over 65 years. The largest number of respondents accounted for 37.2% of the total, were young persons in age between 18 and 24 years. The second most numerous were people aged 36–50 years, which accounted for 27.7% of all respondents.

ents. The third in terms of numbers group were people aged 25–35 years, which accounted for 23.1% of all people. Almost every tenth respondent was a person in age 51–65 years (11%). In contrast, people aged over 65 years was only 1% of all respondents.

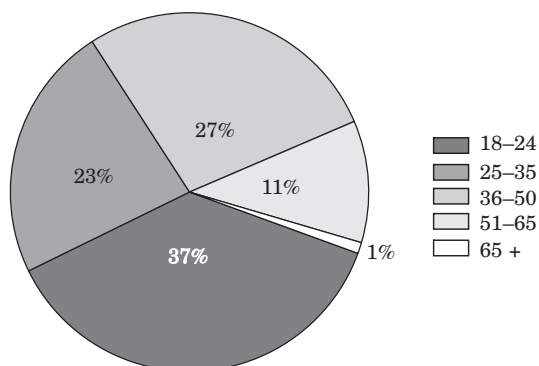


Chart 2. Distribution of respondents by age

The respondents came from two voivodships Mazovia and Podlaskie. Place of residence was divided into five categories: villages, towns up to 50,000 inhabitants, the cities of 51,000–200,000 inhabitants, the cities of 201,000–500,000 inhabitants and the largest cities over 500,000 inhabitants. Within these two regions, a city of more than 500,000 inhabitants was only the capital city of Poland – Warsaw.

The majority of respondents – 38.8% of all, came from small towns with less than 50,000 residents. In second place were inhabitants of Warsaw, who accounted for 30.4% of all respondents. In third place in terms of size of the group, were people living in rural areas – 12.8%. Almost one in ten respondents came from medium-sized cities with a population of 51,000 to 200,000. The least respondents – 6.9% of all, were from large cities from 201,000 to 500,000 inhabitants.

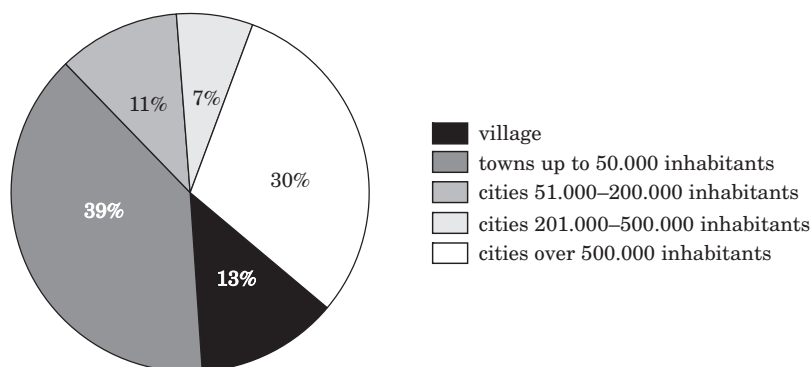


Chart 3. Distribution of respondents by place of residence

For purposes of the research, respondents were divided into groups in terms of education level. The following stages were outlined: lower secondary, upper secondary (high school or technical school), vocational, post-secondary, higher (grade I or II) and incomplete higher.

Definitely the largest group in terms of education level were people with documented higher education, they accounted for almost half of the respondents (49.9%). The second largest group were people with post-secondary education, slightly more than 17% of all. The third most numerous group were people with upper secondary education, they formed a group of more than 16% of respondents. The fourth group of respondents were people in the course of higher education, they constituted 11% of the respondents. The two smallest groups were people with vocational and secondary, respectively 4.9% and 1% of respondents.

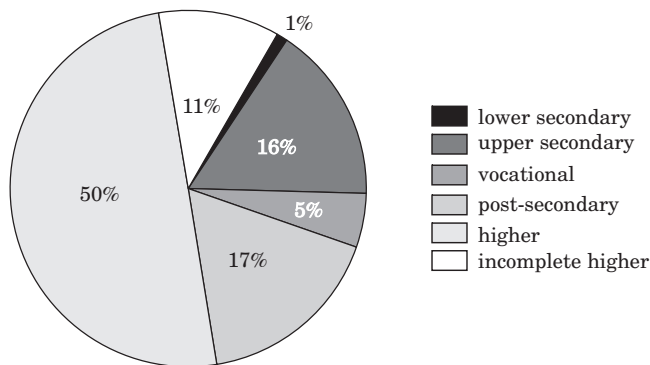


Chart 4. Distribution of respondents by educational level

The research problem: is there a correlation between gender of the respondents and their attitudes relative to the perception of television advertising of OTC medicines as well as their knowledge about the legal aspects of OTC drugs' advertising.

## Results

### 1. Analysis of dependence: Gender and the attitude of recipients to OTC medicaments' television advertising

The first question related to respondents' general attitude to television advertisement of OTC drugs: if they perceive it positively or negatively (including each version of: rather positively/negatively and definitely positively/negatively).

*Question 1: How do you refer to the fact that non-prescription medicines are advertised on the television and in the press?*

Positive attitude means that the recipients are the supporters of obtaining information about the products, in this case about medicines, using the mass media, different attitude represent the people oriented against the transmission of information about medicines in this way. One third of women (33.5%) was geared rather negatively to the fact, that OTC medicines are advertised in the television. Similar opinion was expressed by 21.8% of men. Over half of the women (51.9%) was geared rather positively to the television advertising of OTC drugs . This point of view was shared by almost half of men (48.2%). The extreme opinion “strongly positively” was given by only 1.5% of women and almost every tenth men (8.6%). However, the opposite opinion – “strongly negative” – was represented by 6.5% of women and 4.3% of men. There are big discrepancies between gender and an answer “no opinion”. Only 6.5% of women answered this way with a result 17.1% among men.

Table 1

Gender and attitude the OTC medicaments' television advertisement

		Gender		Total
		women	men	
Definitely negatively	number	56	11	67
	%	6.5%	4.3%	6.0%
Rather negatively	number	287	56	343
	%	33.5%	21.8%	30.8%
Rather positively	number	445	124	569
	%	51.9%	48.2%	51.1%
Positively	number	13	22	35
	%	1.5%	8.6%	3.1%
No opinion	number	56	44	100
	%	6.5%	17.1%	9.0%
Total	number	857	257	1114
	%	100.0%	100.0%	100.0%

In order to verify the significance of the correlation between the analyzed variables the chi-square test was performed. Obtained significant test's result provides the significant correlation between the analyzed variables.

Table 2

The value of test chi-square test

	Value	df	Asymptotic significance (two-sided)
Pearson's chi-square test	66.88	4	.000
Likelihood ratio	58.267	4	.000
Linear relation test	39.225	1	.000
Number of valid observations	1114		

Thus it can be concluded, that gender has a significant impact on the perception of OTC drugs' television advertisement. The conducted analysis indicates that women more often than men rather negatively perceived the advertising of OTC medicines on television. Moreover, fewer women than men answered that fact of television advertising of OTC drugs is definitely positive. Men much more frequently than women do not have the opinion about this topic. The above-mentioned argument proves a higher degree of criticism among women than men with respect to drug advertisements on TV. Male respondents exhibit significantly higher positive attitude in this area than female respondents, and for almost one fifth of them, drug advertisements on TV are neutral.

## 2. Analysis of the dependence: Gender and the decision making on buying OTC medicines based on television advertisement

Respondents were asked if they ever decided on buying OTC drugs (in their assessment) only on the basis of television advertisement and thereby obtained information about the medicines.

*Question 2: Have you ever decided to buy specified OTC medicine, solely on the basis of the viewed advertisement and thus obtained information about this drug?*

More than half of both women (51.8%) and men (56%) declared that they had never taken the decision to purchase OTC drugs solely based on television advertising. Slightly more than one third of women (35.1%) admitted that this situation happened to them once or twice. Analogously answered 26.5% of men. Just over 5% of women stated that they often made decisions about purchasing drugs based on a seen television advertisement. A similar statement expressed 4.3% of men. Less than 8% of women and more than 13.2% of men did not remember these situations.

Table 3  
Gender and decision making about buying the OTC drugs

		Gender		Total
		women	men	
<b>Yes, I made decisions about OTC drugs' purchasing many times based on the viewed advertisement</b>	number	45	11	56
	%	5.3%	4.3%	5.0%
<b>Yes, situation like this happened once or twice</b>	number	301	68	369
	%	35.1%	26.5%	33.1%
<b>No, I have never made the decision about purchasing the OTC drugs solely based on the viewed advertisement</b>	number	444	144	588
	%	51.8%	56.0%	52.8%
<b>I don't remember</b>	number	67	34	101
	%	7.8%	13.2%	9.1%
Total	number	857	257	1114
	%	100.0%	100.0%	100.0%



In order to verify the significance of the correlation between the analyzed variables the chi-square test was performed. Obtained significant test's result provides the significant correlation between the analyzed variables.

Table 4

The value of test chi-square test

	Value	df	Asymptotic significance (two-sided)
Pearson's chi-square test	11.905	3	.008
Likelihood ratio	11.604	3	.009
Linear relation test	10.002	1	.002
Number of valid observations	1114		

The research showed that there is a correlation between the gender of the respondents and making their decisions to purchase OTC medicines based on television advertisement. Women significantly more frequently than men, once or twice decided to purchase OTC medicine based on television advertisement. On the other hand, men much more often than women did not remember the situation, in which they made the decision to buy the OTC medicaments on the basis of television advertising. The results may suggest a higher efficiency of advertisements of medicinal products shown on television among female respondents than male respondents. Women tend, more often than men, to buy OTC drugs on the basis of the suggestions derived from advertising.

### 3. Analysis of the dependence: Gender and the perception of the content of OTC medicines' television advertising

In question 3 respondents were asked about the type of content transmitted in television advertisements of OTC drugs (multiple-choice question).

*Question 3: What do you think, what types of contents are communicated in the television advertising of OTC medicines? (You can select more than one answer)*

The majority of women and likewise men believed that television advertisement contain primarily manipulations and encouragements to medicines' use. These answers were given by respectively 65.1% and 54.5% of women and 69.6% and 56.8% of men. Similarly, only a few percent of women and men replied that the television advertisements present objective information. 6.7% of women and 4.7% of men answered this way. Almost one fifth of women (19.4%) thought that television advertisements present real situations, in which recipients can take the advertised drug. Analogous answer was given by 5.1% of men. 5.1% of women and 8.6% of men did not have opinion on this subject.

Table 5

Gender and the perception of content of OTC drugs' television advertisement

	Gender			
	women		men	
	number	% of number in column	number	% of number in column
Objective information about the drug (the active substances, doses, application)	57	6.7%	12	4.7%
The incentive to use (authorities' recommendations)	466	54.4%	146	56.8%
Manipulations to choose OTC drug of specific manufacturer	558	65.1%	179	69.6%
The real situations, in which recipients can take the advertised drug	166	19.4%	13	5.1%
No opinion	44	5.1%	22	8.6%
Total	857	100%	257	100%

Due to the possibility of choosing more than one answer, chi-square test would not apply in this case, therefore the respondents' answers were compared in columns.

Table 6

Comparisons of proportions in columns

	Gender	
	women	men
	(A)	(B)
Objective information about the drug (the active substances, doses, application)		
The incentive to use (authorities' recommendations)		
Manipulations to choose OTC drug of specific manufacturer		
The real situations, in which recipients can take the advertised drug	B	
No opinion		A

Statistically significant higher percentage of women than men said that television advertisements present "actual situations, in which you can take the medication". In addition, a significantly greater percentage of men than women had no opinion about the content presented in television advertisement. Other responses did not differ with regard to the respondents' gender. The above-mentioned argument proves that women, more often than men, attach importance to the content of advertisements of medicinal products. Men hardly focus their attention on the advertisement message.

#### 4. Analysis of the dependence: Gender and the recipients' perception of the people occurring in television advertising of OTC medicines

Like the previous question, this one also allowed multiple-choice answers. Respondents were asked about people who in their opinion occur in the television advertisements of OTC medicines.

*Question 4: Who do you think occurs in the a television advertisements of OTC medicines? (You can select more than one answer)*

The respondents most frequently answered that people who occur in the advertisements are actors. This statement was a response among 78.2% of women and 74.3% of men. The second reply in terms of frequency was "ordinary people in everyday situations" – these responses accounted for more than one fifth of all types of responses (respectively 21.2% of women and 22.6% of men). On average one in ten people had no opinion on this subject. This answer was given by 11.6% of women and 8.6% of men. Over 5% of women and 9% of men believed that pharmacists occur in OTC drugs' television advertisements. Answer "doctors" was given by 89 people. People from this group made 5.1% of female respondents and 17.5% of male respondents. Thus men three times more often indicated participation of doctors in television advertisement of drugs without a prescription. Answers "scientists" and "nurses" were represented by 1.3% of each response among women and respectively 0.4% and 0.8% among men.

In accordance with the regulations of the *Pharmaceutical Law Act*, in force since 6<sup>th</sup> September 2001 as amended, in OTC medicines' advertisements, which are directed to the general public, the occurrence of public persons, persons with medical or pharmaceutical education or people whose appearance thanks to the medic attributes (for example stethoscope), suggests that they have this type of education is forbidden. Furthermore it is prohibited to refer to the recommendations of the above mentioned persons.

Table 7

Gender and recipients' perception of the people occurring in OTC drugs' television advertising

	Gender			
	women		men	
	number	% of number in column	number	% of number in column
"Ordinary" people in everyday situations	182	21.2%	58	22.6%
Doctors	44	5.1%	45	17.5%
Scientists	11	1.3%	1	0.4%
Nurses	11	1.3%	2	0.8%
Pharmacists	45	5.3%	24	9.3%
Actors	670	78.2%	191	74.3%
No opinion	99	11.6%	22	8.6%
Total	857	100%	257	100%

Like in the previous question, chi-square test would not apply in this case, therefore the responses were compared in columns.

Table 8

Comparisons of proportions in columns

	Gender	
	women	men
	(A)	(B)
“Ordinary” people in everyday situations		
Doctors		A
Scientists		
Nurses		
Pharmacists		A
Actors		
No opinion		

Altogether, more than three-quarters of respondents answered that in television advertisements of OTC drugs, occur actors. Women and men chose this response almost equally often. Men significantly more frequently than women, gave replies “pharmacists” and “doctors”. Such a high percentage of wrong answers, reaching 17% among men may suggest either a lack of knowledge of the pharmaceutical law, which prohibits presenting television advertisements by people with medical profession or introducing the recipient in error by the pharmaceutical manufacturers. They care about as much as possible sale of the non-prescription medicines and therefore they use the recommendations of authorities in the field of medicine. Both, the occurrence of medical professionals, as well as creating the image of such persons by using specific medical attributes is illegal. Moreover, advertisement can not mislead the recipient, including in terms of people occurring in television advertisements, which is provided by the Article 53 of *Pharmaceutical Law Act*. The results of a survey prove the existence of the correlation between the gender and perception of people appearing in television advertising of OTC drugs.

## 5. Analysis of the dependence: Gender and recipients’ perception of the irregularities of the OTC medicines’ television advertisements

This question was also a multiple-choice. Respondents were asked about their opinion on the perceived possible irregularities (and what they involved), or their absence in television advertisements.

*Question 5: Do you notice any irregularities in the OTC medicines’ television advertisements? Is there anything you worried or wondering? (You can select more than one answer)*

Asking about the irregularities in the television advertisements of OTC drugs, only 7.8% of women and 4.7% of men did not notice them. More than one third of respondents answered “no, but I did not think about it”. The above mentioned answer was given by respectively 34.9% women and 38.5% men. More than a quarter of women (27.5%) wondered if the medicine is objectively presented. This type of doubt had only 13.2% of men. Slightly less than one third of women (29.9%) and more than a quarter of men (26.5%) noted a response concerning the therapeutic efficiency of the medicament. Every fifth respondent wondered if the people appearing in the television advertisement, actually are these ones who they say they are. This answer was given by 22.1% of women and 22.2% men. The answer concerning the compliance with the law regulations of people occurring in OTC drugs’ advertisements, was chosen by 17.1% of men and 7.8% of women.

Table 9

Gender and recipients’ perception of the irregularities  
of the OTC medicines’ television advertisements

	Gender			
	women		men	
	number	% of number in column	number	% of number in column
<b>No, I never noticed</b> anything that disturbed me	67	7.8%	12	4.7%
<b>No, but I did not think</b> about it	299	34.9%	99	38.5%
<b>Yes, I was wondering</b> if the person who appears in the advertisement <b>presents the drug in an objective way</b>	236	27.5%	34	13.2%
<b>Yes, I wondered</b> if <b>the drug really helps to ailments</b> that can be used	256	29.9%	68	26.5%
<b>Yes, I was wondering</b> if the people appear in the advertisement, <b>in fact are these ones people who they say they are</b>	189	22.1%	57	22.2%
<b>Yes, I was wondering</b> if the person appearing in the advertisement <b>can appear in that case</b> (under the current rules)	67	7.8%	44	17.1%
Total	857	100%	257	100%

Due to a possibility of a few answers, analogously to the two previous questions, chi-square test would not apply in this case, therefore, the results were compared in columns.

Table 10

Comparisons of proportions in columns

	Gender	
	women	men
	(A)	(B)
<b>No, I never noticed</b> anything that disturbed me		
<b>No, but I did not think</b> about it		
<b>Yes, I was wondering</b> if the person who appears in the advertisement <b>presents the drug in an objective way</b>	B	
<b>Yes, I wondered</b> if <b>the drug really helps to ailments</b> that can be used		
<b>Yes, I was wondering</b> if the people appear in the advertisement, <b>in fact are these ones people who they say they are</b>		
<b>Yes, I was wondering</b> if the person appearing in the advertisement <b>can appear in that case</b> (under the current rules)		A

The above-mentioned results may indicate a correlation between the gender and perception of irregularities in the OTC drugs' television advertisements. Significantly higher percentage of women than men answered that they have wondered if medicines in the television advertisements are presented in an objective way. Furthermore, a significantly higher percentage of men than women admitted that they have wondered if people appearing in the advertisement could occur in it, in accordance with law regulations. The above mentioned issues are regulated by respectively Article 53 and Article 55 of *Pharmaceutical Law Act*.

## 6. Analysis of the dependence: Gender and recipients' knowledge of the document governing the regulations of OTC medicines' advertising

The last question concerned the indication of actual legal act, which contains provisions regulating the advertising of OTC drugs.

*Question 6: Do you know which of the following documents contains regulations relating to the advertising of non-prescription medicines?*

A similar proportion of both women and men knew that the right legal act is the *Pharmaceutical Law Act* of 6 September 2001. In total, only 14.2% of respondents knew the answer to this question, respectively, 14.4% women and 13.6% men. As much as 86% of men and 70.1% of women replied "do not know". Women more often indicated incorrect answers than men. 7.7% of women and only 0.4% of men responded that the rules on television advertising of OTC drugs are regulated by the *Regulation of the Minister of Health concerning the list of medicinal products* from 22<sup>nd</sup> October 2010. The other wrong answer that the rules on OTC medicines' advertising are regulated by the *Act of Office for Registration of Medicinal Products, Medical Devices and Biocidal Preparations* from 18<sup>th</sup> March 2011, was chosen by 7.8% of women and none of men.

Table 11

Gender and recipients' knowledge of the document governing the regulations  
of OTC medicines' advertising

		Gender		Total
		women	men	
<b>Pharmaceutical Law Act</b> dated 6 <sup>th</sup> September 2001	Number	123	35	158
	%	14.4%	13.6%	14.2%
<b>Regulation of the Minister of Health concerning the list of medicinal products</b> dated 22 <sup>nd</sup> October 2010	Number	66	1	67
	%	7.7%	.4%	6.0%
<b>Act of Office for Registration of Medicinal Products, Medical Devices and Biocidal Preparations</b> dated 18 <sup>th</sup> March 2011	Number	67	0	67
	%	7.8%	.0%	6.0%
<b>Do not know</b>	Number	601	221	822
	%	70.1%	86.0%	73.8%
Total	Number	857	257	1114
	%	100.0%	100.0%	100.0%

In order to verify the significance of the correlation between the analyzed variables the chi-square test was performed. Significant test's result was obtained.

Table 12

The value of test chi-square test

	Value	df	Asymptotic significance (two-sided)
Pearson's chi-square test	44.487	3	.000
Likelihood ratio	68.885	3	.000
Linear relation test	9.914	1	.002
Number of valid observations	1114		

Thus the research proved the correlation between the gender and knowledge of the document governing the regulations of OTC medicines' advertising. Women significantly more often than men gave the wrong answers. The majority of respondents could not indicate the legal act regulating the issues related to the advertising of medicinal products. Only 14.4% of women and 13.6% of men gave the correct answer.

## Discussion

As was apparent from the research, different attitudes of the respondents in the division on gender, regarding the perception of the OTC medicines' television advertising can be observed. Perhaps the surprising result may be that women, more often than men, were rather negatively geared towards television advertising of OTC drugs. It is possible that this is related to another result obtained in this survey, that women, more frequently than men, wondered if people objectively present medicaments in television advertisement. Based on these two results, it can be concluded that women were more suspicious about television advertisements and they did not accept it uncritically. However, the survey also proved, that women, more often than men, made decisions about buying OTC medicines on the basis of seen television commercial. It should be noted that it concerned only one or two decision of this kind. On the other hand, men twice as often than women did not remind situation in which they had decided to purchase OTC medicine based on television advertisements. This does not mean that they actually did not make that decision. Furthermore, women significantly more often than men, assessed the situation in OTC drugs' television commercials as the "real situations in which you take the medication". However, men more frequently than women wondered if people occurring in television advertisement could perform in it in accordance with legal regulations. On the other hand, men also significantly more often than women had no opinion about the content transmitted in television commercials.

In questions checking the respondents' knowledge of legislative regulation of OTC medicines' advertising differences between genders can be observed. Men much more frequently than women gave incorrect answers about persons appearing in the advertisements of OTC drugs. They essentially more often than women pointed to the participation of doctors and pharmacists. However, in question about the actual legal act, which contains provisions regulating the OTC medicines' advertising, women significantly frequently than men responded incorrectly. On the other hand, men much more often than women, gave the answer "do not know" to the above question. However, the vast majority (almost three quarters of respondents) did not know the right answer to that question.

This survey may be encumbered certain errors. First of all, presumably the respondents wanted to better present themselves in the study and therefore they provided wishful answers: how they would like to behave in a given situation or how they would like to proceed. On the one hand, society is increasingly aware of the essence of the television advertisements, on the other hand when people decide to purchase medicines, they may forget about it. The questionnaire research allows to think before responding. Thus, the respondents intended to present themselves as more aware consumers, they may chose answers that would be better perceived by the recipients. Possibly they wanted to create themselves as rational consumers. Gender may predispose to



certain behavior inter alia because of the social functions performed by women and men. However it should be remembered that it is not always the only one variable that determines the consumers' choice.

## Conclusion

The marketing activities used by pharmaceutical companies are designed primarily to encourage customers to purchase medicinal products of a specific manufacturer<sup>8</sup>. Furthermore, pharmaceutical companies care about customers' commitment to their brand to cause buying new appearing drugs from the same manufacture in the future<sup>9</sup>. The research conducted by Kinoulty Research demonstrated that almost half (41%) of pharmacies customers while buying OTC medicines, try to choose Polish brands<sup>10</sup>. Given this phenomenon, it is important to educate the society in the field of the pharmaceutical legislative regulations which are in force in Poland and also in the field of marketing activities intentionally used by manufacturers of medicinal products. This is particularly important in the case of medicines, because they are specific products. Their application always affects human health, it can also be associated with side effects. For this reason the appropriate selection of OTC medicines according to the health status and needs of the patient is essential.

On the basis of conducted research it can be concluded that more than half of the respondents declared positive and more than one third negative attitude toward television advertisements of OTC drugs. Women significantly more often than men were geared rather negatively towards television commercials. However, approximately one third of respondents at least once decided to buy a medicinal product on the basis of seen advertisement, women essentially more frequently than men. This does not necessarily constitute a dangerous phenomenon, in condition that the decision will be carried out in a conscious way. This means, the recipient knows the pharmaceutical law concerning advertising of OTC drugs and is being aware of marketing activities and manipulations from the pharmaceutical companies and has the ability to filter the information and make an informed choice of the medicinal product. Unfortunately, low percentage of people who were able to correctly identify a legal act, which contains provisions regulating OTC drugs television advertising was obtained in the survey. Similar percentage of women and men indicated the correct answer, but it was only over a dozen percent of the respondents. Furthermore, 13% of all responses accounted incorrect indication that in OTC medicines' television commercials participate doctors, nurses, pharmacists and scientists. In this case, the men were wrong significantly

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<sup>8</sup> A. Czerw, *op. cit.*, p. 92.

<sup>9</sup> M. Michalik, B. Pilarczyk, H. Mruk, *op. cit.*, p. 273.

<sup>10</sup> Research conducted by Kinoulty Research, Relation to Polish OTC brands, [online] <[www.kinres.com.pl/file\\_download/37](http://www.kinres.com.pl/file_download/37)>, accessed: 17.10.2013.

more often than women. On the other hand, over 60% of respondents said that in their opinion, manipulations are used in television advertisements. Women and men responded this way almost with the same frequency.

On the basis of conducted research the conclusion may be drawn that consumers better than in the legislative regulations are informed about the manipulations and marketing activities used by manufacturers of medicinal products. In comparison to the situation from a few years ago, the health awareness among society has increased, but it is necessary to continuously strengthen it. Conscious consumers besides making rational choices at the pharmaceutical market, may enhance her/his health potential.

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### Summary

#### **Gender and the perception of television advertisement of OTC medicines**

The OTC medicines are advertised in all kinds of mass media. The television advertisement is the main mean of communication and hence has a great impact on the health attitudes of the society. The way, in which the society receive the content of advertisement is significant, because the medicines are specific products due to the fact that they affect the human health and life. Because of the prevalence of this situation, the authors conducted a research concerning the perception of television advertisement by the recipients. They assumed that the gender predisposes to some health behaviours and perhaps to a different perception of medicaments' advertising. The manuscript presents results of analyses of both respondents' knowledge of legislative conditions of medicinal products advertising and their attitudes towards television medicines advertisements.

### Streszczenie

Produkty lecznicze OTC są reklamowane w wielu mediach, jednakże to reklama telewizyjna jest głównym środkiem przekazu i ma duży wpływ na postawy obywateli. Sposób, w jaki społeczeństwo odbiera treść reklamy, jest istotny, ponieważ leki mają określony wpływ na zdrowie człowieka i jego życie. Z tego względu autorki przeprowadziły badania dotyczące postrzegania właśnie reklamy telewizyjnej przez odbiorców. Założyły, iż płeć predysponuje do niektórych zachowań prozdrowotnych i być może do odmiennego postrzegania reklamy leków. W artykule przedstawiono wyniki badań dotyczące znajomości regulacji prawnych reklamy produktów leczniczych, jak i postaw wobec reklamy telewizyjnej.