Making news about medicines
Trigt, Anna Maria van

IMPORTANT NOTE: You are advised to consult the publisher's version (publisher's PDF) if you wish to cite from it. Please check the document version below.

Document Version
Publisher's PDF, also known as Version of record

Publication date:
1995

Link to publication in University of Groningen/UMCG research database

Citation for published version (APA):

Copyright
Other than for strictly personal use, it is not permitted to download or to forward/distribute the text or part of it without the consent of the author(s) and/or copyright holder(s), unless the work is under an open content license (like Creative Commons).

Take-down policy
If you believe that this document breaches copyright please contact us providing details, and we will remove access to the work immediately and investigate your claim.

Downloaded from the University of Groningen/UMCG research database (Pure): http://www.rug.nl/research/portal. For technical reasons the number of authors shown on this cover page is limited to 10 maximum.
CHAPTER 6

INFORMATION ABOUT DRUGS IN FAMILY MAGAZINES

Abstract

Because of the important role which family magazines can play in the diffusion of medical information and information regarding drugs to a "lay audience" we describe in this article what kind of drugs are discussed in the family magazines and which information regarding these drugs is given. Furthermore we look into the information sources for journalists; special attention is paid to the role of the pharmacist, is (s)he recognized by journalists as one of the experts on medicines?

Two approaches were used in order to answer the above described research questions, a content analysis of family magazines supplemented with in-depth interviews of journalists.

The results of this study show that gynecological products as well as drugs for the central nervous system receive much attention in family magazines. The kind of information given about medicines is limited. Only a proportion of the publications pay attention to the side effects of a drug therapy. Therefore health professionals confronted with patients asking questions about drugs in response to publications in family magazines should realize that the patient knows the name of a drug but is seldomly informed about other aspects of the therapy, such as side effects.

In the provision of information physicians and medical specialists play an important role as sources of information for journalists. There is, however, until now no role for the pharmacist as source of information on medicines in family magazines.

1 Published in Pharmacy World & Science 1995; 17 (2): 48-53
6.1 INTRODUCTION

The general public as well as health professionals use many different sources of information about health, illness and drugs. Results of studies show that family magazines and daily newspapers not only play a role as source of medical information for the general public [1,2,3], but inform physicians and other groups of health professionals as well [4,5,6]. Family magazines are more often mentioned by the general public as a source of information on medicines than for example pharmacists [1,2].

The attention paid to science in general in the family magazines is comparable to the attention paid to this subject in the daily newspapers; approximately 5% of the space is devoted to this subject. In the family magazines medical news is the most important category of science news [7]. Durant et al. showed that the general public is very interested in news about new medical discoveries [8].

In the Netherlands more than 50% of the women over 18 years of age are reached by the family magazines [9]. Magazines supply their readers with all kinds of information. According to Hermes [10], readers learn from articles and the "question and answer" section how others solve problems in the field of relationships, illness and grief. The readers are especially interested in human interest stories and the "question and answer" section [10]. According to a physician working for a family magazine, the magazine receives in particular many letters with medical questions [11]. Physicians and medical doctors state that once a new drug or new therapy is discussed in the mass media they receive more questions about the new therapy [12]. One gynecologist stated that family magazines were very helpful in introducing the sub-50 contraceptives in the Netherlands by giving attention to these new oral contraceptives. The women were advised to ask their physicians for a 'low-dose pill' [13]. Both Wellings and Jones et al. showed a decline in the use of the "pill" after negative publicity in the mass media [14-15]. The lay media were also important communication channels in alerting health professionals and patients about the relationship between aspirin and Reye's syndrome [16], and to inform both patients and health professionals that the post-therapy contraception period after acitritin therapy was extended from two months to two years [17].

Because of the important role which family magazines can play in the diffusion of medical information and information regarding drugs to a "lay audience" we address the following questions:
What kind of drugs are discussed in the family magazines and which information regarding these drugs is given?

Where do the journalists get their information?

The World Health Organization recommends that the pharmacist should play a central role in the provision of advice and information to patients and the general public on the use of medicines [18]. Therefore, in this study special attention is paid to the role of the pharmacist, is he recognized by journalists as one of the experts on drugs?

6.2 METHODS

Two approaches were used in order to answer the above described research questions, a content analysis of family magazines supplemented with in-depth interviews of journalists. The content analysis was performed to detect publications mentioning medication in three family magazines in order to determine the kind of drugs discussed and the information given. Secondly, in-depth interviews were conducted with journalists who write about drugs in family magazines to obtain background information on the way they work, which sources they use and how they select the subjects for their stories.

Content analysis

The three Dutch family magazines used for the content analysis (Libelle, Margriet and Viva) were chosen because they contain medical information in almost every issue and because they are read by many women. The total circulation of these three magazines is 1,430,000 copies weekly [9]. Because readers often pass on the magazine to someone else, the number of readers may be much higher than the circulation indicates.

All publications in which medication was discussed over a period of one year (June 1991 - May 1992) were selected. The publications were coded with respect to several topics. First of all we differentiated between the various types of publications (question and answer section, articles and letters to the editor). Secondly, we classified the drugs mentioned by making use of the Anatomical, Therapeutical, Chemical (ATC) classification system. This system has been commonly used in drug utilization studies in Europe. In the ATC classification every preparation is given a code number consisting of up to five elements [19]. The original system consists of 14 main (anatomical) groups; we added three groups, one for homeopathic drugs, one for drugs not yet available in the Netherlands and one group for drugs in general. The 17 categories in-
cluded were: Alimentary tract and metabolism, Blood/bloodforming organs, Cardiovascular drugs, Dermatologicals, Genito urinary system and sex hormones, Systemic hormonal preparations (excl. gynecological drugs), General antiinfectives, Antineoplastic and immunosuppresives, Musculo/skeletal, Central Nervous System drugs, Antiparasitic products, Respiratory drugs, Sensory organs, Various, Homeopathic and alternative drugs, Drugs in general, and not yet available drugs. The data were analyzed on the first and second level of the ATC classification system.

To establish the agenda of the family magazines concerning drugs, the 17 main groups of the ATC system (first level) were ranked according to their frequencies. For all analyses regarding agendas, the 17 main groups of the ATC system (first level) were used. The second level of the ATC classification system was used for descriptive statistics only. A total of 89 different subclasses (second level) can be distinguished in the ATC system used.

Furthermore, we coded the name used to address the drug. Here we differentiated between four categories of names, i.e. brand name, generic name, group name (e.g. hormones) and functional name (e.g. oral contraceptives).

To study the kind of information given about drugs, we provided codes to indicate if information was given about the indication, side-effects, or contra-indications. We also checked whether the reader was advised to consult a physician. Furthermore, we collected information on the sources mentioned in the publications, whether they were patients, physicians, pharmacists or others.

Finally we determined whether the drugs most frequently discussed in the family magazines ("drug agenda of the family magazines") were also the drugs most frequently discussed in the newspapers ("drug agenda of the newspapers"). The rank order of the ATC main groups in newspapers was established as a part of our overall study and is described in detail elsewhere [20]. The agreement in ranking was tested using Spearman Rho (R_s).

Interviews

Three journalists interviewed in this study were responsible for publications about drugs in family magazines included in the content analysis. A fourth journalist worked for a Flemish family magazine not included in the content analysis. In the interviews we asked the journalists about their sources of ideas and information, and the way they select items/topics for publications. Furthermore, we asked the respondents what kind of experts they consult
6.3 RESULTS OF THE CONTENT ANALYSIS

In the three family magazines 255 publications were found containing information about drugs. Only minor differences were found in the contents of the three magazines studied. Most information (62%) was found in the question and answer section; 25% in articles, 8% in letters to the editors and 5% in small news items.

The ATC main group most frequently discussed in the family magazines was 'Genito urinary system and sex hormones' (32% of all publications). Within the main ATC group of the gynecological drugs the 'Sex hormones and stimulants of the genital system' was the most frequently mentioned subgroup, discussed in 26% of all publications (Table I). Drugs for the central nervous system were the second most frequently discussed ATC main group; 40% of the publications discussing central nervous system drugs, paid attention to the psycholeptics. Four other groups were discussed in more that 10% of the publications (Table 1).

For these six ATC main groups most publications were found in the question and answer section, except in the case of the homeopathic drugs. This latter group was most often discussed in articles (Table 2). In 70 publications (27%) one or more over-the-counter (OTC) products were discussed.

Gynecological drugs were proportionally more often discussed alone then the other five major ATC main groups. The gastrointestinal drugs were most frequently discussed in combination with other ATC main groups.

Table 1
Six major main ATC groups and subclasses most frequently discussed in three family magazines (n=255).

<table>
<thead>
<tr>
<th>ATC main group</th>
<th>ATC sub-class</th>
<th>ATC code</th>
<th>number of publications</th>
</tr>
</thead>
<tbody>
<tr>
<td>Genito urinary syst./sex horm.</td>
<td>Sex hormones and stimulants of the genital system</td>
<td>G03</td>
<td>67</td>
</tr>
<tr>
<td></td>
<td></td>
<td>G</td>
<td>81 (32%)</td>
</tr>
<tr>
<td>Central Nervous System</td>
<td>Analgesics</td>
<td>N02</td>
<td>16</td>
</tr>
<tr>
<td></td>
<td>Psycholeptics</td>
<td>N05</td>
<td>18</td>
</tr>
<tr>
<td>General Antiinfectives, systemic</td>
<td>Systemic antibiotics</td>
<td>J01</td>
<td>25</td>
</tr>
<tr>
<td></td>
<td></td>
<td>J</td>
<td>37 (14%)</td>
</tr>
<tr>
<td>Alimentary tract/metabolism</td>
<td>Vitamins</td>
<td>A11</td>
<td>18</td>
</tr>
<tr>
<td></td>
<td></td>
<td>A</td>
<td>33 (13%)</td>
</tr>
<tr>
<td>Homeopathic and altern. drugs</td>
<td></td>
<td>Y</td>
<td>29 (11%)</td>
</tr>
<tr>
<td>Dermatologicals</td>
<td></td>
<td>D</td>
<td>28 (11%)</td>
</tr>
</tbody>
</table>

when they need information on medicines. We also talked with the respondents about their training.
The indication was given in 84% of the publications. Whereas side-effects were mentioned in about a third of the articles (Table 3). The 16% that contained no information on the indication, were concerned with the occurrence of side effects of drugs.

Table 2
Kind of drug classes discussed in different sections of three family magazines

<table>
<thead>
<tr>
<th>ATC main group</th>
<th>total</th>
<th>question/ answers</th>
<th>article</th>
<th>letter</th>
<th>news</th>
</tr>
</thead>
<tbody>
<tr>
<td>Genito urinary syst./sex horm.</td>
<td>81</td>
<td>52 (64%)</td>
<td>21 (26%)</td>
<td>2 (3%)</td>
<td>6 (7%)</td>
</tr>
<tr>
<td>Central Nervous System</td>
<td>45</td>
<td>23 (51%)</td>
<td>16 (36%)</td>
<td>5 (11%)</td>
<td>1 (2%)</td>
</tr>
<tr>
<td>General Antinfectives</td>
<td>37</td>
<td>25 (68%)</td>
<td>10 (27%)</td>
<td>2 (5%)</td>
<td>-</td>
</tr>
<tr>
<td>Alimentary tract/metabolism</td>
<td>33</td>
<td>23 (70%)</td>
<td>10 (30%)</td>
<td>-</td>
<td>-</td>
</tr>
<tr>
<td>Homeopathic and altern. drugs</td>
<td>29</td>
<td>10 (34%)</td>
<td>18 (62%)</td>
<td>1 (3%)</td>
<td>-</td>
</tr>
<tr>
<td>Dermatologicals</td>
<td>28</td>
<td>19 (68%)</td>
<td>7 (25%)</td>
<td>2 (7%)</td>
<td>-</td>
</tr>
</tbody>
</table>

Table 3
Kind of information on medicines in family magazines, (N=255)

<table>
<thead>
<tr>
<th>kind of information</th>
<th>number of publications</th>
</tr>
</thead>
<tbody>
<tr>
<td>name</td>
<td>255 (100%)</td>
</tr>
<tr>
<td>group name</td>
<td>170 (67%)</td>
</tr>
<tr>
<td>functional name</td>
<td>107 (42%)</td>
</tr>
<tr>
<td>generic name</td>
<td>49 (19%)</td>
</tr>
<tr>
<td>brand name</td>
<td>49 (19%)</td>
</tr>
<tr>
<td>indications</td>
<td>215 (84%)</td>
</tr>
<tr>
<td>side effects</td>
<td>94 (37%)</td>
</tr>
<tr>
<td>contra indications</td>
<td>5 (2%)</td>
</tr>
<tr>
<td>other solutions</td>
<td>85 (33%)</td>
</tr>
</tbody>
</table>

Side effects were most often discussed in relation to drugs for the central nervous system; 47% of these publications contained information on side effects. In only 24% of the publications concerned with general antiinfectives and 18% of the articles with information on dermatologicals side effects were discussed (Table 4). Whether or not side effects were discussed in the publications depended on the drug class discussed (Chi-square= 14.08, df=5, p<0.05).

Table 4
Frequency side effects are discussed in family magazines in relation to the six ATC main groups

<table>
<thead>
<tr>
<th>ATC main group</th>
<th>total</th>
<th>side effects discussed</th>
</tr>
</thead>
<tbody>
<tr>
<td>Genito urinary syst./sex horm.</td>
<td>81</td>
<td>31 (38%)</td>
</tr>
<tr>
<td>Central Nervous System</td>
<td>45</td>
<td>21 (47%)</td>
</tr>
<tr>
<td>General Antinfectives</td>
<td>37</td>
<td>9 (24%)</td>
</tr>
<tr>
<td>Alimentary tract/metabolism</td>
<td>33</td>
<td>13 (36%)</td>
</tr>
<tr>
<td>Homeopathic and alter. drugs</td>
<td>29</td>
<td>4 (14%)</td>
</tr>
<tr>
<td>Dermatologicals</td>
<td>28</td>
<td>5 (18%)</td>
</tr>
</tbody>
</table>

Chi-square = 14.1, df = 5, p < 0.05
In 35% of all publications the reader was advised to consult a physician to discuss a complaint or therapy. In another 11% the readers were advised indirectly to consult their physician; in these publications it was for example stated that prescription drugs were necessary. In 8% of the publications a physician was already consulted and the magazine was asked for a second opinion. In the question and answer section the readers were advised to consult their physician (directly or indirectly) in 55% of the publications.

Other solutions (no pharmaceuticals) were mentioned in one third of all publications. The other solutions mentioned were among others drinking milk instead of taking calcium tablets and using a "pad and buzzer" to train a bed-wetter.

The information that was given about drugs came from a variety of sources. In 63 publications a patient (expert of experience) was cited and in 161 publications (63%) a physician or medical doctor was mentioned as source. Pharmacists were not cited as source at all. The combination of both the expert by experience and physician was found in a limited number of publications (15 publications).

The name most often used was a group name (Table 3). A functional name was found in 107 publications (42%), and a brand name was used in about a 19% of all publications. In 5% of all publications the brand name was the only name used. In 26 (38%) of the publications mentioning OTC products the brand name was used to address the product; whereas in only 12% of the articles which discussed prescription drugs a brand name was used. A brand name was significantly more often used in relation to an OTC product than a prescription drug (Chi-square = 19.98, df = 1, p < 0.05).

For the homeopathic drugs the brand name was used in 38% of the publications. The dermatologicals and drugs for the central nervous system were both in approximately a third of the publications mentioned with a brand name. A group or functional name

<table>
<thead>
<tr>
<th>ATC main group</th>
<th>total</th>
<th>brand name</th>
<th>generic name</th>
<th>group and or functional name</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>n (%)</td>
<td></td>
<td>n (%)</td>
<td>n (%)</td>
</tr>
<tr>
<td>Genito urinary syst./sex horm.</td>
<td>81</td>
<td>10 (12)</td>
<td>10 (12)</td>
<td>78 (96)</td>
</tr>
<tr>
<td>Central Nervous System</td>
<td>45</td>
<td>14 (31)</td>
<td>8 (18)</td>
<td>39 (87)</td>
</tr>
<tr>
<td>General Antinfectives</td>
<td>37</td>
<td>3 (8)</td>
<td>5 (14)</td>
<td>37 (100)</td>
</tr>
<tr>
<td>Alimentary tract/metabolism</td>
<td>33</td>
<td>2 (6)</td>
<td>15 (45)</td>
<td>20 (61)</td>
</tr>
<tr>
<td>Homeopathic and alter. drugs</td>
<td>29</td>
<td>11 (38)</td>
<td>4 (14)</td>
<td>23 (79)</td>
</tr>
<tr>
<td>Dermatologicals</td>
<td>28</td>
<td>9 (32)</td>
<td>15 (54)</td>
<td>13 (46)</td>
</tr>
</tbody>
</table>

Table 5
Frequency of different kinds of names to address a drug by ATC main groups
was used in all publications for general antiinfectives and antibiotics, accompanied by a brand name in 8% (Table 5).

The agenda of the magazines is clearly related to the drug agenda of the newspapers, Spearman’s rho is 0.71 (Table 6). The three main ATC groups most often discussed were prominent in both newspapers and family magazines: gynecological drugs, central nervous system drugs and general antiinfectives and antibiotics. The family magazines did however pay proportionally more attention to homeopathic drugs.

### 6.4 Results of the Interviews

The background of respondents is diverse; two have a university degree (one had studied mass communication and the other one Dutch language). Only one of the respondents got some training in the medical field; she attended a few medical lectures. Their experience is journalism varied from 7 to 24 years.

The journalists reported to use different sources to get ideas for articles on health, illness and drugs. Letters from the readers, ideas brought up by colleagues, daily newspapers and press releases from different sources were mentioned as important sources of ideas. Only one respondent considered scientific and medical journals to be important sources of ideas and information.
The magazines receive many letters from their readers. One of the respondents estimates that the magazine receives 200 letters a week, of which about two thirds concerned medical questions.

Pharmaceutical companies supply the journalists with information and invitations. They send press releases and company magazines; sometimes journalists are invited to a press conference or congress. One respondent indicates that there is sometimes a form of co-operation between a company and the magazine. A company finances an enclosure about an illness or drug, or organizes a telephone answering service.

The questions and answers section is an important channel for health-related information. For the selection of questions and the answers the editors seek advice from physicians and medical specialists as experts. Some magazines have physicians on their staff. Most experts were consulted on a regular basis because the journalist had good experiences with them: "If someone knows our magazine, the way we work and the language we use it is very convenient to consult him or her". One of the respondents indicated that it is sometimes difficult to find an other expert because not all experts are suitable as source of information.

All the respondents on occasion interviewed patients. These patients were found through patients' organizations and letters which the editors of the magazine receive. Sometimes a physician was asked to approach a patient.

Pharmacists were mentioned by two of the four respondents as a information source on medicines. Physicians were mentioned by all the respondents.

The most important criterion for selection is the supposed interest of the audience in the topic. The interest of the readers is known by the editors from the letters they receive and by experience. Therefore some topics are discussed in the magazines on a regular basis; contraceptives are for example discussed often, because 'new' readers ask 'old' questions. The topics for the question and answer section and the articles were not only inspired by these letters but also by the time of year. Examples of a season-related subjects are sun allergy or influenza. On the other hand, some topics can not be discussed in summertime, for example life threatening diseases, because the editors expect their readers to read the magazine on holiday.
Besides providing general information about health and illness, family magazines indeed pay attention to information on drugs. In the selection of topics to write about, the major concern of the journalists is the interest of their readers. Family magazines are targeted at women and are read by far more women than men. It therefore seems logical that the drugs most often discussed are gynecological products. Oral contraceptives, belonging to this category, are used by approximately 1.4 million women in the Netherlands [21]. The attention paid to tranquilizers is also related to the consumption of these drugs. Approximately 12% of the women used tranquilizers according to a study done in 1987 [22]. Cardiovascular drugs were used by 9% of the women [23], but these drugs are not often discussed in family magazines. Homeopathic drugs are more often discussed in the articles than in the question and answer section; this is in contrast with the other major ATC main groups. This might be due to the fact that physicians play a significant role as adviser or editor of this section.

The kind of information given about drugs is limited. Only a part of the publications pay attention to the side effects of a drug therapy. This is also found in the American study of Chrisler and Levy (1990) who studied information on premenstrual syndrome in magazines [24]. On the other hand, in one third of the publications the reader is advised to consult a physician. Physicians state that indeed once a new drug is discussed in the mass media they do get more questions [12]. Elie studied the effect of mass media publicity about medical subjects on consultation behavior at physicians; she found little effect on the frequency of the presenting complaints, in general. However, mass media publicity about new cures did cause a significant increase in the frequency of the presentation of the complaint relating to that therapy [25]. Health professionals confronted with patients asking questions about drugs in response to publications in family magazines should realize that the patient knows the name of a drug but is seldom informed about other aspects of the therapy, such as side effects. Negative aspects of drug use receive little attention in the family magazines.

According to a Dutch consumer organization the magazines sometimes advise the use of a brand drug. The organization suspects the influence for the pharmaceutical industry here and in fact considers this as a form of masked advertising [26]. In this study a brand name was found in a limited number of publications, proportionally homeopathic drugs were most frequently
cited by brand name. It is interesting to notice that OTC products are more frequently cited by brand name than prescription drugs. A physician attached to a family magazine expressed disapproval of the use of brand names in a family magazine [27]. Group and functional names were most often used to point to a drug. These names are more clear to the readers of the magazine than a brand or generic names.

The idea sources of the journalists working on family magazines are quite different from the sources used by newspaper journalists. Newspaper journalists focus on the scientific and medical literature to search for news items [28], while journalists working on family magazines are more interested in items that are directly useful or applicable for their readers and are therefore guided by letters from their readers and ideas from other mass media channels. Nevertheless the agendas agree. This partly determined by the important role newspapers play as source of ideas for journalists working on family magazines. The drugs most frequently discussed in the family magazines are also the groups of drugs most frequently discussed in the newspapers.

In general, physicians and other medical experts do play a major role as sources of information on drugs whereas newspaper journalists' major sources of information are the scientific and medical literature and personal contacts with researchers [28]. In contrast to journalists working for daily newspapers, journalists working at family magazines prefer to use the same experts on several occasions. The pharmacist is, however, seldom asked for advice by journalists.

Sometimes a magazine co-operates with a pharmaceutical company. A company may finance an enclosure about a disease or group of drugs. Physicians and pharmacists in the Netherlands sometimes receive mailings from pharmaceutical companies to draw their attention to publications in family magazine [29]. Physicians are in this way prepared to answer questions from patients [30] and pharmacists can buy the drug in advance so they have enough of it in stock [31].

In conclusion we can say that different kinds of drugs are discussed in the family magazines. The choice of topics is directly related to the interest of the readers, much attention is paid to gynecological drugs. The information given about drugs is limited. Side effects for example are not frequently discussed. In the provision of information physicians and medical specialists play an important role. There is, however, until now no role for the pharmacist as source of information on medicines in family magazines.
REFERENCES


5 O’Keefe MT. The mass media as sources of medical information for doctors. Journalism Quarterly 1970; 47: 95-100.


7 Oudenrijn F. van den. Tijdschriften, een medium voor wetenschap en techniek? (Family magazines, a medium for science and technology?) Scriptie Katholieke Universiteit Nijmegen/ Stichting PWT, 1991.


10 Hermes J. Sommige dingen doe ik alleen op uit vrouwenbladen en niet uit de praktijk: Over het gebruik van vrouwenbladen en empowerment. ( Some things I learn by reading family magazines and not by experience: the use of family magazines and empowerment) Massacommunicatie 1989; 4: 283-304.


20 Van Trigt AM, De Jong-van den Berg LTW, Willems J, Haaijer-Ruskamp FM. Does the scientific medical literature set the agenda for medicines discussed in newspapers. Pharmacy World & Science 1993, 15 (6): K14
24 Chrisler JC, Levy KB. The media contruct a menstrual monster: A content analysis of PMS articles in the popular press. Women & Health 1990; 16(2): 89-104
25 Elie IHPM. Medische berichtgeving in de media en consultatiegedrag bij huisartsen. (Medical news in the mass media and physician consultations) Nijmegen, Communicatiewetenschappen Katholieke Universiteit Nijmegen, 1992.
27 Klaassen EJ. Geen verkapte reclame in vrouwenbladen. (No hidden advertising in family magazines) InterinYho magazine 1991; (mei): 7
29 Hofstee HH. Geneesmiddelreclame (ing.brief). (Drug advertising (letter)) Medisch Contact 1991;46 (12):358
31 Bruinsma H, Dekker F. Beïnvloeding van de huisarts door geneesmiddelreclame. (Influencing the physician by drug advertising). Pharm Weekbl 1991; 126: 1030-6