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# An exploratory study of older adults' perceptions of DTCA for prescription medications

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There are many arguments for and against Direct-To-Consumer-Advertising (DTCA) and their impact on the consumer. A study involving 97 older consumers was carried out to investigate their perceptions about long or short versions of written DTCA for arthritis or diabetes medication. The results indicate that even though the ads may improve doctor-patient discussion about medications, they would not necessarily empower them to make decisions. Some of the consumers also believed that DTCA might cause people to ask for inappropriate medicines, become confused and possibly stop seeking medical advice.

## **Disciplines**

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# **An Exploratory Study of Older Adults' Perceptions of DTCA for Prescription Medications**

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## **Abstract**

*There are many arguments for and against Direct-To-Consumer-Advertising (DTCA) and their impact on the consumer. A study involving 97 older consumers was carried out to investigate their perceptions about long or short versions of written DTCA for arthritis or diabetes medication. The results indicate that even though the ads may improve doctor-patient discussion about medications, they would not necessarily empower them to make decisions. Some of the consumers also believed that DTCA might cause people to ask for inappropriate medicines, become confused and possibly stop seeking medical advice.*

Keywords: DTCA, older adults, pharmaceuticals

## **Introduction**

### **Direct-To-Consumer Advertising (DTCA) for Prescription Medications**

The United States (US) and New Zealand (NZ) are currently the only industrialised countries that allow Direct-To-Consumer-Advertising (DTCA) for prescription drugs (Gold, 2003). Over the past few years however, there has been increased pressure from the pharmaceutical industry and related lobby groups to allow DTCA for prescription drugs in Australia, Canada and the European Union (Mintzes 2002; Mintzes *et al.*, 2003). A recent shift in the interpretation of policy governing this DTCA marketing strategy has seen its partial introduction in some European countries and in Canada.

In the US there has never been a law prohibiting DTCA and the first print DTCA appeared in the early 1980s. During that time and more recently, the US Food and Drug Administration (FDA) developed and implemented strict guidelines for the DTCA of pharmaceutical drugs concerning indications, risks and drug effects (Rosenthal *et al.*, 2002, Mintzes, 2002). Similarly, New Zealand has DTCA because of the absence of a prohibitory law. Unlike the US however, New Zealand relies on industry self-regulation, which often results in less risk information appearing in a NZ DTCA than an equivalent US DTCA (Mintzes, 2002).

Based on the US experience, DTCA has had a major impact on the public awareness of prescription drug products. According to US surveys over 90 percent of the public report seeing prescription drug advertisements (Frank *et al.*, 2002) and an estimated 8.5 million consumers annually, have both requested and received a prescription from their physicians in response to DTCA (Heinrich 2002). Spending for DTCA is concentrated on a relatively small number of drugs that treat chronic conditions (Heinrich, 2002). In 2001, the top 10 drugs accounting for a third or 36% of all DTCA in the US (Kaiser Family Foundation, 2003), also ranked high in sales (Rosenthal and Kaiser, 2003).

Currently, even though DTCA is prohibited in Australia, ‘disease advertising’ is permitted (Sutherland, 2002). It is legal therefore, to advertise the availability of products to treat different medical conditions without specifying brand names. Recent times have resulted in an increase in campaigns advertising the treatment of various conditions including obesity, arthritis, fungal infections and genital herpes. In most instances there is a 1800 telephone number for consumers to gain easy access to information about the product which is being advertised.

### **Arguments For and Against DTCA**

In theory, DTCA empowers consumers to make better medical treatment choices, however many would argue about the accuracy and the bias of such advertisements. The following is a summary of *some* of the arguments for and against the impact that DTCA may have on consumers, physicians and the health care system.

#### Arguments for DTCA

- Provides the consumer with information that is validated and complies with guidelines agreed upon by regulatory authorities (Watson, 2002).
- Provides consumers with information about treatment options (Frieden, 2003), helping to increase public awareness and possible treatment of serious diseases such as diabetes, hypertension or depression (Homer, 1999).
- Provides consumers with treatment alternatives to current treatment regimens that may be insufficiently effective or may have unpleasant side effects (Gold, 2003).
- Improves doctor-patient communication and medication compliance (Lewis, 2003; Roberts, 2003), providing a valuable information resource for patients already actively seeking participation in their health care (Rosenthal *et al.* 2003).
- Doctors believe that consumers understand to consult with their health-care professional about appropriate treatment, even after exposure to DTCA (Lewis, 2003).

#### Arguments against DTCA

- DTCA is often misleading (Roberts 2003) with little quantitative data to support claims (Woloshin *et al.*, 2001), and the public rarely receives corrections (Mintzes, 2002).
- Consumers are bombarded with a hard sell from drug companies (Watson, 2002).
- DTCA is aimed at bringing new, patented medicines, whose risks and benefits are not known, to the attention of potential users, who would readily benefit from older, cheaper alternatives (Mintzes, 2002; Roberts, 2003).
- DTCA may encourage consumers to believe that they are suffering from medical conditions (when, in fact, they are not), which can only be treated with pharmaceuticals (Gold 2003; Woloshin *et al.*, 2001).
- Consumer’s requests for medicines are a powerful driver for prescribing decisions (Gold 2003; Mintzes *et al.*, 2003). Surveys indicate that doctors prescribe most requested drugs (Mintzes, 2002) and feel pressured to prescribe specific brands (Lewis, 2003).
- The increasing demand for inappropriate prescriptions may damage the doctor-patient relationship (Murray, 2002).
- During the past 20 years of advertising in the US, there is no evidence that DTCA has reduced hospitalisations, disease or deaths (Mintzes, 2002).

The purpose of the current study was to investigate older consumers' perceptions of the effects of DTCA, and their views in relation to the amount and type of information that should be provided in these advertisements.

## **Methodology**

The participants in this study were 97 members of a regional Australian branch of the University of the Third Age (an international organization that provides educational seminars and activities for retired people). The mean age of the participants was 67.4 years (range 55 to 87), and 73% (71) were female. Sixty percent (58) were born in Australia; and of those born outside Australia, all had lived in Australia for more than 15 years.

The questionnaire was distributed during the group's usual weekly meeting. There were four different versions of the questionnaire, which varied according to the type of medication (arthritis medication versus diabetes medication) and the type of ad (short version, full page ad only versus long version, full page ad plus full page of small print). Participants were randomly allocated according to their medical conditions. The questionnaires were identical, apart from the inclusion of additional questions about the 'small print' in the two long ad conditions. The number of participants in each condition were: diabetes long = 27, diabetes short = 13, arthritis long = 29, and arthritis short = 28.

The incidence of arthritis sufferers in the sample, as anticipated, was considerably higher than the incidence of diabetes sufferers. Fifty-five percent (53) of the respondents reported that they currently have arthritis and a further 13% (13) indicated that they are at high risk of developing arthritis. Thirteen percent (13) reported that they currently have diabetes and a further 8% (8) indicated they have a high risk of developing diabetes. Thus, it is reasonable to assume that arthritis medication is a high-involvement product for 68% of the respondents as opposed to the diabetes medication for 21%.

## **Results**

### **Attitudes Towards the Information in the Ads**

*Considering the whole ad, were there any types of information that were missing or inadequate?*

A total of 82 respondents answered this question. Comparing across medications, 75% (25) of the 34 respondents in the diabetes group and 85% (41) of the 48 respondents in the arthritis group reported that they felt information was missing, a non-significant difference. Comparing across ad types, 79% (38) of the 48 respondents in the 'long ad' condition and (82%) 28 of the 34 respondents in the 'short ad' condition reported that they felt information was missing. Interestingly, those who read the long version were no less likely to believe that information was missing or inadequate. Participants, who responded that they felt information was missing or inadequate, were asked to choose from a list of eight items indicating what information they thought should be provided. The most common information selected was cost (60 respondents), followed by what the medicine contains (38), how to get more information about the medicine

(31), how to use it (23), who can use it (17), who should not use it (15), the medicine’s benefits (10), and it’s side effects and risks (9). There were no significant differences in the types of information respondents felt were missing between the two medication groups. Importantly, the proportion of respondents who felt that specific items of information were missing or inadequate differed across the ad types for only one item, which was ‘what the medicine contains’ (30% of respondents reading the long ad versus 51% reading the short ad,  $p = .04$ ).

*Was there anything in the ad that does not need to be there?*

A total of 75 respondents answered this question. Comparing across medications, 18% (6) of the 33 respondents in the diabetes group and 12% (5) of the 42 respondents in the arthritis group reported that they felt unnecessary information was included, a non-significant difference. Comparing across ad types, 18% (8) of the 45 respondents in the ‘long ad’ condition and 10% (3) of the 30 respondents in the ‘short ad’ condition reported that they felt unnecessary information was included, a non-significant difference. Those who responded that they felt unnecessary information was included were asked to choose from a list of eight items indicating what they believed should *not* be included. The only items reported to be unnecessary were, the cost of the medicine (5 respondents)<sup>1</sup>, how to get more information about it (3), what it contains (2), and who should not use it (1). No respondents thought that information on the medicine’s side effects or risks, benefits, who can use it, or how to use it was unnecessary.

**Attitudes Towards Advertising of Prescription Medicines in General**

Respondents were asked six questions about their perceptions of the potential effects of advertising of prescription medicines (two potentially positive effects, and four potentially negative). Responses were on a four-point scale where 1 = ‘no, it wouldn’t,’ 2 = ‘possibly would,’ 3 = ‘probably would’ and 4 = ‘definitely would.’ Mean scores for each of the six questions are shown in Table 1.<sup>2</sup>

**Table 1: Mean Scores on DTCA Opinion Questions**

	N	Mean	SD
Make better decisions	93	2.22	.95
Better discussions with doctor	97	2.71	.99
Confuse people	89	2.54	.92
Ask for unsuitable medicines	91	2.69	.88
Rely more on medicines	90	2.72	.89
Think not need doctor	92	2.35	.92

There were no significant differences between males and females in their responses to any of these questions, which is why combined results are presented. There were no significant differences in reported opinions between those who read the short version and those who read the long version of the ad. However, there was a difference on one item between those who read the arthritis medication ad and those who read the diabetes medication ad (discussed below).

<sup>1</sup> Note that this information was not actually provided in the ads

<sup>2</sup> For comprehension purposes, the positive items are discussed first (and labeled Q1 and Q2) and the negative items discussed last (labeled Q3-Q6); in the actual questionnaire, the positive items were the first and sixth questions.

## Positive effect

*Prescription medicine advertising would help people make better decisions.* The mean score on this item was 2.22 (just above ‘possibly would’). Over one-quarter (27%) of the respondents felt that DTCA would *not* help people make better decisions, only 10% felt that it definitely would, and the rest that it possibly or probably would help them (34% and 29% respectively).

*Prescription medicine advertising would help people have better discussions with their doctor about their health.* The mean score on this item was higher than the previous positive question, at 2.7 (just below ‘probably would’). Only 10% of the respondents felt that DTCA would not improve patients’ discussions with their doctors, over one-quarter (28%) felt that it definitely would, and the rest that it possibly or probably would help them (36% and 26% respectively).

## Negative effect

*Prescription medicine advertising would confuse people about what medicine is right for them.* The mean score on this item was 2.54 (mid-way between ‘possibly would’ and ‘probably would’). Approximately 10% of the respondents felt that DTCA would *not* confuse people, 19% that it definitely would, and the majority that it possibly or probably would confuse people (45% and 26% respectively).

*Prescription medicine advertising would cause people to ask their doctor for medicines that may not be suitable for them.* The mean score on this item was 2.69 (slightly below ‘probably would’). Approximately 8% of the respondents felt that DTCA would *not* cause people to ask for unsuitable medicines, 20% that it definitely would, and the majority that it possibly or probably would cause them to (35% and 37% respectively). Interestingly, those who read the diabetes medication ad were more likely to believe that DTCA would cause people to ask their doctor for unsuitable medications (mean 3.0 versus 2.5,  $t = 2.63$ ,  $p = .01$ ). More than three times as many respondents who read the diabetes ad as opposed to the arthritis ad, reported that they felt DTCA would *definitely* cause people to ask for unsuitable medicines (30% versus 9%).

*Prescription medicine advertising would make people rely more on medicines to treat their health problems.* The mean score on this item was 2.72 (again, slightly below ‘probably would’). Approximately 9% of the respondents felt that DTCA would *not* cause people to rely more on medicines, 20% that it definitely would, and the majority that it possibly or probably would cause them to (30% and 41% respectively).

*Prescription medicine advertising would make people think they don’t need their doctor’s advice about medicines.* The mean score on this item was 2.35 (slightly above ‘possibly would’). Approximately 19% of the respondents felt that DTCA would *not* make people think they do not need their doctor’s advice, 12% that it definitely would have this effect, and the majority that it possibly or probably would cause them to (40% and 29% respectively).

## Discussion

The most surprising finding from this study was the lack of difference between the two groups in their assessment of the ads providing too little, or too much, information. That is, those who read the short version were equally likely to feel that their information needs were met, as were those who read the lengthy version. This finding should be further investigated to determine the optimal amount of information to provide in DTCA ads.

The respondents generally believed that advertising of prescription medicines may help people to have better discussions with their doctor about their health, even though they were less certain that it would help them make better decisions. On the negative side, they were concerned that DTCA may cause people to ask their doctor for inappropriate medicines, rely more on medicines to solve their health problems rather than seek medical advice and become more confused about their medicines. It is noteworthy that the answers are respondent's perceptions only.

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