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Negative Side Effects May Include": The Social Construction of Direct-to-Consumer Pharmaceutical Advertising as a Social Problem

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Abstract

This paper explores direct-to-consumer prescription drug advertising (DTCPA) and the way it has been reported on in mass media. Social problems theory suggests that a society must recognize a condition as problematic in order for the social problem to exist. Additionally, Spector and Kitsuse recommend that sociologists should not focus on the conditions that make up social problems, but instead the groups who define social problems (claims makers) and their activities. This paper uses social problems theory to report on a content analysis of the New York Times (NYT) and its coverage of DTCPA to find themes and subthemes. The results of the content analysis reveal that the NYT frames DTCPA predominantly as a problem with various financial, social, and medical risks to consumers. When the NYT reports on benefits of DTCPA, they mirror pharmaceutical companies' claims. The results suggest that the NYT acts as a forum for DTCPA debate and a claims maker in constructing DTCPA as a social problem.

1. Introduction

The scene is familiar to most Americans: a photo or video clip of a person looking miserable because of an illness Maybe they're holding their lower back due to pain, sneezing from pollen in the air, or looking longingly at their sexual partner, unable to perform because of erectile dysfunction. Then, a solution! The name of a prescription drug and suddenly the same actor is cured! All the consumer has to do next is listen to a quick list of the most common side effects associated with that particular brand and ask their doctor for a prescription. Ads for prescription drugs are now commonplace. They are on television during major programming, in the most popular magazines, before YouTube videos, and in healthcare facilities. According to a study in the *Pharmacy and Therapeutics* journal, "The average American watches as many as nine drug ads a day, totaling 16 hours per year, which far exceeds the amount of time the average individual spends with a primary care physician"[1]. This type of advertising, Direct to Consumer Pharmaceutical Advertising (DTCPA) is a relatively recent phenomenon that has been widely covered by the media, effects Americans across cultural groups, and therefore merits further sociological examination.

DTCPA is a current and controversial issue that shows no signs of disappearing. In 2014, pharmaceutical companies spent 4.5 billion marketing prescription drugs[2]. Nearly 60 percent of Americas were regularly taking a prescription drug in 2012, according to a study published in the Journal of the American Medical Association[3]. This number rose from 51 percent in 2000[4]. With millions more Americans now having health insurance through Obamacare, DTCPA may continue to increase. Though DTCPA is on the rise, the controversy surrounding it continues. Proponents of DTCPA claim that it empowers patients to be involved with their own healthcare and provides necessary education on new drugs and side effects, while opponents claim that it leads to eroded doctor/patient relationships, unnecessary prescription drug use, and an atmosphere of consumerism surrounding healthcare. Since its popularity boomed in the 1980s and 90s, newspapers have covered the DTCPA debate. This debate is one that spans institutional and individual

levels. In this paper, I analyze the New York Time's coverage of DTCPA to explore how they have constructed it as a social problem.

2. Literature Review

Pharmaceutical companies focusing on DTCPA to increase profits is a new phenomenon that has changed consumer and physician practices. Before the 1980s, pharmaceutical companies focused on marketing their products solely to physicians[5]. Drug companies could technically market directly to consumers from 1938 onward if ads were approved by the Food and Drug Administration (FDA), but final regulations on this type of advertising were not released until 1969[6]. The real boom in prescription drug advertising to consumers came in the late 1980s and early 1990s, when economic and cultural changes created a climate where patients became more involved in their own medical decisions. During that time, regulations for DTCPA were relaxed and pharmaceutical companies were less concerned with protecting the doctor/patient relationship[7]. The first DTCP advertisements ran in 1981 and 1983, which concerned the FDA. From 1983 to 1985 companies were asked by the FDA to stop running ads voluntarily until further regulations could be created. The FDA required companies to include the same information previously required when advertising to physicians, including all of the risks from the prescription package insert. They were also required to discuss both the benefits and risks of the drug in the advertisements[8]. Because these requirements made marketing outside of print ads expensive, radio and television ads did not become as widespread until regulations were relaxed in 1997[9].

Before 1997 pharmaceutical companies were spending millions of dollars on DTCPA, but this number became billions shortly after the relaxation of regulations and has increased ever since. In 1997, drug companies were only required to mention general risks, were allowed to name specific drugs, and were not required to give full disclosure in advertisements. Instead, they could refer customers to a website or hotline where they could find the information[10]. After this change the DTCPA budget "more than tripled to 1.2 billion in 1998" [11]. In 2004, regulations were relaxed further, requiring companies to list only "major risks" in simplified language that average consumers could easily understand, and the industry continued to grow. In 2007 and 2008, DTCPA spending was 5 billion, which includes television, internet, print, and radio ads[12]. This gigantic, rapid growth benefits stakeholders like health insurers, investors in pharmaceutical companies, and state and federal governments. But, DTCPA is also the subject of a debate about the necessity of the advertising and questionable benefits to consumers[13].

The debate surrounding DTCPA centers on concern for consumers. Firstly, opponents question whether DTCPA is actually empowering patients or simply giving them a false sense of empowerment without all the necessary information[14]. Scholars argue that instead of empowering patients, it encourages patients to self-diagnose and ask for unnecessary prescriptions[15]. Physicians have complained that they are no longer the first resource for patients because DTCPA has taken away their authority[16]. Additionally, although the drug industry claims that DTCPA keeps patients aware of the newest medical advances, it may actually just inform them of new and similar drugs that do not represent medical advancements but drive up drug costs because of branding[17]. Branding drugs drives consumers to request specific drugs and creates a culture of consumerism surrounding health and illness.

Scholars studying DTCPA have focused on whether it is an effective form of advertising. Though physicians are ultimately the prescribers of medication, DTCPA directs consumers to their doctors who are often quick to honor requests. Singh & Smith did a mail survey on DTCPA and 40 percent of respondents had asked their doctor about a drug after seeing an ad. Of these respondents, 17 percent asked for the specific brand in the ad, and 58 percent of patients were then prescribed that brand[18]. In the case of antidepressants, a study by Tentler, Silberman, Paterniti, Kravitz, and Epstein analyzed physician prescribing behavior using questionnaires and focus groups[19]. They found that some physicians were annoyed by requests for medication from DTCPA while others were empathetic. After hearing patient's requests for antidepressants the majority of physicians prescribed the requested drug in order to better their relationship with the patient and reported airing on the side of over treating patients. Additionally, more than half of the doctors seemed to believe that patients had diagnosed themselves correctly based on DTCPA[20]. These two examples illustrate the necessity of accessing various stakeholders and media coverage surrounding DTCPA. It is an advertising tool that has a direct impact on the health of individuals.

In medical sociology, scholars have researched what accounted for the recent expansion of the pharmaceutical industry. In 2007, the industry did 600 billion in global sales[21]. This growth, which started in the early 1980s, has a timeline with matches that of DTCPA's growth. Representatives of the industry often portray this growth as a result of increasing technology while medical sociologists attribute it to medicalization, which makes an increasing range of social issues into medical problems. However, Abraham coins the phrase "pharmaceuticalization" to describe the

various sociological factors including the political climate, consumerism, and deregulatory state ideology to explain pharmaceutical growth. Abraham suggests that medicalization partnered with widening diagnostic criteria, emerging new drugs, and increased advertising contributes to an atmosphere of consumerism in the medical field[22]. This rising pharmaceuticalization of America is distinct from that in other countries and relates directly to DTCPA. Because the United States is one of the few countries that allow DTCPA, examining news sources and their coverage of the issue provides additional insight into the various aspects of the construction of DTCPA as a social problem.

In 2006, Coleman, Hartley, and Kennamer published a content analysis of mainstream news coverage of DTCPA. They focused on claims makers, or groups of people that work to define social problems. They examined seven newspapers to identify claims makers' frames in print media and to find out which sources dominate the media discourse on DTCPA[23]. They found that drawbacks, which stated non-financial risks of DTCPA was the most used frame, followed closely by benefits, which stated success or rewards associated with DTCPA. They also examined the mention of the FDA's relationship to pharmaceutical companies. I add to their study by using social problems theory and examining a more extensive list of categories and subthemes over a larger time frame.

3. Research Question

Scholars have argued over how to define the idea of social problems and the best ways to study them. According to Lopata, "A social problem does not exist for a society unless it is recognized by that society to exist"[24]. Social problems are not inherently problematic, but depend on societies' perceptions and actions. In the past, researchers focused solely on the problems themselves by viewing the conditions in an objective way. However, Blumer asserted that social problems were not "objective conditions and social arrangements," but "products of a process of collective definition"[25]. Instead of looking at the conditions that are considered harmful to society researchers should study the process by which those conditions come to be recognized as a social problem[26]. Spector and Kitsuse suggest that social problems theorists need to go a step further and focus solely on claims makers and their activities; focusing on how claims are formed, contested, amended, and socially engaged[27]. Claims makers, according to Spector and Kitsuse, are groups of people that define a condition as a problem and assert the need for changing that condition[28]. Examples of previous studies that have examined how social problems are socially constructed include: alcoholism, child abuse, hate crimes, infertility, and stalking[29].

In order to study how these claims makers construct phenomena as social problems, Spector and Kitsuse suggest that sociologists should study "*the emergence and maintenance of claim making and responding activities"*[30]. Social problems theory studies the activities of making claims, which groups are making claims, and responses to these claims. This can involve studying language used in literature about the social problem, as well as government and legal responses to claims[31]. In order for a condition to become a social problem claims makers must first create public controversy[32], which is where newspapers aid the construction of social problems. The media does not necessarily reproduce the opinions of claimants, but instead can be a claims maker itself as it shapes the images it conveys. Newspapers become a forum for and reporter of public controversies[33].

It is with this social problems theory in mind that I shaped my research on newspaper coverage surrounding DTCPA. Since the 1980s, with a boom since 1997, DCTPA has been a popular and effective method of advertising prescription drugs. By doing a content analysis of the New York Times' (NYT) coverage of DTCPA, I seek to answer the questions: To what degree, and via what means has the NYT constructed DTCPA as a social problem? What are the elements of this social construction and what types of claims does the NYT make about DTCPA? In order answer these questions I did a content analysis of the NYT and found themes and subthemes in their coverage of DTCPA.

4. Methodology

Content analysis is a useful research method for determining trends, focus, and intentions of a given organization, individual, or media source. Instead of focusing on the advertisements themselves, I chose to do a content analysis to produce an account of the social construction surrounding DTCPA, thereby contributing to a deeper understanding of how newspapers serve to both construct and report on existing social problems. News sources, including television, newspaper, and increasingly the internet, are often the primary way that the general public is educated about social problems, though they may be unaware of the presence of claims makers and the way those problems are constructed. Through these sources Americans found out about DTCPA and the controversy surrounding it from its beginning.

The New York Times is a popular, widely read newspaper which counted over 1.6 million readers in 2015. Of these readers, 1 million subscribed digitally while 625,000 received a daily paper copy of the NYT. The NYT websites also has 59 million other visitors per month, who can read articles even though they are not subscribers. Additionally, the NYT News is a free mobile app draws in additional readers[34]. Because of its widespread national and international readership, NYT was the best choice for my content analysis. It is a well-respected, widespread news source that has been able to claim over a million readers for more than a decade[35].

5. Sample

In order to find a sample for this content analysis I searched all of the articles available in the NYT article archives. These archives contain all of the articles published in the NYT from 1851 to the present. For my search, I used the search terms "Direct to Consumer Drug Advertising." This search yielded 633 articles containing any of the terms in the search phrase. To narrow down my sample to the articles that were actually about DTCPA, I briefly read over the 633 search results and created a chart showing which ones were about DTCPA. If the article focused on DTCPA as a whole or relating to a specific drug, or included a subheading or paragraph that discussed DTCPA directly I included in the first sample. I organized these in chronological order from newest to oldest. I did not include articles that were about prescription drugs if they did not mention their advertising; nor did I include articles about advertising of other products, or about advertising pharmaceuticals directly to physicians. By using this method, I produced a purposive sample to use for my research. After this process, my sample contained 142 articles, dating from February 15, 1952 to January 26, 2016. During my data collection, an additional 13 articles were removed from the sample, because of their focus on a topic other than DTCPA. My final sample from the NYT included 129 articles.

For the purpose of this sample, I defined "prescription drugs" as any medication that must be prescribed by a medical practitioner. I included medical devices and cosmetic prescription medications, but did not include over-the-counter medications unless they were prescription medications at the time the article was written. To define "direct-to-consumer advertising," I included articles that described advertising a prescription drug to "consumers, patients, or the public" through any method. The predominant methods described were television and print advertising, but I also included articles that described advertising through social media or other websites. The most important distinction I made was that articles had to describe prescription drugs being advertised to lay people instead of medical professionals.

6. Data Collection

The next step was to categorize the articles by major themes. To do this I read the 142 articles in the initial sample looking for similarities, differences, and other themes in content. It was during this categorization of articles that I discarded 13 articles because they were unrelated to DTCPA. I identified five major categories (described below) that 111 of the articles fit into and created an "other" category for the remaining 18 articles. I looked for themes that would include a relatively large number of articles by focusing on the genre of the article, the section of the newspaper it was in, and the article's content. After determining the five categories I created a codebook that described the category name, a short code for the category, definitions stating how a given article could qualify for that category, and examples. To code an article for categories, I read through it without deciding on the category first. Then, I referred to the codebook to see where I thought it most likely fit. Finally, I reread the article and recorded its category code into the chart of articles. The six categories outlined in the final version of the codebook were concerns, benefits, financial, reports, specific prescription drugs, and other. The specifics of the codebook are described in the findings section. After coding all of the articles into the major thematic categories, I counted the numbers in each category and recorded this data in its own table (Table I). Within this table, I included counts of articles that solely concerned the given category and articles that belonged to multiple categories.

After deciding on the way the articles would be coded initially I printed out the articles to ensure that they would not become unavailable online and the sample would remain the same. Then I identified subthemes within the categories. To identify these subthemes I created individual subtheme codebooks for each category. I read over the articles carefully, reading all of the articles within one category before moving on to the next one. Within each categorical reading I determined subthemes to provide me with more detail about how the issue of DTCPA is constructed by the NYT. By identifying subthemes, I was able to see who the actors are in the DTCPA controversy and what specific claims were made by the NYT about DTCPA. I coded the categories for subthemes one by one,

following the code chart with descriptions of each subtheme to ensure consistency in coding. If the subtheme appeared in the article multiple times it was only counted in the subtheme count once. I made notes on the paper article about which subthemes were in it and why; most of the articles within a given category contained more than one of the subthemes for that category. By developing these explicit, defined subthemes, I ensured that this research could be replicated using other news sources. The subthemes went beyond general news to detail the specific claims that have been present in the reporting of DTCPA over time.

7. Findings

I organized the findings of my content analysis categorically. I present the general findings from each category then the findings of each subtheme within the categories. I list the definitions for each category and subtheme and how many articles were in it. The categories are listed as headings and the subthemes as charts in the order that I coded them. The chart below lists the numbers of articles from each category.

Table 1. Number of articles by category

Code for Category	Number (articles only in designated category)	Number (total)
C (Concerns)	11	37
B (Benefits)	3	17
R (Reports)	13	32
F (Financial)	19	35
S (Specific drug)	28	34
O (Other)	18	18
Multiple Codes	37	129

7.1 Concerns (Code C)

Articles in the concerns category discussed explicit negative aspects and non-financial costs to consumers of DTCPA in general. Articles in the concerns category included opinions about DTCPA that portray it as harmful to consumers. I included articles in which the author's opinion about DTCPA was negative, articles that quoted doctors or scholars giving their opinion that was clearly against DTCPA, and "To the Editor" letters which were published in the NYT against DTCPA. For example, these quotes from articles in the sample would cause the article to be coded as C: "Because health problems with new pills sometimes emerge several years after the drugs go on the market, critics react more strongly to drug ads that to ads for products like cars or alcohol"[36]: "Doctors report feeling pressure to prescribe the most heavily advertised products"[37]. Articles mentioning concerns were included (unless they were solely financial concerns or pertaining to a specific drug). In these cases the article was only coded for the financial or specific drug category. If articles in this category also discussed benefits of DTCPA they were included in both categories.

There were 11 articles that were in only the concern category. The remaining 26 articles in this category also included content which placed them in other categories. In total, the concern category had the most articles, although the majority of the concern articles were included in an additional category. The specific concerns about general DTCPA emerged in the data as subthemes. In many of the articles, multiple subthemes appeared as the authors or contributors were concerned about multiple factors. These concerns focused predominantly on patients, whom the authors felt were most negatively affected by DTCPA

Table 2. Subthemes for concerns category

Subtheme Name	Number of articles
Over diagnosis	13
Misleading advertising	13
Dr./ Patient Relationship (negative)	14
Consumerism	21
Safety/ Time to market	7
Population	5

The *over diagnosis* subtheme was concerned with the growing number of Americans on prescription drugs due to DTCPA. DTCPA leads healthy patients to self-diagnose and pressure their doctors for medications that they've learned about from advertising. DTCPA sends the message to consumers that there is a drug to fix every ailment. Because of this, patients are less willing to try other methods like weight loss, exercise, or therapy to solve medical problems.

The *misleading advertising* subtheme criticized pharmaceutical companies for the tactics they use in DTCPA. These tactics include misleading language in the advertisements, leading patients to believe the medication will treat a medical problem which it cannot, and encouraging consumers to ignore side effects by quickly listing them at the end of the advertisement. Additionally, DTCPA has been criticized for not being fully transparent and using language that is hard for the average consumer to understand.

The *Doctor/Patient relationship* subtheme articles discussed the ways that DTCPA has changed the Doctor/Patient relationship; a relationship where the doctor was once considered an authoritative figure. Since the explosion of DTCPA, patients are more likely to distrust their doctors and fear that they may be missing something. They are also more likely to demand certain new medications that they have seen in advertisements. Finally, doctors, who typically have between 7 and 15 minutes with each patient, now have to use some or all of this time to discuss advertised drugs with patients.

The *consumerism* subtheme was the most frequently appearing subtheme, which suggested that DTCPA has turned prescription drugs into a consumer item instead of a medical tool to fix illness. One of the main concerns in this subtheme was the idea that patients are attracted to advertised drugs because they are newer and more visible. However, these drugs are not necessarily better and may be essentially the same thing as older or generic drugs.

The *safety/time to market* subtheme was concerned with when prescription drugs are advertised and the safety of this timeline. Pharmaceutical companies often start DTCPA as soon as a new drug is approved by the FDA. However, dangerous side effects of these new drugs occasionally appear after a few years of being on the market. Many of these articles suggested a required waiting period between when drugs enter the market and when they are allowed to be advertised.

The *population* subtheme focused on articles that were concerned about the effects of DTCPA on specific populations. These populations included children, mentally ill, elderly, and college students. These populations may be more vulnerable to DTCPA's harmful side effects.

7.2 Benefits (Code B)

Articles in the benefits category discussed the positive aspects and outcomes of DTCPA in general. The articles in the benefits category stated opinions; I included articles where the author was in favor of DTCPA or included quotes from parties in favor of DTCPA. The benefits stated in this category were not medical benefits of prescription drugs, but rather benefits specifically attributed to DTCPA. For example, a letter to the editor in 2015 stated, "Numerous studies demonstrate that prescription drug advertising provides extremely valuable information to millions of Americans who are not adequately informed about the dangers of high blood pressure, diabetes, and other life-threatening and debilitation diseases"[38].

There were 3 articles that discussed only the benefits of DTCPA in general. The remaining 14 articles in this category also fit under other categories. The majority of these doubly categorized articles were also in the concerns category. These articles discussed the positive and negative aspects of DTCPA. I used the various benefits that were discussed in these articles as subthemes, as well as the presence of quotes from pharmaceutical companies.

Table 3. Subthemes for benefits category

Subtheme Name		Number of articles
Education		15
Dr./Patient Relationship (positive)		5
Medical Care		7
Pharmaceutical Companies Quoted		5

The *education* subtheme was the most frequently occurring. These articles described the way DTCPA educates consumers. DTCPA informs consumers about symptoms that they may have been previously unaware treatment was available for, about new drugs available, and about side effects of existing drugs.

The *Doctor/Patient relationship (positive)* subtheme argues that DTCPA changed the Doctor/Patient relationship in a positive, necessary way. It claims that DTCPA empowers patients to start conversations with their doctor that they otherwise would not. It creates opportunities for patients to be involved in their own healthcare.

The *medical care* subtheme is similar to the *education* subtheme, but only includes situations where patients actually seek medical care due to DTCPA ads. It goes beyond education to include instances where patients found out about dangerous side effects thanks to DTCPA, where patients found out about symptoms of an illness they didn't know they had, or where patients went to their doctor because of DTCPA and found out about a more serious medical condition.

The *pharmaceutical companies quoted* subtheme included all the articles where pharmaceutical companies were the actors stating the benefits of DTCPA. Pharmaceutical companies in these articles pushed for DTCPA not on the basis of profit, but by stating the benefits to consumers.

7.3 Reports (Code R)

The reports category included the articles that reported on the regulations or statistics surrounding DTCPA. DTCPA is monitored by the FDA and Congress, who issue requirements detailing what can and cannot go into advertisements. In this category, I included all articles which were about proposed or actual legislation from the FDA or Congress. I also included statistics or studies from other groups like the American Medical Association and advocacy groups. For example, "Drug advertising aimed at consumers, a fast-growing category that reached 4.5 billion last year, will face hard scrutiny in the new Congress, according to industry critics in both the House and Senate… at hearings on the user fees that manufacturers pay to speed the reviewing of new drugs by the FDA"[39]. This article detailed a new member of the Senate Health Committee who was expected to and proposed changes to DTCPA.

There were 13 articles that were only coded for this category. Many of the dually coded articles in this category were also in the financial category. I chose the subthemes based on the types of proposed changes and the claims makers in these articles, which were more varied than the other articles. Because the regulations set by the FDA ultimately dictate what pharmaceutical companies can do with DTCPA, advertising agencies, research groups, and consumer advocacy groups were present in this discussion.

Table 4. Subthemes for reports category

Subtheme Name	Number of Articles
FDA Increasing Regulations	20
FDA Decreasing Regulations	7
Pharmaceutical Companies	9
Congress	8
Advertising Agencies, Research Groups, Consumer Advocacy Groups	19

Since the start of the shift from physician based advertising to DTCPA in 1981, the FDA has been involved in regulating the ways that drugs must be advertised. In the *FDA increasing regulations* subtheme, articles mentioned additional regulations on pharmaceutical companies. These included providing more detail about side effects and

using clearer language. I also included proposed regulations; the most frequently proposed regulations were regarding time between new drugs being approved and being advertised. Regulations that were self-imposed by pharmaceutical companies, in anticipation of FDA regulations, were also included.

The subtheme *FDA decreasing regulations* mentions times when the FDA loosened the regulations surrounding DTCPA. These were predominantly articles from early in the sample, when the FDA initially loosened the regulations surrounding DTCPA. The FDA is lobbied by pharmaceutical companies and also has the tendency to fail to enforce existing regulations, which creates an atmosphere that essentially loosens DTCPA regulations.

The subtheme *pharmaceutical companies* represented the articles in which pharmaceutical companies commented on actual or proposed legislation. These quotes explained the companies' relationship to the FDA. For example, in 2005, Pfizer discussed new guidelines with the FDA that included submitting ads to the FDA before they were made public and creating ads that addressed public health issues without mentioning product.

The *Congress* subtheme includes regulations or hearings that are proposed by Congress instead of the FDA. For example, anemia drugs were reviewed by congress in 2007, when Congress asked pharmaceutical companies Amgen and Johnson & Johnson to suspend DTCPA until the FDA had time to determine if further safety precautions were needed[40].

The *advertising Agencies, research groups, and consumer advocacy groups* subtheme reveals some of the additional claims makers that are present in DTCPA debate. These groups, like the AMA, government watchdogs groups, and advertising agencies that handle DTCPA accounts are often involved in commenting on proposed regulations and funding studies about DTCPA. For example, in 1989 The Prescription Drug Advertising Coalition, a group of 54 advertising companies gave the University of Michigan funds to study the impact of DTCPA on consumers[41].

7.4 Financial (Code F)

Articles in the financial category discussed profits, spending, and other general financial information about DTCPA. It also included financial information about major pharmaceutical companies and general costs of drugs. For example, in 2010, an article reported that an economist argued that "direct-to-consumer broadcast advertising of drugs was responsible for 18 percent of the overall increase in prescription drug expenditures in the United States from 1993 to 2005"[42]. Articles also discussed raw spending on DTCPA and its changes over time. For example, "Consumer drug advertising rose 35 percent last year, to 2.5 billion from 1.8 billion in 1999"[43]. The subthemes revealed the financial benefits and risks of DTCPA.

Table 5. Subthemes for financial category

Subtheme Name	Number
Increase in Profits	6
General Spending	17
Rising Drug Costs	14
Decrease in Spending/Profits	5
Specific Spending	6

The *increase in profits* subtheme consisted of articles that described pharmaceutical companies' increase in profits due to DTCPA. For example, in 1998, the worlds' largest drug makers reported higher profits "thanks largely to sales of new drugs and to direct-to-consumer advertising campaigns that bolstered sales of older products"[44].

The *general spending* subtheme included articles that shared the amount of money that pharmaceutical companies spent on DTCPA at a given time. The articles gave statistics about spending on DTCPA by specific companies and as a whole. This included spending on television, print, and radio advertising, and more recently internet advertising.

The *rising drug costs* subtheme suggested that DTCPA is responsible for rising drug costs by raising demand for certain drugs and therefore driving up costs. This has an effect on consumers, employers, and insurance companies. Gene Kimmelman, of the Consumers Union, argued that pharmaceutical companies put drugs in front of consumers, "and even with the best health care coverage, consumers are becoming aware of drug price increases and an increase in the amount of money they're paying out of pocket for drugs"[45].

The *decrease in spending/profits* subtheme described times when pharmaceutical companies either spent less of DTCPA or had profit drops because of DTCPA. This happens because of pushback against DTCPA by doctors or

consumers, who prescribe or take generics instead of the more expensive, advertised drugs. Additionally, major DTCPA scandals, like those with Vioxx and Lipitor erode sales and make consumers skeptical of the industry.

The *specific spending* category discussed money spent to advertise specific drugs or groups of drugs, as well as which advertising firms were awarded certain drug accounts and how much money they made. The NYT ran short briefs about changing DTCPA accounts. For example, "Glaxo Wellcome Inc. has expanded its relationship with Grey Advertising in New York by awarding Grey the direct-to-consumer accounts for two prescription drug brands, Wellbutrin and Zyban. Billings were estimated at $100 million"[46].

Specific Drug (Code S)

Articles in the specific drug category discussed all aspects of DTCPA in regards to single drugs. These articles were about benefits, concerns, FDA reports, and financial aspects, but were included in this category if they only discussed one drug. In this category, there were 28 articles that discussed only one drug, and 6 that also discussed another aspect of DTCPA in general. These 34 articles all discussed various aspects of how pharmaceutical companies advertised a drug. For example, "Bayer HealthCare Pharmaceuticals has just introduced a new $20 million advertising campaign for Yaz, the most popular birth control bill in the United States. But the television ads… warn that nobody should take Yaz hoping that it will cure pimples or premenstrual syndrome"[47]. Though this article discusses finance and the FDA, it is exclusively about Yaz, so was only included in the specific drug category. If the article discussed DTCPA in general and also DTCPA of a specific drug, it was included in multiple categories.

Though these articles were predominantly about different drugs, I found similarities within them and coded them for subthemes. These subthemes revealed techniques that companies use across drug types, concerns that have been raised about multiple drugs and information about two major controversies with Vioxx and Lipitor, which were coded as their own subtheme.

Table 6. Subthemes for specific drug category

Subtheme Name	Number
Women	6
Celebrities	3
Concerns about tactics	12
Other Concerns	6
Vioxx/Lipitor	7

The *women* subtheme included articles that discussed ways that specific drugs marketed to women. Gender and drug advertising have been used together to increase pharmaceutical sales since the boom of DTCPA, and these articles discussed drugs like birth control, acne medication, and a new treatment for fibroids. Articles in this subtheme also discussed the tactics that companies used to market to women, like airing DTCPA on shows or networks primarily watched by women.

The *celebrities* subtheme discussed using celebrities to market drugs. In 1998, the FDA approved using celebrity endorsements for DTCPA. There were only a few articles mentioning this and the most recent article discussed Kim Kardashian using her Instagram account to promote a morning sickness medication[48]. However, the FDA issued a warning letter to the drug company on the basis that the Instagram post did not detail the drug's risks[49].

The *concerns about tactics* articles discussed concerns about the ways pharmaceutical companies advertised specific drugs. These tactics included using actors to portray doctors and advertising drugs as more effective than existing drugs when they are not. For example, in 2001, AstraZeneca introduced Nexium to replace Prosilec. However, a lawsuit followed on the basis of AstraZeneca "wrongfully presenting Nexium as more effective in treating acid reflux"[50].

The *other concerns* subtheme included articles that discussed concerns other than advertising tactics about the DTCPA for specific drugs. These concerns were about drug safety, rising drug costs, and advertising specific drugs to populations other than women, like teens, mentally ill, and families of Alzheimer's patients.

The *Vioxx/Lipitor* subtheme included articles about two major DTCPA controversies, the pain killer, Vioxx, and the cholesterol medication, Lipitor. In 2004, Vioxx was taken off the market after research showed that it increased risks of stroke and heart attacks. Merck, the pharmaceutical company behind Vioxx, was accused of downplaying risks in DTCPA and paid 58 million in settlements in 2008. In 2008, a congressional committee investigated the Lipitor advertisements, the world's top selling drug by Pfizer, accusing them of using stunt doubles for doctors, misrepresenting Dr. Jarvik, a spokesperson and his credentials, and using false and misleading statements[51].

7.5 Other (Code O)

The articles in the other category were those that fit into no other categories, so I did not code them for subthemes as their content was unrelated to each other. Some of these articles were book or movie reviews that included DTCPA as content or information on events, like lectures, relating to DTCPA. One of the articles in this category discussed depression, DTCPA, and its Western origins. The author, Kathryn Schulz compared depression in the United States to depression in Japan, where the native language has no word for depression and in mild forms is not considered a disease. She details how DTCPA created a boom for antidepressant sales in the U.S. and the ways that U.S. pharmaceutical companies are now trying to market in Japan, where DTCPA is illegal. Through aggressive educational advertising campaigns, Prozac sales in Japan quadrupled from 1998-2003, with heavy pushback from doctors who view the campaigns as detrimental to society and misleading people to believe that the answer to their sadness is a pill[52]. This article gives insight into the way DTCPA relates to globalization. Even though only the United States and a few other countries allow DTCPA, profit-driven pharmaceutical companies are still determined to enter the global market.

7.6 Time

Although I did not originally code the articles based on date, I attempted to identify patterns in the number of articles in the categories over time. I noticed no apparent pattern categorically, but did notice that certain categories seemed to coincide with current events. For example, during the Vioxx and Lipitor scandals, there were more articles in the specific drug category.

8. Discussion

The results of the content analysis revealed the main themes found in the NYT in their coverage of DTCPA were typically negative. The concerns category had the most articles, followed closely by the financial and specific drug categories. This suggests that the general coverage of DTCPA by the NYT framed it as a risk for consumers to be concerned about instead of a benefit to consumers. All of the categories, besides benefits, had some subtheme that stated the high risk to consumers associated with DTCPA, with the damages being attributed to pharmaceutical companies. The most frequently cited specific concern was the idea that prescription drugs are turning into simply a product for consumption, which fuels other risks that were found as subthemes, like rising drug costs, eroding doctor/patient relationships, and over diagnosis. I suggest that the financial category is closely related to the idea of consumerism. NYT coverage extensively details profits, spending, and drug costs relating to DTCPA. The emphasis on spending and profits suggests that the atmosphere surrounding prescription drugs is one more focused on profit than medical advances, which were rarely found in any category.

By covering DTCPA in this way, the NYT is typically constructing it as a social problem. They are doing this by making a claim that it is a public controversy, as well as mirroring claims made by other claims makers, like advocacy groups, doctors, and scholars. I suggest that because of the frequency of opinion pieces against DTCPA, the journalists at the NYT are themselves claims makers in the construction. According to Spector and Kitsuse, to move beyond the construction of a public controversy, claims makers must get recognition of these claims by government agencies and other influential institutions[53]. The FDA is this agency for DTCPA complaints. The NYT extensively covers reports by the FDA, the main government agency in charge of dealing with grievances about DTCPA. By doing this, they take the construction of DTCPA as a social problem a step further and illustrate the legitimacy of the social problem to readers.

The benefits category provides information about the ways the pharmaceutical industry tries to counter-construct DTCPA as beneficial. The NYT, in the benefits articles, becomes a forum for debate, as many of the articles were also included in the concerns category. When highlighting benefits of DTCPA, the NYT typically mirrored pharmaceutical companies' claims by directly quoting representatives of the companies. This serves this NYT's construction by illustrating the lack of claims makers fighting for the counter-construction of DTCPA as beneficial to consumers. The fact that benefits are included also illustrates the power of the pharmaceutical industry over mass media to prevent sources from constructing DTCPA fully as a social problem. When viewing the benefits articles over time there are no instances where benefits of DTCPA were described frequently in a short time period. Therefore, readers are more likely to be exposed to both sides of the debate in their reading or solely negative framing of DTCPA instead of ever reading an article which only described benefits.

9. Limitations

The limitations of this study included the sampling and coding techniques. Lacy, Watson Riff, and Lovejoy suggested that sampling with keyword searches online, the technique I used in this paper, poses significant challenges to content analyses[54]. Because choosing the search terms was a choice of convenience and an attempt to locate as many possible relevant articles, it may have left out certain articles in the NYT that covered DTCPA. The search terms I chose provided a large sample of 633 articles, but only 129 were directed related to DTCPA. There is also some risk that results are affected by not having a panel of reviewers to ensure accuracy in coding. Because I was the sole human coder in this project and developed the codebook, there is a possibility that I had the tendency to code to match the codebook.

The other major limitation to this study is the use of only one newspaper. Though the NYT is a major national newspaper, future studies could compare the coverage of DTCPA across media sources. Future research could also include content analysis with more focus on time periods. Because of the nature of my categorical and thematic coding choices, this study focused more on general framing of DTCPA over the course of the publication of the NYT instead of focusing on specific time periods.

10. Conclusion

Since 1952, the NYT has predominantly constructed DTCPA as a social problem. In their coverage of DTCPA, there are multiple categories present which state the risks consumers face from DTCPA. In my content analysis, the concerns and financial categories had the most articles. These groups of articles suggested that DTCPA has created a culture of consumerism surrounding health and illness. Rarely does the NYT frame DTCPA as beneficial, and in doing so they predominantly mirror counter-constructions by the pharmaceutical industry. This also illustrates the inability of the NYT to construct DTCPA fully as a social problem because of the power of pharmaceutical companies over today's media. In the pharmaceuticalization of America, DTCPA clearly plays a role. However, I suggest that DTCPA has become so normalized that without claims makers in mass media it would be largely not recognized as a social problem. Through the NYT, millions of readers are introduced to DTCPA as a public controversy which is recognized by government agencies like the FDA.

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