

# Gendering the migraine market: Do representations of illness matter?

Joanna Kempner\*

*University of Michigan, Ann Arbor, MI, USA*

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## Abstract

Migraine is a common, debilitating and costly disorder. Yet help-seeking for and rates of diagnosis of migraine are low. Drawing on ethnographic observations of pharmaceutical marketing practices at professional headache conferences and a content analysis of migraine advertising, principally in the USA, this paper demonstrates: (1) that the pharmaceutical industry directs its marketing of migraine medication to women; and (2) as part of this strategy, pharmaceutical advertisements portray women as the prototypical migraine sufferer, through representations that elicit hegemonic femininity. This strategy creates the impression that migraine is a “women’s disorder”, which, in turn, exacerbates gender bias in help seeking and diagnosis of migraine and reifies presumptions about the epidemiology of the disorder. I conclude that these pharmaceutical marketing practices have a paradoxical effect: even as they educate and raise awareness about migraine, they also create barriers to help seeking and diagnosis.

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## Introduction

Migraine is a common, debilitating and costly disorder. Epidemiologists estimate that 23.6 million Americans over the age of 12 have a migraine each year, three quarters of whom are women (Lipton, Stewart, Diamond, Diamond, & Reed, 2001). Pain ranges from mild to severe, but even moderate migraines can leave people in bed for several hours. In severe cases, a migraine can incapacitate a sufferer for days or more (Ruiz de Velasco, Gonzalez, Etxeberria, & Garcia-Monco, 2003). This disability decreases quality of life (Terwindt, Launder, & Ferrari, 2000) and has significant

economic effects. In the aggregate, migraine-related disability is estimated to cost about \$13 billion a year due to missed workdays and impaired work function (Hu, Markson, Lipton, Stewart, & Berger, 1999). The World Health Organization (WHO) has ranked migraine as one of the top 20 disabling disorders in the world (Murthy et al., 2001).

Yet help-seeking for and rates of diagnosis of migraine are low (Lipton, Stewart, Celentano, & Reed, 1992; Lipton, Stewart, & Simon, 1998; Stang, Osterhaus, & Celentano, 1994). Fewer than half of those with migraine (according to the International Headache Society, 2003) seek treatment and, when they do, their physicians often do not diagnose it (Tepper et al., 2004). This is true for both sexes, but especially common among men. For example, a 1998 population survey of the USA found that 41%

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\*Tel.: +1 734 936 1297.

E-mail address: [jkempner@umich.edu](mailto:jkempner@umich.edu).

of women with migraine reported that they received a physician-diagnosis of migraine, compared to only 29% of men (Lipton et al., 2001). Although little is known about the causes of this discrepancy, it suggests a low agreement between diagnostic criteria and medical practice, as well as gender differences both in the application of migraine as a diagnosis and in help-seeking behavior. Given advances in treatment, there is great benefit to increasing help seeking within this population.

Drawing on ethnographic observations of pharmaceutical marketing practices at professional headache conferences and a content analysis of migraine advertising, largely in the USA, I demonstrate: (1) that the pharmaceutical industry directs its marketing of migraine medication predominantly to women; (2) as part of this strategy, pharmaceutical advertisements portray women as the prototypical migraine sufferer by eliciting familiar tropes of femininity and hegemonic feminine behavior. I argue that the pharmaceutical gendering of the migraine market is a powerful cultural force, which creates the false impression that migraine is exclusively a “women’s disorder,” thus ignoring the estimated 6 million men with migraine and exacerbating gender bias in help-seeking and diagnosis. In a culture that has not always value the contributions of women or take women’s illnesses as seriously as men’s, the identification of migraine as a women’s disease can influence how both physicians and patients understand the disorder. I conclude that these gendered pharmaceutical marketing practices have a paradoxical effect: even as they educate and raise awareness about migraine, they also create barriers to help seeking and diagnosis.

## Background

The newly internationalized and consolidated pharmaceutical industry (Busfield, 2003) has a profound influence in the treatment and care of patients. According to a Kaiser Foundation (2004) report, the industry spent \$25.3 billion for advertising in the US during 2003. Migraine medications are a lucrative market of interest for pharmaceutical companies. With a year-long prevalence rate of 12% for Americans adults, migraine provides a large market for treatment. In only the first half of 1997, GlaxoWellcome (now GlaxoSmithKline or GSK) spent \$22.9 million on direct-to-consumer (DTC) advertising for its migraine medication Imigran

(Imigran in the UK) (Krajnak, 1998), one of GSK’s highest selling drugs. (GlaxoSmithKline, 2004). A recent report from Reuter Business estimates that the migraine market is forecast to grow from \$2.4 billion in 2001 to \$3.5 billion in 2007.

The bulk of money used in marketing medications (approximately \$22.1 billion) is directed toward physicians and invested in a diverse range of marketing tactics to brand pharmaceutical products. Advertising to physicians now extends far beyond the traditional office visits from sales representatives, direct mailings or advertisements in medical journals (Pines, 1999). Physicians are targeted at professional conferences, where companies sponsor meetings and, in return, receive the best booth positions and their logo imprinted on conference materials. Companies pay the travel expenses of researchers who speak about the efficacy and use of their drug. They arrange expert panels to speak at “Continuing Medical Education” (CME) sessions, where health care practitioners register for the credit necessary to maintain their board affiliations. Outside conferences, pharmaceutical companies fund the physicians who conduct clinical trials, and in the process choose which studies they want funded at all. While there is strong evidence that these strategies indirectly bias study outcomes (Bodenheimer, 2000; Cho & Bero, 1996; Lexchin, Bero, Djulbegovic, & Clark, 2003; Melander, Ahlqvist-Rastad, Meijer, & Beermann, 2003), pharmaceutical companies also intervene directly in clinical trials. It has been reported that companies review study articles before they are submitted to publication, draft findings, and even ghost write articles (Healy, 2004; Tierney & Gerrity, 2005).

In the USA, an additional \$3.2 billion is spent on DTC advertisements, using a variety of media, including television, print and Internet advertising, as well as educational pamphlets and campaigns. The industry also uses subtle marketing tactics. For example, the industry hires celebrities and doctors to go on publicity tours and make mention of a particular drug on radio and television talk shows when they give interviews to reporters (Pines, 1999). The audience is often not told that these celebrities receive fees for their service (Goodman, 2002).

The pervasiveness of DTC advertising has caused grave ethical concerns. In theory, DTC advertising can provide important patient education and help reduce the gap between expert and patient (Basara, 1996). Critics argue that, in practice, DTC

advertisements transform pharmaceutical treatments from medical therapies to commodities, marketed in the same ways as other goods. Subsequently, pharmaceutical marketing has successfully promoted not just its own drugs, but the acceptance of new disorders (see Clarke, Shim, Mamo, Fosket, & Fishman, 2003; Conrad, 2005). While DTC may encourage diagnosis and bring important knowledge and relief to patients, it may also promote overuse (Kravitz et al., 2005; Mintzes et al., 2003) and a lowered tolerance for the expression of otherwise normal human fragilities (Conrad & Leiter, 2004; Metzl & Angel, 2004).

Taken together, these diverse marketing practices disseminate widespread messages on health and illness. The information, tactics, metaphors, catchphrases and images communicated via promotional schemes not only increase the visibility of those conditions for which drugs are advertised, they inject public discourse with a new set of meanings and symbols with which to understand diseases and disorders. When the American Senator Bob Dole and former football coach, Mike Ditka, speak on behalf of Viagra, they raise awareness about the drug, while reducing the stigma around “erectile dysfunction” (see Mamo & Fishman, 2001). When Pfizer runs advertisements for “Premenstrual Dysphoric Dysfunction,” they are reconfiguring premenstrual syndrome (PMS) into a disorder that ought to be treated by Sarafem (previously known only as Prozac). And the appearances of a sportsman such as Magic Johnson in advertisements selling HIV treatments attempt to destigmatize HIV and AIDS. These advertisements draw on familiar tropes and shared cultural knowledge, such as the body as machine, the woman patient as emotive, and celebrity know-how (Lupton, 1993). En masse, these advertisements have the powerful ability to appear natural, no matter how staged or contrived. Thus, it is increasingly important to analyze the messages disseminated by the pharmaceutical industry, as these marketing practices now serve as an important form of public health messaging that can influence help-seeking and diagnostic practices (Kravitz et al., 2005).

### *Gender in pharmaceutical advertisements*

Images in medical advertising are an important site of analysis because they depict the normative patient, while contributing to the dominant discourses underpinning medical practice. Early re-

search in this area was influenced by the burgeoning feminist movement and focused on representations of women in advertisements that appear in medical journals (Courtney & Whipple, 1983; King, 1980; Mant & Darroch, 1975; Smith & Griffin, 1977). Most of these early analyses found that women were over-represented in medical advertisements. In particular, women were more likely to be represented in advertisements, especially those for psychoactive medications. Men, however, were more often represented in drug advertisements for nonpsychoactive medications (Prather & Fidell, 1975). In addition, both men and women were portrayed as stereotypes, with men at work and women in social or domestic situations (Mant & Darroch, 1975). Similarly, the normative representation of men patients is that of a rational or mechanistic body, while the equivalent representation of women patients is depicted as emotive, self-obsessed, or (in the case of older women patients) even comical (Lupton, 1993).

The 1980s saw a rise in the number of men represented in advertising, however, advertisers continued to depict men and women in traditional gender positions (Hawkins & Aber, 1988). This trend continued in the 1990s, despite changes in social attitudes and the role of women in the workplace. Advertisements for hormone replacement therapies, for example, continue to use suggestive symbols to represent menopausal women as “out-of-control, grotesque, stressed, or confused and a threat to the idealized feminine” (Whittaker, 1998, p. 81).

Goffman’s (1979) early analysis of gender and social rank in advertisements informs this research on the discursive structure of power and knowledge in advertisements. Goffman found, for example, that social status is often represented via the relative size of various characters; the character with valued social status is emphasized by virtue of enlargement or by being placed in an executive role (e.g., the male physician is positioned in the foreground, with the female nurse watching in the background). Women are portrayed as prostrate, sexually available, childlike, or in slanted postures, whereas men are shown as upright, rational protectors. Similarly, women more than men are pictured using their hands, holding and caressing objects, people, or themselves. Others (especially Bordo, 1993) have further developed Goffman’s original guide to decoding advertisements. In this paper, I draw on these analyses to decode a diverse set of advertising

data, asking: How do pharmaceutical advertisements depict the typical migraine patient? How do pharmaceutical companies use gender as a framework for their promotional strategies?

## Methods

The data presented are drawn from a large, multi-method research study on the production of knowledge on headache. The materials were collected via ethnography at headache conferences and a sample of DTC advertisements collected from websites, in order to assess how advertisements depict the typical migraine patient and their care. This study emphasizes pharmaceutical advertising in the USA, although some data (described below) were collected in Italy and Japan.

### *Ethnography*

From 2001 to 2005, I was a participant-observer in seven professional headache conferences sponsored by the American Headache Society (AHS, 2001, 2002, 2003, and 2005 annual meetings), the International Headache Society (IHC, 2001, 2003 and 2005 biennial meetings),<sup>1</sup> and the New York Headache Foundation (NYHF, 2005). These meetings took place in the USA, except for the IHC 2003, which was held in Rome, Italy and the IHC 2005, held in Tokyo, Japan. The manifest purpose of these meetings is the dissemination of new research. However, these meetings are also opportunities for pharmaceutical sponsors to market their products. From elaborate booths, drug representatives attract passersby with a bewildering array of merchandise, including pens, post-its, magnets, mugs, mouse pads, clocks, watches, laser pointers, toys, backpacks, pins, posters, radios, tape players, and books. Some companies offer separate lounge areas, where participants can check email, snack, and receive “educational” materials on medications. Large companies also sponsor satellite symposia (funded by unrestricted educational grants), at which physicians can receive professional credit. In the evenings, companies frequently hold expensive receptions at local tourist attractions. I collected hundreds of promotional materials and advertisements, including newsletters, pamphlets, patient package inserts to medications, television, radio and print advertisements, direct mailings to physi-

cians, press releases, and educational materials produced for physicians.

Coding categories emerged from theoretical concerns about gender representation (see Bordo, 1993; Goffman, 1979; Metzl, 2003) and multiple close readings of the materials. This ethnographic approach to understanding pharmaceutical marketing allowed me to pursue the presentation of gender in promotional strategies without artificial boundaries, and to make connections between pharmaceutical funding of research studies, press releases and news stories on migraine.

### *Internet advertising*

In order to produce descriptive statistics about gender ratios of people portrayed in migraine advertisements, I conducted a content analysis of images used in a discrete sample of pharmaceutical advertisements. The sample was collected in November 2003 from a cross-section of pharmaceutical websites that market headache medicine, and whose parent company rented booths at professional headache conferences (Table 1). For over-the-counter medications used to treat a variety of ailments, images were limited to those that specifically addressed migraine. Of these images, I retained those that would illuminate how marketing campaigns represent the migraine patient and health care workers. I kept all images of people, including both photographs of real people and illustrations or animated representations of people. I discarded all images of objects, such as medication or schematics demonstrating how a medication works. Multiple readings of each website aided analyses of images.

In total, 86 images were analyzed. Several depicted more than one person. The social characteristics of the people depicted were classified according to gender and number (male, alone; female, alone; multiple females; multiple males; mixed), race (white; black; Asian; other; unclear), setting (work—white collar; work—pink collar; work—blue collar; casual; family; clinic; romantic), pain status (pain; nonpain; metaphor for pain; mixed narrative; not-applicable), and status (patient; healthcare provider; expert; other). The location (homepage or not) and size (small, medium, or large) of images were also coded. All images were coded by the author and an independent coder trained in content analysis. Inter-coder agreement, calculated using a Kappa statistic, was

<sup>1</sup>AHS and IHS co-sponsored a meeting in New York in 2001.

Table 1  
List of websites analyzed

Website	Product name	Website
Pharmaceutical websites		
GlaxoSmithKline	Imitrex	<a href="http://www.migrainehelp.com">www.migrainehelp.com</a>
GlaxoSmithKline (educational)	Headachequiz.com	<a href="http://www.headachequiz.com">www.headachequiz.com</a>
GlaxoSmithKline (educational)	HeadacheTest.com	<a href="http://www.headachetest.com">www.headachetest.com</a>
AstraZeneca	Zomig	<a href="http://www.zomig.com">www.zomig.com</a>
Pfizer	Relpax	<a href="http://www.relpax.com">www.relpax.com</a>
Pfizer (educational)	MigraineRelief	<a href="http://www.migrainerelief.com">www.migrainerelief.com</a>
Merck	Maxalt	<a href="http://www.maxalt.com">www.maxalt.com</a>
Ortho-McNeil	Axert	<a href="http://www.axert.com">www.axert.com</a>
Bristol-Meyers Squibb	Excedrin	<a href="http://www.excedrin.com">www.excedrin.com</a>
Health Assure	MigraHealth (herbal)	<a href="http://www.migrahealth.com">www.migrahealth.com</a>
Ortho-McNeil	Motrin	<a href="http://www.motrin.com">www.motrin.com</a>
Wyeth Consumer Healthcare	Advil Migraine	<a href="http://www.advil.com">www.advil.com</a>
MigreLief	MigreLief	<a href="http://www.migrelief.com">www.migrelief.com</a>
Weber and Weber	Petadolex	<a href="http://www.migraineaid.com">www.migraineaid.com</a>

89.6% ( $p = .019$ ). Disagreements were settled by the author.

## Results

### *Who is the prototypical migraine patient?*

Contemporary medical literature portrays migraine as a woman's disease (e.g., Phillips, 1998; Warshaw, Lipton, & Silberstein, 1998). This association comes from global epidemiological data that suggest that migraine is two or three times more common among women than men. In the USA, 18% of women have migraine, as compared to 6% of men (Lipton et al., 2001; Rasmussen, 1995; Stewart, Lipton, Celentano, & Reed, 1992). The gender difference in migraine prevalence is relatively consistent across cultures, even as prevalence estimates fluctuate. Further, the effects of migraine in women tend to be more severe and frequent than in men (Stewart, Schechter, & Lipton, 1994).

In addition to this basic statistical association, researchers cite the strong relationship between migraine incidence and hormonal milestones (Rasmussen & Stewart, 2000; Stewart et al., 1994). Girls and boys have similar rates of migraine until puberty, when rates in girls rise rapidly (Warshaw et al., 1998), and menopause brings relief to a substantial portion of women. However, the gender difference persists even at the age of 70, long after menopause, suggesting that hormonal cycles may not fully explain the variance in gender difference.

The basic epidemiological data on the gender difference in migraine in the USA are robust. These findings are drawn from large population-based studies using a standardized diagnostic algorithm for migraine, developed in 1988 by the IHS. The best of these epidemiological studies draw on self-reports of symptoms (i.e., presence of a one-sided headache; light and sound sensitivity; or nausea), rather than self-reported diagnoses. These diagnostic criteria draw a tight definitional boundary around migraine and may underestimate its prevalence. It is possible that the diagnostic criteria for migraine ought to be loosened, as migraine-specific drugs often work on a broad range of headache symptoms. However, these criteria have shown little of the "diagnostic creep" that has affected related diagnoses like depression (Metzl & Angel, 2004), perhaps because triptans are effective only in the treatment of headaches.

Even so, these statistical and hormonal associations do not constitute sufficient evidence for assigning migraine to the exclusive purview of women. An estimated 6% of American men have migraine and many experience great associated disability (Lipton et al., 2001). In fact, men experience migraine more than diabetes, diseases of the prostate, and ulcers (National Center for Health Statistics, 1996). Men tend to have other forms of headache at a similar rate to women; for example, in the USA 42% of men and 36% of women have episodic tension-type headache, (Schwartz, Stewart, Simon, & Lipton, 1998). If



migraine diagnosis were broadened to include some tension-type headaches (a possibility, as migraine and tension-type headaches may be part of a spectrum disorder), then the relative rates of men with migraine would rise (Cady, Gutterman, Saiers, & Beach, 1997; Lipton et al., 2000; Marcus, 1992).

### *How is the typical migraine patient represented?*

The 1993 release of Imitrex (sumatriptan) by GlaxoWellcome (now GSK) marked a revolution in the pharmacological care of migraine. For the first time, a therapy with few side effects aborted migraine symptoms in a majority of patients. To date, Imitrex maintains a dominant market share through name recognition, advertising, and its position as the first such medication on the market. However, several other medications in its class (referred to as *triptans*) have diversified the market. Although each triptan offers slightly different advantages and disadvantages, none have emerged as a clear leader in terms of efficacy (Ferrari, Roon, Lipton, & Goadsby, 2001). Their similarities increase companies' reliance on promotional strategies.

As part of its marketing campaign, GSK supports at least three US websites promoting Imitrex: [www.migrainehelp.com](http://www.migrainehelp.com), [www.headachequiz.com](http://www.headachequiz.com), and [www.headachetest.com](http://www.headachetest.com) (each accessed November 2003). The first website is dedicated to advertising Imitrex to people with migraine (migraineurs) and provides both general information about migraine and more specific information about the product. The latter two sites are primarily educational, so while labeled as GSK they do not mention Imitrex by name.<sup>2</sup> The overall message of these websites is designed to bring people with headache to the doctor. The main website ([www.migraine-help.com](http://www.migraine-help.com)), for example, offers “tips on communicating with your doctor to get a treatment that’s right for you”. Readers are advised to “Ask for *IMITREX* by name” and the site suggests language to use when speaking to physicians: “I read that *IMITREX* targets your total migraine. If you think

*IMITREX* is right for me, I’d like to try it”. ([Migrainehelp.com](http://Migrainehelp.com), accessed 2003).

The text is gender-neutral throughout the website. The patient is studiously referred to in the second person or a neutered third person. Most of the descriptions are short and—with the exception of those referring to the menstrual cycle—could apply to either a man or a woman with migraine. Yet on nearly every page, this text is accompanied by a visual depiction of a woman.

Few pages within each site provide more than a couple of lines of text. With so little information, the image creates a powerful signifier of the typical migraine sufferer. In the case of GSK’s three websites dedicated to migraine, women are portrayed as patients 14 times more often than men. In contrast, GSK features two images of physicians, both of whom are white men. With an advertising campaign that limits male representation to physicians, the casual reader might infer that migraine is a condition of women.

GSK’s website is typical. Migraine is represented as a women’s condition across all of the websites included in the sample. Of the 86 images analyzed, 79 (85%) featured an image of a lay person with migraine. Of these 79 images, 55 (70%) had a female as the primary figure(s); 15 (19%) had a male as the primary figure; 4 (5%) featured both men and women; and, 5 (6%) featured a romantic couple. Because the representations of women with migraine dominate these images, pictures that portray both men and women read as though the woman in the image is the one who has the migraine. Of the 15 pictures of men, five depicted the same man in different postures on Bayer’s aspirin website. In sum, only 10 different men are depicted as headache sufferers across all 14 websites.

Consistent with other feminist analyses of advertising, role portrayals of lay people conformed to gender stereotypes. For example, men were significantly (at  $p < .01$ ) more often represented in work settings (40%) than women (12.7%). Women were as likely to be shown with children (12.7%), as they were to be shown at work. No men were portrayed as caretakers of children. There were, however, occasional gender role transgressions. The website for Axert (almotriptan) portrayed a black female physician caring for a white male patient, where the woman doctor is positioned only a little higher than the male patient. Another advertisement, posted on Relpax’s (eletriptan) educational website, depicted two women speaking at work, where one appeared

<sup>2</sup>The pharmaceutical industry uses so-called “educational” advertisements that do not mention the name of the marketed drug to avoid federal restrictions on advertising in the US. This form of advertising is extremely effecting. For example, in 1993, an unbranded advertising campaign recommending that people talk to their doctors about a “surprisingly effective” new treatment for migraine generated approximately \$22 million in new and refill prescriptions (Basara, 1996).

to be in a position of authority. These examples reflect a changing workplace where women and minorities play an increasingly important role, but these representations are rare. In GSK's website, for example, three images portray male physicians, two of which are speaking to female patients who appear smaller and shorter than their physicians. As Goffman (1979, p. 28) suggested, such differences in size and perspective connote the "social weight of power, authority, and rank".

Both patients and health care providers were usually portrayed as white and middle class. Sixty four (81%) of the patients were white. The race of an additional 6 (7.5%) was unclear, as each bore some subtle ethnic markers (e.g. an olive tone to the skin or features suggesting mixed race). Only 4 (5%) were clearly black. Class was more difficult to discern, though the vast majority of patients bore markers of affluence; most, for example, wore expensive clothes. With only three exceptions, workers held white-collar jobs, where they sat behind computers and wore business attire.

Representations on pharmaceutical websites exaggerate the epidemiological difference between men and women. As noted, women are represented in a ratio of about three and a half or four to one. The exaggeration may seem minor, but increases when one considers that Bayer's website accounts for a third of the male images. Generally, the prototypical migraineur was portrayed as a white, middle-class woman, attractive, with styled hair, expensive-looking clothing, jewelry and well-applied make-up. Most advertisements depicted a woman without pain, going about her day, whether at work, play, or in a relationship.

#### *Images of men with migraine*

The gendered portrayal of migraine is further exacerbated by the use and placement of male images, which obscure representations of male migraineurs. While images of women are prominently displayed on the homepages of websites, men are so embedded in the website that readers would need to click on several links to find them. This is true even in the rare case when the text refers to men with migraine. For example, Pfizer's website illustrates the following with an image of a man: although migraine was "once thought of as strictly a woman's disease, migraine affects a substantial number of men. In fact, 1 out of every 3 migraine sufferers on the job is a man" (Migrainerelief.com,

accessed 2003b). Ironically, the website suggests elsewhere that representation of migraine as a women's disease might be responsible for the significant under-diagnosis and under-treatment of men with migraine: "Due to a misperception that people have about migraine being a woman's disease, many men may find it difficult to ask for help" (Migrainerelief.com, accessed 2003a). Here Pfizer includes one of its two representations of a man with migraine.

Female dominance exists even in those images that present men and women together as potential migraineurs. In these graphics, men are embedded within more dominant images of women, usually in a ratio that mimics the epidemiological distribution of migraine. Women typically outnumber men in these scenarios 2–3:1. I call this strategy an *epidemiological mosaic*. The advertiser incorporates men into the image, while reasserting the conventional wisdom that migraine is predominantly a woman's condition. For example, MigreLief's advertisements present the faces of six migraine patients. The top row depicts, in order, an older white woman, a young white brunette, and a young black man. The second row begins with a young Asian man, a young white woman, and an older black woman. The ratio in this design represents epidemiological data, depicting four women to two men. Women dominate the image in numbers, but also in design. The layout encourages the viewer's eye to begin in the top left corner of the montage, attracted in part by the top left-hand woman's bright yellow jacket. The eye then drifts to the center images, both of which are women. Men flank the image on the top right and bottom left of the photos, the two corners designed to be the least obvious.

Using a similar strategy, an image from Migra-Health portrays a tiled montage of people with migraine. The advertisement depicts a small photograph of a man with two additional photographs of women. But all of these images are overshadowed by a gray, transparent woman looming in the background. The imagery is again repeated in an advertisement for Frova (frovatriptan), which shows four people reading newspapers with large headlines about Frova. Here, too, there is a man flanked by three women, and he is positioned in the rear, framed as the smallest and least consequential of these potential patients. Given his position, he might be the concerned partner of a migraineur, rather than a migraineur himself. These

advertisements best represent the phenomena of migraine as it is understood in the US today. While acknowledging that men do get migraines, they reaffirm the commonsense notion that women have them more often than men.

### *Gendered messages/gendered metaphors*

Most advertisements for migraine medicine present a gender-neutral text, with pictures of women (and occasionally men) looking pain free. But this is not the only way in which drug companies find their target audience. Rather, they devise entire marketing campaigns designed to appeal to women. I describe two strategies that pharmaceutical companies use to capitalize on stereotypical interests of women to sell their medication: gendered metaphors and gendered narratives. While these strategies are analytically distinct, they are not mutually exclusive and, as described below, marketers often use them in conjunction with each other.

#### *Gendered metaphors*

The use of metaphor communicates latent meanings embedded in marketing strategies (Ettorre & Riska, 1995; Lupton, 1993). Metaphors work by connecting an abstract idea to something concrete and familiar (Lakoff & Johnson, 1980). Advertisements for antihistamines, for example, show fields of flowers in order to indicate that the drug will give the consumer a renewed ability to enjoy the natural world. Gender can strengthen the use of advertising metaphors, as when romance is used to sell diamonds and the promise of sex to sell alcohol. When metaphors work well, the product itself becomes a metaphor for these otherwise abstract notions.

Pharmaceutical companies use feminine metaphors to market their medications to women. For example, Pfizer's 2003 promotional campaign for their newly released migraine drug, Relpax, which used a metaphorical "spa experience" to convey the experience of migraine to consumers.

According to coverage in Anonymous (2003a), "Pfizer turned a wing of New York's Grand Central Terminal into a 'soothing oasis dedicated to the five senses' in a consumer promotion last month for its migraine headache medication Relpax"...

The one-day event, which began at 7am and continued until 8pm, attracted thousands of

commuters. The spa area included a three-piece orchestra, yoga clinics, a free massage area, a Zen garden and a gourmet food sampling area...

Consumers who filled out a short survey about migraines received a gift carton that included a Relpax pamphlet, tea sample, scented candle and a mini eyelid mask (2003a).<sup>3</sup>

Pfizer also created a "virtual spa" on their website. The spa is a small pop-up window, which plays sounds of a rain forest, accompanied by images evocative of a spa vacation. The text uses the "spa experience" as a metaphor to describe relief from the pain of migraine. For example:

**Imagine the fresh scent of a beautiful garden.** For some, even the most exhilarating fragrance can increase nausea when the pain of a full-blown migraine takes over.

**Imagine the gentle touch of your dancing partner.** Even a soft touch that causes the slightest motion can become unbearable. Sometimes, that's how it feels when you're stopped in your tracks by headsplitting migraine pain ([www.relpax.com](http://www.relpax.com), accessed November 2003).

This advertising strategy limits its audience by carefully targeting a middle-class audience and a particular kind of urban, affluent woman. Marketers appeal to women rather than men, by distributing scented candles and mini eyelid masks in exchange for information about potential customers. Alternatively, masculine metaphors could have conveyed a similar message, for example, the troubling experience of developing a migraine during a sporting event.

#### *Gendered messages*

Another discursive tactic is to depict a narrative that draws on hegemonic and familiar tropes of femininity. In this section, I describe two such campaigns. Both feature women as migraine patients, each of whom are represented as caretakers, whose migraines interfere in their ability to nurture. Migraine medications are positioned as a solution to these narratives of pain, nurturing, and care.

The first campaign is run by GSK. Visitors to the Imitrex website who request a "free offer" of medication will receive, by mail, a "Migraine Action

<sup>3</sup>Ironically, scents, especially perfumes, are a major trigger of migraine headaches.



Guide” from GSK that provides information on Imitrex, how it differs from general analgesics, and how to ask a physician for the medication. This information is designed as a pamphlet with pages that turn like a book. Across from each page of information about the drug, the pamphlet portrays a series of pictures representing one person’s recovery narrative. While the images correlate with the text (i.e. when the text refers to physicians, the image portrays a doctor–patient interaction), the text makes no specific comment on the story unfolding on the opposite pages:

The visual story features a young white woman. She is first presented to us on the cover of the guide, where she stands confidently next to a quotation: “Finally, a medicine that can target my total migraine!” On the inside cover, we see the woman dressed in a nurse’s uniform, working in a hospital room full of newborn infants. But she is in pain. She grimaces, pressing her fingers into her temple and frowning her brow. Her back is turned away from the babies, presumably because the intensity of the pain disables her and prevents her from performing her job. That the advertisers chose to represent their model migraineur as a neonatal nurse elicits feminine qualities of nurture and care.

On the top of the next page, she gives voice to her frustration: “I wish people realized how much a migraine disrupts my life.” Imitrex is proposed as the appropriate solution: the text explains, that “general pain relievers are made for general kinds of pain...IMITREX is different.” Using a computer animated outline of a universal patient, the image depicts how Imitrex works. The universal patient model used here is a woman, rather than the typical “universal man” so often used to portray the medical norm (Riska, 2004). The spots on the first body demonstrate how diffuse general pain relief can be. The adjacent image demonstrates how Imitrex works differently, by “targeting” the pain. Shaped like a bullet, the pill shoots towards the source of the pain.

In the next image, the nurse, armed with new knowledge, approaches her physician for a prescription. As the story unfolds, we see an effective interaction with her physician. She gesticulates animatedly as she makes her points and the physician (a white male) appears to listen actively, his posture signifying relinquished authority and an attentive respect for the patient’s medical insight. The two are positioned at nearly the same height, signaling shared power in the interaction.

The physician must have prescribed Imitrex, because in the next two images, she is free of pain and back to work. With Imitrex, the neonatal ward no longer carries the cold, institutionalized ambience of the earlier picture, and now looks more like a homey nursery. Warm, yellow walls with alphabet bordering indicates a change in atmosphere. The nurse’s demeanor has changed as well. She now cradles and cares for a baby, tenderly smiling and cooing. She has a renewed capacity for nurture and work. The final image depicts her in plain clothes again, lounging on a sofa, while talking on a phone. Her face is bright and smiling. Not only has she returned to her work of caring for babies, she has returned to her social life, and is presumably telling her friends how Imitrex has cured her migraines. In short, the patient is a happy customer, brought back to life by GSK’s medication.

This visual narrative appeals to the consumer by using images that draw on culturally resonant images of women at work. As many studies have shown, stories have more rhetorical force when they are relevant to beliefs already held by the audience (Gamson & Modigliani, 1989; Schudson, 1989). Advertisements that coincide with broadly held commonsense notions about the ways of the world appear to be natural and objective. By setting this narrative in a neonatal ward, the advertisement is designed to appeal to workers both at work and at home with their children. The manifest message is that the medication works and that those with migraine should request Imitrex at next doctor’s visit. The latent message confirms that migraine is a women’s disorder. In addition, GSK manages to usurp the patient’s voice in their effort to create recognition with the public.

While pain-free women cradling children demonstrate good caring, pharmaceutical companies also use narratives that demonstrate just the reverse for women in pain. In a recent AstraZeneca advertising campaign of their migraine medication Zomig (zolmitriptan), women in migraine pain are depicted as bad mothers because they are prevented from giving their children the care they need. They appear to abandon their children, crippled by their migraine, literally turning their back on them, just as the GSK nurse turned her back on newborn babies in the neonatal ward.

Two Zomig advertisements are particularly effective at exploiting this narrative. One portrays a little boy standing in front of an open bedroom. His body language conveys utter dejection. Under one arm,

he carries a baseball glove, and in the other a baseball. He is ready to play with his friends and is only missing the transportation. His mother, who we see languishing in the bedroom behind him, is too ill with migraine to take him to his game. The mother's posture suggests that the pain is intense—she is grimacing and her hand is pressed against her forehead. Her eyes are closed and her body contorts away from her son. The boy calls out to the reader as if asking for help: “Mama has another migraine.” It is clearly not the first time that the mother has let her son down like this. The boy is dressed in crumpled clothing and his hat appears to be too big for him, as if his mother has not even been able to take him shopping recently, or that he had to dress himself that morning.

The second image presents a woman in pain on the bus. In this scenario, she is experiencing stress—both the stress of motherhood, but also the daily stress of running errands while caring for her son. Like the mother in the previous advertisement, her body is turned away from her child. Her right hand pressing against her temple may soothe the pain, but it also shields him from her sight. Her opposite hand reaches around the front of her body to hold on to his arm, perhaps signaling a residual desire to nurture. Yet the headline ‘ESCAPE’ evokes a more primal desire of liberation from an overwhelming day-to-day routine. One gets the sense that for this woman motherhood might be too much to bear. The advertisement suggests that Zomig can help with this predicament and mothers can return to their regular duties.

The power of these images is their ability to reflect and reconstruct familiar tropes. Together, these narratives put to work a normative notion of family and motherhood, in which the woman's primary duty is to care for children, which is represented as straightforward for healthy and pain-free women. Men are not represented as caretakers, nor are they represented as sufferers of migraine. This kind of marketing material provides a detailed and emotive social context in which women suffer from migraines, and in which their suffering has damaging effects on their loved ones. No similar context is imagined for men.

## Conclusion

The pharmaceutical industry genders migraine advertisements using a variety of techniques: gendered images; gendered metaphors; and gen-

dered messaging. In addition, the use of *epidemiological mosaics* allows marketers to include lesser demographics (in this case, men), without actually drawing attention to them. These representations of patients in DTC advertising serve to construct the typical patient for a general audience and disseminate important messages about gender and pain to the public.

Pharmaceutical companies market to women because they believe that women are their market. At least this is what they are being told by marketing trade journals, which consistently report that migraine affects many more women than men. For example, [Anonymous \(1999\)](#) report that “about 24 million Americans, most of whom are women, suffer from migraine”. Another journal reports that “about 28 million Americans—one in five women and one in 15 men—experience migraines” ([Anonymous, 2003b](#)). (Such inconsistencies in reporting epidemiology frequently appear in these journals.) Other trade articles suggest that pharmaceutical companies market to women because they believe women are an “underserved market.” Mark Kreston, president of Bristol-Myers Squibb (BMS) Consumer Medicines, explains how BMS used migraine to create a new market among women: “By aligning the brand with female health experts and advocates, and focusing on aspects of the disease that impact women most, we have helped establish migraine as a serious women's health issue” ([Anonymous, 2001](#)).

That migraine is represented as more prevalent among women reflects a clinical reality: more women than men seek help for head pain. But as noted previously, more men experience migraine than diabetes, diseases of the prostate, and ulcers ([National Center for Health Statistics 1996](#)), all of which are described and constructed either as unisex or specifically male diseases. Marketers want to target women because women buy more of their medication. But by targeting migraine as a purely “women's health issue”, drug companies may actually be constructing their audience rather than merely representing it, and in doing so, excluding many people who might suffer from the condition and who would benefit from their medication.

Just as importantly, the construction of migraine as a women's health issue evokes historical associations between pain, hysteria and neurotic women and may increase the stigma of both men and women in pain. Images of women in stereotypically gendered scenarios are effective marketing tools

because they draw on familiar tropes regarding women, particularly with regards to motherhood and the ability to nurture. However, these images also reify these relationships and promote the false claim that these ideas are fundamentally connected.

Advocates of DTC advertising, in those countries where it is legally permitted, have argued that this advertising provides much needed education to health care consumers. This paper suggests that these pharmaceutical marketing practices actually have a paradoxical effect: even as they educate and raise awareness about migraine, they also create barriers to help-seeking and diagnosis. It is beyond this study to assess whether these advertisements directly affect the exchange between physicians and patients and more research is needed to understand the links between representation, help-seeking and diagnosis.

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