The male heart and the female mind: A study in the gendering of antidepressants and cardiovascular drugs in advertisements in Irish medical publication

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Available online 7 October 2005

Abstract

Stereotypes which suggest that cardiovascular disease and depression are related to gender can have consequences for the mental and physical health outcomes of both men and women. This study examines how these stereotypes may be reinforced by medical publications advertising for cardiovascular and antidepressant medication. A random sample of 61 (with no repeats) advertisements which appeared in Irish medical publications between July 2001 and December 2002 were analysed using both content and semiotic analysis. Results indicate that the meanings created by advertisers for cardiovascular drugs and antidepressants did in fact gender these products. Women were depicted as the predominant users of antidepressants and men as the main users of cardiovascular drugs. The images used identified two stereotyped patients: the ‘male’ heart patient and the depressed ‘female’ patient. Furthermore, the imagery and language used to promote the two categories of medication tended to strengthen gendered associations.

Gender, depression and heart disease

The social constructions of both gender and health have resulted in certain illnesses being gender typed. One of the conditions which has received most attention is depression. However, it has been argued that well-established gender differences in the reported incidence of depression may partly be the result of men and women being encouraged to adopt socially defined “dominant norms of femininity and masculinity” (Courtenay, 2000, p. 1387). This construction of masculinity influences men’s well-being in that men suffering from depression may tend to deny it, as depression is linked to feelings of powerlessness and lack of control,
typically feminine characteristics. Masculinity, on the other hand, is associated with being tough and not talking about feelings or pain (Courtenay, 2000). Similarly, cardiovascular disease has come to be seen "as typical of men" (Dublin Women’s Health Council, 2002, p. 14) although actual incidence rates do not reflect this image. In the USA, cardiovascular disease has claimed the lives of more women than men since 1984 (Bell and Nappi, 2000).

The potentially harmful effects of such misrepresentative stereotyping are twofold: they can lead to under-diagnosis on the part of medical professionals and sub-optimal use of effective therapies. In the case of depression men are less likely to seek help therefore, they are less likely to be diagnosed (Rutz, von Knoring, Pihlgren, Richmar, Walinder, 1995; Department of Public Health, 2001). Diagnosis may also be influenced by different culturally accepted labels for men and women experiencing the same kind of symptoms, with women more likely to be labelled as suffering from depression and men from alcoholism (Cleary, 1997).

On the other hand, men are more likely to be correctly diagnosed with heart disease than women. This may be as a result of the fact that men and women often experience different symptoms of heart disease, with men's symptoms being the norms to which women's are compared. This, it has been argued, is because of the lack of clinical research focusing on women's symptoms (Lafer, 2002). As a result women may not be relieved of the same standard of treatment for heart disease (McGovern, 2002). In support of this, the decline in ischaemic heart disease has been slower for women compared to men (Cardiovascular Health Strategy Group, 2000). A recent study suggests that this may be due to a gender bias in the prescription of important secondary preventive therapies in primary care (Williams, Bennett, & Feely, 2003). This study found that women with ischaemic heart disease were less likely to receive a prescription for aspirin, calcium channel antagonists, beta-blockers or ACE inhibitors. These findings are consistent with gender bias reported in other studies (Steingart et al., 1991; Spencer, Unwin, & Pledger, 1995; Hippisley-Cox, Pringle, Crown, Meal, & Wynn, 2001).

The role of advertising

Consumer product advertising is an integral part of modern culture and one of the main commu-
Health Care Management Research and Educational Foundation, 2003).

**Description of the present study**

The current study analyses the gender meaning constructed in advertisements for antidepressants and cardiovascular drugs in Irish medical publications. The approach taken towards analysis of advertisements is based both on a quantitative content analysis and a qualitative semiotic analysis. Content analysis is an effective way of quantitatively cataloguing and assessing media output. However, it is limited to measuring the manifest content or surface meaning of advertisements. On the other hand, contemporary advertising relies heavily on the construction of multiple levels of meaning around visual images. Semiotics, the study of signs, is a form of analysis that attempts to decode the deeper messages and connotative meanings contained in images. Leiss et al. (1986) argue for the use of a combined content analysis/semiotic approach to examine both the denotative and connotative meaning of advertisements.

It was predicted that the images used in advertisements for anti-depressants in Irish medical publications reflect an ideology which maintains that depression is a female disorder. This prediction is in accordance with previous research on the representation of depression, which has found that psychotropic drug advertisements gender typing of anti-depressants as used by females tend to rely heavily on traditional gender stereotypes (Mant & Darroch, 1975; Prather & Fidell, 1975; Ficca, Brabato, Beatrice, Muscettola, 2000; Lovdahl & Riska, 2000). It was further predicted that images used in advertisements for heart disease medication tend to reflect a stereotype which maintains that heart disease is a male disorder. This has received less attention in the literature although studies have identified a gender bias in the treatment of cardiovascular disease.

**Context of the present study**

This research was conducted in the Republic of Ireland. Prescription drug advertising in Ireland is controlled by legislation and only permitted in medical publications, a highly specialized media with a well-defined target audience. This made Ireland a particularly suitable candidate for this research as it has a very tightly controlled environment for drug advertising.

This advertising has a purpose. Drugs for the cardiovascular and nervous systems accounted for nearly half the total spent on drugs, medicines and appliances in Ireland in 2002: 121.59 million euros on cardiovascular system drugs, and 111.12 million euros on nervous system drugs (General Medical Services Payment Board, 2002). There is a suggestion that depression may be under-diagnosed in males in Ireland: a national study in 2001 found that males were almost five times more likely to commit suicide, but that females were more likely to take nervous system medication (Department of Public Health, 2001). The rate of heart disease in Irish women is similar to that of men (Irish Heart Foundation, 2001).

**Method**

The following analysis is based on advertisements for anti-depressants and cardiovascular drugs which appeared in four Irish medical publications over an 18-month period from July 2001–December 2002. The sample was drawn from every first issue of the month of the three weekly publications, the Irish Medical Times, the Irish Medical News, and Medicine Weekly and the eighteen monthly issues of Forum, giving a total of 54 publications. Including repeats, a total of 474 advertisements appeared for antidepressants and cardiovascular drugs during this time. The rate of repetition varied, from 12 (19.7%) shown once to 17 (27.9%) nine or more times, including two that were repeated over 30 times. The final sample consisted of 61 original advertisements, where cardiovascular drugs accounted for 62.3% (38) of the sample and advertisements for anti-depressants 37.7% (23).

Advertising is a major part of these publications and is an important source of income with full-page colour advertisements costing from €1208.74 to €2006.19, depending on publication, with some publications dedicating over half their print space to advertisements (Medialive, 2003). A readership survey carried out in July 2001 calculated a readership of 84% for the Irish Medical Times, 74% for the Irish Medical News and 70% for the Medicine Weekly (Irish Medical Times, 2002).

**Procedure for content analysis**

A content analysis codebook was designed to incorporate gender discriminator and indicator variables identified from a review of the literature.
on advertising and gender (Williamson, 1978; Goffman, 1979; Lupton, 1993; Alexanderson, 1999). Gender discriminators are distinctions made unjustifiably on the basis of gender and include items 16 and 19 from Alexanderson’s ‘An Assessment Protocol for Gender Analysis of Medical Literature’. By counting the number of illustrations showing men, women or both, Item 16 identifies the predominant gender of users in each drug treatment category; the gender being presented in the advertisement is identified as the norm for this illness. Item 19 looks at any differences in the positions/occupations or status of the women presented compared to men (Alexanderson, 1999). Activity of the patient and the type of setting they are placed in were also identified as important discriminators. Lupton (1993) found that women, especially older women, were rarely portrayed as physically active, whereas men in every age group are routinely depicted as active. A study by Kleinman and Cohen (1991) associated the removal of patients from a real-world settings. This relationship was not significant, with words with different connotations” (Alexanderson, 1999, p. 89). An analysis of medical textbooks to determine whether men and women are “described in different terms, with words with different connotations” (Alexanderson, 1999, p. 89). As advertisements were the focus of this study, this concept was broadened to include words and images. Two coders independently identified the signifier, signified and sign in fifteen advertisements. Although terminology differed, there was an 85% agreement on concept.

Results

The results support the conclusion that distinct images are used by advertisers in medical publications to identify patients at risk of or suffering from depression and cardiovascular disease. Content analysis found that in advertisements displaying human forms, 91.7% (22) of users of cardiovascular drugs were portrayed as male, whereas 85.7% (12) of the users of anti-depressants were depicted as female. This difference was highly significant \( \chi^2(1) = 22.75, p < 0.001 \) with the measure of association Lambda being 0.714, indicating an extremely strong relationship between gender of user and the category of drug advertised (Table 1).

This basic gender difference was reinforced by the way in which people were portrayed in the two groups of advertisements. Users of cardio-vascular drugs (17: 81%) were significantly more likely than users of anti-depressants (3: 21.4%) to be displayed in active rather than passive roles \( \chi^2(1) = 12.15, p < 0.001; \lambda = 0.533 \). Consumers of anti-depressants were more likely than consumers of cardio-vascular drugs to be represented in abstract as opposed to real settings. This relationship was not significant, but the relationship between the type of setting and gender was significant \( \chi^2(1) = 7.54, p < 0.05 \) and quite strong \( [Cramer V = 0.451, p < 0.05] \), with women (11: 84.6%) more often situated out of real-world contexts and men (15: 65.5%) placed in real-world settings. Where occupation of user was
Activity of user depicted as incomplete [body while 64.3% of users of anti-depressants were also more likely to be portrayed with a complete women in a paid occupation.

Advertisements for antidepressants did not place distinction (in paid work) on two occasions (2: 15.4%).

Cardiovascular drugs were depicted with an occupa-
discernible, in 13 (36.9%) cases, male users of cardiovascular drugs were depicted with an occupation (in paid work) on two occasions (2: 15.4%). Advertisements for antidepressants did not place women in a paid occupation.

Users of cardiovascular drugs (19: 76%) were also more likely to be portrayed with a complete body while 64.3% of users of anti-depressants were depicted as incomplete \(\chi^2(1) = 5.29, p < 0.05; \text{Cramer } V = 0.364\]. The gaze of the user was also important; 83.3% (10) of users of anti-depressants were shown facing the reader (female gaze), while 42% of users of cardiovascular drugs were depicted so. The users of cardiovascular drugs tended to be gazing elsewhere (male gaze). These differences were highly significant \(\chi^2(1) = 5.13, p < 0.05; \text{Cramer } V = 0.407\].

The text used to describe the action of the two classes of drug (product information excluded) also differed. The majority (24: 96%) of advertisements for cardiovascular drugs contained scientific or medical language, while the majority (12: 85.7%) of the advertisements for anti-depressants used language that made reference to the ‘simple’, ‘natural’ or ‘ease’ by which patients could be made better. These differences were highly significant \(\chi^2(2) = 26.39, p < 0.001; \lambda = 0.306\].

The semiotic analysis bore out this differentiation. It was found that distinct images are created in advertisements for anti-depressants and cardiovascular disease drugs that reflect the socially perceived “essential natures” of women and men. The displays used in advertisements for antidepressants convey depression as natural to women. Users of anti-depressants are predominantly depicted as female. They are presented in passive roles, often looking helpless and sad, and situated in an abstract environment with little reference to any real-world context. For example an advertisement for ‘Prozac’ shows a shy, thin, smiling woman in her thirties sitting on the ground hugging her knees, dressed in grey. She is set against a grey blank background with a faint outline of the sun in the corner. The caption reads ‘Prozac can make the difference, life really feels worth living again’.

Passivity tends to be connected with femininity (Greenhalgh, 1996) and signifies acceptance and lack of control over one’s life. The depiction of users of antidepressants as passive assigns the feminine quality of passivity to them and tends to link the symptoms of the disease with feminine qualities. In the case of cardiovascular drugs, men are portrayed as the dominant users. However, unlike the users of anti-depressants they are rarely shown in the ‘sick role’. Instead they are portrayed as active, often engaged in quite strenuous activities, for example jogging (Cozaar) and dancing (Soprol). Advertisers of cardiovascular drugs maintain the health beliefs culturally associated with masculinity by not depicting men suffering from cardiovascular disease as weak or vulnerable. Instead, they present them as strong, in control, robust and physical.

The images used, furthermore, focus on the activity involved rather than the individual. The male patient ‘at risk’ of cardiovascular disease is shown at a distance as part of the scene, thus suggesting the belief that cardiovascular disease is brought about by external environmental causes. In contrast, placing women outside a real-world environment, without context, suggests that their condition resides within them. This is a common method used in psychiatric drug advertisements to promote the theory that mental health problems come from within the person (Kleinman & Cohen, 1991).
The notion of deficiency or incompleteness is further suggested through displaying users of antidepressants with partial bodies. This leaves open the role of restoring the balance or making women complete again to the drug. This is evident in an advertisement for ‘Seroxat’, which depicts a jigsaw of a young woman’s face with one piece of the jigsaw missing. A hand fits the last piece; it is a smile. The caption reads ‘You made her life complete’.

On the other hand, the predominantly male users of cardiovascular drugs are depicted as complete, thus complying with stereotyped beliefs of the male body as structurally efficient and superior.

The eyes and the face are the most expressive parts of the body. Associating the ‘female gaze’ with antidepressants exploits the expressive code, where vacant, expressionless eyes and faces define the condition of depression. The male gaze away from the audience suggests control and independence.

Advertisements for anti-depressants employ language that refers to the naturalness, simplicity and ease of cure, for example, ‘Efexor’ is promoted as ‘simple and effective’ in treating ‘depression and associated anxiety’. The advertisement depicts a delighted female student graduating. Depression is linked to the ‘natural progression’ (‘Lexopro’) in women’s lives. This emphasis on the natural suggests that it is natural for women to be depressed at different stages in their lives. This builds on the premise that depression is inherent, further supporting the notion that it might be a biologically determined female disorder.

In contrast to this, advertisements for cardiovascular drugs use technical language to describe the mode of action of the drugs. The treatment and prevention of heart disease demand skill and expertise. For example ‘Diovan’ is ‘selective, effective, protective’ and offers ‘tolerability for your patients who have little time for side effects’; the patient identified is a man playing golf. ‘Teveten’ reduces ‘vasoconstrictor SNS effects’ for a football goalie. Statistics and scientific fact link cardiovascular drugs with the world of technology, further gender typing these drugs as male.

The difference in portrayals of the two patient types emerged with particular clarity in the depiction of old age. Accepting the inevitable rather than triumphing over the ageing process is the message conveyed in advertisements for anti-depressants. These drugs are promoted as an ‘effective and efficient’ way of helping older women come to terms with the ageing process. For example, in an advertisement for ‘Efexor’, a woman in her sixties is portrayed standing on a podium, wearing a straw hat, wellington boots and gardening gloves all in shades of gold. Her face is expressionless and she is holding a basket of cut flowers. The caption reads ‘Blooming marvellous’. The meaning created is the acceptance of growing old gracefully, placed within cultural notions of what is considered appropriate behaviour in terms of dress and activities for older women.

Traditionally, women’s bodies signify beauty, fertility, pleasure. Female ageing has connotations not associated with the male body, such as diminished appeal and loss of fertility. Advertisers may use these connotations to imply that women become depressed due to their ageing body. In the case of male body image the emphasis is on defying the ageing process. Lupton (1993) argued that this reflects the ‘valorization’ in Western society of the physically fit body in contrast to the stigmatization of the ageing body. Cardiovascular drug advertisements promote their drugs as ways of restoring vitality, so that those experiencing cardiovascular disease can engage in physical activities such as running on the beach (‘Lipitor’), golf (‘Diovan’) or jogging faster than a younger man (‘Cozaar’). The slogans used do not refer to slowing down or taking life easy, but make reference to living ‘life to the full’ and ‘enjoying life’. Attributes that contradict stereotypes of old age are scattered throughout advertisements for cardiovascular drugs. Signifiers, such as outdoor clothes and men engaged in active pursuits, imply continuation of normal active life. Idealized forms of masculinity are perfect for conveying the notions of power, control and protection, which the advertiser wants us to associate with cardiovascular drugs. In addition to building on existing stereotypes which portray cardiovascular disease as a male disease, the advertisements seek to associate the drug with the broader concept of masculinity.

The intent of the advertiser to identify a particular patient type is evident through the depiction of patients not typically thought of as predisposed to the disease. For example, the fit and healthy football goalie in the ‘Teveten’ advertisement creates awareness of hypertension in fit and younger males, the atypical patient. The hidden dangers of undiagnosed hypertension are further emphasized through imagery such as a heart in the
shape of a time bomb (‘Dilzem’), or the portrayal of an iceberg (‘Vasteral’).

This targets the prescriber’s desire for reassurance that nothing has gone unnoticed (Scott & Ferner, 1994).

Younger men, those at highest risk of suicide, are never depicted in the anti-depressants’ advertisements studied. Those identified as at risk of depression are women, young, middle-aged and old. What they have in common is coping with change in their lives: graduating from college, or loss of role, status and fertility. The prescriber is thus encouraged to equate the drug with the solution to problems that women encounter in their lives. There is no recognition of the effect that social disadvantage and inequality, and violence and abuse, both emotional and sexual, have on increasing women’s risk of depression (Astbury, 1999).

Discussion

The basic numerical difference in the gender of the users represented in these two types of advertisements demonstrates a dramatic difference and conforms to the stereotypical notion of depression as a ‘female’ disease and heart disease as ‘male’ one. In the case of depression this finding agrees with similar studies (Mant & Darroch, 1975; Prather & Fidell, 1975; Ficca et al., 2000). Advertisers may argue that in reality women are more likely to suffer from depression, but the process of diagnosis is not clear-cut (Astbury, 1999; Lovdahl & Riska, 2000). Similarly, as discussed in the introduction, heart disease does represent a real threat to women’s health.

The numerical difference in the sex of users represented is reinforced by the use of images and ideas with heavily gendered associations. These are particularly interesting because these associations not only reinforce the idea that certain diseases are ‘male’ or ‘female’ but also in some cases suggest particular ideas about the nature of the illnesses themselves. For example incompleteness and passivity might legitimately be associated with depression. However, it is argued that this overlapping of meaning only disguises and does not eradicate the gendered meanings involved. The differences observed are subtle and persistent. They not only help to inform our understanding of a particular illness as male or female, but construct for us an understanding of the nature of the illness itself.

Conclusion

The present study cannot demonstrate that the gender typing of antidepressants and cardiovascular drugs results in different outcomes for men and women suffering from these illnesses. However, it can be proposed that as advertisers are on familiar terms with their audience of medical practitioners, these advertisements are meaningful to their target audience. The depiction of these stereotypical images reinforces communal meanings of gender and health, which must have some impact on the treatment of both men and women. This is suggested by the fact that research has consistently found that women are less likely to receive medically proven secondary prevention therapies for heart disease (Steingart et al., 1991; Spencer et al., 1995; Hippisley-Cox et al., 2001; Williams et al., 2003), and are more likely than men to receive treatment for depression.

What is particularly disquieting is the growing sophistication and importance of advertising in the pharmaceutical market. Due to the high cost of drug research and development, companies need to exploit their products fully. Building brand value through advertising is seen as a means of sustaining demand for a drug and guaranteeing profit after its patent has expired.

Central to all brands is a set of values. These values “can be positioned as masculine or feminine—can reflect human personality traits” (Blackett, 2001, p. 20). By continuing to position antidepressants as feminine and cardiovascular drugs as masculine, advertisers maintain and reinforce the stereotype of ‘the male heart’ and ‘the female mind’.

References


