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Psychoactive drug advertising: content analysis

ABSTRACT

The goal of this study was to describe the human figures portrayed in psychoactive drug advertising in terms of gender, age, ethnic group, and social context. Content analysis for 86 new pieces of printed advertisements released in 2005 was carried out. Fisher exact test was used to analyze the association between categories. There was a preponderance of women (62.8%) who were four times more present in advertisements for antidepressants and anxiolytics than men. Most of the people shown were Caucasian (98.8%) young adults (72%). These people were pictured in leisure activities (46.5%), at home (29%), or in contact with nature (16.2%). The message conveyed was that the drugs treat routinely felt subjective symptoms of discomfort, inducing in an irrational appeal that may affect drug prescription.

DESCRIPTORS: Psychotropic Drugs. Drug Publicity. Propaganda. Health Knowledge, Attitudes, Practice. Gender and Health.

INTRODUCTION

Prior studies have shown discrepancies in the proportion of male and female characters in drug advertisement, especially in psychoactives.^{2,3}

Antidepressant drug advertising builds an image of depression as a female symptomatology, and the same can be seen in advertisements for benzodiazepines, drugs with anxiolytic and hypnotic properties. On the other hand, adult males or the elderly generally appear in neuroleptic drugs.¹

Lövidahl & Riska³ (2000) named the 70s and the 80s the “age of the sleeping pills” and human characters, especially men, were pictured as needing benzodiazepines to be able to put up with the external pressure of work. On the other hand, women appeared in situations considered “subordinate”, such as sleeping or during household chores. In the mid-90s, when new antidepressants (SSRI - Selective Serotonin Reuptake Inhibitors) were released, drug advertisement starts building the image of depression as a female mental disorder.

The stereotypes in drug advertisement lead to irrational practices and, consequently, affect medical prescriptions, making way for bias between mental disorders and gender,⁶ and to overmedication of mental disorders.¹

The objective of the present study was to describe the human figures displayed in psychoactive drug advertisements according to gender, ethnic group, age, and social context, aiming at identifying stereotypes related to mental disorders.

METHODS

Pieces of psychoactive drug advertisement distributed by the pharmaceuticals industry to physicians were collected in clinics, health centers and hospitals in the city of Araraquara, Southeastern Brazil, in 2005.

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The drug advertisements released by the pharmaceutical industry are the same for all of Brazil. Therefore, the pieces of advertisement collected in the city of Araraquara can be considered representative of the psychoactive drug advertisement aimed at prescribing physicians.

After gathering 167 new pieces of psychoactive drug advertisement, the Munce et al⁴ (2004) form was adapted to analyze the content of human figures in them. The following information was collected: therapeutic class of the drug advertised, ethnic group, age, social environment, and place where the subject was found.

Age was divided in four groups: adolescents, subjects between 20 and 40, 41 to 60, and over 60 years of age. Places were classified as: home or garden, nature (waterfalls, beach, trails), work (office, shop, laboratory), social context (places of leisure, such as parks, shopping centers, restaurants, clubs). Social environment refers to the situation in which the person is found, and it was classified as work, family or leisure.⁴

The information gathered was counted and tabulated, according to gender and therapeutic class of the drug in the advertisement, and according to gender and possible stereotypes (ethnic groups, age, social environment).

The association between the categories was analyzed through Fisher's exact test.

RESULTS

From the 167 pieces of psychoactive drug advertisement collected, 86 displayed human figures. According to the therapeutic class, the pieces of advertisement were for antidepressants (39.8%), anxiolytics (23.3%), antipsychotics or neuroleptics (11.4%), hypnotics (9.1%), anticonvulsants or mood stabilizers (10.2%), and others (6.2%, cognitive enhancers, antiparkinsonians).

Most pieces contained human figures (51.5%), who were mostly Caucasian (98.8%). Women were present in 62.8% of the pieces, and most of them were young adults (between 20 and 40 years of age), who were generally at home (18.6%), or in contact with nature (10.4%), or in leisure activities (30.2%). The men displayed (10.5%) were also young adults (between 20 and 40 years of age), and were frequently pictured at the workplace or during professional (4.6%) or leisure (5.4%) activities (Table).

Psychoactive drug advertisement usually displays young adults between 20 and 40 years of age (72%), mainly in pieces advertising antidepressants and anxiolytics, and anticonvulsants. The few adolescent figures were displayed in advertisement for anticonvulsants; and the elderly were displayed mainly in advertisements for antiparkinsonians and cognitive enhancers or neuroleptics.

Statistically significant differences were found between gender and place where the subjects were pictured ($p=0.017$) and social position ($p=0.003$).

DISCUSSION

In this study, women appeared four times more than men in antidepressant and anxiolytic advertisement. However, epidemiological data on depression and anxiety reveal a gender proportion of 2:1 (WHO, 2001).⁵ The difference between the epidemiological data and the representation of women in drug advertisement may impact on medical prescriptions.^{3,4}

Similar results were found by Munce et al⁴ (2004) in analyzing human figures in psychoactive drug advertisement in psychiatric journals in the United States, England and Canada. Men were displayed less often; however, when they were displayed they were found in the workplace, and pictured as productive and independent, and with a good financial situation; whereas the women, who were frequently displayed, were usually found in the garden, at home or sleeping.

In the last decades, the role of women in society has increased. However, psychoactive drug advertisement continues to display them as submissive, engaged in

Table. Characteristics of the human figures displayed in psychoactive drug advertisement according to gender. Brazil, 2005.

Characteristic of displayed figures	N	Men %	Women %	Total %
Ethnic group				
Caucasian	85	10.5	61.6	26.7
Black	1	-	1.2	-
Age group				
Adolescents	3	-	3.5	-
20 – 40	62	8.1	40.7	23.2
41 – 60	10	1.2	5.8	4.6
> 60	11	2.3	5.8	4.6
Place*				
Home/garden	25	2.3	18.6	8.1
Nature	14	3.5	10.4	2.3
Work	6	4.6	1.2	1.2
Social activity**	12	2.3	3.5	8.1
Not identified	29	-	20.9	12.8
Social environment***				
Work	7	4.6	2.3	1.2
Family	12	2.3	5.8	5.8
Leisure	40	5.8	30.2	10.5
Other	27	-	17.4	14.0

* $p=0.017$ according to Fisher's exact test

** Leisure places, restaurants, clubs

*** $p=0.003$ according to Fisher's exact test

household chores, during leisure activities, not during work, or even in a sexy fashion, in addition to being well dressed, thin, young, adult, and attractive.⁴ In this study, it was found that 40.7% of the women were young adults, thin, well dressed, and engaged in leisure or household activities.

The over-representation of women and the tendency of displaying them in a stereotypical fashion may produce a prototype of depression and anxiety, according to which physicians 'pathologize' their female patients with depression and anxiety whereas, in fact, they may be going through circumstantial and/or transitory problems. In the same way, male patients may be underdiagnosed and go untreated^{1,4} resulting in different kinds of treatment for men and women. When diagnosed, men were treated for work-related stress, and women for diffuse emotional symptoms.² Smith & Griffin⁶ (1977) state that advertisement exaggerate in 'stereotyping' in order to minimize the needs for more complete diagnoses.

In regard to age, just as in Mastroianni et al³ (2003) and Lövdahl et al¹ (1999), advertisement for antidepressants, anxiolytics, hypnotics and mood stabilizers portray young adults, whereas advertisement for neuroleptics, antiparkinsonians, and cognitive enhancers picture adults and the elderly. Although adults and the elderly are the ones who need psychoactive drugs most, the most common human figures displayed are young adults.

The stereotype induced in drug advertisement may affect diagnoses and prescriptions, overmedicating the young and undermedicating other age groups. It is necessary to rediscuss the regulations and inspection of drug advertisement in Brazil, since they do not mirror reality in addition to not containing information on posology, warnings or side effects for each age group. There is a lack of this kind of information especially concerning pediatric and geriatric patients.³

In regard to ethnic group, it was found that psychoactive drug advertisement only portrays Caucasians (98.8%). According to the 2000 census, 44.6% of the Brazilian population is black or mixed.^a However, out of all the pieces of advertisement analyzed in this study, only one piece on an anxiolytic drug portrayed a black woman; people of Asian background were not displayed at all, thus providing an inadequate picture of the Brazilian ethnic groups.

The lack of racial diversity in drug advertisement may affect prescription,⁴ leading to both underdiagnose and undertreatment of mental disorders in blacks and Asians. Therefore, psychoactive drug advertisement does not help promote rational use of medication.

The human figures displayed in psychoactive drug advertisement are generally pictured in leisure moments (46.5%), while resting at home (29%), or in contact with nature (16.2%). These images convey the message that the drugs treat general feelings of discomfort and stress, thus providing rest and moments of leisure. Some pieces of advertisement for anxiolytics portrayed women in relaxation activities such as yoga or being massaged, conveying the message that these activities are equivalent to using the anxiolytic drug on the advertisement.

The non-scientific appeal in psychoactive drug advertisement is mirrored in the attitude of physicians, resulting in drug prescriptions (a medication or over-medication process), which do not take other kinds of therapy into consideration. The very same underlying messages were reported in Lövdahl & Riska² (2000) while analyzing human figures in advertisement from 1970 to 1990. To this date, psychoactive drug advertisement does not mirror their real indications, and this may lead to an irrational use of the drug and even to addiction.

In conclusion, the present study shows there is a bias between gender and mental disorders portrayed in psychoactive drug advertisement, strengthening the stereotype that depression and anxiety are women-related symptoms, in clear opposition to current epidemiological data. Besides, the pieces of advertisement analyzed convey the idea that using antidepressants and anxiolytics can promote a feeling of well-being similar to the moments of leisure and rest at home and/or when in contact with nature, thus resulting in these drugs being prescribed for any kind of feeling of discomfort regardless of an objective indication.

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^a The Brazilian Institute for Geography and Statistics (*Instituto Brasileira de Geografia e Estatística*, IBGE). 2000 Demographic census. Rio de Janeiro; 2000 [cited 2007 May 10]. Available from: http://ibge.gov.br/home/estatistica/populacao/censo/2000/populacao/cor_raca_censo2000.pdf.

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