Journal of Fundamental and Applied Sciences

ISSN 1112-9867

Available online at

ntal and Applied Sciences

e at http://www.jfas.info

A REVIEW OF THE IMPACT OF COMMERCIAL DRUG ADVERTISING ON THE EMERGENCE OF SELF-MEDICATION PHENOMENON

R. Ershadpour¹, Z. Kargar¹, M. Y. Rajput²*

¹Health Research Center, an expert of operating room, Jahrom University of Medical Sciences, Jahrom, Iran

²Assistant Professor of Internal Medicine, Gastroenterology and Hepatology, Jahrom University of Medical Sciences, Jahrom, Iran

Published online: 24 November 2017

ABSTRACT

Introduction: Today, the phenomenon of commercial advertising is not a simple information tool to link consumer to producers. The pharmaceutical industry is increasingly influenced by commercial advertising. Self-medication may be one of the major consequences of drug advertising.

Methodology: This review article was conducted through reviewing 100 articles and 12 books, derived from valid libraries and electronic sources.

Findings: Besides the drugs prescribed by physicians, patients also go to pharmacies directly and provide and take different drugs based on their own [often false] diagnosis to prevent their diseases or to treat or strengthen themselves and this is due to the inappropriate culture induced by drug advertising. On the other hand, commercial advertising has changed the culture of over-the-counter (OTC) medications and has increased their use. One of the major strategies used in satellite TV advertising is promotion of the culture of disease among public

View metadata, citation and similar papers at core.ac.uk

brought to you by **CORE** AJOL - African Journals Online UO Scientific

and official base.

Discussion and conclusion: Numerous studies indicate that due to the drug advertising, some common and non-medical symptoms are considered as disease.

Author Correspondence, e-mail: shabnamrajput2014@gmail.com doi: http://dx.doi.org/10.4314/jfas.v9i7s.73



Considering the lack of awareness of people about the nature of their diseases, further expansion of these ads will certainly result in medication misuse, induction of false need and the prevalence of smuggled, unhealthy and fake drugs among public. Therefore, it is necessary to investigate this phenomenon in Iranian society to identify its unknown dimensions in accordance with today's Iranian culture and to make effective efforts to promote educations and to build a proper culture.

Keywords: commercial advertising, drug advertising, self-medication

INTRODUCTION

Commercial advertising is one of the most common phenomena of this era. Advertising is a deliberate and precise attempt to shape individuals' perception, to manipulate their understanding and to align their behaviors with a specific purpose; in other words, it conveys a specific thought to influence the others' thoughts and deeds and to achieve certain purposes using various tools and methods, within a limited time and at a limited place (1, 2, 3, 4) and 5).In the advertising culture, it is defined as: any type of content, statement or announcement [in which some goods or services are declared] published through the media to attract people or public opinion (1 and 6).Due to its profound and gradual influence on different aspects of life, many countries have paid special attention to this phenomenon for many years (7, 8 and 9).Utilizing the amazing capacities of the modern mass media, commercial advertising is no longer considered a simple information tool to link consumers to producers; however, it is a reality with fundamental effects on all areas of social, economic, cultural and political life (10, 11, 12 and 13). In the western countries, commercial advertising is considered a major cause of commercial and industrial prosperity, quality improvement and cost reduction; however, relentless advertising on positive features of goods and services is considered by many social and communication researchers as a dangerous brainwashing (14,15,16). Cultural critics of commercial advertising believe that commercial advertising mainly focuses on creating a specific desire in people; something that has never existed before (17). They believe that commercial advertising does not merely aim at creating awareness in customers about a simple product; but, it creates some kind of passion and enthusiasm in customers that can be quenched only after purchasing the advertised goods or services, which is obviously dangerous (14, 15 and 16). One of the major industries that are increasingly influenced by commercial advertising is the "pharmaceutical industry", which has currently become an integral part of people's lives. Self-medication is one of the major consequences of drug advertising (19, 20, 21, 22 and 23). Today, different TV channels, satellite TV channels,

Internet, radio, newspapers, journals, brochures and banners have become doctors who prescribe different prescriptions for various people without paying deep attention to their main problem (24 and 25). Many of these advertising centers exploit people's fear of disability and death and focus on these weaknesses (26). Today, Iran has one of the highest medication consumption rates in the world and over the past decade, indiscriminate use of medication has increased in this country (27). Studies have shown that Iran lacks a proper medication consumption model. Some efforts have been made to reform the existing model; however, they have mostly failed. Iran's medication system faces problems such as indiscriminate consumption and self-medication and advertising has a significant impact on indiscriminate consumption of medications. The results of a study in the U.S. (1998) showed that more than 53 million patients have consulted with their doctors on the possibility of changing their medications, after watching an advertisement on TV and 49 million patients have tried to get more information about new treatments for their diseases through surfing the Internet (24, 28 and 29). According to these reports, drug advertising influences a significant number of healthy or seemingly healthy people; they may visit physicians after watching these ads. In this study, it was also found that over 12 million prescriptions were issued at the request of patients, under the influence of mass media advertising (11 and 30). Advertising for goods, such as medicines, which are directly associated with the health and lives of humans is an indecent act (31 and 32). Some ads are distributed under minimal supervision to encourage the general public to buy medicines; however, they do not provide enough information about the disadvantages and side effects of these medicines(23 and 33). Considering the profound effects of ads on people's medication consumption habits, this study aimed to identify these effects and subsequent changes in the public medication consumption culture and attempted to offer solutions to prevent its further development.

METHODOLOGY

To access relevant texts and articles, databases including: Pub Med, ISI, Google Scholar, Magiran, SID, Medlib and Science Direct were searched for the following keywords: commercial advertising, the impact of advertising, direct drug advertising and various types of ads. First, the abstract and then, if relevant, the whole article was studied. Relevant, coherent and useful articles entered into the study. A total of 60 related articles and 10 books were finally selected. In the next stage, the texts and documents were reviewed and categorized by two scholars, based on the various types of commercial ads and the effects (advantages and disadvantages) of commercial advertising on the publicmedication consumption culture.

Finally, 40 articles and books, publishedduring 1992-2014, which covered the most relevant aspects were selected and presented in the form of this review article.

FINDINGS

It has been about 10 years since the FDA changed its policy for initiating direct drug advertising on television (22, 26 and 34).Drug advertising is not merely limited to television advertising and today, pharmaceutical marketers personally promote their cosmetic products, health products, supplements and medications in pharmacies to attract customers. This has induced some false needs in customers (35). Today, besides the drugs prescribed by physicians, most peoplego to pharmacies directly and provide and take different drugsbased on their own - often false- diagnosis to prevent their diseases or to treat or strengthen themselves (27 and 36). Today, there are many concerns about the consumption of over-the-counter (OTC) drugs and according to studies, commercial advertising has changed the culture of their consumption and has increased their indiscriminate use (22 and 36). Meanwhile, according to studies, it has been observed that these ads influence women more than men; because women are more concerned about the health of their family and children (37). According to the global statistics, a small number of advertised drugs are new and the rest are expensive drugs that have long been used by a large population (25, 26, 38, 39 and 40). Misled by the invalid information presented in advertisements, a healthy person may buy a drugwithout a full understanding of the symptoms of his/her disease. In this case, the position of physicians and specialists is faded awayand a phenomenon called "advertising medicine" happens. Today, the satellite TV channels allocate a considerablepart of their time to advertising programs; yetthey choose their programs based on their audiences and the culture of the target society (26 and 41). In Persian-language channels, the ads mainly focus on weight loss, height increase and wrinkle removal products, guaranteed treatment of freckles, guaranteed treatment of addiction, treatment of sexual disabilities and many similar cases. This type of medicine is provided by satellite TV channels and an interconnected network of different people who occasionally appear as physicians. This medicine is not real, scientific and academic and most of the cases are based ondemagogic purposes (25, 26, 42 and 43). Many of these people who introduce themselves as physicians are not physicians or they may have been away from the field of medicine for a long time and many have become businessmen. In this case, the disaster occurs when an individual's health is at risk; for example, patients may put aside the drugs prescribed by their physicians and may turn toward those they have heard of in various ads (26).Sexual enhancement advertising on satellite TV channels is a multi-billion dollar business worldwide.Because of some cultural and social reasons, in Iranian society, many people who suffer from sexual dysfunction will not go to physicians. These people are unaware of various possible consequences of their act.Naturally, in such a situation, peoplewill have no access to experts and specialists; thus, the satelliteTV channels or yellow

journals will become their only source of knowledge and this increases the possibility of purchasing and taking illicitdrugs (26 and 41). Recent studies by the Nutrition Improvement Office of the Ministry of Health and Medical Educationhave revealed the prevalence of obesity and overweight, according to which, about 50% of urban men aged 40-69 years and 66% of women at the same age group are overweight. An almost large group of these people come along with theirobesity and overweight throughout their lives; however, some otherstry to lose weight due to their illness or to improve their fitness. Therefore, overweight and obesity are two major problems in advertisingmedicine (30, 41 and 42). Every day, more and more women try to lose weight by taking pills, syrups, gels and creams. Some people try almost all the products and brands. They go on crash diets to achieve their ideal weight and fitness. Advertising suggests that all women should have beautiful bodies and encourage them to go onvarious diets and to take weight loss medications. The possible weight loss is mainlydue toone's exercises, not due to the pills and drugs suggested by the satellite TV channels; because people are usually advised to go onsome diets and do some exercises before or after taking these medications. These practices are certainly effective and make some changes and people usually attribute these changes to the drugs they have taken (15 and 26).One of the majorstrategiesused in satelliteTVadvertising is promotion of the culture of disease among publicand in some cases, the information and statistics given by these channels have no scientific and official base. Each disease has a unique scientific definition and people should not be deceived by baseless claims of frauds. On the other hand, sometimes theads mentionsomenonscientific psychological symptoms for diseases; however, one cannot expect himself/herself to do beyond his/her natural physiological capacities. Considering the lack of awareness of people about the nature of their diseases, further expansion of these adswill certainly result in medicationmisuse and the prevalence of smuggled, unhealthy and fake drugs among public (25, 26 and 45).

DISCUSSION

The tremendous wave of advertising leads all the actions and reactions. It creates a new human being and forces him to choose its proposed products. This reality is the critique raised bysome scholars who argue that advertising results in "human slavery" (10, 11, 14 and 47).Herbert Marcuse, a German-American philosopher also viewed commercial advertising with a highly critical approach. He believes that this type of commercial advertising entangles man more and more in the profiteering conditions of the ruling community (14 and 48). The needs to possess, consume, implement and replace various types of products and equipment are some of the destructive effects of this type of commercial advertising (23).Kawachiet al. in their study entitled "the effect of direct-to-consumer advertising on medical care experiences" introduced the phenomenon of "medicalization" as a process by which people assume some common and non-medical symptoms as illnesses (49). Some critics believe that drug advertising is not in the interest of the public health; because these ads challengephysicians' authority and reduce patients' trust in their prescriptions. Advertising agencies recognize prevalent diseases and problems among people and plan to make drugs for these diseases in order to make more money (21). In fact, pharmaceutical companies mostly focus on the profitability of their products than their effectiveness (23). Such advertising leads to over-consumption of drugs, especially new drugs, which have not yet been examined for their long-term side effects (50 and 51). Another major issue in this regard is that theadvantages of pharmaceutical advertising should not be ignored. Drug advertising can enhance clinical information of individuals and canpersuade them to obtain more information about various diseases and treatments (52 and 53).Commercial advertising sometimes makespeopleaware of a hidden illness or symptoms of an illness that have already been ignored; thus, they can buy the drugs to preventfurther deterioration of their conditions and on the other hand, this can reduce the treatment costs (28 and 32). Some health-related problems have nosymptom. They are usually left untreated and direct-to-consumer advertising encourages people to seek medical treatments for these problems (54 and 55). However, currently the disadvantages of this type of advertising overshadowits benefits and every day we observe variousside effects of these drugs. The most dangerous effect of direct-toconsumer advertising is that it creates a sense of need for medical care and treatment in healthy people (56, 57, 58, 59 and 60). Continuation of these misleading ads will transform human society into a healthy, but depressed and fearful society (38). To reduce the impact of satellite TV advertising (satellite medicine), authorities should attempt to increasepublic awareness about the purpose of the programs as well as the side effects of various drugs.Patients should also be informed of their diseases and treatment procedures. Another important issue is to respond appropriately to the publicneeds.For instance, people should know where to go and which specialist to visit when they suffer from an illness. In this case, the position of physicians in the treatment of diseases should be strengthened. Specific

problems such as sexual problems require effective information communication. Patients with sexual problems must be guided to relevant centers; meanwhile, due to the high prevalence of these problems, such centers should be further developed in Iran. In the case of weight loss pills, these drugs should be examined by experts before they are distributed in the market. This becomes especially important when we see many of these European and American drugs and products are prohibited even in producing countries. In many of these countries, even vitamin supplements require prescriptions. Moreover, authorities shouldmonitor drug advertising in the country more carefully. The information provided in advertisements must be validated by experts. The psychological effects of this type of advertising should also be checked. This advertising should not turn societies into greedy and consumerist societies. At the moment, an urgent and planned action is essential to prevent these ads and their adverse effects. This study aimed to examine various effects of drug advertising in order to prepare the ground fortaking further preventive actions. It is imperative to study this phenomenon in Iran's specific cultural conditions in order to identify its unknown dimensions and to make effective efforts to promote educations and to build a proper culture in this regard.

ACKNOWLEDGMENT

Hereby, the author would like to express hisgratitude and appreciation to Dr. Abolfazl Nikosir, the Food and Drug Deputy of Jahrom University of Medical Sciences and Elham Kashafi, the Head of the Committee of Reasonable Drug Administration and Consumption in the R& D Department of Food and Drug Administration of Jahrom University of Medical Sciences.

REFERENCES

1- Bagherpour, Rasool. What iscommercial advertising? Art and Culture Center of Branch 13 of Tehran University of Applied Sciences. June 2014.

2- Advertising as communication, translation of MahmoodiFazeli, Mohammed sadegh . Journal of Research and Assessment. spring 2002: 29.

3- GhidariNasiri, Hassan. Advertising in the context of globalization, Proceedings of the Second Congress of Iran Technology, Department of Propaganda Ministry of Culture and Islamic Guidance. 2003.

4- Naqib Sadat, Seyed Reza. Outlook for advertising in the information age, the media, Journal of Media Research Center. winter 2002: 58 - 63.

5- Proceedings of advertising and media, research and evaluation, Journal of Islamic Republic of Iran Broadcasting Department of Research and Planning. Spring 2002.

6- A.p fox. What is advertising? Translation of Sh. Bahar. Media, Journal of Media Research Center, Fall Issue 1992: 36 - 41.

7- Approach to the use of different media in marketing and advertising, translator and author K. Kelleher, Research and Evaluation, Islamic Republic of Iran Broadcasting. 2002:
29.

8- Sabribaghaei, Azarakhsh. The role of advertising in the economy. Proceedings of the Second Conference of the advertising industry's development department of the Ministry of Culture and Islamic Guidance, 2003.

9- BolourianTehrani, Mohammad. Campaign style features in some countries,

Proceedings of the Second Conference of the advertising industry in Iran (Tehran:

Administration of Press and Propaganda Department of the Ministry of Culture and Islamic Guidance advertising, printing 2003: 56-66.

10- M. Ray. Brecko and Welwyn, management of communications, translated by Mohammad Arabs and DavoudIzadi, Tehran, the Cultural Research Bureau. 1999.

11- Ghazi Zadeh, Ali Akbar. Advertising, the industry that makes belief, Research and Assessment. 2002 : 29.

12- AssadiTari, Mohammad Hassan. The history of advertising, media, Journal of the Center for Media Studies. Spring 1993 : 54 - 59.

13- Hakim ara, Muhammad Ali. Advertising, a try for convincing. The media, Journal of Media Research Center, Summer Issue 2000: 96 - 101.

14- Williams, Raymond. The magic of advertising, article published in the book of Cultural Studies, edited by Simon During, translation HumiraMoshirzadeh, Snoopy future Cultural Institute, Tehran, first edition. 1999.

15- Motamednejad, Kazem. Advertising and self-alienation, Media, Journal of MediaResearch Center, Summer Issue 1990: 2 - 7.

16- Gharedaghi, I. Advertising regulations, Tehran, General Administration of Press and Advertising Department Advertising Ministry of Culture and Islamic Guidance, 2003.

17- Garth S. Java and Victoria O'Donnell, promote and encourage, translated by AhmadMir Abedini, Media, Journal of Media Research Center, Winter Issue; 1993: 38 - 49.

18- HosseiniPakdehi, AR. Advertising and cultural values. Proceedings of the First Conference of the advertising industry development department of the Ministry of Culture and Islamic Guidance. 2000. 19- Sherwood LM. Important information. Fosamax (alendronate sodium tablets): proper dosing and avoidance of esophageal side effects. (Letter to US physicians, 15 Mar 1996.)
 MedWatch Safety Summaries—Fosamax. www.fda.gov/medwatch/safety/fosamax.htm (accessed 27 Feb 2014).

20- Wazana A. Physicians and the pharmaceutical industry. Is a gift ever just a gift? JAMA 2000; 283:373-80.

21- Mintzes B, Barer ML, Kravitz RL, Kazanjian A, Bassett K, Lexchin J, et al. Influence of direct to consumer pharmaceutical advertising and patients' requests on prescribing decisions: two site cross sectional survey. BMJ 2002; 324:278-9.

22- MintzesBarbara , Direct to consumer advertising is medicalising normal human experience . 13 april 2002; 324 : 908-909.

23- Julie M. Donohue, Marisa Cevasco. A Decade of Direct-to-Consumer Advertising of Prescription Drugs. N Engl J Med 2007; 357:673-681.

24- Khojasteh, Hassan. The function of commercials on radio and television from the perspective of the critical school, Research and Assessment. 2002: 29.

25- Medical Journal of doctor salam. Media and publications on drug advertising play an important role. Persian date July 2013.

26- Satellite medicine. Weekly health. Iran's Health Information Center (Slamtyran). No.463, March 1392: 40.

27- Davati A, Jafari F, Samadpoor M, Tabar K. [Survey of medication in ageing of Tehran city]. J Med Council Islamic Republic Iran 2008; 25(4): 450-6.

28- IMS Health. IMS Health reports pharmaceutical direct to –consumer advertising investment in US reaches \$1.3 billion in firsthalf 2000. www.imshealth.com (accessed 20 Jan 2013).

29- Richardson MA, Ramirez T, Nanney K, et al: Alternative/ complementary medicine: Implications for patient-provider communication. Proc Am SocClinOncol. 1999; 590:18.

30- Sollner W, Zingg-Schir M, Rumpold G, et al: Attitude toward alternative therapy, compliance with standard treatment, and need for emotional support in patients with melanoma. Arch Dermatol. 1997; 133:316-30-321.

31- Researched Medicines Industry Association of New Zealand. DTC advertising can enhance public health. The case for fordirecttoconsumer prescription medicine advertising. June 2000.

32- M S Wilkes, R A Bell, R L Kravitz. Direct-to-consumer prescription drug advertising: trends, impact, and implications. Health Affairs, June 1, 2014 : 110-125.

33- Levin JS, Glass TA, Kushi LH, et al: Quantitative methods in research on
complementary and alternative medicine: A methodological manifesto. Med Care. 1997;
35:1079-1094.

34- Pressman A, Forsyth B, Ettinger B, Tosteson AN. Initiation of osteoporo- sis treatment after bone mineral density testing. Osteoporosis Int 2001;12:337-42.

35- Marketing in pharmacies, a new dimension of health promotion. Iranian Students News Agency (ISNA). Persian date March 2014.

36- DoustarSanaei M, Sobhani AR. [Pattern of drug consumption and its changes during the first trimester of pregnancy]. J Qazvin Univ Med Sci 2002; 20: 55-61.

37- Craig, Stephen. Women as Home Caregivers: Gender Portrayal in OTC Drug Commercials . 1992; 22, 4: 303-312.

38- http://www.corpwatch.org .stuart Elliot. Sun May 25, 2014.

39- Therapeutics Initiative. Cox-2 inhibitors update: do journal publications tell the full story? Therapeutics Letter 2001;43. www.ti.ubc.ca/PDF/43.pdf (accessed 27 Jan 2014).

40- Bell RA, Wilkes MS, Kravitz RL. The educational value of consumer- targeted prescription drug print advertising. J FamPract 2000; 49:1092-8.

41- Medical Journal doctor Hello. Warning about drug advertisements in satellites. march 2012.

42- Razzaghi, Ebrahim. Consumption patterns and cultural invasion, Tehran. First Edition, 1396.

43- DanaeiMoghaddam, V. TV commercials, newspaper Iran, the sixth year. 2013: 1463:7.

44- Jacques Ellul, advertising ethics, translation Hooman refugees, media, Journal of Media Research Center, Summer Issue 1991: 40 - 47.

45- Mohamadian, Mahmoud. Advertising management, Tehran: Horoufiye Publisher, 2001.

46- B. Jbarlvyshabestary, advertising: advertising ubiquitous, Proceedings of the Second Conference of the advertising industry in Iran, Tehran advertising machinery development department deputy press secretary of the Ministry of Culture and Islamic Guidance, first edition. 2004: 158-170

47- Blake Reed and Edwin Harvldsn, the concepts of communication, translation M. Owhadi, Tehran: Soroush. 2000.

48- Ismaili, M. Commercials, books, and necessary legislative rights. Majlis Research Center. First edition. 2008.

49- Kawachi I, Conrad P. Medicalization and the pharmacological treatment of blood pressure. In: Davis P, ed. Contested ground. Public purpose and private interests in the regulation of prescription drugs. New York: Oxford University Press, 1996.

50- Pignone M, Phillips C, Mulrow C. Use of lipid lowering drugs for primary prevention of coronary heart disease: meta-analysis of 798andomized trials. BMJ 2000;321:983-6.

51- Pfizer and Canadian Lipid Nurses' Network. Which would you rather have, a cholesterol test or a final exam? Chatelaine 2001; 74(9):74-5.

52- Dominick L Frosch . Creating Demand for Prescription Drugs: A Content Analysis of Television Direct-to-Consumer Advertising . Ann Fam Med 2007:5:6-13.

53- Reuters Medical News. European "direct-to-consumer" drug information plans may face opposition. www.medscape.com/reuters/prof/2002/01/01.11/20020110rglt009.html (accessed 18 Jan 2014).

54- Yael Schenker, Robert M. Arnold, Alex John London. The Ethics of Advertising for Health Care Services. The American Journal of Bioethics.2014: 14:3, 34-43.

55- Robert A. Bell PhD1, Richard L. Kravitz . Direct-to-Consumer Prescription Drug Advertising and the Public .Journal of General Internal Medicine. November 1999: 14(11) ; 651–657.

56- Patrick W. Corrigan, Kristin A. Kosyluk, J. KonaduFokuo, Jin Hee Park. How Does Direct to Consumer Advertising Affect the Stigma of Mental Illness? Community Mental Health Journal. 2014.

57- Joshua E. Perry, Anthony D. Cox, Dena Cox. Direct-to-Consumer Drug Advertisements and the Informed Patient: A Legal, Ethical, and Content Analysis. American Business Law Journal . 2013: 50:4, 729-778.

58- Hannah Kang, Soontae An. How Direct-to-Consumer Drug Websites Convey Disease Information: Analysis of Stigma-Reducing Components. Journal of Health Communication.2013: 18:12, 1477-1491.

59- Levin JS, Glass TA, Kushi LH, et al: Quantitative methods in research on complementary and alternative medicine: A methodological manifesto. Med Care. 1997: 35:1079-1094.

60- Lyons, Sean, Karen Mayor and Richard S.J. Tol. "Convergence of consumption patterns during macroeconomic transition: A model of demand in Ireland and the OECD". Economic Modelling .2009:702–1-714.

How to cite this article:

Ershadpour R, Kargar Z, Rajput M Y. A review of the impact of commercial drug advertising on the emergence of self-medication phenomenon. J. Fundam. Appl. Sci., 2017, 9(7S), 788-799.