



# Assessment of Medical Advertisement Oversight in Iran's Medical Council: Compliance Evaluation with Medical Ethics Standards

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## Abstract

**Background:** One of the most important ways to protect consumer health is to regulate the advertising and marketing of pharmaceutical and healthcare products and to promote professional ethics in the trade of these products. Ethical and legal liability can protect consumers' corporeal and spiritual interests and help the profession maintain the market.

**Methods:** The initial phase of this cross-sectional study, a literature review was conducted to identify the ethical principles and criteria relevant to advertising in healthcare services. Following this, a researcher-developed checklist was created, incorporating the ethical standards derived from these principles. This checklist was then used to evaluate the existing and completed files within the Iran's medical council, which were utilized by the technical and supervisory deputy of the Iran's medical council to monitor medical advertising across the country during the period from 2021 to 2022. After the data collection, all the information was analyzed using SPSS version 26 statistical software.

**Results:** In this study, 561 advertising content published in the field of healthcare services in cyberspace was examined. Finally, in evaluating the compliance of the monitoring conducted by the Iran's medical council with the established ethical criteria, it was found that out of the 17 criteria identified, 7 criteria (41.2%) were monitored during oversight by the Iran's medical council, while 10 criteria (58.8%) were not addressed.

**Conclusion:** In conclusion, while this study shed light on various aspects of medical advertising within healthcare services, it also revealed critical areas requiring attention to enhance ethical compliance.

**Keywords:** Advertising, Internet, Iran, Legal liability, Marketing, Pharmaceutical preparations, Software

## Introduction

Health and medical establishments provide arguably the most essential services offered in any given community. From quality-of-life enhancements to life-saving interventions, the services provided by healthcare organizations are without parallel, making these entities key community assets (1-3). But despite the skill of physicians, the magnitude of medical technologies, the compassion of nurses, or the benefit of any other associated investment, healthcare services possess very little impact potential unless they are communicated effectively to current and potential patients (1,4).

Medical advertising plays a pivotal role in modern healthcare systems by serving as a bridge between healthcare providers and patients. It encompasses the use of various marketing strategies, including mass media, to communicate information about medical services, products, and treatments (5,6). Over time, medical advertising has evolved into a significant tool for engaging the patients, raising awareness about health conditions, and promoting healthcare services. Medical advertising is designed to inform and attract patients by highlighting the benefits of specific medical services or products.

This form of communication often employs emotional appeals, educational content, and institutional prestige to build trust and encourage patient engagement. For example, academic medical centers and private healthcare providers use advertising to differentiate themselves in competitive markets, often emphasizing advanced technologies or specialized care options (1). The growth of medical advertising has been particularly notable in recent decades. In the United States alone, spending on Direct-to-Consumer (DTC) advertising for prescription drugs, health services, and laboratory testing increased significantly from 1997 to 2016. This trend reflects the increasing reliance on promotional activities to capture market share and expand consumer awareness (4). Similarly, healthcare organizations worldwide are adopting diverse advertising strategies to communicate effectively with target audiences (7,8). Health marketing is gaining prominence as a vital field in both healthcare and marketing, especially in Iran, where improving the nation's health is of paramount importance (9).

Despite its benefits, medical advertising raises ethical

concerns regarding the accuracy and balance of information presented. One of the most significant ways to protect consumer health is to regulate the advertising and marketing of pharmaceutical and healthcare products and to promote professional ethics in the trade of these products. Ethical and legal liability can protect consumers' corporeal and spiritual interests and help the profession maintain the market (10). Misleading or exaggerated claims can undermine public trust and lead to inappropriate healthcare decisions. As such, ongoing efforts are needed to strike a balance between effective marketing practices and adherence to ethical standards. Accordingly, the present study aimed to investigate the extent to which the Iran's medical council complied with medical ethics standards in medical advertising during the years 2021-22.

## Materials and Methods

In the initial phase of this cross-sectional study, a literature review was conducted to identify the ethical principles and criteria relevant to advertising in healthcare services. Following this, a researcher-developed checklist was created, incorporating the ethical standards derived from these principles. This checklist was then used to evaluate the existing and completed files within the Iran's medical council, which were utilized by the technical and supervisory deputy of the Iran's medical council to monitor medical advertising across the country during the period from 2021 to 2022. The sampling method was census.

The criteria evaluated by the Iran's medical council included the advertiser's gender, academic rank mentioned in the advertisement, advertisement location, possession of a medical advertising license, use of images of children, title or search keywords, and the city where the advertisement was placed. However, several ethical criteria were not assessed during the supervision conducted by the Iran's medical council. These unexamined criteria included the advertiser's qualifications in relation to the advertisement's content, the truthfulness and accuracy of the information presented, publication of false content, relevance of the content to the audience's cultural level, scientifically valid claims, misleading claims that could harm colleagues, advertising of

psychotropic substances and narcotics, clarity and comprehensibility of the concepts without misleading elements, and adherence to social norms and public decency. To access the completed checklist from the national Iran's medical council, a request was made to the relevant authority. With permission from the aforementioned deputy and in collaboration with the secretariat for promoting medical ethics of the Iran's medical council, the supervisory checklist prepared by that organization was reviewed. The variables within this checklist were analyzed according to the ethical advertising criteria and incorporated into a researcher-developed checklist. Ultimately, while detailing the cases reviewed by the Iran's medical council, an assessment was made regarding how well the supervision aligned with the identified ethical criteria.

### **Ethics approval**

This study design was approved by the ethical committee of Iran University of Medical Sciences, Tehran, Iran. IR.IUMS.REC.1401.940.

### **Statistical analysis**

The collected data were input into the statistical software IBM SPSS Statistics for Windows version 26.0. The descriptive results were presented by mean $\pm$  Standard Deviation (SD) for quantitative variables with normal distribution.

## **Results**

In this study, 561 advertising contents published in the field of healthcare services in cyberspace were examined. In terms of gender distribution, the gender of the monitored individuals was male in 338 cases (60.2%) and female in 223 cases (39.8%). In the analysis of individuals subjected to advertising supervision based on their educational qualifications, it was found that 3 individuals (0.5%) held a bachelor's degree, 3 individuals (0.5%) had a PhD, 31 individuals (5.5%) possessed a professional doctorate, 352 individuals (62.7%) had a specialty, 55 individuals (9.8%) held a fellowship, and 117 individuals (20.9%) had a subspecialty.

When examining the educational fields of those under advertising supervision, the highest representation was in obstetrics and gynecology with 134 cases

(23.9%), followed by general surgery with 122 cases (21.8%), and plastic and reconstructive skin surgery with 113 cases (20.1%). Regarding the geographic distribution of the individuals under surveillance by the Medical System Center, Tehran had the highest number with 370 cases (66%), followed by Shiraz with 30 cases (3.5%), and Isfahan with 27 cases (8.4%).

In terms of the platforms used for publishing advertising content under surveillance, the highest frequency was recorded for websites with 371 cases (66%), followed by Instagram with 171 cases (30.5%), the Aparat platform with 14 cases (5.2%), and the Naam platform with 5 cases (9.0%). When analyzing the search keywords used to locate advertising content for surveillance, "lipomastics" was the most frequently searched term with 72 cases (8.12%), followed by "nose surgery" with 70 cases (5.12%), and both "breast surgery" and "vaginal surgery" each had 56 cases (10.0%). Additionally, 108 instances (19.3%) of advertising content were monitored through public reports. In assessing advertising licenses, only 23 instances (4.1%) of the monitored advertising content had a license, while 538 instances (95.9%) did not possess an advertising license. Furthermore, none of the advertisements included identifiable images of child patients.

Finally, in evaluating the compliance of the monitoring conducted by the Iran's medical council with the established ethical criteria, it was found that out of the 17 criteria identified, 7 criteria (41.2%) were monitored during oversight by the Iran's medical council, while 10 criteria (58.8%) were not addressed (Table 1).

## **Discussion**

The findings of this study provide valuable insights into the landscape of medical advertising within the healthcare sector, particularly in the context of compliance with ethical standards. With a total of 561 advertising contents analyzed, the gender distribution indicated a predominance of male advertisers (60.2%), suggesting a potential gender bias in representation within healthcare marketing. This imbalance raises questions about the inclusivity of advertising practices and whether they adequately reflect the diversity of healthcare providers. Educational qualifications

**Table 1.** Evaluating the compliance of the monitoring conducted by the Iran's medical council with the established ethical criteria

Extracted ethical criteria	Reviewed
1. Gender of the advertiser	Yes
2. Scientific level in the advertisement	Yes
3. Place of advertisement	Yes
4. Possession of a medical system advertising license	Yes
5. Publication of child images	Yes
6. Title or search keyword	Yes
7. City of advertisement	Yes
8. Proportion of the advertiser's level with the content of the advertisement	No
9. Truth and accuracy of the content	No
10. Publication of untrue content	No
11. Proportion of the content with the cultural level of the audience	No
12. Scientifically correct claims	No
13. False claims and destruction of colleagues	No
14. Advertising the psychotropic substances and narcotics	No
15. Publication of precise and understandable concepts free from misleading concepts	No
16. Publication of the phrases, images, or words contrary to social norms or public decency	No
17. Failure to respect privacy	No

among those monitored revealed that a significant majority (62.7%) held a specialty, while only a small percentage possessed advanced degrees such as PhDs or professional doctorates. This result was consistent with the results of studies around the world (11-13). While campaigns like the WHO's gender equity in health leadership aim to address these imbalances, but progress remains slow in many regions (14-16). This suggests that the majority of advertisers are likely to be well-versed in their respective fields, which is crucial for ensuring that the information presented in advertisements is credible and reliable. However, the small representation of individuals with higher academic qualifications may indicate a gap in expertise that could impact the quality of advertised content. The analysis of educational fields showed that obstetrics and gynecology, general surgery, and plastic surgery were the most frequently represented specialties. This concentration may reflect current trends in patient demand and public interest in these

areas, highlighting the need for targeted ethical oversight to ensure that advertising practices do not exploit patient vulnerabilities or promote unnecessary procedures. Geographically, Tehran dominated the advertising landscape with 66% of cases, which could imply a centralization of healthcare services and advertising efforts in urban areas. This raises concerns about accessibility and representation for patients in less populated regions, where healthcare providers may struggle to reach potential patients effectively. The platforms utilized for advertising revealed a significant reliance on websites (66%) and social media platforms like Instagram (30.5%). This trend underscores the importance of digital marketing strategies in contemporary healthcare advertising but also emphasizes the need for stringent ethical guidelines to prevent misinformation and ensure that advertisements are not misleading. The low number of licensed advertisements (4.1%) raises serious ethical concerns regarding compliance

with regulatory standards, emphasizing the need for improved enforcement mechanisms to protect consumer interests. In evaluating compliance with ethical criteria during monitoring by the Iran's medical council, it was concerning to find that only 41.2% of the identified criteria were actively monitored. This gap highlights a significant area for improvement in ensuring that medical advertising adheres to established ethical standards.

The research offers important insights into the ethical compliance of medical advertising in Iran; however, it also highlights several limitations that must be addressed. First of all, the study uses a cross-sectional design, analyzing data from a single time frame (2021–22). This limits the ability to observe trends or changes in advertising practices over time, such as pre-pandemic *versus* post-pandemic shifts. The second limitation, out of 17 identified ethical criteria, only 7 (41.2%) were actively monitored by the Iran Medical Council, leaving 10 criteria (58.8%) unaddressed. This incomplete evaluation restricts the comprehensiveness of the oversight and may underrepresent the true extent of ethical violations. The third limitation, a significant portion of the monitored advertisements (66%) originated from Tehran. This urban-centric focus may not reflect advertising practices in rural or less populated areas, potentially limiting the generalizability of the findings across Iran. Fourth limitation, the study evaluates existing files within the Iran Medical

Council, which may be subject to documentation biases or inconsistencies. Missing or incomplete records could affect the accuracy of the analysis. The fifth limitation, although gender bias was identified (60.2% male advertisers), the study does not explore underlying causes or propose solutions to address inclusivity in healthcare marketing.

## Conclusion

In conclusion, while this study shed light on various aspects of medical advertising within healthcare services, it also revealed critical areas needing attention to enhance ethical compliance. The findings suggest an urgent need for more comprehensive regulatory frameworks and monitoring processes to ensure that medical advertising not only informs but also protects consumers from misleading or unethical practices. Future research should focus on developing strategies to address these gaps and promote ethical standards across all forms of medical advertising, ultimately fostering a more trustworthy healthcare environment for patients.

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## Conflict of Interest

There was no conflict of interest in this manuscript

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