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Ethical and Legal Assessment of Medical Advertising Signage in Rasht, Iran: A Descriptive-Analytical Study

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Abstract

Background: Medical signage serves as a crucial element in urban healthcare systems, offering both directional guidance and professional identity to healthcare providers. In recent years, Iran has seen a surge in private clinics and medical institutions, necessitating a standardized approach to outdoor medical advertising. This study evaluates the compliance of medical signs in North of Iran, with legal standards and ethical principles, particularly in relation to patient rights and the Iranian Medical Ethics Charter.

Methods: This descriptive-analytical research applied direct field observation using a validated checklist to assess signage content, dimensions, location, and design characteristics. Quantitative data analysis was performed to identify trends in regulatory adherence.

Results: Key findings revealed high compliance with technical standards, such as signage size (88.9% adhered to the 50×70 *cm* standard) and sign number restrictions. However, substantial ethical gaps were identified: only 2.8% of signs included phone numbers, 2.1% displayed working hours, and none included the Iranian Medical Council logo. Additionally, 55.3% of signs lacked information on specialties or services offered, limiting their effectiveness in guiding patients.

Conclusion: The study emphasizes the gap between formal regulations and actual practice in Iran's healthcare communication system. Compared to international standards, where signage acts as a symbol of institutional trust and transparency, Rasht's signage system fails to offer clear ethical and legal guidance to patients. The authors suggest revising regulations, strengthening enforcement, and implementing educational programs to improve signage quality in Iran.

Keywords: Advertising, Ethics, Iran

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Introduction

Effective healthcare delivery in urban areas depends not only on clinical performance but also on functional healthcare infrastructure, including physical markers like signage (1). Medical advertising signs, especially those placed at clinics, hospitals, and diagnostic centers, serve a dual purpose: informing the public and reflecting professional identity (2). They act as access points, navigation aids, and symbols of trust and legitimacy for patients. However, the quality and adherence of these signs to legal and ethical standards are largely understudied, particularly in developing regions (3,4).

In Iran, medical signage is regulated by specific laws issued by the Iranian Medical Council and enforced by municipalities and health authorities. These rules cover dimensions, fonts, content requirements (such as professional license numbers and institutional names), and design restrictions to prevent unethical advertising or misinformation (5). However, anecdotal evidence and local reports indicate widespread noncompliance, including signs that omit vital patient-facing information like physician credentials or practice hours (5,6).

A review of international standards from countries like the UK, Canada, and Japan shows a greater focus on signage transparency, readability, and the inclusion of multiple languages to serve diverse patient populations. For instance, national health service guidelines in the UK emphasize clear wayfinding and accessibility (7), while Canadian standards stress bilingual communication to serve diverse communities (8). Similarly, the Japanese approach includes "Easy Japanese" for foreign residents and tourists (9). These signs are viewed not just as marketing tools but as ethical tools for informed access (10).

Despite this global momentum, limited academic literature has focused on Iran's medical signage practices (11,12). The few existing studies highlight a lack of supervision, design inconsistencies, and ethical breaches in how clinics present themselves to the public. Given the country's growing private healthcare sector, this oversight can erode public trust and create barriers to access (4,13,14).

This study addresses this critical gap by systematically evaluating the compliance of medical signage in northern Iran with legal and ethical standards. It investigates signage content, visual design, and regulatory alignment with a focus on ethical imperatives such as transparency, truthfulness, and the patient's right to informed choice. By contextualizing the findings within global best practices, the research aims to provide actionable insights for regulators, clinic administrators, and urban planners (13,14).

Materials and Methods

This cross-sectional, descriptive-analytical study was carried out in Rasht, Iran, in 2022. The research aimed to systematically evaluate all visible medical advertising signs related to clinics, individual practitioners, and medical institutions across the city, following national signage and ethical advertising standards. The protocol was approved by Guilan University of Medical Sciences Research Committee (IR.GUMS.REC.1401.552).

A census approach was used, including all permanent medical advertising signs present on main roads, alleyways, and all urban districts of Rasht. Temporary, digital, or non-medical signs were excluded to maintain a precise and targeted sample.

Inclusion required fixed signage related to officially registered clinics, medical offices, or healthcare institutions.

Data collection was performed by a team of two trained observers. Observers attended a standardized training session to ensure consistency and minimize inter-observer variability using a structured checklist.

Checklist design and validation

The data collection checklist was specifically designed for this study based on a comprehensive review of the official regulations and guidelines governing medical advertising in Iran. The primary references for checklist items were the "By-law on Medical and Pharmaceutical Advertising" issued by the Iranian Medical Council (5) and the "Guideline for Installation of Medical Signboards" provided by the Iranian Ministry of Health and Medical Education (15). These documents outline explicit requirements for the physical characteristics (*e.g.*, dimensions, color schemes, maximum number of signboards), mandatory content (*e.g.*, display of license number, practitioner's name and specialty, official emblem),

and prohibited elements in medical signage.

The initial checklist was drafted to encompass all these regulatory criteria, including items such as sign dimensions, background color, presence of contact information (phone number, working hours), display of specialties, inclusion of the Iranian Medical Council logo, license number, and institutional affiliations. The checklist underwent a validation process through pilot testing on a sample of 30 signs not included in the main study. This pilot phase confirmed the clarity, relevance, and objectivity of the items. Furthermore, the checklist was reviewed and approved by a panel of three experts in health policy and medical ethics to ensure its comprehensiveness and alignment with the national regulatory framework. Field data were gathered from 653 eligible signs citywide. Regular team meetings and random double-checks of observations were conducted to further ensure reliability.

Statistical analysis

Statistical analysis was performed using SPSS version 18 (IBM Corp., Armonk, NY). Descriptive statistics (frequencies and percentages) summarized patterns of regulatory compliance. Subgroup analyses examined associations by practitioner gender, location type (central vs. peripheral), and medical specialty. In cases of missing data, a complete case analysis approach was adopted and the number of excluded records, if any, was reported. No inferential statistics were applied due to the observational nature of the study.

Results

The study analyzed 653 medical advertising signs across Rasht, yielding a detailed snapshot of signage practices and compliance rates. Most clinics were operated by men (57%), though a substantial portion were owned by women (43%). Nearly half of the clinics (45%) were managed by medical specialists, with the remainder comprising general practitioners, physiotherapists, midwives (26%), and sub-specialists (28%). There was an intense urban concentration, as 93% of clinics were located in dense city areas. Notably, none of the clinic signboards displayed the Medical Council emblem. All the clinics complied with local regulations regarding signboard count, with no clinic exceeding the limit of three outdoor boards. Among clinics situated in alleyways, 60% provided guide signs on main roads, while the other 40% did not (Table 1).

A majority of clinics (89%) used standard-sized signboards (50x70 *cm*), and 87% followed the prescribed color schemes (white for medical clinics, yellow for related professions). For double-sided boards, all the signs presented identical information on both sides. However, very few signboards included detailed contact information: only 3% listed a phone number and just 2% displayed reception hours, with none providing information in English. Regarding services, most general practitioners and dentists (77%) limited their signage to three therapeutic fields, and most specialists (72%) to two. Academic or university titles were infrequently displayed (11%), yet 95% of signboards contained the name of the medical institution. Missing administrative information was apparent, as no signboard featured a license number or date of establishment. Approximately 30% the referenced institutional affiliations, while 44% listed specialized services offered, and almost none (0.1%) included the founder's name on the signage (Table 2).

Discussion

This cross-sectional study systematically evaluated the characteristics and regulatory compliance of 653 medical advertising signs across Rasht, revealing

Table 1. Distribution of clinic owners' gender, specialty fields, clinic locations, and key compliance features among surveyed medical clinics

Category		
Owner gender (Male)		375(57.2%)
Therapeutic field	- GPs/physiotherapists/ midwives	171(26.2%)
	- Specialists	297(45.5%)
	- Subspecialists	185(28.3%)
Clinic location	- Dense urban	607(93%)
	- Sparse	46(7%)
Medical council emblem		0(0%)
More than 3 signboards?		0(0%)
Guide sign for alley clinics		41(60.3%)

Table 2. Compliance of clinic signboards with standard regulations and information display, including size, color, content, and identification features among surveyed medical facilities

Category	Number (%)
Standard size signboard (50x70 *cm*)	581(89%)
Background color (white/yellow)	571(87%)
Two-sided identical display	653(100%)
Phone number on signboard	18(2.8%)
Reception hours displayed	14(2.1%)
English titles on signboard	0(0%)
GP/dentist: max 3 therapy fields	102(76.6%)
Specialist: max 2 therapy fields	213(71.7%)
Academic/university title	75(11.4%)
Medical institution name displayed	619(94.8%)
License/establishment date	0(0%)
Affiliation to specific institution	198(30.3%)
Specialized services/departments listed	292(44.3%)
Founder's name on signboard	1(0.1%)

important insights into the current state of medical signage in an urban Iranian context. The findings highlight both strengths and notable gaps in adherence to national advertising and ethical guidelines.

A striking 93% of clinics were located in dense urban areas, which correlates with expected population distributions and healthcare demand in cities. However, 40% of clinics located in alleyways lacked guide signs on main roads, potentially limiting patient access and visibility. This finding aligns with studies on wayfinding, which emphasize that inadequate directional signage is a significant barrier to navigating healthcare facilities and can negatively impact the patient experience (14). Enhancing directional signage for such clinics could improve patient navigation and clinic accessibility.

Most clinics (89%) complied with the standard size requirements (50x70 *cm*), and 87% adhered to approved color schemes, indicating strong adherence to national visual standards. This high level of compliance with physical criteria is a notable strength. However, this contrasts sharply with the critical deficiencies in informational content, a pattern observed in other regions where formal regulations may prioritize visual uniformity over informational utility (13).

Paragraph 4 (lack of contact and multilingual information):

A mere 3% of signboards displayed phone contact numbers, and only 2% showed reception hours, which are essential for patient communication and service accessibility. The complete absence of signage in English limits outreach to non-Persian speakers and reduces the inclusivity of medical service communication. This stands in stark contrast to initiatives in other countries, such as the use of "Easy Japanese" in Japan, which aims to make critical health information accessible to foreigners (9). This gap suggests a lack of attention or regulatory requirement around multilingual communication for medical facilities in Iran.

Furthermore, academic credentials and professional affiliations were rarely indicated, and the absence of license numbers or establishment dates on all signs is a significant oversight that undermines transparency and public trust. Research revealed that patients rely on such information to verify a practitioner's legitimacy and to make informed choices (1). The omission of these details deprives patients of crucial data and points to a critical area for improved enforcement.

The total lack of the Medical Council emblem on all signboards is a concerning discovery, as such a symbol serves as an important marker of official recognition and ethical endorsement. Overall, the study findings suggest that the current signage practices in Rasht fall short of their potential to function as true ethical tools for informed patient access, a role that is increasingly emphasized in the literature on effective health communication (10). To enhance the quality and transparency of medical advertising, regulatory bodies in Iran should consider revising signage guidelines to explicitly require the display of contact information, office hours, licensing details, and multilingual elements.

Limitations

Despite its comprehensive scope, this study had several limitations. First, the cross-sectional design provided a snapshot of medical advertising signage at a single point in time (2022) in Rasht, which may

not capture seasonal or temporal variations in signage practices. Second, the study focused exclusively on fixed, permanent signs and excluded temporary, digital, or mobile advertising, thereby potentially underestimating the total advertising landscape in the city. Third, data collection relied on trained observers and a structured checklist, but some degree of observer bias or misclassification cannot be entirely ruled out despite training and quality checks.

Moreover, the study was geographically limited to one urban center, Rasht, which may affect the generalizability of findings to other cities or rural areas in Iran that might have different regulatory enforcement or advertising cultures. The absence of inferential statistical analysis limits causal interpretation or the exploration of associations between compliance and clinic or practitioner characteristics. Finally, the study did not collect or assess patient perspectives regarding the clarity, usefulness, or impact of these advertising signs, which could provide valuable insights into their practical effectiveness.

Future research should consider longitudinal designs, inclusion of other advertising media, broader geographic sampling, and integration of patient feedback to obtain a more holistic understanding of medical advertising practices and their impacts in Iran.

Conclusion

This study provides a comprehensive overview of medical advertising signage practices in Rasht, Iran, revealing a high level of compliance with physical and visual standards such as sign size, color schemes, and the permitted number of signs. However, significant deficiencies were identified in the display of critical information, including contact details, reception hours, licensing data, and the use of multilingual content. The absence of the Medical Council emblem on all signs and limited disclosure of practitioner qualifications and institutional affiliations highlight gaps in transparency and regulatory enforcement. To improve patient access, trust, and informed decision-making, regulatory authorities should strengthen the guidelines and monitoring of medical advertising, emphasizing the inclusion of essential contact information, licensing credentials, and multilingual communication. Enhancing these aspects will foster clearer, more ethical, and patient-centered medical advertising across urban healthcare facilities in Iran. Future research is imperative to investigate the underlying causes of this compliance gap, exploring potential factors such as enforcement challenges, economic incentives, lack of awareness among practitioners, and other systemic barriers that prevent the full adherence to ethical and legal standards.

Ethical approval

The protocol was approved by Guilan University of Medical Sciences Research Committee (IR.GUMS.REC.1401.552).

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Conflict of Interest

There was no conflict of interest in this manuscript.

References

1. Kalyan BA, Rani MY, Shouri S. A study on patients' perception of signage system in a tertiary care teaching hospital. Heart Vessels Transplant 2024;8(3):356-63.

2. Elrod JK, Fortenberry Jr JL. Billboard advertising: An avenue for communicating healthcare information and opportunities to disadvantaged populations. BMC Health Serv Res 2017;17(Suppl 4):787.

3. Zhu M, Chakravarti D, Ni J. Emerging marketing research on healthcare and medical decision making: toward a consumer-centric and pluralistic methodological perspective. J Assoc Consum Res 2022;7(2):133-41.

4. Deng L, Romainoor NH, Zhang B. Evaluation of the usage requirements of hospital signage systems based on

the Kano model. Sustainability 2023;15(6):4972.

5. Yousefi N, Sharif Z, Chahian F, Mombeini T, Peiravian F. An investigation into the pharmaceutical advertising in Iranian medical journals. J Pharm Policy Pract 2022;15(1):18.

6. Shamsi-Gooshki E, Parsapoor A, Asghari F, Parsa M, Saeedinejad Y, Biroudian S, *et al.* Developing" code of ethics for medical professionals, medical council of Islamic Republic of Iran". Arch Iran Med 2020;23(10):658-64.

7. Phung VH, Asghar Z, Matiti M, Siriwardena AN. Understanding how Eastern European migrants use and experience UK health services: A systematic scoping review. BMC Health Services Research 2020;20(1):173.

8. Fournier B, Karachiwalla F. Public Health and preventive health care in canada: public health and preventive health care in Canada. 6th ed. Saunders Canada; 2020. 492 p.

9. Oi R, Ohta R, Shiba Y, Sano C. The importance of "easy japanese": Communicating health information to foreigners in Japan. Cureus 2022;14(7):e27036.

10. Evans WD, Blitstein J, Hersey JC, Renaud J, Yaroch AL. Systematic review of public health branding. J Health Commun 2008;13(8):721-41.

11. Zaboli P, Hashemi-Meshkini A, Varmaghani M, Gholami H, Vazirian I, Zekri HS, *et al.* Pharmaceutical laws and regulations in Iran: An overview. J Res Pharm Pract 2016;5(3):155-61.

12. Mirsadeghi A, Pazokian M. Barriers to reporting medication errors in Iran: a systematic review. Int J Med Rev 2015;2(4):317-21.

13. Rodrigues R, Coelho R, Tavares JMR. Healthcare signage design: a review on recommendations for effective signing systems. HERD 2019;12(3):45-65.

14. Sahoo B, Pillai JSK, Md S, Sahoo MC, SAHOO B, Pillai JS, *et al*. Implementation of wayfinding signage in public hospitals and its evaluation towards quality improvement. Cureus 2024;16(7).

15. Sadeghi R, Mazloomy-Mahmoodabad SS, Rezaeian M, Fallahzadeh H, Khanjani N. The application of geographic information systems (ArcGIS) in selecting locations for installing banners and billboards in a health campaign. Health Educ Res2019;34(5):532-41.