

The cardiovascular scamdemic: The epidemic spread of cardiovascular treatment scams and misinformation

*Kardiyovasküler aldatma-salgını:
Kardiyovasküler tedavilerde kandırma ve yanlış bilgilendirme epidemisinin yaygınlaşması*

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ABSTRACT

Recently, some cardiovascular surgeons have been increasingly using social media for marketing, often employing misleading terminology. This trend, which we termed the “cardiovascular scamdemic,” involves the widespread dissemination of deceptive advertisements for cardiovascular treatments, resembling an epidemic. Exposure to such misinformation not only endangers patients, who naturally rely on information from professional sources, but also erodes public trust in medical ethics and scientific integrity. Additionally, it contributes to treatment refusal and adverse health outcomes. The lack of comprehensive global regulations addressing these issues highlights the urgent need for more effective enforcement measures.

Keywords: Disinformation, medical ethics, social media.

Social media has evolved into a key platform for distributing health information, allowing healthcare professionals to engage with a larger audience and have the opportunity to share accurate, timely, and relevant health-related content. It encompasses various formats, such as microblogs (e.g., Twitter), social networking sites (e.g., Facebook and Instagram), professional networks (e.g., LinkedIn), media-sharing sites (e.g., YouTube, Slideshare, and TikTok), and wikis (e.g., Wikipedia), among others.

ÖZ

Son zamanlarda, bazı kalp damar cerrahları sıklıkla yanıltıcı terimler kullanarak pazarlama amacıyla sosyal medyayı giderek daha fazla kullanmaktadır. “Kardiyovasküler aldatma-salgını” olarak adlandırdığımız bu eğilim, kardiyovasküler tedaviler için yanıltıcı reklamların salgın benzeri bir şekilde yayılmasını içeren bir durumu yansıtmaktadır. Bu tür yanlış bilgilere maruz kalmanın, profesyonel kaynaklardan gelen bilgiye doğal olarak güvenen hastaları tehlikeye atmakla kalmayıp, aynı zamanda tıbbi etik ve bilimsel doğruluğa olan kamu güvenini de zedelemektedir. Ayrıca, bu durum tedavi reddine ve olumsuz sağlık sonuçlarına da katkıda bulunmaktadır. Bu sorunları değerlendiren kapsamlı küresel düzenlemelerin yetersizliği, acilen daha etkili uygulama önlemlerine gereksinim olduğunu ortaya çıkarmaktadır.

Anahtar sözcükler: Dezenformasyon, tıp etiği, sosyal medya.

Healthcare practitioners use social media to publicize new treatment methods, showcase their skills and accomplishments, attract patients, compete with peers, and drive commercial success.^[1] This flood of information often includes misleading content, highlighting the importance of critical evaluation. The lack of verification and regulation has led to the spread of inaccurate or deceptive information, creating a significant risk to patient safety and public well-being.^[2]

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Since the emergence of social media in 2004 and with 5.17 billion people using social media in 2024, representing 63.82% of the global population, the concepts of infodemiology and infoveillance have gained increasing importance.^[3] Infodemiology, which studies the distribution and determinants of health information and misinformation within electronic media, particularly on the internet, aims to inform public health and policy decisions, while infoveillance involves the use of internet-based data for syndromic surveillance.^[4,5] Among the challenges addressed by infodemiology are misinformation and disinformation. Misinformation is false or inaccurate information that is disseminated without the intent to mislead, often when people share unverified claims or rumors without realizing they are untrue. Disinformation, in contrast, involves the intentional distribution of false information with the aim of deceiving or manipulating others for personal or political gain. Both types encompass a range of misleading or contradictory information.^[2] Although the key difference is intent, both share the common trait of being circulated on social media platforms.^[6] The harmful effects of spreading false information became evident during the COVID-19 (coronavirus disease 2019) pandemic, as inaccurate stories about health issues contributed to vaccine hesitancy and resistance to essential public health measures.^[7] Studies have shown that false information tends to spread more rapidly on social media than accurate information.^[8]

Health-related information is particularly susceptible to misinformation and disinformation.^[9] A systematic review examining health-related misinformation on social media and its dissemination found that from 2012 to 2018, studies focusing on health-related misinformation increased, with a notable uptick from 2017 onward.^[9] Misinformation is hazardous regardless of its source, but what is truly alarming is when medical professionals spread misleading content on social media for commercial gain, promoting products or services, a practice often referred to as a scam. Health treatment scams on social media refer to deceptive advertisements or promotions that exploit vulnerable individuals by offering false or unproven medical treatments or products, often promising miraculous results or cures for various health conditions.^[6]

Healthcare-related scams have employed subtle tactics, such as using misleading statistics, presenting percentages without context, incorporating hidden biases, or using confusing abbreviations. Popular terms and phrases such as “wellness,” “holistic,”

“natural,” “body cleansing,” and “anti-aging” are often used loosely and can be interpreted in various ways when questioned about their true meaning. People often take these posts at face value because they trust the source and assume medical ethics are being followed. Repeated exposure to medical myths not only poses a threat to patients but also casts a shadow over all physicians and the medical profession, eroding public trust in science and leaving individuals more susceptible to misleading claims from unreliable sources. It not only contributes to treatment refusal and worsened health outcomes but also undermines public trust, potentially leading individuals to hesitate in seeking care from healthcare partners.^[10]

All diseases and surgical interventions in medical treatments are prone to misinformation on social media. However, in cardiovascular surgery (CVS), the potential for unwanted outcomes could lead to increased morbidity and mortality. Lately, there's been a noticeable rise in cardiovascular specialists using social media to promote various minimally invasive and noninvasive treatments, suggesting that these procedures are ideal for every patient and every scenario. This is despite the fact that these treatments are typically most effective for certain patient groups and under specific conditions. In this study, we have coined the term “cardiovascular scandemic” to describe deceptive advertisements for cardiovascular treatments that are spreading like an epidemic. To enhance the appeal of these procedures and attract a larger patient base, enticing terminology is used, such as “high-tech,” “space-age technology,” “revolutionary technology,” “anti-aging,” “natural,” “drug-free,” or “surgery-free.” However, these types of approaches, which might be classified as health scams, carry significant risks and can lead to various negative consequences. Patients might develop unrealistic expectations about the effectiveness and suitability of these treatments, leading to disappointment or disillusionment when results do not meet the expectations. It can also encourage inappropriate treatment choices, potentially resulting in ineffective treatment or harm. When healthcare professionals focus on marketing tactics, it can erode patient trust, causing them to question the motives behind medical recommendations and suspect that profit, rather than patient care, is the driving force. Furthermore, overemphasis on trendy or buzzword-laden cardiovascular treatments can lead patients to neglect more traditional, evidence-based approaches that might be more appropriate for their condition. Such misleading marketing can also introduce legal and ethical risks if patients feel deceived or if treatment outcomes are suboptimal due to incorrect

choices. This can raise concerns about the integrity and honesty of cardiovascular healthcare professionals. Furthermore, when patients opt for more expensive cardiovascular treatments based on marketing rather than medical necessity, it can drive up healthcare costs for both individuals and healthcare systems. These negative consequences underscore the importance of ethical marketing in cardiovascular healthcare and the need for accurate, transparent communication about these treatments.

Buzzwords in marketing strongly attract patients in need of cardiovascular intervention for several reasons. They are simple and easy to remember, creating a sense of familiarity and comfort. Terms such as “cutting-edge,” “innovative,” and “precision” suggest modern, advanced, and tailored care, instilling confidence. Phrases such as “fast recovery” and “pain-free” appeal to patients who fear pain or inconvenience, promising a smoother experience. Similarly, terms such as “natural,” “drug-free,” and “noninvasive” resonate with those preferring holistic or alternative approaches, addressing safety concerns, while the terms “high-tech” and “space-age technology” imply advanced equipment and techniques, reassuring patients about receiving the latest care. “Surgery-free” appeals to those who fear invasive procedures, offering relief. Social media and marketing amplify these buzzwords’ impact, particularly from reputable specialists, enhancing their credibility. However, patients should prioritize evidence-based guidance over catchy marketing to make informed decisions.^[10]

LAWS, REGULATIONS, AND ETHIC CODES

The primary objection to assessing the truthfulness and ethics of verbal, written, or visual statements about health on public platforms and to imposing penalties when such statements are misleading is the “freedom of expression” outlined in Article 10 of the European Convention on Human Rights (ECHR).^[11] Nevertheless, as stated in the same article, public health concerns may restrict freedom of expression, provided such limitations are proportional and essential. Moreover, Article 10/2 of ECHR underscores that while individuals possess the right to express their thoughts and opinions, they also carry specific obligations. Additionally, the professional code of ethics may establish limitations on the extent to which this freedom can be practiced.^[11]

The World Medical Association’s (WMA) International Code of Medical Ethics emphasizes

physicians' responsibility in health-related matters, advising caution in discussing recent developments in public forums such as social media to ensure scientific accuracy and public comprehension.^[12] Additionally, physicians should clarify when their personal opinions conflict with evidence-based scientific information. Furthermore, the World Medical Association's Statement on Professional Responsibility for Standards of Medical Care highlights that ethics committees, credential committees, and other peer-review processes have long been established and are widely accepted in the medical community to evaluate physicians' professional conduct and, if needed, to apply reasonable restrictions on their complete professional freedom.^[12]

The USA leads the fight against deceptive misinformation on social media through legal measures and ethical guidelines. The Federal Trade Commission enforces consumer protection laws requiring disclosure of material connections by social media influencers under its Guides Concerning Use of Endorsements and Testimonials in Advertising.^[13] The Food and Drug Administration ensures accuracy in advertising for healthcare products. The Lanham Act allows challenges to false advertising claims. The American Medical Association guides physicians on truthful advertising and confronting misleading information, and its Code of Medical Ethics^[14] emphasizes clarity and accuracy, discouraging deceptive claims and complex terminology. It advises caution with testimonials, promoting factual support and realistic outcomes.

In Türkiye, consumer protection laws prohibit misleading advertising, overseen by the Turkish Ministry of Trade, which can act against deceptive marketing practices. The Advertising Self-Regulatory Board (Reklam Özdenetim Kurulu) also monitors advertising and addresses complaints about misleading claims. The Pharmaceuticals and Medical Devices Agency of Türkiye (Türkiye İlaç ve Tıbbi Cihaz Kurumu) regulates the advertising of pharmaceuticals and medical devices, requiring that claims about benefits be accurate and not exaggerated. The Turkish Medical Association Ethics Committee issued a guide on February 15, 2017,^[15] to local medical chambers, emphasizing the prevention of healthcare commercialization, advertising, and ethical violations in electronic sharing by physicians and healthcare institutions. Physicians and institutions can utilize the internet, including social media, to share information about professional activities and healthcare services, provided it adheres to medical deontology and professional ethics. However, the content must be accurate, avoiding unverified or scientifically unsound

information, and refraining from contradicting generally accepted scientific knowledge. The guide prohibits sharing content related to curative healthcare services, fostering competition, giving a commercial appearance to medical services, or criticizing other providers. Additionally, offering treatment suggestions without a physical examination and using appropriate keywords aligned with the license information are prohibited.

The Regulation on Promotional and Informational Activities in Healthcare Services, published in the Official Gazette of the Republic of Türkiye (No. 32263) on July 29, 2023,^[16] imposes strict guidelines and penalties concerning healthcare promotion on the internet and social media. It mandates adherence to general ethics, medical deontology, and professional conduct in healthcare advertising. Prohibited actions include misleading promotions, implying unauthorized healthcare practices, or creating unfair competition. Healthcare promotions must not endorse unproven or unregulated medical methods for treating diseases, nor should they misrepresent scientific terms, research results, or statistics. Promotional content must not exploit public trust or imply superiority among healthcare services. Violations carry shared responsibility, with fines for doctors or dentists and warnings for facilities. Repeated violations may lead to suspensions, and severe cases may be reported under Law No. 5651, potentially resulting in content blocking.

According to the declaration of the Turkish Medical Association,^[17] the core principles of the medical profession, which prioritize “first, do no harm” and emphasize that “there are no diseases, only patients,” are mandatory for all physicians in any situation. This means that broad, generalized statements that are not tailored to individual cases or that do not follow scientific research and publication standards are not protected as freedom of expression. Although not every legal ruling establishes ethical guidelines, every ethical judgment can serve as a basis for legal ones. When ethics and the law are in conflict, the law often adapts to align with ethical values over time. Even when an action might be legally justified, it can still violate deontological rules or ethical standards.

Particularly in the field of CVS, there is a lack of global regulations specifically addressing exaggerated or deceptive claims made by professionals on social media. However, various countries and regions have established legal frameworks and regulatory bodies to combat misleading assertions in healthcare content. In

the USA, the Society for Vascular Surgery is actively addressing deceptive misinformation in cardiovascular care on social media. The Society for Vascular Surgery Young Surgeons Advisory Committee has assembled a diverse group to develop recommendations for responsible social media use in vascular surgery, aiming to ensure accuracy and honesty in shared content. While not exhaustive, these guidelines aim to promote best practices among vascular surgeons and trainees. In Türkiye, in accordance with the special ethical principles of the Turkish Society of Cardiovascular Surgery’s Ethical Committee Guidelines,^[18] members of the society should avoid false, deceptive, or misleading statements, as well as other claims of dubious validity, in advertisements and other communications directed at the public. According to this regulation, members who share content that is not scientifically or professionally accurate or valid will be subject to censure. Providing misleading, exaggerated, or binding advertisements or announcements, creating unfair competition conditions, or promoting medical success with exaggeration will be considered a violation of rules if proven.

THE MOST COMMON MISLEADING INFORMATION IN CARDIOVASCULAR DISEASE TREATMENTS

Recently, particularly in the field of CVS, social media advertisements have been promoting treatment options for conditions such as lipedema, lymphedema, Buerger's disease, diabetic foot, and varicose veins. However, these suggestions often deviate from scientifically supported treatment methods with widely accepted indications. Instead, they rely on catchy slogans such as “cutting-edge,” “high-tech,” “space-age technology,” “guaranteed solution,” “quick fix,” or “permanent cure for life,” which may not accurately reflect reality and may not be suitable for every patient, potentially leading patients astray. People who opt for these treatments might feel disappointed when the outcomes do not meet their expectations, with a gap between what was promised and what was achieved. As is well known, these are chronic conditions that cannot be cured with a single treatment or miracle remedies. It is crucial to provide patients with accurate information about the best treatment options for them and guidance on future preventive measures. Promises made through fancy slogans that lack a solid basis do not reflect reality and can be misleading. Moreover, if some physicians assert that they are the only ones capable of using certain methods and techniques or imply that they alone have specific

treatment devices, it is again a case of false claims and unfair competition.

As of May 2024, there are about 2,000 active websites belonging to cardiovascular surgeons and clinics, accompanied by roughly 700 Instagram, 600 Twitter, 600 Facebook, and 200 LinkedIn accounts. While most of these accounts uphold scientific accuracy and ethical standards, our research, which included content analysis of popular social media platforms such as Instagram, Twitter, and Facebook, revealed many promotional posts by CVS specialists exaggerating or misleading treatment recommendations.^[9] These posts often target various conditions such as coronary artery disease, heart valve disorders, congenital heart defects, venous insufficiency, Buerger's disease, diabetic foot, arterial stenosis and aneurysms, congenital vascular malformations, lipedema, and lymphedema.

It appears that many of the flashy promotional efforts in the cardiovascular field are designed to attract patients with promises of easier, less painful, supposedly lower-risk procedures, and shorter recovery times. As a result, it can be said that many of the procedures that are highlighted and often exaggerated in their outcomes are either minimally invasive or noninvasive methods. While these techniques are indeed indispensable and correct approaches when applied to the appropriate patients and conditions, presenting them as the universally correct treatment, suitable for every case, could lead patients to question the reliability of traditional invasive methods. This, in turn, might push patients toward seeking treatments that are not only inappropriate but potentially risky, specifically in situations where conventional invasive procedures are required. It is a violation of professional ethics to promote minimally invasive surgery without considering whether the treatment method is suitable for a specific patient. This often involves misleading patients with cosmetic concerns, suggesting that minimally invasive surgery techniques are universally appropriate without regard to individual patient needs. Additionally, some social media posts that appear to present scientific evidence are found to specifically highlight only the favorable parts of academic studies, attract patients, or offer commercial benefits. These selective quotations from research are then used to create an impression of scientific backing while omitting other crucial data that might provide a more balanced view.

Coronary artery disease treatment relies on evidence-based scientific data, designed according

to international and national guidelines, and is updated regularly when new validated approaches are developed. Cardiac surgeons and cardiologists must explain treatment options to patients and their families, outlining the risks and benefits both in writing and verbally. Since these treatments and their follow-up require collaborative efforts, they must go through discussions and approval by a council.^[19] Although coronary artery bypass grafting and percutaneous coronary intervention have proven effective for coronary artery disease,^[19] spreading misleading information such as “no more bypass” or “no more stents” and endangering patients' health for social media popularity or personal gain is unacceptable. These misleading practices should be strictly monitored and stopped by the relevant authorities.

Currently, for patients who are suitable candidates and have appropriate vascular anatomy, various techniques such as minimally invasive surgery, beating heart surgery, endoscopic procedures, and robot-assisted methods are employed for coronary artery bypass grafting. Findings and clinical outcomes for these methods are being documented across early, intermediate, and long-term durations.^[20] However, it is erroneous to suggest that these techniques are universally applicable to all cases. Moreover, misleading information on social media and other platforms often promotes excessive percutaneous coronary interventions, where patients undergo repeated stent placements, ultimately restricting their surgical options down the line. This approach can marginalize traditional surgical treatments for coronary artery disease and fail to mention the risks involved with repeated stenting, ultimately compromising patient care. An illustrative example is the so-called “full metal jacket” pattern in medical literature,^[21] where repeated stent insertions preclude future bypass surgery. A patient-specific evaluation conducted through multidisciplinary consensus, using established guidelines and risk assessment tools, can help mitigate these risks and deliver more effective treatment outcomes. In contrast, promotional misinformation has the potential to cause significant clinical errors and could lead to malpractice litigation.

The primary goal in treating heart valve disease is to repair the patient's valve and restore its function. However, not all valves can be repaired with a single technique, and certain patient-related factors can lead to outcomes that are less than ideal, potentially necessitating additional surgeries. A common source

of misinformation on social media concerning heart valve disease treatment is the notion that minimally invasive approaches such as minimally invasive surgery, neochorda on a beating heart, or percutaneous methods like MitraClip are suitable for every patient and every lesion. Of course, repair is generally preferred over replacement because mechanical and biological valves have their own drawbacks, and repair tends to be a more comfortable option for the patient. However, when repair is not feasible or fails in unsuitable cases, valve replacement becomes inevitable, and it is critical to select the most appropriate prosthesis for the treatment.^[22]

Similarly, while minimally invasive methods are often preferred in congenital heart disease for the comfort of the patient and shorter recovery times, they may not always be the optimal approach for every patient. In cases involving complex congenital lesions, where multiple repairs are required, the most ideal approach is to address these through traditional open heart surgery to maintain full visibility and control over the surgical field. For example, if a smaller incision or percutaneous interventions such as umbrella devices might lead to incomplete repairs, the patient's clinical condition may not improve sufficiently, necessitating reintervention.^[23]

Venous insufficiency stands out as one of the most exploited conditions on social media, where promises of treatments with scientifically inaccurate claims about their efficacy and outcomes are made, often resulting in recurrences. Common slogans encountered on social media include promises such as “pain-free treatment during lunch break,” “treatment in 10 min,” “lifetime guarantee,” “zero risk,” “zero complications,” and “put an end to compression stockings.” As with many diseases, treatment methods for venous insufficiency are neither universally suitable for every patient nor can they guarantee lifelong permanent results. In recent years, the treatment of venous insufficiency, commonly known as varicose veins, has primarily shifted towards interventional methods using catheters (e.g., as laser, radiofrequency, glue, and liquid/foam sclerotherapy).^[24] National and international guidelines provide evidence-based recommendations on which methods can be used at each stage of the disease and rank their recommendation levels accordingly. However, recently, there have been misleading advertisements, videos, images, brochures, and posters on social media regarding the treatment of

varicose veins in fields other than CVS, such as other medical specialties and medical aesthetics. These advertisements often exaggerate the success of the treatments while completely omitting any mention of complications. The vast majority of these promotions are purely driven by commercial interests, with a tendency to deviate significantly from scientific accuracy and reality.

One of the most discussed topics in cardiovascular care on social media in recent years has been the treatment of lymphedema and lipedema, with many patients falling prey to misleading claims. Lymphedema is a complex condition with limited surgical options and unsatisfactory treatment results, making it a prime target for fraudulent individuals who offer unscientific and temporary solutions. Treating lymphedema requires a multidisciplinary approach, involving not only CVS but also physical therapy and rehabilitation, and infectious disease experts (for treating lymphangitis). However, social media often promotes dubious claims such as “one-stop solutions,” “100% results,” and “space-age technology,” enticing desperate patients to turn to these unreliable sources. Lipedema, a condition involving abnormal fat accumulation, typically in the legs, is increasingly common in modern society, particularly among women, due to genetic factors, sedentary lifestyles, unhealthy diets, and food intolerances. Treatment options for lipedema are still not clearly defined in the medical literature or guidelines, making a multidisciplinary approach essential, involving vascular surgery, plastic surgery, dietary management, and physical therapy and rehabilitation. Despite this, lipedema has become a popular topic on social media, with extravagant claims of “space-age technology,” “state-of-the-art methods,” and “artificial intelligence-based treatments,” which often lack clear evidence or verification. In diseases where flashy devices are used in treatment, patients are more eager to take action due to cosmetic concerns and more drawn to the promise of a quick and seemingly high-tech fix, thus increasing the demand for such clinics. However, the issue is that some clinics, to recoup the costs of these devices, make promises that far exceed what the devices can realistically deliver, thereby exploiting patients' trust in medical science and eroding the profession's reputation.

In social media posts about treatments for complex and chronic vascular diseases such as diabetic foot and Buerger's disease, alongside reputable hospital, clinic, and physician websites providing accurate information, one also often encounters social media accounts

that appear to deliberately spread misinformation (disinformation), particularly adorned with populist slogans. These accounts not only cause patients to waste time and incur significant financial costs but also fail to offer any real benefit. As we all know, both diseases require a medically multidisciplinary approach, where the cause-and-effect relationship must be clearly established, and the treatment should prioritize clarifying etiology and preventive medicine. Ironically, on complaint platforms, the topics with the highest patient dissatisfaction often concern these same diseases, highlighting the prevalence of misinformation affecting those suffering from them.

DISCUSSION

This review highlighted the growing problem of fraudulent practices on social media in the field of CVS, as in all other medical disciplines, in an effort to raise awareness and encourage all stakeholders to play an active role in combating the rapid increase and pandemic-like spread of unethical cardiovascular treatment commercials on social media, which we have aptly termed “cardiovascular scamdemic.” These unethical actors prioritize their own financial gain, media visibility, influence, and reputation over patient care, in stark contrast to physicians who are guided by scientific evidence-based medicine and adhere to the universal Hippocratic Oath, providing accurate verbal and written information to patients about all possible complications, responding quickly to emergencies, and following procedures correctly to ensure optimal patient outcomes. The rapid proliferation of these negative examples demands serious discussion and immediate action to combat this epidemic.

This study was compiled to promote the examination and restriction of misleading social media posts featuring advertisements, promotional content, or news from physicians, practitioners, and institutions in the field of CVS. Such posts might contradict the principle “there are no diseases, only patients,” by presenting treatments that may not work for everyone, claiming zero complications, or promising rapid recovery. The goal is to address these issues using existing national ethical codes and regulations, which are not always effectively enforced. People who promote methods and materials to the public that do not align with standard scientific practices, are not evidence-based, and whose medium- to long-term benefits are yet to be proven, thereby misleading the public and gaining undue financial or competitive advantages, should be reviewed by ethical bodies and penalized if

necessary. Given that rules, laws, and regulations are already in place, the continued spread of misleading information indicates that the existing regulations must be enforced more effectively, rather than introducing new ones. Despite existing rules and regulations, it is concerning that these sources persist in spreading misinformation and not a single website or social media account has faced any penalties. Passive observation of these commercial, deceptive, and unscientific approaches without appropriate action or simply criticizing in casual conversations among colleagues may contribute to a broader issue of accountability. What some may consider a gain represents a loss of dignity and credibility for all their colleagues in the medical profession.

Within the scope of this study, it is neither possible nor accurate to determine the extent of misinformation on these sites and accounts by referencing them. However, by considering complaint platforms and through committees established by ethics boards, individually examining each account belonging to practitioners in the relevant field and enforcing the rules and sanctions outlined in regulations would be a highly effective approach to combat this misinformation epidemic. A crucial responsibility of expert doctors in combating misinformation must be to ensure the rapid dissemination of accurate information, thereby marginalizing false information. They should engage in educational and noncommercial sharing in a manner understandable to the public, aiming to raise awareness among patients. Over time, patients becoming more discerning between correct and incorrect information, or at least questioning the reliability of the information, will play a significant role in addressing this epidemic of deception.

The “cardiovascular scamdemic” is a worldwide concern, rapidly spreading in Türkiye, as in every other country. Just as we derive lessons from international guidelines and publications in treating diseases, we should take guidance from international institutions, boards, particularly CVS associations that have effectively tackled this issue. There is a need to adopt and implement their preventive measures, monitoring methods, and sanctions at the national level. Moreover, in our country, collaboration with the ethical committees of major health institutions such as the Ministry of Health and the Turkish Medical Association is essential. It would be beneficial to have a dedicated session on this topic at our national conferences or organize specific meetings to raise awareness. With the support of all relevant institutions, associations, and members, disciplining those who

engage in misinformation is inevitable. Addressing the issue before it worsens will not only preserve professional integrity but also significantly reduce the potential risks to patients from misinformation.

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