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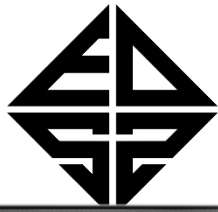


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## Section: Medicine

# INTEREST OF FUTURE MEDICAL PROFESSIONALS IN STUDYING ADVERTISING AND INFORMATION TECHNOLOGIES

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**Relevance.** Advertising and information technologies (AIT) are playing an increasingly important role in modern medical practice. They are transforming communication between doctors and patients, supporting the promotion of medical services, and building trust in healthcare institutions. In the digital age, AIT—such as social media, targeted advertising, telemedicine, and informational platforms—not only improve access to medical information but also pose new challenges related to ethical issues, data protection, and content quality. The growing impact of AIT highlights the need for their in-depth study and integration into educational programs to train future medical professionals capable of effectively using these technologies in their professional activities.

**The aim of this study:** To analyze the current context of the application of advertising and information technologies in medicine, assess medical students' interest in studying these technologies, and identify ways to integrate AIT into medical education.

**Materials and Methods.** The study is based on a systematic analysis of scientific literature on the application of AIT in medicine, statistical data on the use of digital technologies in healthcare, and the review of global experiences in implementing AIT in medical education and practice.

**Results and Conclusions.** Modern medicine operates under conditions of digital transformation, where information technologies and marketing strategies play a key role. According to the American Medical Association (AMA, 2020), 80% of patients use the internet to search for medical information and choose a physician. This underscores the need for medical professionals to develop skills in creating reliable

content, communicating effectively in digital spaces, and ethically promoting medical services.

AIT in medicine encompasses a wide range of tools and platforms that facilitate effective interaction with patients and the promotion of medical services. These technologies include the development of websites for clinics and private practices that provide access to information about services, physicians, and online appointment booking. Active management of social media pages such as Instagram, Facebook, and TikTok allows for the creation of educational content and dialogue with the audience. Educational videos and podcasts raise awareness about health and prevention, while email marketing informs patients about new services, special offers, or appointment reminders. Digital advertising of medical services, compliant with ethical and legal standards, including EU Directive 2001/83/EC on the promotion of medicinal products, also plays an important role. A study by Accenture Health (2021) showed that 65% of patients expect active communication from doctors via digital platforms, highlighting the relevance of AIT in the medical field.

Effective use of AIT is impossible without proper training of medical professionals. Lack of skills in working with informational resources may negatively affect a physician's professional activities—reducing patient trust due to unprofessional communication, losing competitive advantages in the medical service market (especially in the private sector), and contributing to the spread of misinformation, which undermines the credibility of the profession. Current demands on physician competencies include media literacy for assessing and creating high-quality content, the ability to work with statistics and evidence-based information to justify recommendations, and ethical advertising skills in compliance with legal restrictions such as the ban on misleading drug advertising. Understanding digital tools for data analysis and targeted communication is also essential. Leading universities, such as the University of California, San Francisco (UCSF), have already introduced training in medical communication, including the basics of creating informational materials and working with social media.

Medical students' interest in studying AIT is driven by several motivational factors. First, it is the opportunity to promote their own practice, which opens up prospects for career development in the private sector. Second, effective communication enhances patient trust and loyalty. Third, the ability to create credible content helps combat medical misinformation, which is especially important in the digital era. Finally, students recognize the need to adapt to the demands of the digital society. Research by Hawn (2009) confirms that the use of social media by medical professionals increases patient trust and contributes to the success of preventive programs.

Despite the clear benefits, integrating AIT into medical education faces several challenges. Inadequate qualification of faculty, many of whom lack experience in medical marketing or digital technologies, complicates the introduction of new courses. Stereotypes within the medical community, suggesting that advertising

contradicts the ethical principles of the profession, create additional barriers. Overloaded curricula focused on clinical disciplines leave little room for interdisciplinary subjects, and limited resources—including insufficient funding for course development and technical support—exacerbate the problem. These challenges are particularly relevant in Ukraine, where medical education is only beginning to adapt to digital realities.

To overcome these barriers, a range of measures is proposed. Introducing elective courses such as “Medical Communication and Marketing,” “Media Literacy for Physicians,” and “Ethical Advertising in Medicine” would combine theoretical knowledge with practical skills, such as creating content for social media. Creating interdisciplinary programs in collaboration with faculties of journalism, marketing, or business would foster the development of digital marketing, data analysis, and communication strategy skills. Improving faculty qualifications through international exchange programs and training in digital technologies is necessary to ensure quality instruction. The development of practical projects, such as student-led health awareness campaigns on social media, would increase public awareness of health issues. Global experience, including programs at Johns Hopkins University, demonstrates the effectiveness of an interdisciplinary approach that combines medicine, marketing, and law, creating a strong foundation for training modern medical professionals.

Advertising and information technologies are an integral part of modern medical practice, promoting effective communication with patients and the advancement of medical services. Medical students’ interest in studying AIT is growing due to their aspirations for professional development and adaptation to the demands of the digital society. However, the integration of these technologies into medical education is hindered by a lack of qualified faculty, persistent stereotypes, and curriculum limitations.

To increase the competitiveness of medical graduates, the following actions are essential:

- Expand curricula by introducing courses on medical communication, marketing, and digital literacy.
- Promote cooperation between medical and other faculties to create interdisciplinary programs.
- Ensure practical training through projects that address real needs in medical practice.

Future research may focus on evaluating the effectiveness of implemented courses and their impact on physicians’ professional activities.

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## **DIASTOLIC DYSFUNCTION AND DYSYNCHRONY OF THE LEFT VENTRICULAR MYOCARDIUM IN PATIENTS WITH NEWLY IDENTIFIED TYPE 2 DIABETES MELLITUS**

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Interstitial and perivascular fibrosis in histological preparations is a hallmark of diabetic cardiomyopathy, which leads to an increase in the number of isolated collagen fibers and a decrease in the functional myocardium. In the early stages, contractile function is preserved, but diastolic dysfunction and myocardial dyssynchrony are manifested. Timely detection of pathological changes allows you to start treatment and slow down the progression of heart failure

**Objective.** To analyze echocardiographic data in patients with type 2 diabetes mellitus with mild course for the presence of diastolic dysfunction and myocardial dyssynchrony.

**Materials and methods.** 16 patients with type 2 diabetes mellitus aged 42 to 50 years were examined. The inclusion criteria in the main group were: patients with type 2 diabetes, the presence of a widened QRS complex > 120mc, as signs of electrical dyssynchrony of the myocardium. The subjects were prescribed therapy: