

## Original Article

# Historical aspects and features of deontology in preventive medicine

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#### **ABSTRACT**

This article examines the role of medical deontology in preserving public health. The main purpose of any doctor's professional activity is to prevent diseases and restore health to preserve lives as well as to reduce the suffering of patients from incurable diseases. Nowadays the world medical and pharmaceutical communities note a huge interest in the problems of modern bioethics. Therefore, European conferences and world congresses were held on the most pressing problems in America and most European countries, national bioethics committees were created in France and the USA with the participation of the presidents of these countries. Most international organizations, including the World Health Organization, UNESCO, the Council of Europe, and the World Medical Association, have established commissions and committees to address the problem. Many countries around the world have a network of linked medical ethics committees which include central, regional, and local organizations. The main purpose of this study is to substantiate the features of deontological aspects in the practical work of doctors in the field of disease prevention. The article suggests that an increase in the importance of the preventive direction in medicine and strengthening the control of medicine in the formation of a healthy environment and a healthy lifestyle can change the efficiency of modern medicine.

Keywords: Health, Deontology, Ethics, Prevention

#### Introduction

Today, scientific research and innovative technologies in the field of biomedicine require a strengthened ethical regulation to preserve human health and life [1, 2]. Bioethics (biomedical ethics) arose to protect human rights and dignity in the context of the rapid development of society, the growing mass of knowledge, the progress of biomedical development, and genetic research which could potentially be dangerous. We note the emergence of new complex moral and ethical dilemmas and

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discussions on whether everything technically possible should be resolved. An American scientist and oncologist V.R. Potter came up with the term "bioethics" and defined it as an interdisciplinary field of knowledge that combines two elements that are most important for medical science: biological knowledge and universal human values. Bioethics as a bridge between natural science and humanitarian disciplines originated in the United States, and then it developed into bioethics of principlism and rapidly spread around the world [3-5].

Such close international attention to the problems of bioethics is primarily due to the active introduction of basic biomedical sciences into the medical education system in recent years, the active development of technological progress, and the introduction of new technologies into the daily practice of a modern medical practitioner. In the late 1980s, members of the Council of Europe decided to create a Pan-European regulation, and already in 1993, the General Assembly of the Council of Europe adopted the Convention on the Protection of Human Rights and Dignity in connection with the application of the

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achievements in the fields of biology and medicine, which brought together most European countries.

The social policy of most countries of the world community is aimed at preserving health and increasing the population's life expectancy. The main areas of social policy are full-fledged preventive work designed to preserve the health of citizens and provide favorable conditions for their livelihood and comprehensive development. These are both professional and moral challenges not only for politicians but also for the healthcare system and health workers in particular.

The purpose of our research in the historical aspect is to identify the main deontological problems and justify the tasks in the practical activity of a doctor in the field of preventive medicine.

#### Materials and Methods

The objects of the research are the deontological principles of disease prevention and problems in the implementation of preventive measures, considered with the help of a retrospective literary review of representatives of different schools, directions and trends.

#### Results and Discussion

The main purpose of a doctor's professional activity is to prevent diseases, restore health, save a life, and maximize the reduction of suffering and pain in incurable diseases.

The generally accepted and undisputed point of view is that the moral culture of a doctor is not only a set of one's personality traits that deserve respect but also one's skills that determine their expertise.

Medical ethics (derived from Latin "ethica" and Greek "ethice" meaning the study of character and moral nature) is a set of ethical standards and principles of medical workers' behaviour while performing their professional duties. The European tradition of medical ethics has existed continuously for about 2400 years. In ancient times, the healer was almost the same as a deity. In various historical periods, the system of doctor's ethical values was supplemented and enriched. The first special works on medical ethics appeared in England back in the 18th century. Among them are the works "Lectures on the duties and qualifications of a doctor" by J. Gregory and "Medical Ethics" by T. Percival. At present close attention is paid to the necessity of observing moral and ethical standards and values by medical workers in the conduct of their professional activities. The concept of "professionalism", as opposed to the "profession", captures not only the type of human activity but also the measure of special knowledge, abilities, and practical skills acquired as a result of special training and work experience, as well as the quality and originality of knowledge related to this profession and connected specifically with it and characteristic of it. Are the moral qualities of the doctor and the acquired ethical knowledge part of the professional competence of medical professionals? What particular moral qualities determine the professionalism of a doctor? These questions are

answered by the deontology (from the Greek "deon" meaning "due") section of bioethics devoted to the study of the problem of responsibility and duty. Medical deontology is a doctrine of medical personnel's principles and standards of behavior. General medical deontology is a set of rules for all medical professionals regardless of their specialty. Specific types of medical deontology include recommendations related to the peculiarities of a particular medical specialty. The term "deontology" was proposed by the English lawyer and sociologist Jeremiah Bentham in the XIX century in his work "Deontology, or The Science of Morality" to designate the theory of ethics as a science of morality. However, it is worth noting that the foundations of deontology originated in the medicine of the Ancient World.

Hippocrates' (460-377 BC) moral requirements of a sufficiently high level to doctors of that time are presented in his essay "The Law". Hippocrates writes: "Medicine is of all the Arts the noblest" [6]. The awe for the moral principles of the doctor in the representation of Hippocrates can be observed in the treatise "On benevolent behavior": "...For a Doctor being a Philosopher is equal to God. In fact, little is the difference between wisdom and medicine, and everything that is sought for wisdom is all in medicine..." [6]. The importance of moral and ethical aspects in the implementation of medical activities is evidenced by the Hippocratic Oath which graduates of higher medical schools are required to give. This oath is a tribute to a tradition, the basis of which was laid by the oath of Hippocrates and the very need for a doctor to honestly fulfill their duty which allows them to devote their skills and knowledge to treatment, and most importantly to preventing diseases, improving the health of a man and preserving the most valuable thing that they have - their life; the oath demands to keep medical secrecy, promotes readiness of a doctor to provide medical care, carefully treat patients and act solely in their interests, regardless of their race, gender, nationality, origin, language, property, official position in society, residence, and so on. Up to the present day, the Hippocratic Oath has been a great contribution to the development of the principles of deontology setting a high moral level for a doctor of any specialty. Even though the original text of the "oath" has been repeatedly edited, the basic ethical principles of mercy, caring for the benefit of the patient, the dominant interests of the patient, and not harm remain unchanged [6-8]. The most famous Hippocrates' aphorisms are: "Wherever the art of medicine is loved, there is also a love of humanity" and "First not harm".

Persian physician Abu Bakrar Razi (865-925) wrote about medical ethics, "The purpose of the doctor is to do good even to our enemies, and even more so to our friends, and my profession forbids us to harm our brethren, since this is established for the good and well-being of mankind, and God has placed on them an oath of doctors not to invent deadly medicines" and that "a person who devoted oneself to the service of medicine should first of all be educated, modest, truthful and humane. In addition, one must be a reasonable

healer and delve deeply into the essence of any question" [9, 10].

In medieval times medicine and medical ethics continued to develop which is evidenced by the work of the great scientist and philosopher of the X-XI century Abu Ali Ibn Sina also known as Avicenna. In the main work of his life "The Canon of Medical Science" Avicenna collected advanced information about medicine known at those times [7, 11]. In his work Avicenna highlighted the individuality of each patient to which a doctor must find an approach. Avicenna emphasized, "Each patient has a unique set of personal qualities." Ibn-Sina is also credited with the saying: "The doctor must have the eyes of a falcon, the hands of a girl, the wisdom of a snake and the heart of a lion".

Salerno Medical School, which was founded in the 10<sup>th</sup> century and worked for about 5 centuries, should also be noted for its contribution to the medical community. Throughout the entire training period, this school not only educated future doctors but also passed on the humane traditions of medicine of that time, it instilled a sense of medical duty and care for the patient.

Another representative of the Middle Ages doctor was the famous Maimonides (1135- 1204) who summarized the achievements of Arabic and Jewish medicine. One of his main works is the doctor's prayer: "Preserve the strength of my body and my soul so that they ever be ready to cheerfully help and support rich and poor, good and bad, enemy as well as a friend" [12, 13].

Paracelsus (1493-1541) taught: "The strength of a doctor is in his heart; the most important basis of medicine is love".

It is necessary to mention not only the ethics of a doctor but also of medical activity in general. When studying this problem, quite unexpected things were discovered. For instance, starting from ancient times our ancestors used many ethical canons and applied them to specific patients and the entire population. This approach to medicine was never limited to the framework of deontology in our understanding of this science but covered a fairly extensive range of recommendations and requirements that a physician of that time was expected to follow. The popular expression of the great Russian writer and doctor A.P. Chekhov, "Everything should be first-rate in a person, his face, clothes, soul, and thoughts" is not subject to doubt as he was always guided by ethical values, and also introduced requirements for representatives of the medical class.

A well-known German professor, therapist, and clinician, writer, teacher, privy councilor, director of the municipal hospital, Hugo Wilhelm von Ziemssen (1829-1902), when delivering lectures, formulated ethical requirements for the personality of a modern doctor and their activity, in doing so he was able to go far beyond the scope of deontological relationships with his patients. These requirements affected the following aspects of the doctor's activity: physical health, general education, manners, appearance, clothing, consistency, uniformity, and diligence at work, compulsory reading, recreation and entertainment, educational courses, scientific and research work, preparation for medical activities, and many other points [14, 15].

It is necessary to distinguish between the concepts of "medical deontology" and "medical ethics". Ethics itself covers a huge range of issues, affecting not only the fulfillment of professional duty to a society and a patient, the norms of interaction with colleagues and subordinates but also all aspects of behavior while carrying out duties. Medical deontology represents exclusively a combination of ethical standards concerning medical workers' performance of their professional duties [16, 17].

Many scientists paid great attention to the moral training of a doctor; the merits of M. Y. Mudrov (1776-1831), N. I. Pirogov (1810-1881), and Van Rensselaer Potter (1911-2001) are worth noting in particular.

In 1813, within the walls of Moscow University, a doctor and professor M.Y. Mudrov delivered the famous Act speech "Word about piety and moral qualities of a Hippocratic doctor" calling on professors to educate the spirit of humanism, self-sacrifice, and unselfishness in future doctors. M. Y. Mudrov outlined his thoughts in more detail in his work "The Word on the Way to Teach and Learn without Practice" [17]. In this work M. Y. Mudrov emphasized the necessity of linking medical ethics to the treatment of patients [18, 19].

The Russian surgeon, professor, naturalist, founder of the Russian school of anesthesia N. I. Pirogov also received welldeserved recognition from the medical community for selfcriticism and high medical morality. He has become a model both for doctors of his time and for future generations of doctors. Addressing his students, N. I. Pirogov asked them to find deep inside them and then nurture such qualities, necessary for a citizen, like honesty, dignity, and devotion to duty, as well as some qualities specific to doctors, such as having good faith and diligence, caring attitude to patients, striving for professional development. This worldview of N. I. Pirogov was reflected in his works "Letters from Heidelberg", "The Diary of the Old Doctor" and "Annals of the Surgical Department of the Clinic of the Imperial University of Dorpat." In these works, he not only detailed the moral requirements for a doctor but also impartially analyzed errors to prevent them in the future, which positively characterizes N. I. Pirogov [20, 21].

One of the most important events in the formation of medical ethics was the publishing of the book "Bioethics: A Bridge to the Future" in 1971 by the founder of the new science, the American biochemist, oncologist Van Rensselaer Potter [22, 23]. Introduced into the modern scientific language by V. Potter, the term "bioethics" in the original version denoted special environmental ethics. The main concept of Potter was the necessity of consolidation of the humanities and biological sciences to meet the challenges of preserving life on earth, given the long-term effects of scientific and technological progress, especially in the field of biomedical technologies. Potter identified the main ways to advance environmental and ethical ideas in their application to the field of biological research and medical practice. First of all, it is the role of biology in solving the global problem of the survival of mankind in the conditions of man-made civilization. Subsequently, new meanings were introduced into the concept of bioethics; currently, the term is used to refer to a large range of ethical problems that arise along with the rapid progress of biological sciences and modern medicine. The main task facing bioethics at present is to build and develop the philosophical and moral foundations of the peaceful and harmonious coexistence of mankind and its bioenvironment with the role assigned to each living being.

The modern period of medical ethics is directly related to the adoption of a Pan-European document - the Convention on Human Rights and Dignity by the Council of Europe on April 4, 1997, due to the application of the achievements in the fields of biology and medicine. The main fundamental Convention provisions relate to the protection of the fundamental human right to life and health. A patient's interests prevail over any other interests of the society and science, the government bears moral responsibility for the state of the population's health. The convention states that with the development of new technology, society should find the most acceptable moral, ethical, and legal solutions to emerging problems.

In medicine, deontology is most often associated with the doctrine of professional, legal, and moral duties and rules of conduct of a medical worker concerning a patient. It is no coincidence in this regard that most scientific papers on this issue were developed by clinicians or health care organizers. And very few works are devoted to the peculiarities of deontology in the activity of doctors of the medical and preventive profile (hygienist and epidemiologist doctors), the object of which is not only a patient but also a healthy person and population in general. The COVID-19 pandemic that has spread about the whole world has shown how important the work of epidemiologists is.

Modern philosophy recognizes that the "foundation" of any action is its purpose. The goal of medical knowledge and medical activity is to save a person's life and to help improve health. Today the leading experts of the World Health Organization (WHO) attribute about 15% of the impact on the health of the planet's population to medicine. In our opinion, such a small role is assigned to medicine in preserving human health due to a lack of understanding of its real possibilities and to not taking into account the importance of its preventive direction. If considering this, the necessity of changing the role of medicine fundamentally, including the preventive direction as the main vector of influence, and the medicine's role in the population's health through the formation of a healthy habitat of the population, and the formation of idealistic concepts of a healthy lifestyle is becoming clear. In these conditions, the importance of prevention is in preserving and enhancing human health. This direction can be implemented if the main way to achieve the goal set for the protection of life and health of the population is adequately determined, the priorities of state institutions of all ranks in this difficult problem are correctly set, and the criteria for assessing the effectiveness of actions and decisions taken are developed.

Thus, medical deontology is considered to be a doctrine of medical workers' duty not only to patients but also to the whole society. The specificity of the deontological problems faced by specialists in the field of hygiene and epidemiology stems from many factors that come not only from the interests of individual patients but also from the interests of the whole society. Doctors involved in the prevention of diseases should not only recognize the occurrence of deviations in the state of people's health due to the influence of environmental factors but also in due time develop recommendations at a high scientific level and promptly apply them to prevent possible harmful effects on people's health caused by these environmental factors as well as identify adverse situations that have arisen and quickly eliminate them. The professional duties of doctors of this medical profile include monitoring the implementation of sanitary and anti-epidemic events aimed at preventing environmental pollution, improving people's working, training, living and leisure conditions, organizing healthy nutrition, as well as preventing and reducing morbidity. Therefore, the deontology of a preventive medicine doctor should determine the principles of their behavior, which maximize the prevention of environmental degradation, preservation of health, and working capacity of a person. The deontological component accompanies all the stages of the work of a preventive medicine doctor, especially making responsible decisions affecting the fate of thousands of people. At the same time, doctors working in a preventive field of medicine should justify their actions as well as form public and official awareness of the vital necessity of following the rules and instructions given by them. A vivid example of such measures and activities is the work of epidemiologists during the COVID-19 epidemic. Epidemiological research plays an important role in studying the effects of environmental factors on public health.

When conducting epidemiological studies at the population level, the obtained data on the incidence of the population are objective evidence of the adverse effect of environmental factors. This explains the high social responsibility taken by preventive medicine doctors in conducting epidemiological studies. In such cases, the main task of doctors is to attain help from the administrative authorities in taking appropriate measures to improve the environment.

The passive role of medicine in solving health problems of the population utilizing implementing the preventive method is connected with insufficient deontological education of medical personnel based on secondary and higher educational institutions. Today this direction is aimed not at active intervention and, not to mention, at rendering pressure in forming a healthy lifestyle and habitat, but only at a verbal statement of the irrationality of ignoring preventive measures or at the elimination of consequences of negative effects. In the face of already existing demographic and environmental problems, active consumption of alcohol and drugs, the HIV infection epidemic scales considerably increasing, inactive lifestyle, poor nutrition, etc. it is obvious that the preventive direction of medical deontology is not sufficiently implemented at the moment.

Nowadays, a modern doctor should be able to correctly evaluate indicators estimating the state of the population's health in connection with numerous environmental factors, such as living, working, and educational conditions, that hurt the well-being of citizens. In addition, it is essential to carry out population and, most importantly, individual prevention of diseases, most effectively conduct medical education of patients and healthy people. Today, a medical worker should emphasize the importance of individual protection measures, the prevention of occupational diseases, the need to regularly undergo compulsory medical examinations, compliance with the diet and rest regime, and the harm of drinking alcohol and taking various nicotine-containing substances. Based on the above, the first meeting of a person with medical workers should have a deontological vector. Thus, the main link "doctor-patient" must be preceded by the link "doctor-healthy person" [24].

Therefore, we can form an active position among medical workers on creating the most adequate environment and instilling basic skills in a healthy lifestyle among the population. We should also take into account the fact that the professional activity of a doctor in the field of prevention has its exceptional features in the field of deontology and ethics, being the basis for professional medical interests.

The above-mentioned duties demand that doctors should have rather serious knowledge in different sciences including special, legal, economic, and others. In addition, a doctor must have such qualities as activity, initiative, and devotion to the professional duty and the interests of the population, the state, and patients, etc. The current situation requires doctors to be ready to come into conflict situations to achieve the goal, resolve them gracefully, and complying with the law. For this purpose, a doctor should be able to skillfully use the knowledge of various related subjects. Timely use of this arsenal in combination with high professionalism can provide complete success in the field of human health protection.

These days, a preventive medicine doctor should be a worthy professional in their field of knowledge, have a good general medical scientific base, as well as have a wide preventive outlook and social worldview. It is possible to comply with these conditions only in the case of a deep study of disciplines related to medicine. The national and social orientations of a doctor's activity certainly imply high consciousness and devotion to the profession, selflessness, integrity, and honesty of each specialist. Now, if we think about the duties of the 21st-century doctor, a new conception becomes relevant - modern doctors should not only treat patients but also carry out the prevention of non-infectious and infectious diseases, premature senility, and disability in a timely and professional manner.

This current challenging situation poses new requirements for a modern doctor. The time has come when it is necessary to forever abandon the long-established stereotype that medicine, as art, is composed of a volume of the studied material, which is necessary exclusively for understanding the causes and pathophysiological mechanisms of various diseases, based on clinical experience and the ability to think clinically. The time has come to develop preventive medicine in interconnection with personalized and population-based approaches to existing problems. So, along with the timely monitoring of the use of medication and the prevention of side effects when using them

taking into account the genetic and individual characteristics of the patient, it is necessary to carry out work on conducting genetic analysis, create forecasts developing various preventive events for high-risk groups to solve urgent problems of the effectiveness of protecting the population from the mass spread of viral infections.

### Conclusion

In the view of the foregoing, it is important to note that today the need to comply with the norms of bioethics and deontology in the professional activity of a doctor in the field of disease prevention is not just a moral duty of an individual employee, but also a direct obligation. Besides, it is essential to note the importance of systematic training of doctors in the field of preventive medicine at the stage of medical education or during professional development courses.

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