

PROFESSIONAL TRAINING OF THE FUTURE DENTIST: DEVELOPMENT OF COMPETENCE AS THE BASIS OF THE QUALITY OF EDUCATION**L.G. Hrynkevych, Zh.A. Chornenka, A.C. Biduchak***Bukovinian State Medical University, Cernivtsi, Ukraine*

Key words: professional training, future dentist, higher medical education, quality of education, professional competencies.

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Resume. Modern realities place high demands on the training of qualified dentists. In Ukraine, there is an increase in the number of dentists and dental offices, active introduction of new technologies in this field. Today, the training of a dentist aims at forming a specialist who is able to combine theoretical knowledge with practical skills in both clinical and preventive medicine. The main goal of modern higher education is the practical application of acquired knowledge and skills in atypical situations of professional activity, as well as the formation of graduates' motivation for self-education, self-development and self-improvement. Achieving these tasks is facilitated by introducing a competency-based approach to the educational process. This approach is the conceptual basis of modern higher education and requires thorough theoretical and methodological support in all fields of education, including medical.

The aim of the study is to substantiate the conceptual foundations of the formation of the professional competence of the future dentist.

Material and methods. The influence of professional competence on a dental student as his ability and readiness for professional activity, personal experience and its attitude to the future profession of a dental doctor was studied.

Results. It was established that the process of forming the professional competence of future dentists is based on the introduction of modern scientific approaches (personal, activity, competence, system, axiological, synergistic) into the system of professional training. The main components are: ensuring an inseparable connection between the scientific potential of higher education and practical dentistry; modernization of pedagogical methods in dental education; integration of specialized dental knowledge with related medical disciplines to strengthen the fundamental base; implementation of the principles of the Bologna process; as well as proper financial, logistical and personnel support for the professional training of future dentists.

Conclusion. The process of forming the professional competence of future dentists will be effective if it is holistic and involves continuous improvement.

ПРОФЕСІЙНА ПІДГОТОВКА МАЙБУТНЬОГО ЛІКАРЯ-СТОМАТОЛОГА: ФОРМУВАННЯ КОМПЕТЕНТНОСТІ ЯК ОСНОВА ЯКОСТІ ОСВІТИ**Л.Г. Гринкевич, Ж.А. Чорненко, А.С. Бідучак**

Ключові слова: професійна підготовка, майбутній лікар-стоматолог, вища медична освіта, якість освіти, фахові компетентності.

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Резюме. Сучасні реалії висувають високі вимоги до підготовки кваліфікованих стоматологів. В Україні спостерігається зростання кількості стоматологів і стоматологічних кабінетів, активне впровадження нових технологій у цій галузі. Підготовка стоматолога сьогодні спрямована на формування фахівця, здатного поєднувати теоретичні знання із практичними навичками як у клінічній, так і в профілактичній медицині. Головною метою сучасної вищої освіти є практичне застосування отриманих знань і навичок у нетипових ситуаціях професійної діяльності, а також формування у випускників мотивації до самоосвіти, саморозвитку та самовдосконалення. Досягненню цих завдань сприяє впровадження компетентнісного підходу в освітній процес. Цей підхід є концептуальною основою сучасної вищої школи і вимагає ґрунтовного теоретико-методичного забезпечення в усіх галузях освіти, включно з медичною.

Мета роботи – обґрунтування концептуальних основ формування професійної компетентності майбутнього стоматолога.

Матеріал і методи. Вивчено вплив професійної компетентності на студента-стоматолога як його здатність та готовність до професійної діяльності, досвіду особистості та її ставлення до майбутньої професії лікаря-стоматолога.

Результати. Встановлено, що процес формування професійної компетентності майбутніх лікарів-стоматологів ґрунтується на впровадженні сучасних наукових підходів (особистісного, діяльнісного, компетентнісного, системного, аксіологічного, синергетичного) у систему професійної підготовки. Основними складовими є: забезпечення нерозривного зв'язку між науковим потенціалом вищої освіти та практичною стоматологією; модернізація педагогічних методик у стоматологічній освіті; інтеграція спеціалізованих стоматологічних знань із суміжними медичними дисциплінами для посилення фундаментальної бази; впровадження принципів Болонського процесу, а також належне фінансове, матеріально-технічне та кадрове забезпечення професійної підготовки майбутніх стоматологів.

Висновок. Процес формування професійної компетентності майбутніх стоматологів буде ефективним, якщо він матиме цілісний характер і передбачатиме постійне вдосконалення.

Introduction. Ukrainian statehood is currently experiencing a challenging period, accompanied by serious challenges that affect the future development of the nation. These tests will inevitably have long-term consequences; in particular, they will significantly impact the process of forming national self-awareness and self-determination of each citizen of Ukraine. In this context, the education system plays an important role, which is a powerful tool for the spiritual revival of the nation and the activation of the development of the individual.

The issue of education is particularly acute in the medical field, since future specialists face a responsible task - not only to restore the physical health of the population, but also to provide assistance in the rehabilitation of the psycho-social state of those who suffered from the war. In this process, an important factor is the development of the internal potential of the future dentist. It is he who becomes the foundation of professional skill, the formation of a positive image and the key to successful career growth.

The future dentist must be ready to solve complex tasks in professional activities, conduct research and innovate in conditions of uncertainty. For this, it is necessary not only to master modern knowledge and manual skills, but also to develop moral and willpower qualities, creative potential and the ability to independently make informed decisions [1].

Of particular importance is the formation of professional thinking, understanding the impact of social and environmental factors on human health, as well as the ability to develop and implement preventive measures [2].

Higher education, as a key element of social development, provides professional training in all spheres of activity. In the educational process, the student is formed as a person, professional and citizen [3]. The main task of education is to prepare graduates who can effectively use the acquired knowledge and skills in non-standard situations of professional activity, continuing the process

of self-education and self-development [4].

Providing high-quality medical care requires constant improvement of professional competencies of dentists and their self-realization in the face of modern challenges. The professional success of a dentist is largely determined by the level of his professional achievements, in particular, skill in conducting medical and rehabilitation activities, the presence of competencies in related medical areas and the ability to integrate the latest techniques into practical activities.

The implementation of the competency-based approach to education is the conceptual basis for the formation of a new generation specialist. This approach needs theoretical and methodological support, particularly in the medical field [5].

In 2008, the Ministry of Health of Ukraine published on its official website a draft of the Concept of Dental Care in Ukraine for public discussion, which continues to this day. However, a detailed analysis of this document indicates the absence of a clear relationship between the development of the dental industry and the training of future specialists in higher medical educational institutions in Ukraine [6]. It is worth noting that there is no such information in the concept of the activities of the Association of Dentists of Ukraine, which contradicts modern approaches to the formation of a competent and competitive specialist [7]. In particular, in international practice, it is employers, among whom the state plays a key role, who determine the main requirements for the level of professional training of graduates. Unlike the Ukrainian experience, the conceptual documents of the American Association of Dental Education [8] contain clear provisions on the harmonization of the educational process with the needs of practical healthcare. Such an approach contributes to increasing the level of provision of dental services, the development of science and the improvement of the professional competence of future specialists. Ukrainian dental education also needs to be integrated with

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the real demands of the labour market and modern global trends.

Despite the relevance of the problem, the scientific literature currently lacks a holistic concept for the development of professional competence of future dentists, which creates certain challenges for the modernization of the educational process and ensuring high quality training of specialists.

Analysis of the dentistry industry in Ukraine shows the need for its radical reorganization [9]. The training of future dentists is a strategic direction of the development of medicine, focused on the formation of professional competence and competitiveness in the field of medical services.

The innovative approach to training future dentists involves the synergy of medicine and higher education pedagogy, which allows paying special attention to the comprehensive development of the doctor's personality. This approach contributes to the formation of not only professional skills, but also the necessary personal qualities that allow for effective interaction with patients, finding individual approaches to treatment, and meeting the high standards of modern medical practice.

Given the economic situation in the country, prevention becomes an important tool for improving the health of the population [6]. However, the current health care system has several problems:

1. Training is mostly based on clinical cases of critically ill patients.
2. Insufficient attention is paid to the formation of preventive consciousness of patients. (можливо preventive awareness)
3. Doctors have limited time to work with each patient.
4. Economic incentives are focused on disease treatment, not prevention.
5. The pharmaceutical industry is focused on selling drugs, not on disease prevention.
6. The mentality of society does not support the idea of prevention. (можливо social mentality)

However, one of the needs of a dentist today is preservation and increase of public health resources; increasing use of digital technologies - computer tomography and 3D modeling, which allow dentists to provide more accurate and effective treatment.

The aim of the study. Justification of the conceptual foundations of the formation of the professional competence of the future dentist as a necessary element of ensuring a high level of training of specialists and improving the quality of dental care.

Material and methods. The influence of professional competence on a dental student as his ability and readiness for professional activity, personal experience and its attitude to the future profession of a dental doctor was studied.

Results. The professional competence of the future specialist, according to the opinions of most scientists, is a qualitative characteristic that reflects the readiness to perform professional activities [10]. In foreign studies [11], the formation of professional competence is considered as the goal of education, the result of training or as a

characteristic of a specialist that demonstrates his ability to perform professional tasks. This emphasizes the dynamic nature of the process, its stages and the possibility of assessing the level of competence formation at each stage.

Formation of professional competence of future dentists takes place during training at a higher medical institution and in the process of postgraduate education. It encompasses a set of personal qualities, knowledge, skills and general culture, which together ensure the effectiveness of professional activity.

Every medical worker must be guided by certain internal motives and be a person who possesses such qualities as purposefulness, value orientations, social attitudes, expectations, emotional stability and strong-willed character traits. That is why the motivational component is an integral part of the professional competence of future doctors. It is a complex system that includes needs, goals and ideals that determine a person's behaviour in professional activities. The level of individual activity, both in everyday life and during the acquisition of professional knowledge and skills, largely depends on motivation.

A doctor's professional skills are formed not only on the basis of the knowledge and practical skills acquired, but also due to the personal desire to achieve a high level of professional training for the successful performance of professional duties. It is important to note that the system of motives during the training of future medical specialists performs a key regulatory function. In the absence of sufficient motivation in students, their readiness for professional activity is significantly reduced, which negatively affects the effectiveness of the educational process. That is why teachers of medical institutions of higher education face an important task – the creation of a motivational learning environment in which students will be able to realize the significance of professional competence and strive for its improvement. It is worth emphasizing that the optimal level of motivation is the main factor in the effectiveness of both the educational and future professional activities of a doctor. Highly motivated students demonstrate greater involvement in the process of self-improvement and professional development, which, in turn, leads to the achievement of better results.

Modern education focuses on motivational factors: personal traits, such as organizational abilities, general culture, management skills. Only after that, the knowledge and specialized skills necessary for professional activity are taken into account. This is proven by numerous works of domestic scientists [12].

Another important element of professional competence is the personal component, which is determined by a set of individual characteristics that affect the effectiveness of a specialist's activities. This component involves the realization of the need for professional formation and self-development through the mastering of educational material, the definition of professional ideals and the desire to improve one's skills and abilities. An important aspect is also the ability to adequately assess one's own level of training, to form clear professional goals and value orientations.

The personal component includes such important traits as responsibility, observation, tolerance, friendliness, and balance, which are considered key to effective communication with patients, their families, colleagues, and management. It allows the inner world of the future doctor to be revealed, helps to form a conscious attitude to professional duties and life situations, contributes to the construction of optimal communicative relations and effective cooperation in the medical environment.

The study of the content of the basic concept as the most important theoretical and methodological problem of the study revealed that the main structural elements of the professional competence of the future dentist are professional standards: Educational and professional program and educational and qualification characteristics, theoretical medical knowledge, practical skills, personal qualities of future specialists.

Specifying these provisions, it is necessary to note:

- Theoretical knowledge covering natural, medical, clinical, dental, psychological and economic aspects.
- General and special competencies that are the result of the educational process.
- Personal qualities, such as moral and strong-willed stability, creative thinking, ability to make decisions.

The professional competence of the future dentist presupposes the readiness to implement the acquired knowledge and skills in the future professional activity.

The above provisions indicate that in order to ensure the effectiveness of the development of the professional competence of future dentists in the training process, it is necessary to apply modern scientific approaches. Among them:

- systemic, aim at identifying the peculiarities of the training of future specialists in the dental field;
- person-oriented, provides effective interaction between all sides of the pedagogical process, ensures optimal creative development of the personality of future specialists;
- activity, whose main task is the development of the theoretical consciousness of the subject, the perception of knowledge as conscious beliefs, considers various types of activities that are performed with the aim of achieving the final result, expressed in the development of the most professional way of acting. Acquired knowledge becomes a means of appropriate action, and the learner becomes the subject of professional competence formation.
- competency-based, involves the use of modernized, in accordance with modern educational standards, content, methods, means of forms and technologies of training aimed at forming the necessary competencies;
- axiological, which should be understood as a system-value approach based on "traditional" and "new" value systems of education, which is the main point of correlation of new approaches to training a specialist. It is obvious not only the transformation of values in the course of historical development, but also their organic relationship and interdependence; - synergistic – the formation of cooperation between the parties of the educational process, new ideas about the mechanisms of functioning and development of self-organizing and self-developing

systems.

The success of the implementation of the conceptual foundations of the development of the professional competence of the future dentist depends on the observance of modern principles of higher education in the learning process:

1. The principle of competence - creation of conditions for the development of the necessary structural elements of the professional competence of a graduate of the dental faculty of a higher medical educational institution.
2. The principle of creativity - creation of conditions for the development of individual personal development of the future specialist.
3. The principle of problem-solving - the future specialist's orientation towards solving real professional problems.
4. The principle of realism involves the orientation of the stomatological faculty of a higher medical educational institution to the achievement of real professional goals, mastery of the necessary means and methods.
5. The principle of professional self-development – orientation of the future dentist to create conditions for stable satisfaction of one's own professional and spiritual needs for self-development and self-realization.

The formation of a dentist's professional competence is a dynamic process that includes learning, self-development and practical implementation of the acquired knowledge. The introduction of modern approaches and principles will make it possible to prepare a specialist capable of meeting the requirements of modern dentistry.

Professional competence is of key importance for the activities of a future dentist, as it performs the following functions:

- Self-determination: awareness of one's own role in the professional sphere.
- Self-assessment: the ability to critically analyze one's actions and results.
- Self-motivation: stimulation for professional growth.
- Self-improvement: the desire to develop knowledge and skills.
- Self-realization: realization of personal potential in professional activity.

To achieve the effectiveness of the process of forming the professional competence of future dentists, it is necessary to:

1. Theoretical and methodological justification: creation of a scientific base for the development of competence.
2. Competence acquisition: in accordance with modern education standards ([9], [13]).
3. Formation of structural components of competence:
 - Motivational: developing interest in the profession.
 - Valuable: understanding the importance of the profession for society.
 - Cognitive: acquiring theoretical knowledge.
 - Social: communication and cooperation skills.
 - Technological: the ability to use modern dental technologies.
 - Praxeological: the ability for effective practical work.

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- Deontological: compliance with ethical principles.
- Self-development: development of the ability to self-education and self-improvement.

4. Development of professionally significant qualities, in particular, responsibility, stress resistance, accuracy in work.

Conclusions

Conceptual bases of formation of professional competence of future dentists include:

- Use of modern scientific approaches (personal, activity, competence, system, axiological, synergistic).

- Ensuring an inseparable connection between the scientific base and practical stomatology.

- Modernization of pedagogical approaches in dental education.

- Deepening of fundamental knowledge through the integration of dental and other medical specialties.

- Implementation of the principles of the Bologna process, which contribute to the international integration of education.

- Financial, material, technical and personnel support for the process of training dentists.

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