УДК 378 (73) DOI 10.11603/m.2414-5998.2021.4.12700

> **T. I. Khvalyboha** ORCID https://orcid.org/0000-0003-2160-4535 ResearcherID B-2428-2016 Scopus Author ID 57202830426

I. Horbachevsky Ternopil National Medical University SYSTEM OF ADVANCED TRAINING FOR MEDICAL SCHOOLS TEACHERS' IN THE USA

Т. I. Хвалибога

Тернопільський національний медичний університет імені І. Я. Горбачевського МОЗ України СИСТЕМА ПІДВИЩЕННЯ КВАЛІФІКАЦІЇ ВИКЛАДАЧІВ МЕДИЧНИХ ШКІЛ У США

Abstract. It has been established that advanced training of medical school teachers in the USA has two directions: the deepening of pedagogical competence and clinical and medical competence. An overview of the historical development of the teachers' advanced training system has been made. The emphasis is placed on the role of globalization processes in the organization of advanced training. It has been established that in the USA in the field of advanced training, the emphasis is placed on consultations and strengthening of collegiality, as opposed to many other countries where advanced training is aimed at developing strategic approaches to improving teaching and learning at institutional level.

The following conclusions have been made the development of the system of professional development of teaching staff in the USA is regulated by the activities of the US Department of Education for the organization of an effective system of university teachers' advanced training; the reform of the American system of professional education and the improvement of the legal and regulatory framework of the system of advanced training resulted from the changing of socio-economic paradigm in society; the experience of the advanced training abroad became a necessary driving force for the implementation of an optimal system in the United States.

It has been established that professional associations and organizations engage in the professional development of teachers at the national level. In addition to special institutions and agencies, most medical schools in the United States have separate divisions responsible for conducting advanced training courses for the faculty. These divisions include independent departments (for example, the Academy of Medical Teachers) or units of academic or other departments. The activities of the medical educators' advanced training programs in the USA are carried out in the following areas: application of technologies in education, academic leadership, development of professional communication, development of the innovative evaluation techniques, conflict management, work in a multicultural environment, etc.

Key words: advanced training; medical school; teacher; USA.

Анотація. Встановлено, що підвищення кваліфікації викладачів медичних шкіл США відбувається у двох напрямах: поглиблення педагогічної і клініко-медичної компетентності. Здійснено короткий аналіз історичного розвитку системи підвищення кваліфікації викладачів. Закцентовано увагу на ролі глобалізаційних процесів в організації підвищення кваліфікації. Виявлено, що в США у сфері підвищення кваліфікації викладачів вищої школи акцент робиться на наданні консультацій та зміцненні колегіальності, на відміну від багатьох інших країн, де підвищення кваліфікації спрямоване на розробку стратегічних підходів до поліпшення викладання і навчання на інституціональному рівні. Показано, що організація і розвиток ефективної системи підвищення кваліфікації науково-педагогічних кадрів вищої школи США регулюються діяльністю Департаменту освіти країни. Реформування американської системи професійної освіти та вдосконалення нормативно-правової бази системи підвищення кваліфікації викладачів вищої школи стали відповіддю на зміну соціально-економічної парадигми в суспільстві. Досвід підвищення кваліфікації викладачів вищої школи за кордоном став необхідною рушійною силою для впровадження оптимальної аналогічної системи в США. Виявлено, що важливим напрямом роботи з розвитку професійно-педагогічної культури американських викладачів є оцінка їх діяльності, яка включає різні форми оцінювальних дій: анкетування студентів, колегіальну оцінку, самооцінку викладача, змістовний аналіз курсів, дидактичних матеріалів тощо.

Ключові слова: підвищення кваліфікації; медична школа; викладач; США.

Introduction. In the current conditions in the United States, with increasing demand for medical professionals, requirements for the level of qualification of teachers of medical schools, the quality of providing

educational services are increasing. In the conditions of informatization and globalization of society, the emergence of a large amount of new scientific knowledge, significant changes leading to the rapid aging of information, the disappearance of existing

© T. I. Khvalyboha

and the emergence of new professions require scientists, teachers, doctors and other specialists of a new level of qualification, mobility, adaptability to the conditions that cannot be provided only through education already received. This necessitates the transformation of specialist training into a continuous process, and the improvement of their qualifications – into a systematic need, which persists throughout all professional activity.

Despite the fact that the system of advanced training of teachers of higher medical educational establishments was studied by numerous researchers (Yu. Voronenko, I. Zvarych, O. Isayeva, L. Kaydalova, M. Mruha, V. Chernykh and others), the problem cannot be considered solved because the American experience of university teachers' professional development has not been analysed yet. The fragmentation of existing research in this area reinforces the relevance of the suggested research.

The aim of the article is to study the peculiarities of advanced training of teachers of institutions of higher education in the United States.

Theoretical framework. Usually, US medical school teachers are trained in two ways: developing pedagogical competence and further development of clinical-medical competence. This complicates the work of clinical educators to some extent, but at the same time explains their high academic status in the global educational community.

In the United States, until the 1960s, there really was no training or retraining for medical professionals. When it became apparent that the continuity of education was a serious factor in ensuring the competitiveness of workers and educational institutions, state and university management began to organize and fund work to improve the skills of their scientific and teaching staff.

In addition, according to R. Mandell, during this period in American society the prestige of academic personnel rocketed. At the same time, the competition between teaching staff for jobs has become increasingly fierce. Highly qualified specialists were more likely to win this competition. Advantage was given not to internships in large companies or private institutions, but to systematic training at the university level [5, p. 102].

The rise in this awareness has led to the adoption of new legislation that has become the basis of the US professional development system. The Higher Education Act of 1965, proposed by the US Department of Education, testifies to increased support by the federal government for higher education institutions, in particular to enhance the qualifications of academic and teaching staff in educational institutions themselves.

In 1989, President Bush met with Governors to discuss educational development in the country and to present "The National Education Goals" or America-2000 program, which outlined the country's educational achievements by the early 21st century and the areas where efforts were needed to improve education. Of particular interest was Goal 5, aimed at enhancing the competitiveness of American education in the global economy. As a result, in 1992, expenditures on postgraduate education radically increased, compared to other branches of education.

In addition, in the late 1960s, the activities of professional agencies and associations advising the research and teaching staff of US high schools, such as the American Association of University Professors, the North Central Association of Colleges and Schools, and the American Association of University Women, became particularly active.

In the 1960s and 1970s, special centres of advanced training for higher educational establishment teachers began to appear, being affiliated to universities, especially large ones, in which the state played a significant role. The first of these, according to W. Lee, was the Centre for Research in Learning and Teaching, founded in 1962 at the University of Michigan at Ann Arbor. The Clinical Centre for the Advancement of University Teaching at the University of Massachusetts (Amherst) was subsequently established.

Of particular importance was the creation and functioning of two leading US organizations specialized in advanced training for university teachers: the Professional and Organizational Development Network in Higher Education (1975) and the North American Council for Scientific and Educational Personnel, Programs, and Organizational Development (1977). Both represent the interests of higher education institutions in the country as well as abroad, in particular in Canada. Along with faculty advisory agencies, professional associations, and specifically organized centres of excellence for higher education academic staff, agencies and private foundations have emerged in the United States to provide funding for research projects in higher education, including federal higher education programs: (Fund for the Improvement of Postsecondary Education), National Science Foundation, Health Resources and Services Administration. The advantages of these centres are that they establish links with similar institutions in other universities in the country, if the goals of their professional development are similar.

The role of globalization processes in the organization of advanced training should be emphasized. University

teachers' organizations around the world exchange their experiences in scientific journals and hold international conferences. Teachers' internship programs at US universities allow teachers and administrators from other countries to borrow American experience, and, conversely, academic tourism around the world helps US educators to learn from other countries' best practices.

In general, in the US in the field of higher education teacher training, the focus is on counselling and collegiality, unlike in many other countries, where advanced training is aimed at developing strategic approaches to improving teaching and learning at the institutional level.

In recent years, successful efforts have been made in the United States to unite the efforts of many educational organizations to improve the psychological and pedagogical training of teachers in the advanced training system. The national programs "Faculty Development Program" and "Preparation Future Faculty" have been developed and successfully implemented.

According to the analysis of the academic programs of various American universities, the forms of advanced training that are implemented within these programs are extremely diverse: holding roundtables on the problems of higher education methodology, organizing seminars and pedagogical workshops, conducting orientation conferences for beginner teachers, preparation of professional files, organization of mentoring and mutual visiting, individual counselling, organization of various courses and many others. One of the areas of work for the development of the professional and pedagogical culture of teachers of American universities is to evaluate their activities, which includes various forms of assessment activities: student questionnaire, peer evaluation, teacher's selfesteem, meaningful analysis of courses, didactic materials, etc.

Particularly valuable is the experience of the Preparing Future Faculty program, which is essentially a national movement that aims to transform ways to improve teachers and accelerate their career preparation. The program provides beginner teachers with opportunities to monitor the performance of professionally required experienced teachers in various academic institutions, during special classes to model their own professional activities, analyse it to expand the existing competence.

In this context, the experience of Harvard Medical School is valuable. In order to improve the skills

of teachers, it organizes many annual courses and seminars, after which the students receive certificates. The documentation that trainees receive after completing the course is recognized by accreditation commissions, including the Accreditation Board for Continuing Medical Education.

Let us consider some of these courses. The "Systematic Approach to Assessment in Medical Education" course is designed to encourage participants to apply systemic thinking to the development of assessment programs for continuous improvement. It involves the use of new pedagogical methods: interactive presentations, discussion of learning situations, institutional planning groups, mini-sessions and seminars on assessment tools and approaches, consultation with School professionals. Through an intensive six-day program, teachers are introduced to key concepts of a systematic approach to assessment, best practices in other educational institutions. During the miniseminars, teachers and course listeners model specific approaches to assessment, problematic situations that automate activity. Upon completion of the course, participants gain the knowledge and ability to evaluate the educational potential of their own educational institution in terms of a systematic approach, to introduce elements of a systematic approach into the educational process in order to improve the quality of graduate preparation, to assess the state of the assessment system at their own university.

"Advanced Teaching Skills" is another innovative advanced training course at this School. It aims at introducing new methods of engaging students in the learning process and information acquisition. The course provides a thorough teaching of the casemethod, constructing effective lectures, conducting interactive classes, providing feedback, using nonstandard technologies in working with students with physical disabilities. In addition, with the participation of simulator patients, teachers can improve their own communication and teamwork skills [1].

The annual course "Advanced Innovation in Health Care and Medical Education" aims to teach to: 1) anticipate disruptive innovations that can adversely affect the delivery of health care and educational services; 2) identify the role of international trends in education and medicine at the local level; 3) evaluate the structure, processes, culture and readiness of educational institutions for inevitable changes; 4) develop leadership qualities of their own and students who contribute to systematic educational innovations; 5) overcome conflict situations and more. The activities of the so-called Academy of Medical Educators are important. Many schools have such schools. They provide educational services for their and other faculty members.

Such an academy functions at the School of Medicine at Colorado State University. It is an independent unit working in close liaison with the teaching department and the teaching staff. The main objectives of the Academy are to develop and support the staff of medical education professionals, to promote and celebrate academic excellence, to encourage innovation in curriculum and teaching, to promote research and grant implementation. Its activities cover the following areas: the development of pedagogical skills, the development of mentoring, the development of curricula, the formation of assessment skills, academic leadership. The courses offered include: Women in Leadership: The Art of Business Dinner, Design Thinking and Digital Education, The Use of Standardized Patients in Innovative Curriculum Development and Research, Time Management in Academic Medicine.

From the above, we can draw the following conclusions: 1) the organization and development of an effective system of advanced training of scientific and pedagogical staff of US high schools is governed by the US Department of Education; 2) reforming the American professional education system and improving the legal framework of the country's university teacher training have responded to the changing socio-economic paradigm in society; 3) the experience of advanced training of university teachers abroad has become a necessary driving force for the implementation of an optimal equivalent system in the USA.

The Academy also offers one-on-one counselling for teachers. Participation in courses and counselling are free of charge. Teachers can get advice on curriculum strategies, curriculum development, research methodology, communication skills and leadership [3].

The Academy offers classes for young teachers and residents separately. The course lasts 4 weeks and is held twice a year in May and December. The advanced training course for beginner educators consists of three components: master classes and lectures aimed at familiarization with the basics of teaching; educational practice in order to apply new knowledge; project work aimed at applying the acquired knowledge and skills in the chosen field (curriculum development, training methodology). The first week covers a series of seminars and workshops, the second and third include compulsory training and time to work on the project. The seminars are conducted by teachers who have experience in each topic. Workshops are always interactive and allow you to practice new skills. The main topics of the seminars and workshops are: the influence of teaching styles on teaching methods; teaching at the patient's bed; procedural skills training; identifying a student who has learning difficulties; reading improvised lectures, teaching large groups; providing effective feedback your future career as a clinician educator; development of expert knowledge; effective mentoring; curriculum development.

The completion of the training is a prerequisite for completing the course. Practical training opportunities include (but are not limited to) teaching medical students communication skills in physical examination, guidance to small groups of 3rd and 4th year students, morning conferences, and many others.

The project is a mandatory logical completion of advanced training courses. Residents and young educators design and implement their own project depending on the residency or scholarship program. The students identify the mentor of the project through the Academy. Possible project topics include designing and conducting a specialty training conference or seminar (e.g., effective feedback), organizing a seminar for students from interest groups (e.g., ECG reading training, respiratory tract management, neurological examination, etc.) [6].

Similar academies operate at many US universities: the Medical Schools of the University of San Francisco, Emory University (Atlanta, Georgia), Hofstra University (Hampstead, New York), Kansas State University (Kansas City), and others. The latter university offers courses on career planning, scientific guidance and mentoring, self-presentation skills and others, in addition to the typical areas of advanced training. As we can see, the peculiarity of their activity is the focus on the professional training of their own employees, taking into account the latest requirements of time, preventing the "aging" of knowledge, maintaining a high level of pedagogical qualification of educational, scientific and medical staff of medical colleges.

An important role in improving the qualifications of medical professors is played by scientific periodicals. Most medical schools and professional organizations publish their own periodicals in which scholars in the field of medical education share successful experiences, discuss existing problems and challenges, and make suggestions for educational innovations. For example, the topics of the periodical MedEdPortal cover issues of overcoming the gaps between classroom and clinical practice, equipping students with the skills necessary for successful communication with patients, inclusiveness of medical education, difficulties in teaching students at the bedside, social determinants, and social determinants. others.

An analysis of the various aspects of advanced training of a US medical school teacher allows us to identify both positive and negative aspects of the development of this system. The positive one is the predominance in the modern American pedagogy of humanistic tendencies, which is reflected in the field of training of teaching staff for medical school. Personally oriented technologies are increasingly used. Along with the traditional forms of training and retraining of teachers at the pre-professional stage, work on individual plans, drawn up on the basis of an analysis of personal readiness level, features of individual psychological development, professional interests and abilities, becomes especially widespread.

In American society, there are objective and subjective factors that contribute to the involvement of teachers in the process of retraining and professional development (salary increase, job growth, permanent contract, awareness of the need to abandon the role of being a single source of information, the need for increased professional information).

At the same time, the implementation of integrated subject-teacher training programs is often slow. There are no uniform requirements for the content of doctoral programs, a large number of scientific degrees and, most importantly, the variability of their content components, complicates the analysis of the effectiveness of pedagogical training obtained by teachers. There is no single methodological centre that would coordinate the work of numerous teacher training centres, although some steps have already been taken in this regard (national centres for the implementation of programs "Training of future teachers", "Development of teaching staff"). There is no uniformity of certification requirements for further pedagogical education.

A meaningful analysis of various aspects of US university teachers' advanced training provides practical guidance on how to use American experience in Ukrainian higher education practice:

1. To broaden the scope of activity of centres and institutes of retraining and advanced training of teachers, or those who start work after a long break. 2. To carry out intensive training of specialists in the field of adult education, first of all teachers, on pedagogical technologies of work with various categories of students, trainees (evening, correspondence department, retraining courses of specialists).

3. To develop multi-level programs for engaging postgraduate students in professional activities, using step-by-step complications and extending their responsibilities (modelled on American teaching assistants).

4. To use organizational forms and methods of training, retraining and advanced training of US teachers acceptable for the Ukrainian university – such as pedagogical workshops, drawing up professional portfolios, orientation conferences for beginner teachers, etc.

5. The most intensive implementation of various forms of evaluation of teachers' activity (student questionnaire, peer evaluation, self-assessment) in the practice of the Ukrainian higher education institution, in order to carry out systematic feedback in order to diagnose problematic spots in their work and improve educational activities.

6. To make the most of the latest computer and telecommunications technologies in the training and advanced training of university teachers.

7. To pay particular attention to the psychological aspect of advanced training (methods of conflict management, working with large audiences, etc.).

8. To develop measures at the state, regional and institutional levels to stimulate university teachers engaged in improving their pedagogical skills.

Conclusions and Prospects for Research. Thus, globalization and informatization place new demands on teachers' professional growth. US medical school teachers' advanced training programs are designed to respond effectively to these requirements. At the national level, professional associations and organizations are involved. In addition to specialty institutions and agencies, most US medical schools have separate units that are responsible for conducting advanced training courses. They may take the form of separate departments (for example, the Academy of Medical Educators) or be units of a training or other department. In general, the activities of professional development programs for medical professors in the United States are carried out in the following areas: the use of technology in education, academic leadership, the development of professional communication, the development of new methods of assessment, conflict situations, work in a multicultural environment, etc.

List of literature

1. Горпініч Т. І. Теоретичні основи професійної підготовки майбутніх лікарів в університетах США : монографія / Т. І. Горпініч ; наук. ред. А. В. Вихрущ. – Тернопіль : Укрмедкнига, 2018. – 408 с.

2. Advanced Teaching Skills / Harvard Medical School, 2019. – Access mode : https://cmeregistration.hms. harvard.edu/events/advanced-teaching-skills/eventsummary-61975b435857420d9a815b86129ce1c9. aspx?RefID=cmecatalog.

3. Faculty Development / Academy of medical educators. University of Colorado School of Medicine, 2019. – Access mode : http://www.ucdenver.edu/ACADEMICS/ COLLEGES/MEDICALSCHOOL/EDUCATION/ ACADEMY/FACULTYDEVELOPMENT/Pages/default. aspx.

4. General Teaching / UCSF Continual Professional Learning, 2019. – Access mode : https://wiki.library.ucsf. edu/display/UCPLS/General+Teaching.

5. Mandell R. D. The Professor Game. What Really Goes on in the Multi Billion Dollar Education Industry / R. D. Mandell. – New York : Doubleday, 1977. – 275 p.

6. Residents and Fellows as Medical Educators Elective / Academy of medical educators, University of Colorado School of Medicine, 2019. – Access mode : http://www. ucdenver.edu/academics/colleges/medicalschool/education/ academy/edelective/Pages/edelective.aspx.

References

1. Horpinich, T.I. (2018). Teoretychni osnovy profesiinoii pidhotovky maibutnikh likariv v universytetakh SSHA [Theoretical basics of future doctors' professional training at the universities in the USA]. Ternopil: Ukrmedknyha [in Ukrainian].

2. Advanced Teaching Skills / Harvard Medical School, 2019. Retrieved from: https://cmeregistration.hms. harvard.edu/events/advanced-teaching-skills/eventsummary-61975b435857420d9a815b86129ce1c9. aspx?RefID=cmecatalog.

3. Faculty Development / Academy of medical educators. University of Colorado School of Medicine, 2019. Retrieved from: http://www.ucdenver.edu/ACADEMICS/ COLLEGES/MEDICALSCHOOL/EDUCATION/ ACADEMY/FACULTYDEVELOPMENT/Pages/default. aspx.

4. General Teaching / UCSF Continual Professional Learning, 2019. Retrieved from: https://wiki.library.ucsf. edu/display/UCPLS/General+Teaching.

5. Mandell, R. D. (1977). *The Professor Game. What Really Goes on in the Multi Billion Dollar Education Industry.* New York: Doubleday.

6. Residents and Fellows as Medical Educators Elective / Academy of medical educators, University of Colorado School of Medicine, 2019. Retrieved from: http://www. ucdenver.edu/academics/colleges/medicalschool/education/ academy/edelective/Pages/edelective.aspx.

> Received 03.11.21 Recommended 12.11.21

E-mail address for correspondence: gorpinich@tdmu.edu.ua