Kovalchuk I. M.: https://orcid.org/0000-0002-9278-9891 BE

Conflict of interest / Конфлікт інтересів:

The authors declare no conflict of interest. / Автори заявляють про відсутність конфлікту інтересів.

Corresponding author / Адреса для кореспонденції

Bek Nataliya Serhiivna / Бек Наталія Сергіївна

Danylo Halytsky Lviv National Medical University / Львівський національний медичний університет імені Данила Галицького

Ukraine, 79010, Lviv, 69 Pekarska str. / Адреса: Україна, 79010, м. Львів, вул. Пекарська 69

Tel.: +380679263783 / Тел.: +380679263783

E-mail: dok bek@ukr.net

A — Work concept and design, B — Data collection and analysis, C — Responsibility for statistical analysis, D — Writing the article, E — Critical review, F — Final approval of the article / A — концепція роботи та дизайн, B — збір та аналіз даних, C — відповідальність за статичний аналіз, D — написання статті, E — критичний огляд, F — остаточне затвердження статті

Received 04.10.2023 / Стаття надійшла 04.10.2023 року Accepted 01.03.2024 / Стаття прийнята до друку 01.03.2024 року

DOI 10.29254/2077-4214-2024-1-172-285-290

UDC 378:61(73)]:001.835]](092Flexner)

Bieliaieva O. M., Bilash S. M., Lysanets Yu. V., Rozhenko I. V., Taran Z. M., Buhaienko K. S., Hurai L. P. ABRAHAM FLEXNER: A MAN, TEACHER, AND REFORMER

Poltava State Medical University (Poltava, Ukraine)

o.bieliaieva@pdmu.edu.ua

Engaging in an interdisciplinary exploration at the crossroads of United States history and medical pedagogy, this study focuses on Abraham Flexner's biography. A thorough analysis unfolds against the backdrop of historical epochs shaping Flexner's impactful contributions. The study highlights the imperative nature of the radical reforms enacted in the early 20th century. Flexner led the way in these transformative actions, which included closing and radically reorganizing institutions that trained future doctors. This initiative was carried out at the request of the American Medical Association for Medical Education, with steadfast support from the Carnegie Foundation for the Advancement of Teaching.

This paper highlights the necessity of these reforms for the "sanitation" and progressive evolution of both medical education and the US healthcare system, despite encountering staunch opposition from the academic and medical communities of the time. Central to the discussion are the criteria put forth by Flexner for evaluating the quality of medical education. Emphasizing crucial aspects like the quality of students, having an educational license, standardized admission procedures, a strong material and technical setup, qualified faculty, and students' access to clinical facilities, the study clarifies the essential role these elements played in Flexner's vision.

The research sheds light on the success of Flexner's reforms, attributing a significant portion to his personal qualities and pedagogical education. His ability to dispassionately evaluate medical schools across the USA and Canada showcases the depth of his insights. Despite some critical remarks, the study emphasizes the invaluable contribution Flexner made to the radical transformation of the American medical school, elevating his figure to an almost legendary status.

Key words: medical education, United States, historical context, "Flexner Report of 1910", reform, medical pedagogy.

Connection of the publication with planned research works.

The study was conducted as part of the research project "Development of Pedagogical Skills Among Academic Staff in Higher Medical Educational Institutions Through an Integrated Approach" (state registration number 0122U202026).

Introduction.

The first decade of the 20th century is widely regarded as a watershed moment in the annals of medical education in the United States. This period marked the beginning of an era of great reforms that continue to this day.

Traditionally, the reformation of American medical education is associated with the name of Abraham Flexner, whose seminal report, "Medical Education in the United States and Canada" [1], commissioned by the Carnegie Foundation for the Advancement of Teaching, shook the foundations of the medical and academic establishments upon its publication in 1910. Commonly known as the "Flexner Report". This document detonated like a bombshell in American medical and academic circles, catalyzing a seismic shift in the educational paradigm of the nation and precipitating an irrevocable transformation in the training of physicians and the overarching modernization of the American healthcare system.

As time progresses, interest in Flexner's persona and his transformative reforms persists unabated. A plethora of publications continues to emerge, offering

diverse perspectives on his role in the history of medical pedagogy. These works span a spectrum, from laudatory to neutral or even critical evaluations, underscoring the imperative of an interdisciplinary examination of Flexner's biography and reformist endeavors against the backdrop of the historical epochs in which he operated.

The aim of the study.

To perform an interdisciplinary study of Abraham Flexner's biography and his transformative initiatives within the context of history.

Main part.

Abraham Flexner was born on November 13, 1866, in Louisville (Kentucky). He was one of nine descendants of Esther Abraham and Moritz Flexner, who came to the United States from Europe in the 1840s. The Flexner family narrative is a typical story about the triumph of a family of emigrants who went to America in search of a better fate and, despite war, danger, difficulties, business failures, and depression, were able to get back on their feet [2].

After many turbulent events in his life related to political events in America, the father of the future reformer was forced to close his own business and start working as a salesman. Since the family did not have enough money to give the children (seven sons and two daughters) a decent education, which Moritz Flexner himself received in Europe at one time (Abraham's father was born in the Bavarian city of Neumarkt, and later lived in Strasbourg, France) [3], he developed his own system, according to which boys attended school in the morning, and had to work part-time in the afternoon and evening. As older children grew up and acquired a profession, they made a financial contribution to the education of younger brothers and sisters [2, 3]. Abraham's first parttime job was at a private library in Louisville, where, at the age of 15, he worked after school from 2:30 p.m. to 10 p.m., earning \$16 a month. Working in the library instilled in Abraham the excellent habit of preparing his homework in advance, allowing him to peruse the latest newspapers and fiction during his shifts, and eavesdrop on the conversations of regular visitors who frequented the library for social interaction [2].

In 1884, Abraham's eldest brother, Jacob, sent the 17-year-old Abraham to study at Johns Hopkins University. Six years later, Abraham returned the favor by sending his younger brother, Simon, to study at the same university's medical school. Interestingly, Jacob, described as exceptionally intelligent and determined by Ward O. Griffen, Jr. [3], played a pivotal role in the lives of his more renowned brothers — Abraham, who would become a prominent educator and reformer, and Simon, who would become a professor of pathology at the University of Pennsylvania and the inaugural director of the Rockefeller Institute for Medical Research [3].

After earning a bachelor's degree in education and returning to his hometown of Louisville in 1886, Abraham began teaching at an all-boys high school, where he quickly gained recognition as an innovative educator, specializing in classical languages and literature [4].

Flexner, who believed in the "ultimate importance of the kindergarten idea" [5], later decided to establish his own private school – "Mr. Flexner's School." Distinguished by its emphasis on emotional development and a scientific foundation in education [5], Flexner's school offered small classes where students were meticulously

prepared for admission to prestigious colleges and universities [2].

Over its 15-year existence, "Mr. Flexner's School" flourished as a profitable enterprise. The profits generated from the school enabled Abraham to support his family members, including funding his brother Simon's scientific research, sending his sister Mary to Bryn Mawr, assisting his brothers Bernard and Washington in their respective legal careers, and providing financial assistance to his mother. It is estimated that Abraham invested between \$150,000 to \$200,000 in supporting his relatives [4].

Flexner's educational approach garnered the attention of renowned figures such as John Dewey, a prominent American philosopher and education reformer, and Charles Eliot, the then-president of Harvard University [4, 6]. Graduates of "Mr. Flexner's School" entered Harvard at younger ages and completed their studies at a faster pace compared to students from elite preparatory schools in New England. Intrigued by this phenomenon, Eliot encouraged Flexner to document his methodology, which was subsequently published in "The Educational Review" in November 1899 [6].

A few years later, at the age of 39, Flexner made a radical decision. In 1905, he shuttered his private school, enrolled at Harvard for a master's degree, and embarked on a journey to Europe to study the European education system. It is worth noting that these opportunities were made possible in part by the financial stability of his wife, Anne Lazier Crawford, a successful playwright and the mother of their two daughters, Jean and Eleanora, who had once attended "Mr. Flexner's School" [2].

Although there is no direct biographical confirmation, it is plausible to assume that Flexner's interest in European education was partly influenced by his parents' reminiscences of Europe, which left a profound impression on him [7].

Upon returning to the United States with a master's degree, Flexner sought to share and contrast his European experiences with those of American education. In 1908, he published "The American College," a critical examination of the deficiencies in American higher education [7]. Despite containing several innovative ideas, none were implemented by university administrators [6].

Despite this, by a happy coincidence, Flexner's book fell into the hands of Henry Pritchett, who headed the newly created Carnegie Foundation for the Advancement of Teaching and determined the state of health care improvement in America as the main direction of his philanthropic activities at that time [8].

Today, hardly anyone can believe that the state of medical education and healthcare in the USA at the turn of the 20th century was, in many places, dire. G. Riggs aptly characterizes this period: "The early 20th century was a time of promise and chaos, paradox and evolution – the pace of change was more rapid than the last several centuries combined. Industrialization and capitalism were transforming the nature of society, though traditional crafts (including medicine) persisted. Scientific achievements offered unprecedented understanding of a rational world, though belief in the unseen, the occult, and the mysterious remained prominent in the collective psyche. ... Medicine was not immune to these cul-

tural paradoxes. In America, medical colleges abounded. Curricula ranged from the innovative scientific approach of Osler and Cushing at Johns Hopkins to entrepreneurial diploma mills where a medical doctorate could be obtained simply by paying a fee. Students might have had instruction in cutting-edge discoveries like Pasteur's germ theory of disease and Lister's aseptic technique, or they might have been schooled in traditional beliefs, such as the notion that the surgeon's bloody hands and gown were badges of patient trust and surely would not transmit disease. The period of formal didactics (if reguired) varied from months to years, often with a mixture of scientific rationalism, folk medicine, and myth. Training might or might not include apprenticeship to a more senior practitioner whose education rarely exceeded that of the student [9, p. 1669]". The situation was further complicated by the fact that the majority of American physicians at the time were ill-prepared to embrace advancements in healthcare due to inadequate medical training [10].

The need for reform in medical education had long been recognized, with concerns about the substandard training of American medical personnel voiced two decades prior to Flexner's report by esteemed organizations such as the Illinois State Board of Health, the American Medical Association, and medical colleges affiliated with the latter [10]. Certain measures had indeed been taken to address this issue prior to Flexner's intervention. By the time of the "Flexner Report," notable professors and educators had emerged in the United States. Many of these individuals had ventured to Germany between 1870 and 1914, joining approximately 15.000 American physicians seeking to enhance their expertise in science and medical training. Their experiences in German laboratories paved the way for the emergence of leaders in medical education upon their return to the USA. The pursuit of this goal became a cornerstone of the movement to reform medical education [10].

The timing of the reform was crucial. By 1910, the United States boasted approximately 400 medical schools, the majority of which were of questionable quality, with many failing to endure beyond their inaugural year [11, p. 318]. As early as 1904, there were already 166 medical schools in operation. The emergence of the Council on Medical Education of the American Medical Association, dedicated to fostering excellence, precipitated significant changes. Between 1906 and 1910, 29 educational institutions faced partial closures under its influence [11].

Prior to the "Flexner Report", for profit diploma mill medical schools, "essentially money making in spirit and object", had "educational quacks" graduating anyone "who had settled his tuition" [5, 12].

Aware of the need for further reform, the Council of the American Medical Association on Medical Education turned to the Carnegie Foundation for the Advancement of Teaching in 1909 with a proposal to investigate the state of medical education [6].

Pritchett, who, as mentioned above, was already familiar with the ideas of Abraham Flexner, decided that Flexner was the person to whom this important work could be entrusted [8]. At first, Flexner was surprised by Pritchett's unexpected proposal and even thought he had been mistaken for Brother Simon, but Pritchett «picked Flexner because Flexner could write, because

Flexner shared his views on traditional education, and because Flexner was well connected through his brother Simon with the medical education establishment centered at Johns Hopkins [4, p. 162]».

G. Riggs half-jokingly describes the beginning of Flexner's reform activity as follows: "With the imprimatur of the Carnegie Foundation, Flexner embarked on an ambitious whirlwind tour of medical colleges across the country [9, p. 1669]". The inspection of medical education institutions occurred between 1909 and 1910, during which Flexner, driven by purpose and determination, spent a year and a half tirelessly on the road. His journey took him across 98 cities in the USA and Canada, where he conducted a staggering 174 inspections [5, 13]. As described, he traversed North America by various means – trains, horse and buggy, and occasionally, a Ford flivver – encountering challenging conditions and visiting remote locales [13].

Flexner's focus during these evaluations differed from that of a practicing physician, as he approached them from an educator's perspective. He posed minimal inquiries regarding clinical opportunities, primarily directing questions to deans and professors of clinical departments. Instead, he prioritized understanding the school's affiliations and privileges within specified hospitals, as outlined in their catalogs [8]. Criteria such as admission standards, infrastructure quality – including access to well-equipped laboratories – and the incorporation of scientific methodologies into medical education were pivotal in his assessments of educational quality [14].

Flexner subjected the then admission rules, or rather the lack thereof, for medical specialties, to merciless criticism. He emphasized the imperative of assessing professional suitability: «... anybody could ... "walk into a medical school from the street", and small wonder that of those who did walk in, many "could barely read and write". But with the advent of the laboratory, in which every student possesses a locker where his individual microscope, reagents, and other paraphernalia are stored for his personal use; with the advent of the small group bedside clinic, in which every student is responsible for a patient's history and for a trial diagnosis, suggested, confirmed, or modified by his own microscopical and chemical examination of blood, urine, sputum, and other tissues, the privileges of the medical school can no longer be open to casual strollers from the highway. It is necessary to install a doorkeeper who will, by critical scrutiny, ascertain the fitness of the applicant: a necessity suggested in the first place by consideration for the candidate, whose time and talents will serve him better in some other vocation, if he be unfit for this; and in the second, by consideration for a public entitled to protection from those whom the very boldness of modern medical strategy equips with instruments that, tremendously effective for good when rightly used, are all the more terrible for harm if ignorantly or incompetently employed» [1, p. 22].

The findings of the inspection were compiled and published in the "Flexner Report" [1]. According to J.M. Prutkin, this report emerged as a scathing critique of medical education in North America, sweeping through the country like a tornado [6]. Additionally, Flexner faced lawsuits and even death threats as a result of his work [5, p. 1291]. In his autobiography, Flexner wrote

with sarcasm: «Such a rattling of dead bones has never been heard in this country before or since. Schools collapsed to the right and left, usually without a murmur» [15] and persisted in accomplishing the task set before him.

Johns Hopkins Medical School was selected as the "gold standard," having embraced the German model of medical education [8]. Flexner depicted this educational institution as follows: «The Johns Hopkins Hospital and Dispensary provide practically ideal opportunities. The medical staff of the hospital and the clinical faculty of the medical school are identical; the scientific laboratories ranged around the hospital are in close touch with clinical problems, immediate and investigative. The medical school plant is thus an organic whole, in which laboratories and clinics are inextricably interwoven. Recent foundations have greatly augmented the original hospital plant in the direction of psychiatry, pediatrics, and tuberculosis. Three hundred and eighty-five beds under complete control are now available. The dispensary is largely attended, and is admirably conducted from the standpoint of both public service and pedagogic efficiency [1, p. 283]».

Flexner's critique of the Georgia College of Eclectic Medicine and Surgery was unrelenting: «Laboratory facilities: The school occupies a building which, in respect to filthy conditions, has few equals, but no superiors, among medical schools. Its anatomy room, containing & single cadaver, is indescribably foul; its chemical «laboratory» is composed of old tables and a few bottles, without water, drain, lockers, or reagents; the pathological and histological «laboratory» contains a few dirty slides and three ordinary microscopes. Clinical facilities: The school is practically without clinical facilities. Its outfit in obstetrics is limited to a tattered manikin! Nothing more disgraceful calling itself a medical school can be found anywhere [1, p. 205]».

Flexner's assessment categorized all medical schools into three groups: the first comprised institutions that exceeded the Johns Hopkins standards; the second included schools deemed of subpar quality but potentially salvageable with financial aid; and the third encompassed institutions deemed so deficient that closure was recommended [8]. Consequently, the "Flexner Report" catalyzed comprehensive reforms across nearly all existing American medical schools at the time [16].

Flexner advocated for a drastic reduction in the number of medical schools, proposing to consolidate them from 155 to 31, underlining the notion of the medical school as a "public service corporation." He justified this significant reduction by emphasizing that any medical school failing to fulfill its societal obligation of producing highly skilled physicians warranted closure [1]. Subsequent to the "Flexner Report" and the ensuing administrative decisions, significant alterations were implemented in the curricula of the "surviving" medical schools [11].

The statement of G. Riggs is interesting in this context: "Critics would later debate whether Flexner's speed and methods permitted an accurate appraisal of each institution, but even if his report was only somewhat accurate, the state of American medical education was clearly in disarray. Through a complicated confluence of historical circumstances, the Carnegie Foundation was in an authoritative position to advance the cause of

medical education reform, and it did so with vigor based on Flexner's recommendations [9, p. 1669]".

The main recommendations set forth in the "Flexner Report" seem so obvious in the 21st century that, without any doubt, they can be classified as "condicio qua non", therefore "one may not appreciate their revolutionary nature" [5]: "First, Flexner urged all medical schools to be linked to teaching hospitals with proper resources. Second, students would have to be highly qualified to enter. Third, unbiased research and laboratory investigation should be conducted in the schools and inform the education of students [5, p. 1292]".

Flexner advocated for the indispensable role of quality facilities and clinical training in shaping the education of medical students and the future landscape of North American medicine [1].

He emphasized the necessity for medical students to undergo objective and impartial evaluation, free from financial or political biases. Flexner recommended a system where the competence of all students, regardless of their background, would be assessed equally – i.e., a son of a dean or a wealthy university sponsor should prove the same competence in examinations as a financially disadvantaged farm boy from the outback [1].

Flexner's insights extended to the vital support and recognition of educators who prioritize teaching, as well as the imperative for pedagogical adaptations to equip doctors with lifelong learning skills and a comprehensive professional identity [16], reflecting remarkably modern perspectives.

He advocated for the advancement of various medical specialties through postgraduate education, foreseeing enhanced knowledge of diseases, patient safety, and care efficiency through specialization. Emphasizing the importance of ongoing education, Flexner urged practitioners to remain updated with the latest developments in healthcare delivery [16].

Furthermore, Flexner championed diverse educational methodologies, including bedside learning, case studies, and laboratory and clinical experiences, now recognized as integral components of medical education. Notably, he emphasized the untapped potential of clinical training to enhance the educational process, emphasizing its critical role in shaping competent medical professionals [16].

Given the article's format constraints, it is impractical to delve into every facet of Flexner's reform efforts. Nonetheless, critics of Flexner's approach highlight that «his prescription for medical study, they say, was too rigid, too stubborn in its insistence on an impersonal scientific standard throughout the curriculum. Flexner, in this view, left too little room for personal experience and the wisdom of the past in hastening the demise of the old-fashioned medical school. He imposed a «Flexnerian» sameness on the humane and personalized medicine of the past. The medicine he represented was, in their eyes, cold, bureaucratic, inhumane, and smelled too much of the laboratory. There was little place in his scheme for the struggling average practitioner, the striving woman doctor, or the hapless black physician. Or so the critics say [4, p. 161]».

Flexner retired in 1939 at the age of 72, but continued writing books, including two autobiographies: «I Remember» (1940) and «Abraham Flexner: An Autobiography" (3th revised edition), published posthumously

in 1960 [17]. Abraham Flexner died on September 21, 1959, a little less than two months before his 93rd birthday, and is buried next to his wife in Cave Hill Cemetery in Louisville [17].

Conclusions.

The "Flexner Report" offers a multitude of recommendations, proposals, and reflections that not only catalyzed the reform of medical education in the USA but also retain relevance in the present day. It demonstrates that true reform in this sphere is a complex endeavor, requiring careful consideration of myriad social and economic factors. Objective and balanced decisionmaking is imperative for genuine enhancement of medical education and healthcare provision.

The significance of Abraham Flexner's legacy for Americans is eloquently illustrated by the following quote: "On the evening of April 23, 1956, a spry and distinguished 89-year-old Abraham Flexner was honored in the Great Ballroom of the Waldorf Astoria in New York City in front of over 300 attendees, including the deans of 57 out of 81 medical schools in the United States. He received the prestigious Frank H. Lahey Memorial Award for "outstanding leadership in medical education", presented on behalf of three organizations: the American Medical Association (AMA), the Association of American Medical Colleges (AAMC) and the National Fund for Medical Education (NFME). He was hailed as the man who made "the greatest single contribution that [had] ever been made to the advancement of medical education in America [17]".

References

- 1. United States and Canada. A Report to the Carnegie Foundation for the Advancement of Teaching by Abraham Flexner with an Introduction by Henry S. Pritchett, President of the Foundation. Bulletin Number Four (1910). Reprinted. New York: Arno Press, Medicine and Society in America Series: 1972, 364 p.
- Halperin EC, Perman JA, Wilson EA. Abraham Flexner of Kentucky, his report, Medical Education in the United States and Canada, and the historical questions raised by the report. Acad Med. 2010 Feb;85(2):203-210. DOI: 10.1097/ACM.0b013e3181c88506.
- Griffen WO. Jr. Jacob: the other Flexner. Ann Surg. 2004 Jun;239(6):808-817. DOI: 10.1097/01.sla.0000128684.67062.39. Bonner TN. Searching for Abraham Flexner. Acad Med. 1998 Feb;73(2):160-166. DOI: 10.1097/00001888-199802000-00014
- Huecker M, Danzl D, Shreffler J. Flexner's Words. Med Sci Educ. 2020 May 27;30(3):1291-1293. DOI: 10.1007/s40670-020-00986-1.
- Prutkin JM. Abraham Flexner and the development of the Yale School of Medicine. 1999. Yale J Biol Med. 2010 Sep;83(3):151-159.
- IAS. Abraham Flexner: Work [Internet]. [cited 2023 Sept 8]. Available from: https://www.ias.edu/flexner-work.
- Duffy TP. The Flexner Report-100 years later. Yale J Biol Med. 2011 Sep;84(3):269-276.
- Riggs G. Commentary: Are we ready to embrace the rest of the Flexner Report? Acad Med. 2010 Nov;85(11):1669-1671. Available from: https://psycnet.apa.org/doi/10.1097/ACM.0b013e3181f5ced4.
- 10. Barzansky B. Abraham Flexner and the era of medical education reform. Academic Medicine: Journal of the Association of American Medical Colleges. 2010 Sep;85(9):19-25. DOI: 10.1097/ACM.0b013.
- 11. Doukas DJ, McCullough LB, Wear S. Reforming medical education in ethics and humanities by finding common ground with Abraham Flexner. Acad Med. 2010;85(2):318-323. DOI: 10.1097/ACM.0b013e3181c859
- 12. Orr LM. Medicine's debt to Abraham Flexner. JAMA. 1960;173:1429-1431. DOI: 10.1001/jama.1960.03020310017006.
- 13. Markel H. Abraham Flexner and his remarkable report on medical education: a century later. JAMA. 2010;303(9):888-890. DOI: 10.1001/ jama.2010.225.
- 14. Beck AH. The Flexner Report and the standardization of American medical education. JAMA. 2004;291:2139-2140. DOI: 10.1001/ jama.291.17.2139.
- 15. Flexner A. I remember; the autobiography of Abraham Flexner. New York: Simon and Schuster; 1940. 414 p.
- 16. Zhdan VM, Dvornyk VM, Avetikov DS, Bieliaieva OM. Returning to the report of Abraham Flexner: «Lessons of history» for medical education. In: Coll. of Articles VIII of the International science and practice conference Current issues of linguistics, professional linguistic didactics, psychology and pedagogy of higher education; 2023; Poltava. Poltava: PSMU; 2024. p. 3-8.
- 17. Seyal SM. Abraham Flexner: His life and legacy. Hektoen International A Journal of Medical Humanities [Internet]. [cited 2024 March 8]. Available from: https://hekint.org/2017/01/29/abraham-flexner-his-life-and-legacy/.

АБРАХАМ ФЛЕКСНЕР: ЛЮДИНА, ПЕДАГОГ, РЕФОРМАТОР

Беляєва О. М., Білаш С. М., Лисанець Ю. В., Роженко І. В., Таран З. М., Бугаєнко К. С., Гурай Л. П.

Резюме. Перше десятиліття XX ст. вважається найвизначнішим етапом в історії медичної освіти Сполучених Штатів Америки, адже цей період став початком епохи докорінних змін, які нерозривно пов'язані з ім'ям знаного американського реформатора, фахівця у галузі педагогіки Абрахама Флекснера (1866-1959).

У науковій розвідці міждисциплінарного характеру, що виконана на стику історії США та історії медичної педагогіки з використанням біографічного методу, значну увагу приділено постаті Абрахама Флекснера та питанням реформування американської медичної освіти на тлі історичних періодів, на які припала діяльність Флекснера.

Проаналізовано літературні джерела з питання, що досліджується, а також оригінал доповіді Абрахама Флекснера, відомої як «The Flexner Report of 1910», або просто «Flexner Report». Закцентовано увагу на тому, що за підтримки Carnegie Foundation for the Advancement of Teaching практичне втілення концепції Флекснера та безпрецедентні кроки щодо реформування та модернізації медичної освіти США, що були зроблені в перші десятиліття XX століття стали запорукою прогресу в цій царині.

Продемонстровано, що «The Flexner Report of 1910» натепер залишається не просто цінним історичним документом, а й дає змогу по-новому поглянути на сучасні освітні реалії і стверджувати, що деякі настанови та педагогічні ідеї Флекснера не втрачають актуальності і в ХХІ столітті. Зокрема, це стосується соціальної ролі та відповідальності лікаря, пріоритету навчання на старших курсах «біля ліжка хворого», прозорості та об'єктивності оцінювання студентів, потреби в навчанні впродовж життя, прихильником якого Флекснер залишався до кінця своїх днів.

Ключові слова: медична освіта, США, історичні умови, «Доповідь Флекснера 1910 року», реформування, медична педагогіка.

ABRAHAM FLEXNER: A MAN, TEACHER, AND REFORMER

Bieliaieva O. M., Bilash S. M., Lysanets Yu. V., Rozhenko I. V., Taran Z. M., Buhaienko K. S., Hurai L. P.

Abstract. The opening decade of the 20th century stands out as a crucial period in the evolution of medical education in the United States. This period marked the beginning of an era of fundamental changes that are inextricably linked with the name of the well-known American reformer and pedagogical expert, Abraham Flexner (1866 – 1959), whose name has become synonymous with transformative change in this field.

In this interdisciplinary study, we merge American history with the evolution of medical pedagogy, with a particular focus on the influential figure of Abraham Flexner. Through a biographical approach, we examine Flexner's pivotal role and the historical context that shaped his contributions.

The primary focus is directed towards the seminal "Flexner Report of 1910," a cornerstone document analyzed alongside pertinent literary sources. This report, supported by the Carnegie Foundation for the Advancement of Teaching, triggered unprecedented reforms in medical education during the early 20th century, setting a trajectory for progress in the field.

Notably, the enduring relevance of the "Flexner Report" transcends its historical significance, offering insights into contemporary educational landscapes. Flexner's principles and pedagogical insights continue to resonate into the 21st century, underscoring themes such as the social responsibilities of medical practitioners, the importance of experiential learning at the patient's bedside, objective evaluation methods for students, and the imperative of lifelong learning – a conviction championed by Flexner throughout his lifetime.

Key words: medical education, United States, historical context, "Flexner Report of 1910", reform, medical pedagogy.

ORCID and contributionship:

Bieliaieva O. M.: https://orcid.org/0000-0001-9060-4753 ABDEF Bilash S. M.: https://orcid.org/0000-0003-0421-6362 ABDEF Lysanets Yu. V.: https://orcid.org/0000-0003-0421-6362 ABDEF Rozhenko I. V.: https://orcid.org/0000-0001-8334-5087 EF Buhaienko K. S.: https://orcid.org/0009-0005-3098-8093 CB Taran Z. M.: https://orcid.org/0009-0002-0380-5870 BE Hurai L. P.: https://orcid.org/0009-0009-9285-898X CE

Conflict of interest:

The authors declare no conflict of interest.

Corresponding author

Bieliaieva Olena Mykolaiivna Poltava State Medical University Ukraine, 36011, Poltava, 23 Shevchenko str.

Tel.: +380994140597

E-mail: o.bieliaieva@pdmu.edu.ua

A — Work concept and design, B — Data collection and analysis, C — Responsibility for statistical analysis, D — Writing the article, E — Critical review, F — Final approval of the article

Received 10.10.2023 Accepted 01.03.2024

DOI 10.29254/2077-4214-2024-1-172-290-298

UDC 378.6:61:37.091.3-027.22

Bilanova L. P., Bobukh V. V., Andreyko S. S., Svintsytska N. L., Bilash V. P., Bilanov O. S.

DEVELOPMENT OF GENERAL AND PROFESSIONAL COMPETENCES OF FUTURE HEALTHCARE PROFESSIONALS THROUGH THE IMPLEMENTATION OF TRAINING IN THE EDUCATIONAL PROCESS

Poltava State Medical University (Poltava, Ukraine)

bilanova.lara@gmail.com

The article considers the relevance and effectiveness of training in the educational process for students in the field of Knowledge 22 Healthcare to form general and professional competencies. During the training, informal, relaxed communication is created, which opens up many options for students to develop and solve the problem for which they have gathered.

Trainings fight against passivity among students and generate interest in them. It is associated with non-material motivation and can be an impetus for enthusiasm, the desire for discovery, and the search for the root causes of pathologies and radical changes in medicine. They are considered to be an encouragement and an educational breakthrough because, at low cost, they benefit education, medicine, and society in general. The subtleties and nuances that the future medical elite learn from them allow them to maintain energy and professional endurance. Training