

REVIEW ARTICLE

ACADEMIC DEGREE

# Academic Degrees of Candidate of Sciences and Doctor of Philosophy Obtained by Oral and Maxillofacial Surgeons in Ukraine: Comparison of Print Diplomas and Their Digital Analogs in Diia (Action) Application: A Narrative Review

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## ABSTRACT

The purpose of this narrative review is to analyze the transition of the Candidate of Sciences (CSc) to the Doctor of Philosophy (PhD) academic degree among doctors who defended their theses in modern Ukraine and who specialize in Surgical Dentistry (i.e., Oral Surgery) and Maxillofacial Surgery. The following were highlighted: (1) regulatory documents regarding obtaining a CSc/PhD degree, (2) institutions that issued

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The abbreviation "PhD" in the upper right icon means that this article displays a digital analog of a Doctor of Philosophy degree diploma in the Diia application.

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and issue diplomas and diploma supplements of CSc/PhD, (3) eight CSc and PhD diplomas awarded to citizens of Ukraine and foreigners since 2002, as well as supplements to diplomas, (4) a digital analog of the PhD diploma in the Diia (Action) smartphone application, (5) capabilities of the Diia app for educational documents, and (6) the number and types of points awarded for defending theses and obtaining PhD diplomas. The article also suggests why the Diia app does not contain digital analogs of diplomas of Candidate and Doctor of Sciences. According to our analysis, this is the first publication that highlights the comparison of the CSc and PhD diplomas of dentists at different stages of development of the specialties Surgical Dentistry and Maxillofacial Surgery and with the first published visualization of the digital analog of the PhD diploma.

### KEY WORDS

Academic degree, scientific degree, candidate of sciences, doctor of philosophy, diploma, diploma supplement, digital analog of diploma, Diia (Action) application, surgical dentistry, oral surgery, maxillofacial surgery

### INTRODUCTION

Academic degree (also known as scientific degree) in Ukraine is the highest qualification awarded to the applicant by specialized academic councils of higher educational or scientific institutions as a result of successful completion of the relevant educational-scientific or scientific program at the third (scientific, educational-scientific or educational-creative) level and public defense of a dissertation (i.e., thesis) or scientific papers [1]. In Ukraine as of February 01, 2025, the following degrees are awarded: (1) Doctor of Philosophy (PhD), (2) Doctor of Arts, and (3) Doctor of Sciences [1].

Thesis (i.e., dissertation) of a candidate for the PhD degree is a qualifying scientific work, which is carried out by a candidate for the PhD degree personally, contains the scientific results of his research and is submitted for the purpose of awarding him the degree of PhD [2].

Historically, the PhD degree (Latin: Philosophiæ Doctor) in Ukraine was preceded by the Candidate of Sciences degree [3-5]. The abbreviation of the degree is CSc (Latin: Candidatus/Candidata Scientiarum) [6].

In the Western states, a PhD is a terminal degree that usually denotes the highest level of academic achievement in a given discipline and is awarded following a course of graduate study and original research [7].

In Ukraine, as of February 01, 2025, PhD is not a terminal degree. The terminal one is Doctor of Sciences (Latin: Scientiæ Doctor [ScD]) academic degree [8, 9]. Doctor of Sciences is obtained by a person on the basis of the CSc/PhD degree in a scientific specialty and involves the acquisition of the highest competencies in the field of developing and

implementing research methodology, conducting original research, obtaining scientific results that provide a solution to an important theoretical or applied problem, have national or global significance and are published in scientific publications [9].

In modern Ukraine, since 1991, there has been an extremely rapid development of oral and maxillofacial surgery with the defense of a large number of theses [10-17]. For Ukrainian doctors who specialize in surgical dentistry (i.e., oral surgery) and/or maxillofacial surgery [18], obtaining a PhD degree is not only a scientific and clinical achievement, but also a step that opens up new career opportunities.

The purpose of this review is to highlight the process of transition in modern Ukraine from CSc to PhD degree with a presentation for clarity and comparison of the diplomas obtained.

### BACKGROUND

Ukraine's integration into the European Union (EU) civilization space contributed to the signing of new EU integration laws, which affected, in particular, all aspects of medicine, dentistry and their science.

On July 1, 2014, the Verkhovna Rada of Ukraine adopted the Law of Ukraine "On Higher Education," which introduced amendments to academic degrees in Ukraine. The law entered into force on September 6, 2014. After the entry into force of this Law, the CSc academic degree is equated to the PhD degree as the first academic degree. The main goal of the new law was integration into the educational and scientific environment of the EU and the introduction of EU educational standards in Ukraine [9]. The law abolishes the CSc degree [9].

According to Reheilo and Shahaieva (2020), for PhD researchers whose training began before

September 1, 2016, the practice of awarding the CSc degree was extended until December 31, 2020 [1, 9]. Since 2014, the CSc degree has been equated to the PhD degree [1]. It is worth noting that the CSc degree has been equated to the PhD degree since the 1990s [4]. And this is evidenced in particular by the CSc diploma and supplement to it of doctor Olexandr Tymofieiev, which are presented below.

### **The rapid growth of oral and maxillofacial surgery and its science in Ukraine since 1991**

Since the beginning of the 90s, Ukraine has seen a comprehensive development of both the specialty "Surgical Dentistry" and the specialty "Maxillofacial Surgery" [18]. New departments are being opened, unique clinical developments are being published in both Ukrainian and foreign scientific professional publications [19-28]. Joint operations are being performed and papers with foreign colleagues are being published [29-33]. The variety of topics of theses defended by citizens of Ukraine and foreigners is quite wide [10-17, 34].

### **Examples of CSc diploma, PhD diploma, and diploma supplement**

When searching for the years of diplomas, we were guided by the years of the institutions that awarded these diplomas for both citizens of Ukraine and foreign citizens [3, 4]. An integral part of the PhD diploma is the European-style Diploma Supplement, which contains structured information about the completed studies [35].

The PhD diploma, as a state-standard document, and the diploma supplement (European standard) are described in detail in particular in the "Regulations on ordering, completing, issuing, and registering a PhD diploma and its supplement of the European model" by Dolishniy Institute of Regional Research of National Academy of Sciences of Ukraine [35]. An important detail is the fact that the PhD diplomas on the Ukrainian-language side no longer indicate the patronymic of the diploma holder.

### **Chronological order of institutions that issued/issue CSc/PhD diplomas to dentists in modern Ukraine**

1. Supreme Certifying Commission of Ukraine (Figs 1-3).
2. Ministry of Education and Science, Youth and Sports of Ukraine (Fig 4).
3. Ministry of Education and Science of Ukraine (Figs 5 and 6).
4. Institutions with departments specializing in surgical dentistry and maxillofacial surgery (e.g., universities/academies) with an accredited educational and scientific program by the National Agency for Higher Education Quality Assurance (Figs 7 and 8).

The National Agency took over certain regulatory and control functions of the Ministry of Education and Science of Ukraine; replaced the Supreme Certifying Commission of Ukraine and the State Accreditation Commission [3, 4, 36].

### **Regulatory documents regarding obtaining a PhD degree**

Links to regulatory documents regarding obtaining a PhD degree in Ukraine are presented on the website of the National Agency for Higher Education Quality Assurance [37]. We also provide the full list of documents below:

- Law of Ukraine "On Higher Education."
- Procedure for Awarding the Degree of Doctor of Philosophy (Resolution of the Cabinet of Ministers of Ukraine dated 12.01.2022 No. 44).
- Procedure for Training Applicants for the Degree of Doctor of Philosophy and Doctor of Science in Higher Education Institutions (Resolution of the Cabinet of Ministers of Ukraine dated 23.03.2016 No. 261).
- Requirements for the Design of a Dissertation (Order of the Ministry of Education and Science dated 12.01.2017 No. 40).
- On Publishing the Results of Dissertations for the Degree of Doctor and Candidate of Science: Order of the Ministry of Education and Science of Ukraine dated 23.09.2019 No. 1220.
- On Approval of the Form of the Decision of a One-Time Specialized Academic Council on Awarding the Degree of Doctor of Philosophy: Order of the Ministry of Education and Science of Ukraine dated 24.04.2024 No. 578.
- Procedure for the Functioning of the Information System of the National Agency for Quality Assurance of higher education "NAQA.Svr" with amendments that entered into force on 01.01.2025.

- Procedure for considering reports on violations of the procedure for defending a dissertation for the degree of Doctor of Philosophy.
- Procedure for considering complaints/reports on facts of academic plagiarism, fabrication, falsification.

**Accrual of points for PhD dissertation defense and for obtaining a PhD diploma**

Since defending a thesis (i.e., dissertation) is an extraordinary event in the lives of both scientists in general and oral and maxillofacial surgeons in particular, obtaining the CSc and PhD degrees is evaluated by the state and institutions by awarding points (Table 1):

- By 100 continuing professional development

(CPD) points to the personal educational portfolio [38, 39]. All nuances of accrual of CPD points are regulated by the Order of the Ministry of Healthcare of Ukraine of February 22, 2019, No. 446 [38-42]. 100 points is the highest number of points for 1 activity out of 10 different types of CPD.

- By 150 points to the annual individual rating of a university department employee for obtaining a CSc/PhD degree and diploma [43]. Until 2024, this rating was named the annual individual rating of a scientific and pedagogical worker of the department of the university. And according to it, for the approval by the Attestation Board of the Ministry of Education and Science of Ukraine of a dissertation for the PhD (CSc) degree, the performer received 250 points to the annual rating.

**TABLE 1.** Accrual of Points for Obtaining a Diploma of Doctor of Philosophy.

Type of Points	Number of Points
Continuing professional development (CPD) points	100 (points are awarded in the year of thesis defense)
Points in the annual individual rating of a university employee (i.e., scientific and pedagogical worker)	150 (250 until December 2024)

**Diia (Derzhava i Ia; Action) application**

This review presents for your attention a digital analog of the PhD diploma in Diia smartphone application obtained by a dentist, citizen of Ukraine, with the specialization of Maxillofacial Surgery (Fig 7C-E).

Diia is a state mobile application, web portal, and brand of the digital state in Ukraine, developed by the Ministry of Digital Transformation of Ukraine by order of President of Ukraine [44]. Diia was released on February 06, 2020 [44].

The name "Diia" has several meanings, it is an abbreviation of three words in Ukrainian "Derzhava i Ia" (In English: State and I) and diia as action [44].

In the Diia mobile application from March 22, 2024, you can find the following documents [45]:

1. Certificate of basic secondary education.
2. Attestation/certificate of complete general secondary education.
3. Certificate of assignment (improvement) of labor qualification.
4. Diploma of a qualified worker.

5. Diploma of a professional junior bachelor.
6. Diploma of a junior specialist.
7. Diploma of a junior bachelor.
8. Bachelor's diploma.
9. Specialist diploma.
10. Master's diploma.
11. Diploma of a doctor of philosophy.
12. Diploma of a doctor of arts.

To find documents, you need to update Diia app, and the documents will be automatically pulled up, but provided that they are in the Unified State Electronic Database on Education [45].

*"Educational documents are already in Diia. Yes, this means that You no longer need to search through drawers for certificates and ask Your mom to help you find Your diploma. And You don't have to worry if You went abroad and forgot Your diploma at home, because all Your educational documents are already at hand – in Diia."*

—Mykhailo Fedorov

Minister of Digital Transformation of Ukraine  
Post in social media [46]

March 22, 2024



**FIGURE 1.** This Diploma of Candidate of Medical Sciences (DK No 015955) was issued to Yan Evaldovych Vares based on the decision of the Presidium of the Supreme Certifying Commission of Ukraine on October 09, 2002, Protocol No 8-09/9. The diploma is in only one language, Ukrainian. The diploma contains the seal of the Danylo Halytsky Lviv National Medical University under the Ministry of Healthcare of Ukraine, signatures of the Chairman and Secretary of the Specialized Academic Council. Title of the dissertation is "Prevention of Alveolar Process Deformities during Surgical Treatment of the Cysts of the Jaws" [10]. Published with permission and copyrights retained by Y.E.V.



A

**FIGURE 2.** This Diploma of the CSc (DK No 039798) (comparable to the academic degree of PhD) **(A)** and Diploma Supplement **(B)** were issued to Olexandr Olexiyovych *Timofyeyev* in 2007. The diploma is in Ukrainian and diploma supplement is in English. It contains the seal of the Supreme Certifying Commission of Ukraine, signatures of the Head and Scientific Secretary. The document states that this supplement has been prepared according to model developed by European Commission, Council of Europe and UNESCO/SEPES. Title of the dissertation is “Prevention of Abnormal Changes in Oral Cavity Tissues when Applying Metal Constructions of Fixed Dentures” [11]. Published with permission and copyrights retained by O.O.T. **(Fig 2 continued on next page.)**



**FIGURE 2 (continued).** This Diploma of the CSc (DK No 039798) (comparable to the academic degree of PhD) **(A)** and Diploma Supplement **(B)** were issued to Olexandr Olexiyovych **Timofeyev** in 2007. The diploma is in Ukrainian and diploma supplement is in English. It contains the seal of the Supreme Certifying Commission of Ukraine, signatures of the Head and Scientific Secretary. The document states that this supplement has been prepared according to model developed by European Commission, Council of Europe and UNESCO/SEPES. Title of the dissertation is “Prevention of Abnormal Changes in Oral Cavity Tissues when Applying Metal Constructions of Fixed Dentures” [11]. Published with permission and copyrights retained by O.O.T.



**FIGURE 3.** This Diploma of Candidate of Medical Sciences (DK No 042375) was issued to Serhii Vasyliovych **Maksymcha** based on the decision of the Presidium of the Supreme Certifying Commission of Ukraine on October 11, 2007, Protocol No 10-09/8. The diploma is in only one language, Ukrainian. The diploma contains the seal of the Shupyk National Medical Academy of Postgraduate Education under the Ministry of Healthcare of Ukraine, signatures of the Chairman and Secretary of the Specialized Academic Council. Title of the dissertation is “Rational for the Use of Hyposensitizing Therapy in Patients with Mandibular Fractures” [12]. Published with permission and copyrights retained by S.V.M.





**FIGURE 4.** This Diploma of Candidate of Medical Sciences (DK No 007237) was issued to Mariia Oleksiivna Yarifa based on the decision of the Presidium of the Supreme Certifying Commission of Ukraine on September 26, 2012. The diploma is in only one language, Ukrainian. The diploma contains the seal of the Ministry of Education and Science, Youth and Sports of Ukraine, signatures of the Head of the Certification Board (i.e., Minister) and the Academic Secretary. Title of the dissertation is “Prognostication and Prophylaxis of Complications at Prosthetics with Partial Constructions of Denture, Fixed on Teeth and Dental Implants” [13]. Published with permission and copyrights retained by M.O.Y.



**FIGURE 5.** This Diploma of Candidate of Medical Sciences (DK No 046141) was issued to Ievgen Igorovych Fesenko based on the decision of the Attestation Board of the Ministry of Education and Science of Ukraine on February 1, 2018. It is indicated that Diploma is comparable to the Academic Degree of Doctor of Philosophy (PhD). The diploma is bilingual, namely in Ukrainian and English. The diploma contains the seal of the Ministry of Education and Science of Ukraine, signatures of the Head of the Certification Board (i.e., Minister) and the Academic Secretary. Title of the dissertation is “Peculiarities of Diagnostics, Prevention, and Treatment of Inflammatory Complications in Patients with Non-gunshot Mandibular Fractures” [14]. Published with permission and copyrights retained by I.I.F.

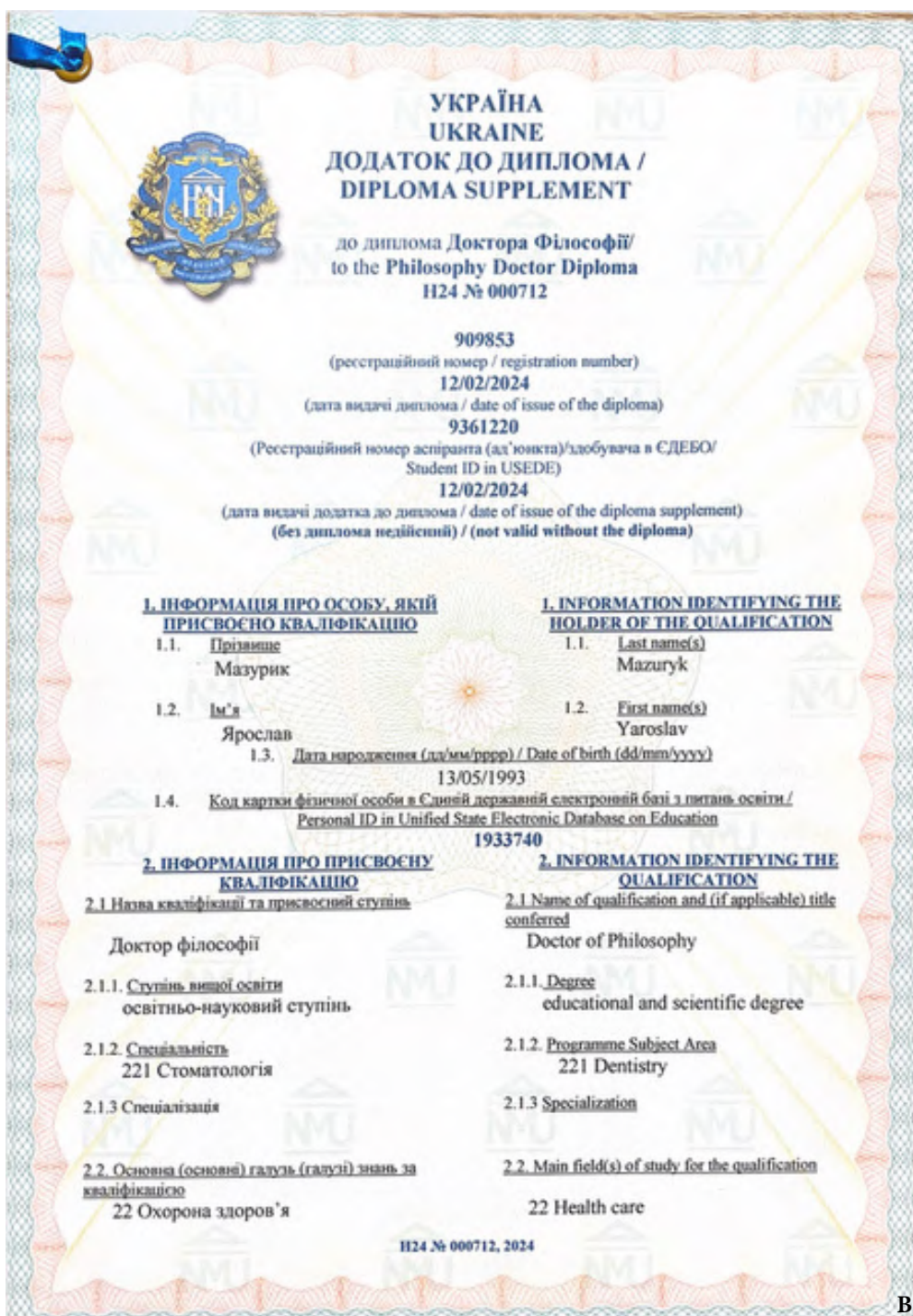


**FIGURE 6.** This Diploma of Candidate of Medical Sciences (DK No 046362) was issued to Beka Beridze (citizen of Georgia) based on the decision of the Attestation Board of the Ministry of Education and Science of Ukraine on March 20, 2018. It is indicated that Diploma is comparable to the Academic Degree of Doctor of Philosophy (PhD). The diploma is bilingual, namely in Ukrainian and English. The diploma contains the seal of the Ministry of Education and Science of Ukraine, signatures of the Head of the Certification Board (i.e., Minister) and the Academic Secretary. Title of the dissertation is “Benign Tumors of the Parotid and Submandibular Salivary Glands (Clinics, Diagnostics, Treatment, Prevention of Complications)” [15]. Published with permission and copyrights retained by B.B.

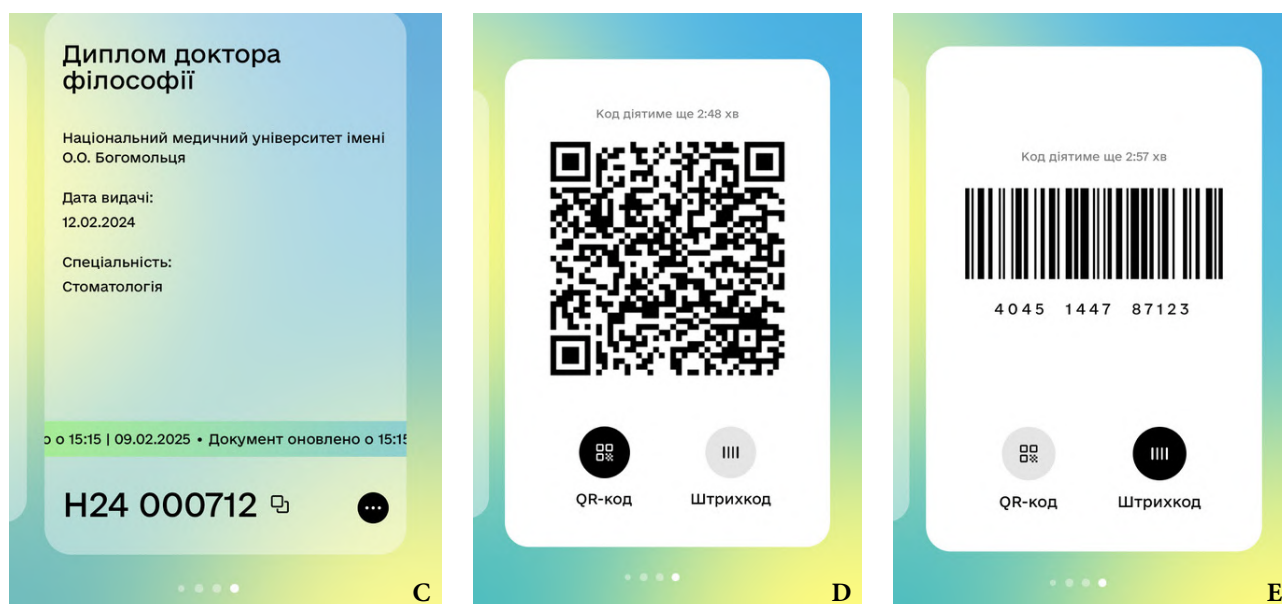


A

**FIGURE 7.** This PhD Diploma (A) (H24 No 000712) and Diploma Supplement (B) (page 1 of 12) were issued to Yaroslav Mazuryk on February 12, 2024. The diploma is bilingual, namely in Ukrainian and English. The diploma contains a signature of the Rector and a seal of the Bogomolets National Medical University, the authorized governing body of which is the Ministry of Healthcare of Ukraine. It is indicated that the scientific and educational program “Dentistry” is accredited by the National Agency for Higher Education Quality Assurance. Image C demonstrates digital analog of the PhD Diploma (H24 000712) in the Diia application (in Ukrainian). The analog indicates the institution where the defense took place, the date of issuance of the diploma, and the specialty (in this case, Dentistry). The Diploma in Diia app has 2 verification codes (QR code [D] and barcode[E]), which are generated when you click on the document card in the application. The codes do not contain any personal information, they are disposable and valid for 3 minutes. Title of the dissertation is “Comprehensive Treatment of Patients with Open Fractures of the Lower Jaw in the Presence of a Tooth in the Fracture Gap” [16]. Published with permission and copyrights retained by Y.M. (Fig 7 continued on next page.)



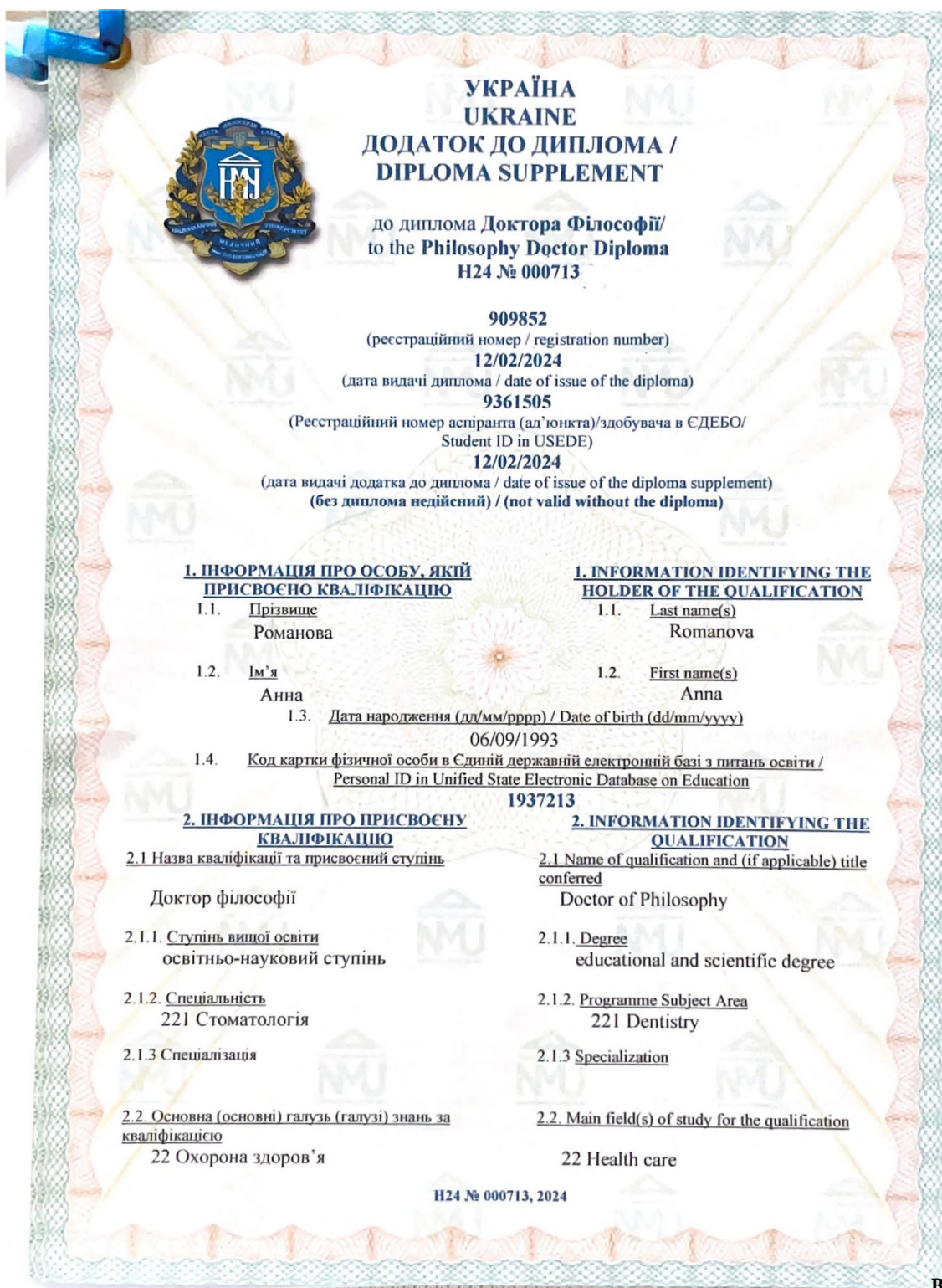
**FIGURE 7 (continued).** This PhD Diploma (A) (H24 No 000712) and Diploma Supplement (B) (page 1 of 12) were issued to Yaroslav Mazuryk on February 12, 2024. The diploma is bilingual, namely in Ukrainian and English. The diploma contains a signature of the Rector and a seal of the Bogomolets National Medical University, the authorized governing body of which is the Ministry of Healthcare of Ukraine. It is indicated that the scientific and educational program “Dentistry” is accredited by the National Agency for Higher Education Quality Assurance. Image C demonstrates digital analog of the PhD Diploma (H24 000712) in the Diia application (in Ukrainian). The analog indicates the institution where the defense took place, the date of issuance of the diploma, and the specialty (in this case, Dentistry). The Diploma in Diia app has 2 verification codes (QR code [D] and barcode[E]), which are generated when you click on the document card in the application. The codes do not contain any personal information, they are disposable and valid for 3 minutes. Title of the dissertation is “Comprehensive Treatment of Patients with Open Fractures of the Lower Jaw in the Presence of a Tooth in the Fracture Gap” [16]. Published with permission and copyrights retained by Y.M. (Fig 7 continued on next page.)



**FIGURE 7 (continued).** This PhD Diploma (A) (H24 No 000712) and Diploma Supplement (B) (page 1 of 12) were issued to Yaroslav Mazuryk on February 12, 2024. The diploma is bilingual, namely in Ukrainian and English. The diploma contains a signature of the Rector and a seal of the Bogomolets National Medical University, the authorized governing body of which is the Ministry of Healthcare of Ukraine. It is indicated that the scientific and educational program “Dentistry” is accredited by the National Agency for Higher Education Quality Assurance. Image C demonstrates digital analog of the PhD Diploma (H24 000712) in the Diia application (in Ukrainian). The analog indicates the institution where the defense took place, the date of issuance of the diploma, and the specialty (in this case, Dentistry). The Diploma in Diia app has 2 verification codes (QR code [D] and barcode[E]), which are generated when you click on the document card in the application. The codes do not contain any personal information, they are disposable and valid for 3 minutes. Title of the dissertation is “Comprehensive Treatment of Patients with Open Fractures of the Lower Jaw in the Presence of a Tooth in the Fracture Gap” [16]. Published with permission and copyrights retained by Y.M.



**FIGURE 8.** This Diploma of Doctor of Philosophy (**A**) (H24 No 000713) and Diploma Supplement (**B**) (page 1 of 12) were issued to Anna Romanova on February 12, 2024. The diploma is bilingual, namely in Ukrainian and English. The diploma contains a signature of the Rector and a seal of the Bogomolets National Medical University, the authorized governing body of which is the Ministry of Healthcare of Ukraine. Title of the dissertation is “Clinical and experimental substantiation of the mandibular osteosynthesis with the use of fixators manufactured from the low-modulus titanium alloy ( $\beta$ -Zr-Ti-Nb)” [17]. Published with permission and copyrights retained by A.R. (**Fig 8 continued on next page.**)



**FIGURE 8 (continued).** This Diploma of Doctor of Philosophy (A) (H24 No 000713) and Diploma Supplement (B) (page 1 of 12) were issued to Anna Romanova on February 12, 2024. The diploma is bilingual, namely in Ukrainian and English. The diploma contains a signature of the Rector and a seal of the Bogomolets National Medical University, the authorized governing body of which is the Ministry of Healthcare of Ukraine. Title of the dissertation is "Clinical and experimental substantiation of the mandibular osteosynthesis with the use of fixators manufactured from the low-modulus titanium alloy ( $\beta$ -Zr-Ti-Nb)" [17]. Published with permission and copyrights retained by A.R.



According to the official Diia website, information from the supplements of educational documents will appear later [45].

The official website of the Diia indicates that these digital analogs can be used when entering a higher education institution or getting a job [45, 47].

The Diia service is implemented by the Ministry of Digital Transformation of Ukraine jointly with the Ministry of Education and Science of Ukraine with the support of the European Union within the framework of the EU4DigitalUA project, implemented by the Estonian E-Governance Academy and the EGAP Program, funded by the Swiss Agency for Development and Cooperation and implemented by the Eastern Europe Foundation [45].

Thus, based on this list of 12 different educational documents, we can conclude that on the path to Ukraine's integration into the EU space, the state has begun a policy of gradually abandoning both CSc diplomas (their replacement was PhD diplomas) and ScD diplomas.

For educational documents to be displayed in the Diia app, you need to update the application. They will be automatically pulled up if available in the Unified State Electronic Database on Education.

Documents in Diia (Fig 7C-E) have verification codes (QR-code and barcode) that are generated when you tap on the document card in the application [48]. You can scan them using special readers, the QR code scanner in Diia, or enter a 13-digit code. The codes do not contain any personal information, are one-time and valid for 3 minutes [48].

During validation, you can receive confirmation of the validity of the document, the correspondence of the user's full name to the data in your system, or the correspondence of the user's age [48].

## CONCLUSION

Thus, in modern Ukraine, the academic degree of Candidate of Sciences made a transition to academic degree of Doctor of Philosophy, which is generally accepted in the Western world. Despite the war waged by the aggressor country (the Russian Federation) against Ukraine back in 2014, Ukrainian science and oral and maxillofacial surgery demonstrates an extremely high level of resilience and productivity. Moreover, the number of domestic and international publications is constantly growing, as is the number of defended dissertations (i.e., theses). The introduction

of such digital technologies as Diia application with digital analogs of educational documents in it are new accelerators for the development of educational services and their convenience. It is worth noting that the Diia app does not have the ability to add a digital analog of a Candidate or Doctor of Sciences diploma. It can be assumed that this is a conscious decision by the ministries to systematically transition to the educational standards of the European Union (EU). And this is despite the fact that the defense of the dissertation for the scientific degree of Doctor of Sciences is still being held as of February 01, 2025.

## DECLARATION OF COMPETING INTEREST

The authors declare that they do not have any financial interests or personal relationships that could have appeared to influence the work reported in this article. The authors report no conflict of interest.

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## ОГЛЯДОВА СТАТТЯ

UKRAINIAN LANGUAGE

# Наукові ступені кандидата наук та доктора філософії отримані в Україні лікарями-стоматологами зі спеціалізацією «хірургічна стоматологія» і «щелепно-лицева хірургія»: порівняння друкованих дипломів та їх цифрових аналогів у застосунку «Дія»: розповідний огляд

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## АНОТАЦІЯ

Мета даного розповідного огляду – проаналізувати процес переходу наукового ступеня кандидата наук до ступеня доктора філософії у лікарів-стоматологів, які захистили дисертації в сучасній Україні та

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Абревіатура «PhD» на правому верхньому зображенні означає, що ця стаття демонструє цифровий аналог диплому про вчений ступінь доктора філософії в застосунку «Дія».

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мають спеціалізацію «хірургічній стоматології» та/або «щелепно-лицевій хірургії». В статті висвітлено наступне: (1) нормативні документи щодо здобуття ступенів кандидата наук та доктора філософії, (2) заклади, які видавали та видають дипломи та додатки до дипломів кандидата наук та доктора філософії, (3) вісім дипломів кандидата наук та доктора філософії, виданих громадянам України та іноземцям з 2002 року, а також додатки до дипломів, (4) цифровий аналог диплому доктора філософії у смартфон-застосунку «Дія» (Держава і я), (5) можливості застосунку «Дія» для документів про освіту та (6) кількість і види балів, які нараховуються за захист дисертацій та отримання диплому доктора філософії. В огляді також пояснюється, чому в додатку «Дія» немає цифрових аналогів дипломів кандидата та доктора наук. Згідно нашого аналізу це перша публікація в якій висвітлюються порівняння дипломів кандидата наук та доктора філософії лікарів-стоматологів на різних етапах розвитку спеціальностей «хірургічна стоматологія» та «щелепно-лицева хірургія» і з вперше опублікованою візуалізацією цифрового аналога диплому доктора філософії.

### КЛЮЧОВІ СЛОВА

Науковий ступінь, кандидат наук, доктор філософії, диплом, додаток до диплома, цифровий аналог диплому, застосунок «Дія», хірургічна стоматологія, щелепно-лицева хірургія