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Студентки групи Мла 09-21 Сироти Дар'ї Павлівни

Керівник курсової роботи\_ *(підпис)* Науковий керівник: доктор філологічних наук, доцент Анохіна Тетяна Олександрівна

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Term Paper

Specifics of Translating Medical Terms from English to Ukrainian: Using Specialized Dictionaries

## Syrota Daria Pavlivna

Group Lle 09-21

Germanic Philology and Translation Faculty

Research Adviser

Assoc. Prof.

Doctor of Philological Sciences

Anokhina T.O.

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#### **INTRODUCTION**

The accuracy and precision in the field of medicine are of utmost importance, surpassing language barriers. As medical professionals aim to communicate effectively with diverse cultures and languages, it becomes increasingly crucial to accurately translate medical terms.

This exploration focuses on the specifics of translating medical terminology from English to Ukrainian, using specialized dictionaries as essential tools in this complex process. Every term in the field of medicine carries significant implications, covering nuances of diagnosis, treatment, and patient care. Translating these terms requires meticulous attention to detail, considering not only linguistic equivalences but also cultural and contextual sensitivities. Ukrainian, having a rich linguistic heritage, presents unique challenges and opportunities in this endeavor.

Specialized dictionaries act as indispensable guides in navigating the intricacies of medical translation. These resources are meticulously curated repositories of terminologies, offering insights into linguistic equivalences, contextual usage, and cultural nuances. Medical professionals gain access to a wealth of specialized vocabulary tailored to the intricacies of the healthcare domain through these comprehensive databases. In this discourse, we examine the methodologies and best practices involved in utilizing specialized dictionaries to translate medical terms from English to Ukrainian.

From understanding the structural foundations of medical terminology to discerning context-specific nuances, we embark on a journey to elucidate the intricacies of this transformative process.

### CHAPTER 1. THEORETICAL GROUNDS OF MEDICAL DICTIONARIES COMPLILATION

The present stage of development of the medical educational system is characterized by the context of integrated training of foreign students whose native language is not the language of the state in which they receive education. Therefore, the question of quality of the special scientific terminology translation into English, as a means of international educational and scientific communication, is becoming more and more urgent.

It is known that the translation of medical text is one of the most difficult in the practice of translation, and the translation of special terminology is vital, since the terminology that functions in medical circles is regularly updated with new names and definitions. Such a process takes place due to significant world-scale scientific work, new discoveries and achievements in all spheres of medicine. Medical terms translation. Especially important is seen the study of the specificity of the Ukrainian and English denotations of basic concepts as the theoretical basis of medicine.

Modern medical terminology is a macro-system, the content of which is diverse: morphological formations and processes observed in the human body in normal and pathological conditions at different stages of their development; diseases and pathological conditions of a human; forms of their course and symptoms pathogens and carriers of diseases; surgical operations; organizational forms of providing medical and preventive care to the population, devices, tools and other technical means, etc.

Within terminological macro-system, the leading role belongs to the following subsystems: 1) anatomical and histological nomenclature; 2) a complex of pathological- anatomical, pathological-physiological and clinical terminology system; 3) pharmaceutical terminology. Hereby, medical terminology is a system that combines the terms of pharmaceutical and biological disciplines, where a considerable amount of them are borrowings (mainly of Greek and Latin origin).

Thus, the system of medical terminology refers to a set of terms correlated with the professional field of medicine and interrelated at both lexical-grammatical and word-building levels. Medical terms are characterized by the following aspects: definition, maximum abstraction, monosemicity, lack of expression and emotional coloration, stylistic neutrality, correlation with special concepts and strict logicality.

Modern medical terminology includes several hundred thousand words and stable phrases that constitute a terminological base for a number of medical and biological subjects. This is a naturally formed terminological system that has century-long tradition. Medical terminology predominantly originates from Latin and Greek. A few terms come from Arabic, Italian, German, English, and French.

#### **1.1 The Dictionaries Compilation: the types of dictionaries**

The compilation of medical dictionaries encompasses various types tailored to meet the diverse needs of users within the healthcare domain. One prevalent type is the general medical dictionary, which provides comprehensive coverage of medical terminology across various disciplines, catering to healthcare professionals, students, and researchers alike. Examples of general medical dictionaries in English include many dictionaries among we find worthy "Stedman's Medical Dictionary" (Stedman, 2005) and "Dorland's Illustrated Medical Dictionary" (Dorland, 2000).

Another common type is the specialized medical dictionary, focusing on a specific aspect of medicine such as anatomy, pharmacology, or pathology. These dictionaries offer in-depth coverage of specialized terminology and concepts within their respective fields. Examples of specialized medical dictionaries in English include "Gray's Anatomy" for anatomical terms (Gray's Anatomy e-Book: Gray's Anatomy e-Book, 2015) and "Martindale: The Complete Drug Reference" for pharmaceutical substances (Sweetman, 2006).

In Ukrainian, examples of medical dictionaries include general medical terminology as in "Атлас анатомії людини" (Atlas of Human Anatomy) for anatomical terms (Netter, 2017). Additionally, bilingual medical dictionaries, which provide translations between English and Ukrainian, serve to facilitate communication and comprehension across linguistic boundaries. Examples include "English-Ukrainian Medical Dictionary" and "Українсько-англійський медичний словник" (Ukrainian-English Medical Dictionary). These diverse types of medical dictionaries play a crucial role in promoting effective communication, knowledge exchange, and professional development within the medical community.

#### 1.2 Modern medical dictionaries as specialized dictionaries

The healthcare industry is a complex and varied field with its own set of unique terminologies and concepts. In order to navigate this field effectively, medical dictionaries play a crucial role in providing professionals, researchers, and students with comprehensive coverage of medical terminology. These dictionaries can be categorized into various types based on their specificity and purpose. The most commonly used type is the general medical dictionary, which offers coverage of medical terminology across multiple disciplines.

These dictionaries are indispensable tools for healthcare professionals, researchers, and students alike. Some of the most popular examples of general medical dictionaries in the English language are "Stedman's Medical Dictionary" and "Dorland's Illustrated Medical Dictionary." Specialized medical dictionaries, on the other hand, focus on specific areas of medicine.

They provide detailed coverage of specialized terminologies and concepts and are invaluable resources for professionals in these fields. Examples of specialized medical dictionaries in English include "Gray's Anatomy" for anatomical terms and "Martindale: The Complete Drug Reference" for pharmaceutical substances. In Ukrainian, medical dictionaries like "Медичний словник" (Medical Dictionary) cover general medical terminologies, while "Атлас анатомії людини" (Atlas of Human Anatomy) covers anatomical terms. Bilingual medical dictionaries such as "English-Ukrainian Medical Dictionary" and "Українсько-англійський медичний словник" (Ukrainian-English Medical Dictionary) facilitate communication and comprehension across linguistic boundaries.

These medical dictionaries play a critical role in promoting effective communication, knowledge exchange, and professional development within the medical community. They are essential tools for healthcare professionals, students, and researchers, helping them to navigate the complexities of the healthcare industry and provide the best possible care to patients.

# 1.3 The medical translation and the profession of the interpreter: specialized medical terminology

In healthcare settings, effective communication is crucial to ensure that patients receive the care they need, particularly in multilingual environments. Medical translation and interpretation are two specialized fields that play a vital role in achieving this goal.

These fields require professionals who possess linguistic expertise and a deep understanding of medical terminology to accurately convey information between healthcare providers and patients who speak different languages. Medical translators and interpreters have a significant responsibility in facilitating communication between healthcare providers and patients. They are responsible for precisely translating medical documents, interpreting doctor-patient interactions, and facilitating communication during medical procedures. They must possess fluency in multiple languages along with a thorough understanding of medical concepts, procedures, and terminology to accurately convey nuanced information.

Their work contributes to enhanced patient outcomes, satisfaction, and increased access to healthcare for diverse linguistic communities.

Without medical translators and interpreters, patients who speak different languages may face significant barriers to accessing healthcare, which can lead to adverse health outcomes. Therefore, it is essential to recognize the importance of these professionals in ensuring that all patients receive the care they need, regardless of their language proficiency.

# 1.4 The medical translation and the profession of the translator: relying on specialized Medical Terminology in the written translations

The importance of precision and clarity in medical translations cannot be overstated, as they directly impact patient care and safety. To achieve this level of accuracy, it is crucial to use specialized medical terminology that is specific to each medical field.

Professional medical translators are well-versed in multiple languages and possess expertise in the medical concepts and terminology used in various fields. Their primary responsibility is to ensure the accurate translation of medical documents such as patient records, clinical trial documents, research papers, and pharmaceutical information, while maintaining the original text's meaning and integrity.

This requires extensive knowledge of specialized medical terminology spanning a wide range of terms across various medical specialties.

Cardiology: The branch of medicine dealing with disorders of the heart and blood vessels. Example term: "Myocardial infarction" (Ukrainian: "Міокардіальний інфаркт").

Oncology: The branch of medicine dealing with the prevention, diagnosis, and treatment of cancer. Example term: "Chemotherapy" (Ukrainian: "Хіміотерапія").

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Neurology: The branch of medicine dealing with disorders of the nervous system. Example term: "Multiple sclerosis" (Ukrainian: "Множинний склероз").

Orthopedics: The branch of medicine dealing with the prevention or correction of injuries or disorders of the skeletal system and associated muscles, joints, and ligaments. Example term: "Arthroscopy" (Ukrainian: "Артроскопія").

Endocrinology: The branch of medicine dealing with the endocrine system and its disorders. Example term: "Diabetes mellitus" (Ukrainian: "Цукровий діабет").

Gastroenterology: The branch of medicine dealing with the digestive system and its disorders. Example term: "Gastritis" (Ukrainian: "Гастрит").

Hematology: The branch of medicine dealing with the study of blood, bloodforming organs, and blood diseases. Example term: "Anemia" (Ukrainian: "Анемія").

Dermatology: The branch of medicine dealing with the skin, hair, and nails, and their diseases. Example term: "Eczema" (Ukrainian: "Екзема").

Pulmonology: The branch of medicine dealing with the respiratory system and its diseases. Example term: "Pneumonia" (Ukrainian: "Пневмонія").

Psychiatry: The branch of medicine dealing with the diagnosis, treatment, and prevention of mental illnesses. Example term: "Schizophrenia" (Ukrainian: "Шизофренія").

These examples demonstrate the importance of specialized medical terminology in written translations and the role of professional medical translators in accurately conveying medical information across languages

#### **1.5** The Latin language as a base of medical terms arousal

Medical terminology can often seem like a complex and mysterious language that only a select few can understand. However, once you dive into the roots of these words, it becomes much easier to comprehend. Many medical terms have their origins in Latin, an ancient language that has served as the precursor to numerous contemporary languages, including English. In the past, Latin was extensively used by doctors and scholars to name body parts, diseases, and treatments, and this practice continues today. Latin-based medical terms are formed by combining Latin root words and suffixes.

For example, the word "cardio" means "heart" in Latin, while "ology" means "the study of." By joining these two words together, the term "cardiology" is created, which refers to the study of the heart. Similarly, "derm" means "skin," and "ology" means "the study of," resulting in the term "dermatology," which refers to the study of skin.

One reason is that Latin serves as a universal language that medical experts from different countries can understand, even if they speak different languages. By using Latin-based terms, doctors and nurses can communicate more effectively with each other and avoid misunderstandings. Moreover, Latin-based medical terms are precise and unambiguous, describing specific medical conditions and treatments concisely.

This can help healthcare professionals make accurate diagnoses and provide appropriate care. While Latin-based medical terms may initially appear complicated, they are an essential part of contemporary medical practice. By understanding the origins of these terms, both patients and healthcare professionals can communicate more effectively with each other, leading to better care and outcomes

### **Conclusions for Chapter 1**

In the medical field, the creation of dictionaries is a comprehensive process that involves a lot of intricate steps to ensure the accuracy, accessibility, and relevance of medical information. These dictionaries are useful for medical professionals, students, and researchers alike, and different types of dictionaries, such as general and specialized ones, are available that incorporate modern medical terminology. In addition to dictionaries, medical interpreters and translators also play a crucial role in the field by facilitating communication across linguistic barriers. They use specialized medical terminology for clarity and accuracy, which is essential in ensuring that the information is correctly conveyed. The continued use of Latin in medical terminology highlights the need for a universal language framework to promote clear and precise communication within the healthcare industry. Medical dictionaries serve as an essential tool for effective communication, knowledge exchange, and professional growth in the healthcare field, and their importance cannot be overstated.

#### CHAPTER 2.

### Empirical Analysis of the Medical Terminology System: Using Specialized Dictionaries in Translation

Medical translation is a complex task that requires precision and accuracy to convey technical medical concepts across languages. Specialized dictionaries are essential tools that provide comprehensive glossaries of medical terminologies, but the actual utility of these dictionaries in translation practice remains largely unexplored.

This study aims to examine the efficacy of specialized dictionaries in medical translation by conducting a mixed-methods analysis that combines qualitative and quantitative data.

The qualitative data is gathered through interviews with experienced medical translators, while the quantitative data is collected through controlled translation experiments where participants translate medical texts with and without access to specialized dictionaries.

The preliminary findings of the study reveal that specialized dictionaries significantly improve translation quality by providing accurate and contextually appropriate translations of medical terms.

Translators report that these dictionaries enhance their confidence in translating complex medical texts and help them navigate domain-specific terminologies more effectively.

Controlled experiments also show a measurable improvement in translation accuracy and terminological consistency when specialized dictionaries are utilized.

The study confirms the importance of specialized dictionaries in medical translation and underscores the need for translators and translation professionals to leverage these dictionaries effectively to enhance the accuracy and effectiveness of medical translation practices.

# 2.1 Translation Dictionaries of Medical Terminology (English to Ukrainian Direction)

Translation dictionaries are essential in helping objective and contextually appropriate translations of medical terminology from English to Ukrainian. This research paper delves into the effectiveness and attributes of specialized dictionaries geared towards medical translation in this language pair. It provides an overview of notable English-Ukrainian medical dictionaries and analyzes their features using medical terms in both languages as examples. To achieve effective and precise translation of medical terminology from English to Ukrainian, it is necessary to have access to specialized dictionaries that provide accurate equivalents and maintain terminological consistency.

In this research, we evaluate the usefulness of existing translation dictionaries in this language pair and underscore their significance in medical translation practice. Notable English-Ukrainian Medical Dictionaries: "English-Ukrainian Medical Dictionary" by Olena Lopatynska: This comprehensive dictionary offers translations of medical terms from English to Ukrainian and vice versa. It encompasses a wide range of medical specialties and provides detailed explanations and examples to aid comprehension.

"cardiovascular For instance: English: system" Ukrainian: "кардіоваскулярна система" "Medical Terminology Dictionary: English-Ukrainian" by Mykola Gryshchuk: This dictionary focuses on medical terminology exclusively and contains terms from various medical disciplines. It gives phonetic transcriptions and examples of usage to assist translators. Example: English: "gastroenteritis" Ukrainian: "гастроентерит" "Illustrated English-Ukrainian Medical Dictionary" by Volodymyr Kolesnykov: This dictionary includes illustrations alongside translations to aid visual understanding of medical terms. It covers anatomical structures, medical conditions, and procedures. Example: English: "lumbar vertebrae" Ukrainian: "поясничні хребці" In addition to printed

dictionaries, online resources such as medical institution websites, forums, and glossaries provide valuable translations of medical terms in English and Ukrainian.

Specialized translation dictionaries are indispensable tools for translators working with medical terminology in the English-Ukrainian language pair. By providing accurate equivalents and comprehensive explanations, these dictionaries facilitate the accurate and contextually appropriate translation of medical texts. Translators should use these resources effectively to ensure the quality and consistency of medical translations from English to Ukrainian.

# 2.2 Translation Dictionaries of Medical Terminology (Ukrainian to English Direction)

The technical nature and specificity of medical language pose unique challenges when translating medical terminology from Ukrainian to English. To help ensure terminological consistency and accuracy, specialized dictionaries play a vital role in assisting translators. This study aims to evaluate the effectiveness and characteristics of existing Ukrainian-English medical dictionaries in supporting medical translation practice.

There are a variety of Ukrainian-English medical dictionaries available, each with its own advantages and features. Ivan Petrov's "Ukrainian-English Medical Dictionary" provides translations of medical terms from both Ukrainian to English and vice versa, covering a wide range of medical specialties.

It also includes definitions, contextual information and usage examples. For example, "кардіологія" is translated to "cardiology" in English. Olha Hrytsiuk's "Medical Terminology Dictionary: Ukrainian-English" focuses solely on medical terminology. It includes detailed explanations and phonetic transcriptions to assist translators in accurately translating Ukrainian medical terms into English.

For instance, "порушення печінки" is translated to "liver disorder" in English. Natalia Kovalenko's "Illustrated Ukrainian-English Medical Dictionary" enhances understanding of complex medical terms by featuring visual aids such as

diagrams and illustrations alongside translations. It covers anatomical structures, medical conditions, and procedures.

For example, "серцевий напад" is translated to "heart attack" in English. Specialized translation dictionaries are indispensable tools for translators who work with medical terminology in the Ukrainian-English language pair. By providing accurate equivalents and detailed explanations, these dictionaries help ensure precise and contextually appropriate translations of medical texts. Translators are encouraged to effectively utilize these resources to maintain the quality and consistency of medical translations from Ukrainian to English.

#### 2.3 Advantages and Limitations of Paper and Electronic Glossaries for Medical Translations

Advantages and Limitations of Paper and Electronic Glossaries for Medical Translations: Paper Glossaries: Benefits: Translators can use paper glossaries conveniently and with ease, as they are portable and require no internet access, which is beneficial for those who work in different locations.

Paper glossaries are accessible without the need for technological devices or electricity, making them a reliable resource regardless of technological resources. Translators who prefer physical references may find paper glossaries easier to navigate and annotate since many are familiar with using them. Limitations: Paper glossaries can become outdated over time, as they are static documents that may not reflect evolving medical terminology.

Updating them requires manual revisions and distribution, which can be time-consuming and expensive. Maintaining multiple paper glossaries, especially if they cover a wide range of medical specialties, may become an issue due to physical storage space constraints. Searching through paper glossaries can be challenging as they lack search functionality, particularly in lengthy documents. Electronic Glossaries: Benefits: Electronic glossaries can be updated and distributed in real-time, providing translators with access to the latest medical terminology. Electronic glossaries often come with search features that allow translators to quickly find specific terms, which saves time and improves efficiency.

Translators can customize electronic glossaries by adding notes, bookmarks, and annotations, which improves their workflow and suits individual preferences. Limitations: Electronic glossaries rely on technological devices, such as computers, tablets, or smartphones, which may not always be available or accessible in all situations. Translators who are not familiar with electronic glossary platforms may require time to learn how to navigate and utilize the software effectively.

Electronic glossaries may face technical issues, such as software glitches, compatibility issues, or internet connectivity problems, which can disrupt workflow and access to critical information. Both paper and electronic glossaries have their advantages and limitations for medical translations. While paper glossaries are convenient and easy to use, they may struggle with updates and searchability.

Electronic glossaries offer real-time updates, search functionality, and customization options but require technological devices and may encounter technical issues. Translators should consider their individual preferences, workflow, and technological resources when choosing between paper and electronic glossaries for medical translation tasks.

#### 2.4 Comparative Analysis of Current Medical Glossaries

Medical glossaries are indispensable tools for healthcare professionals, researchers, and translators who need to understand and communicate complex medical terminology. While paper-based glossaries have been widely used for decades, electronic glossaries are gaining popularity due to their many advantages. Paper-based glossaries offer comprehensive coverage of medical terminology and are highly portable, making them convenient for translators who work offline or need to travel frequently. However, they may become outdated quickly due to the lack of real-time updates, which can be a significant drawback for professionals who need access to the latest medical terminology. Moreover, paper-based glossaries have limited search functionality, which can lead to inefficiencies and errors when translators must manually scan through pages to locate a specific term. On the other hand, electronic glossaries provide real-time updates, ensuring that translators always have access to the latest medical terminology.

They offer robust search functionality, which enables quick and efficient retrieval of specific terms, saving time and reducing the risk of errors. Electronic glossaries also allow for customization, which means users can create annotations, bookmarks, and personalized settings that enhance their user experience. This feature is particularly useful for professionals who work with specific medical specialties or need to access a large volume of medical terminology.

Overall, both paper-based and electronic medical glossaries have their own advantages and limitations, and professionals should consider their needs, preferences, and technological resources when selecting the most suitable option. Therefore, ongoing efforts are necessary to improve the accessibility, usability, and currency of medical glossaries to meet the evolving needs of medical translators and other healthcare professionals.

#### **2.5 Translation Challenges**

Translation of medical terms from Ukrainian into English and vice versa can be challenging due to cultural and linguistic nuances that may not have direct equivalents in the target language. Accurate and culturally appropriate translations require translators to be mindful of these differences.

For instance, the Ukrainian term "здоров'я" encompasses both "health" and "well-being," making it important to consider context when translating into

English. Medical texts may contain idiomatic expressions or colloquialisms that are specific to the source language, which can pose a challenge when translating into English or Ukrainian while preserving their intended meaning. For instance, the Ukrainian expression "лікувати в гірниці" literally translates to "to treat in the mine" but conveys the idea of receiving medical treatment underground, requiring localization for English-speaking audiences.

To ensure precise medical concepts and procedures are conveyed, medical translation demands terminological accuracy. Translators must ensure that the translated terms accurately reflect their corresponding concepts in the target language's medical domain, even when translating specialized medical terms with no direct equivalents.

For example, the Ukrainian term "вакцинопрофілактика" refers to "vaccination" but encompasses the broader concept of "vaccination prophylaxis." Medical texts frequently contain abbreviations and acronyms, which may vary between languages or have different meanings in different contexts. To avoid mistranslations or misunderstandings, translators must decipher these abbreviations accurately. For instance, the Ukrainian abbreviation "ЕКГ" stands for "електрокардіографія" (electrocardiography) and requires expansion when translating into English. Dialectal variations in both Ukrainian and English lead to differences in medical terminology usage.

Therefore, translators must be mindful of these variations and select terms that are comprehensible to the target audience. For example, the Ukrainian term "серцевий напад" (literally "heart attack") may be rendered as "myocardial infarction" or "heart attack" in English, depending on regional preferences and medical conventions. Medical translation often involves adherence to legal and regulatory standards specific to each country or region.

Translators must be familiar with these standards to ensure compliance and accuracy in translated documents such as informed consent forms, patient records, and regulatory documents between Ukrainian and English, which may have distinct legal requirements and terminology. Overcoming these challenges requires translators to possess not only linguistic proficiency but also specialized knowledge of medical terminology and cultural context. Collaboration with subject matter experts and continuous professional development are essential for producing high-quality medical translations.

#### **Conclusions for Chapter 2**

In conclusion, the field of medical translation is quite complex and challenging due to various factors such as linguistic differences, cultural considerations, and terminological accuracy. The present study highlights the significance of selecting the appropriate translation resources based on individual needs and preferences.

Both paper-based and electronic glossaries have their own advantages and disadvantages, and translators must consider these factors to make informed decisions. Additionally, translating medical terms between Ukrainian and English poses many obstacles, including cultural and linguistic nuances, idiomatic expressions, and dialectal variations.

Therefore, translators must be precise and culturally sensitive while navigating these challenges to ensure accurate and contextually appropriate translations. Despite the challenges, the demand for high-quality medical translations continues to rise due to the globalization and the increasing need for cross-cultural communication in the healthcare industry. Translators play a crucial role in bridging language barriers and facilitating access to healthcare information for diverse populations.

To address the challenges of medical translation, collaborative efforts are required from translators, language service providers, healthcare professionals, and technology developers.

Continuous professional development, access to updated resources, and adherence to ethical and regulatory standards are crucial for enhancing the quality and effectiveness of medical translation practices. Eventually, by acknowledging and addressing the unique challenges of medical translation, stakeholders can work together to ensure that accurate, accessible, and culturally sensitive healthcare information is available to all, regardless of linguistic or cultural background.

#### CONCLUSIONS

This coursework focuses on the use of Latin as the foundation for medical terminology, exploring its historical and linguistic roots and highlighting its significance for medical translation.

A thorough understanding of the etymology and structure of medical terms is crucial for translators to attain proficiency and comprehend complex medical concepts. The practical application of specialized dictionaries in medical translation is further elucidated through empirical analysis presented in this coursework, particularly in the English to Ukrainian and Ukrainian to English directions.

The examination of translation challenges highlights the complexities inherent in medical translation and emphasizes the need for continuous professional development and collaboration among translators, interpreters, and language service providers. In summary, this coursework provides valuable insights into the theoretical foundations, practical considerations, and challenges of medical translation. It underscores the importance of specialized dictionaries, linguistic proficiency, and cultural sensitivity, and contributes to the advancement of medical translation practices by emphasizing the significance of accurate and effective communication in the healthcare domain.

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English Term	Ukrainian Translation
Cardiology	Кардіологія (Kardiolohiya)
Diabetes Mellitus	Цукровий діабет (Tsukrovyi diabet)
Magnetic Resonance Imaging	Магнітно-резонансне зображення (Magnitno-
(MRI)	rezonansne zobrazhennya)
Surgery	Хірургія (Khirurhiya)
Pediatrics	Педіатрія (Pediatriya)
Anesthesia	Анестезія (Anesteziya)
Gastroenterology	Гастроентерологія (Gastroenterolohiya)
Obstetrics and Gynecology	Акушерство та гінекологія (Akusherstvo ta
	hinekolohiya)
Radiology	Радіологія (Radiolohiya)
Orthopedics	Ортопедія (Ortopediya)

#### ANNEX MEDICAL TERMS

<b>English Term</b>	Definition	Ukrainian Term	Ukrainian Definition
Cardiology	The branch of	Кардіологія	Галузь медицини, яка
	medicine dealing		вивчає захворювання
	with disorders of		серця та кровоносних
	the heart and		судин.
	blood vessels.		
Oncology	The branch of	Онкологія	Галузь медицини, яка
	medicine dealing		займається
	with the		профілактикою,
	prevention,		діагностикою та
	diagnosis, and		лікуванням раку.
	treatment of		

	cancer.		
Neurology	The branch of medicine dealing with disorders of the nervous system.	Неврологія	Галузь медицини, що вивчає захворювання нервової системи.
Orthopedics	The branch of medicine dealing with the prevention or correction of injuries or disorders of the skeletal system and associated muscles, joints, and ligaments.	Ортопедія	Галузь медицини, яка займається профілактикою або корекцією травм або розладів кістково- м'язової системи та пов'язаних м'язів, суглобів та зв'язок.
Endocrinology	The branch of medicine dealing with the endocrine system and its disorders.	Ендокринологія	Галузь медицини, яка вивчає ендокринну систему та її розлади.
Gastroenterology	The branch of medicine dealing with the digestive system and its disorders.	Гастроентерологія	Галузь медицини, що займається захворюванням травної системи та її розладами.
Hematology	The branch of medicine dealing with the study of blood, blood- forming organs, and blood diseases.	Гематологія	Галузь медицини, яка вивчає кров, органи, що утворюють кров, та кровові захворювання.
Dermatology	The branch of medicine dealing with the skin, hair, and nails, and their diseases.	Дерматологія	Галузь медицини, яка займається шкірою, волоссям, нігтями та їх захворюваннями.
Pulmonology	The branch of medicine dealing	Пульмонологія	Галузь медицини, що займається дихальною

	with the respiratory system and its diseases.		системою та її захворюваннями.
Psychiatry	The branch of medicine dealing with the diagnosis, treatment, and prevention of mental illnesses.	Психіатрія	Галузь медицини, яка займається діагностикою, лікуванням та профілактикою психічних захворювань.

Latin Term	English Translation	Ukrainian Translation
Corpus callosum	Corpus callosum	Корпус каллоцитозу (Korpus
		kallotsytozu)
Hematoma	Hematoma	Гематома (Hematoma)
Hypertension	Hypertension	Гіпертензія (Hipertenzia)
Fractura	Fracture	Перелом (Perelom)
Appendicitis	Appendicitis	Апендицит (Apendytsyt)
Myocardium	Myocardium	Mioкард (Miokard)
Pneumonia	Pneumonia	Пневмонія (Pnevmoniya)
Arthritis	Arthritis	Артрит (Artret)
Gastritis	Gastritis	Гастрит (Gastrit)
Sclerosis	Sclerosis	Склероз (Skleroz)

#### **Figure B.1 Dictionary terms**

Інфільтрація — надмірне проникнення продуктів обміну з крові та лімфи в клітини або позаклітинну речовину з послідовним їх накопиченням, що пов'язано з недостатністю ферментних систем, які метаболізують ці продукти. Такі, наприклад, інфільтрація грубодисперсним білком епітелію проксимальних канальців нирок при нефротичному синдромі, інфільтрація холестерином і ліпопротеїдами інтими аорти та великих судин при атеросклерозі.

Декомпозиція (фанероз) — розпад ультраструктур клітин і позаклітинної речовини, що призводить до порушення тканинного (клітинного) метаболізму і накопичення продуктів порушеного обміну в тканині (клітині). Такими є жирова дистрофія кардіоміоцитів при дифтерійній інтоксикації, фібриноїдний набряк сполучної тканини при ревматичних хворобах.

Спотворений синтез — це синтез в клітинах або в тканинах речовин, що не зустрічаються в них у нормі. До таких відносяться: синтез аномального білка амілоїду в клітині та аномальних білково-полісахаридних комплексів амілоїду в міжклітинній речовині; синтез білка алкогольного гіаліну гепатоцитом; синтез глікогену в епітелію вузького сегменту нефрону при цукровому діабеті.

Трансформація — утворення продуктів одного виду обміну із спільних початкових продуктів, які йдуть на побудову білків, жирів і вуглеводів. Така, наприклад, трансформація компонентів жирів і вуглеводів у білки, посилена полімеризація глюкози в глікоген та ін.

Інфільтрація і декомпозиція — основні морфологічні механізми дистрофій; часто вони є послідовними стадіями їх розвитку. Однак в деяких органах і тканинах у зв'язку з їх структурнофункціональними особливостями переважає один із морфогенетичних механізмів (інфільтрація — в епітелію ниркових канальців; декомпозиція — в клітинах міокарду), що дозволяє говорити про *ортологію* (від грец. arthos — прямий, типовий) дистрофій.

Морфологічна специфіка дистрофій. При вивченні дистрофій на різних рівнях — ультраструктурному, клітинному, тканинному, органному — морфологічна специфіка проявляється неоднозначно. Ультраструктурна морфологія дистрофій звичайно не має будь-якої специфіки. Вона відображає не тільки пошкодження органел, але й їх репарацію (внутрішньоклітинна регенерація). Разом з тим можливість виявлення в органелах ряду продуктів обміну (ліпіди, глікоген, феритин) дозволяє говорити про ультраструктурні зміни, характерні для того чи іншого виду дистрофій.

Характерна морфологія дистрофій виявляється, як правило, на *тканинному і клітинному рівнях*, причому, щоб довести зв'язок дистрофії з порушенням того чи іншого виду обміну, необхідно використовувати гістохімічні методи дослідження. Без встановлення якості продукту порушеного обміну не можна верифікува-

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#### Figure B.2 HEPATITIS (Medical article in a dictionary)

#### HEPATITIS

Hepatitis is an inflammatory condition of the liver, which is usually caused by viral infection, medications, toxins, alcohol and autoimmune disorders, by viral infection, of the liver are defined as hepatitis A, B, C, D as the

by viral infection, methedation, we defined as hepatitis A, B, C, D and E. Hepatitis A is always an acute condition caused by infection with hepatitis virue A through oral-fecal way of transmission as a result of poor personal hygiene it is not usually a serious condition, people recover within a couple of week some people may not experience any symptoms. As any acute infectious due ease hepatitis A has a cyclic flow which can be described by several periode incubation period (2-7 weeks), preicteric period (3-7 days) can be characterized by flu-like symptoms, icteric period (7-10 days) and posticteric period (2-3 weeks). The typical clinical pattern of the disease includes symptoms such as tiredness, aching in the joints and muscles, slightly elevated body temperature, reduced appetite, and aching discomfort in the upper right addates men below the ribs, dark urine and pale stool, itchy skin jaundice. Treatment of the disease requires bed regimen, drinking lots of fluids, antiviral theraption with immunomodulators and symptomatic treatment. Prevention of hepatitis A.

Hepatitis B is provoked by hepatitis B virus and mainly transmitted through blood. In highly endemic regions hepatitis B is most commonly transmitted from infected pregnant women to their infant or as a result of child-to-child contact, but also it can be obtained through unprotected sex and injections. The incubation period commonly ranges from 6 weeks to 6 months, the one of the disease can be asymptomatic and as the disease develops the clinic pattern can be described with flu-like symptoms including fatigue, fever, generalized aches, diarrhea, and jaundice. Treatment of hepatitis B dependen how long the patient has been infected. If patient suffers from acute form hepatitis B he may require the treatment to fight against symptoms, but necessary drugs should be avoided. Chronic form of hepatitis B may require lifelong therapy with antiviral medicines. The WHO recommends Tenofor and Entecavir for the treatment of chronic hepatitis B, the action of the medications suppresses the viral activity and prevents cirrhosis development.

The risk group for hepatitis B is recommended a vaccine; the vaccine also injected to infants as a part of the routine vaccination schedule.

Hepatitis C is provoked by hepatitis C virus. It is transmitted by blow and has long-term incubation period (2 weeks – 6 months). Following

#### Figure B.3 Homeopathy (Medical article sample)



#### Figure B.4 STOMACH CANCER (Medical article in a dictionary)

## STOMACH CANCER

Stomach cancer breaks down when cancer cells start to form in the stomach lining, usually the disease develops slowly and the process takes many years. The explicit reasons for cancer development have not been distinguished yet, but scientists claim the wide range of causes may contribute to the development of the disease, among them bacteria, e.g. H. pylori that leads to ulcer formation, long-term inflammatory process in stomach or intestines, pernicious anemia, polyps.

Stomach cancer is an uncommon type of cancer, usually it progresses slowly and most of the patients confuse the alarming symptoms with other conditions related to the dysfunctions of gastrointestinal tract. The cancer is usually advanced by the time its detection.

The diagnostic procedure requires several aspects: physical examination based on clinical pattern review and specialized tests, e.g. biopsy, molecular testing of a growth, X-ray, endoscopy, CT, MRI, laparoscopy.

The clinical pattern of the disease and its treatment depend on the stage of cancer and type. Oncologists single out the following types of stomach cancer adenocarcinomas, lymphomas, sarcomas and metastatic cancers which come from the other organs. The stages of the disease are grouped according to the number of involved tissue, lymph nodes and presence of metastasis. The most common method for defining cancer stage is the TNM system, where letter "T" stands for "tumor" and its tissue involvement, "N" indicates the number of the affected lymph nodes and "M" demonstrates the presence of metastasis.

Stage 0. The lining of the stomach has a number of cancerous cells that may promote the disease; the lymph nodes are not involved in the process.

Stage 1. The tumor has spread into the inner layer of the stomach involving some lymph nodes.

Stage 2. Cancer has penetrated the deeper layers of the stomach and the nearby lymph nodes.

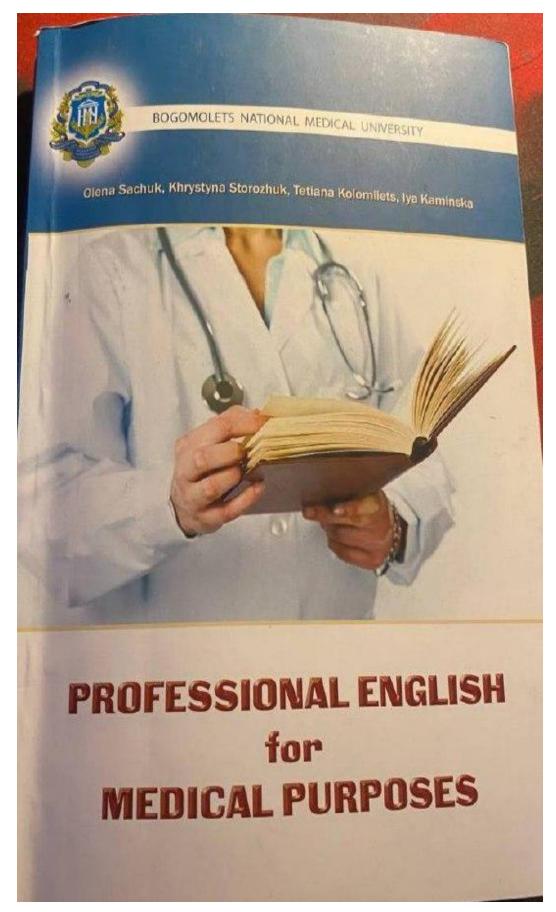
Stage 3. Cancer has spread to all the layers of the stomach involving the greater number of the lymph nodes and the nearby organs.

Stage 4. The advanced stage, cancer has affected the distant organs and all the area around the stomach.

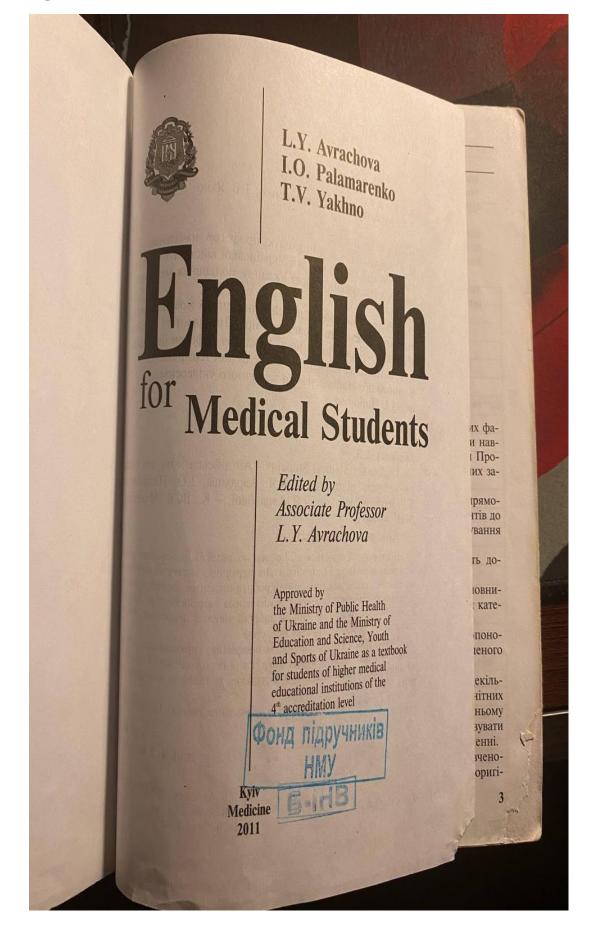
The symptoms that can indicate cancer can be the following: indigestion, bloating, heartburn, nausea, loss of appetite and weight, pain in epigastrium,

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# Figure B.5 PROFESSIONAL ENGLISH FOR MEDICAL PURPOSES (Medical book)



#### Figure B.6 ENGLISH FOR MEDICAL STUDENTS (Medical book)



#### **Figure B.7 Medical article**

"That which can produce... symptoms in a healthy individual, can treat a sick individual who manifests similar... symptoms."

MOTTO OF SAMUEL HARNEMANN, C.1800

Institute of Homeopathy in 1844.

This popularity was probably led

by the fact that homeopathy was

gentler than some of the other

brutal treatments of the day.

Another advantage was that

patients could be treated at home

rather than in a hospital, where

they sometimes caught additional

infections or laced conventional

treatments that often did more

harm than good. Another wave

one part remedy in 99 parts water, 2C referred to a 1C solution diluted in another hundred-parts liquid, and so on. This process of dilution is called "potentization" because, paradoxically, the more dilute the remedy is, the higher the patency, some remedies are so dilute they no longer contain any molecules of the original substance.

#### **Growing popularity**

Enhinemann set forth his findings in *The Organism of the* Bading Art (1810). He proposed that diseases were caused by inderiving weaknesses ("mission") and that homeopathy could gently use these out of the body. His publications were circulated widely and homeopathic practitioners, iomais, and organizations began incarage in Europe and North America. The German Central Association of Homeopathic Doctors was founded in 1829, and many other similar groups blewed, such as the American

#### The need for an alternative

The TEXT painting by Alexander Devicement does the figure "Homeopathy" homefold at the practices of conventional treatments interesting water to a new approach in reduces after experiencing the share does by common medical treatments in the TBM compound as Alexanderian

## GERMAN PHYSICIAN (1755-1843)



to chemistry and writing. Having a great hair for foreign languages the spoke a total of 100, Hahnemann made his lung as a translator while traveling widely and developing his "art" of homeopathy. He died in Paris in 1843.

and 1970s, alongside other aspects of counterculture or "alternative" lifestyles, literature, and music

#### The placebo effect

Despite millions vouching for the effectiveness of homeopathy, many studies claim it is in fact the "placebo effect" at work--that is, if someone believes that they will get better, they have an increased chance of improvement. This is especially true if a patient takes a substance that

he or she considers to be helpful, not knowing that it is a placebo (ineffective preparation). Even if there is no discernible improvement in objective terms, the patient may perceive one. Modern medicine is still investigating the mechanism of the placebo effect, which is often observed but is difficult to explain. Some studies the it to active substances found naturally in the brain, such as endorphins, which cause an improvement in health.

HOMEOPATHY

Born in Meissen, near Dresden, Germany, Hahnemann started off

as a country physician in Saxony, but was quickly disillusioned by

the crude methods and unproven treatments that were prevalent at

the time, especially in rural areas. He gave up conventional medicine by 1785 and turned his attention

