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Translating Medical Terms from English into Arabic: A Contrastive Study

The Case Study of COVID-19

A Dissertation Submitted to the Department of Letters and English Language in Partial Fulfillment of the Requirements for the Degree of Master in Language and Culture

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DEDICATION

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Abstract

This study explores the challenges and strategies involved in translating english medical terminology into Arabic. It investigates the linguistic, morphological, and cultural complexities that translators face due to structural differences between English and Arabic, particularly with terms derived from Latin and Greek. The research examines translation methods such as borrowing, calque, literal, adaptive, and communicative techniques, highlighting their benefits and limitations. Additionally, it evaluates the role of key institutions like ALECSO and the Arab Medical Union in standardizing Arabic medical vocabulary and promoting terminological consistency. Through a carefully designed bilingual corpus of approximately 500 terms, including COVID-19-related vocabulary, the study analyzes practical translation scenarios, assessing accuracy, clarity, and cultural relevance. Dictionaries such as the Unified Medical Dictionary, Arabterm, and Almaany are also reviewed for their reliability and terminological coherence. Findings reveal that inconsistent terminology across sources, regional variations, and lack of unified standards significantly affect translation quality. The study concludes that translators must adopt a context-sensitive, audience-aware approach to ensure clarity and precision in medical communication. It emphasizes the need for improved institutional collaboration and updated terminology databases to enhance the quality and reliability of medical translations in Arabic-speaking healthcare environments.

Keywords: Translation, English-Arabic Translation, Unified Medical Dictionary, COVID-19, Arabic Medical Translation.

List of Abbreviations

UMD: Unified Medical Dictionary.

ALECSO: Arab League Educational, Cultural and Scientific Organization.

AMU: Arab Medical Union.

WHO: World Health Organization.

COVID-19: Coronavirus Disease 2019.

EFL: English as a Foreign Language.

LSP: Language for Specific Purposes.

AI: Artificial Intelligence

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General Introduction

The translation of medical terminology from English into Arabic is faced with unique linguistic, cultural, and practical challenges. As international medical research and communication are predominantly conducted in English, the translation of specialized terminology into Arabic has become essential for effective public health communication, clinical practice, academic research, and patient education in Arab societies. However, the differences in morphological structure, lexical origin, and syntactic structure between Arabic and English pose significant challenges to equivalence. While english medical terms are Latin- and Greek-based, Arabic has a root-pattern system lacking direct lexical counterparts. This makes it an arduous task to achieve accurate, concise, and culturally appropriate translations.

This thesis addresses the field of english-arabic medical term translation from theoretical background, institutional efforts, and practical methodology perspectives. It draws on historical and modern resources to contextualize the evolution of medical terms in Arabic, from the Abbasid era to the COVID-19 pandemic. It also accounts for the efforts of Arab institutions such as ALECSO and the Arab Medical Union to develop unified medical dictionaries and terminology standards.

Moreover, the study contrasts direct translation strategies such as borrowing, calque, literal translation, and adaptive or communicative strategies and their effectiveness in different communicative contexts. A COVID-19-specific terminology is used in a bilingual corpus of about 500 words to measure actual translation strategies and challenges.

This is an academical work that aims to uncover the ongoing inconsistencies between existing translation activity and real use. By critically analyzing translation output, this

research contributes to the improvement of the clarity, consistency, and cultural appropriateness of arabic medical terminology in healthcare communication.

Statement of the Problem

Despite large-scale institutional efforts to standardize arabic medical terminology, inconsistencies in translation continue to affect healthcare communication throughout the Arab region. Medical terms have more than one Arabic equivalent in dictionaries, official reports, and national health campaigns. This variation leads to confusion among both patients and medical personnel, reduces comprehension, and undermines the effectiveness of health messages. In addition, most translators fail to select context-specific approaches in translating complex or recently introduced terms, particularly during crises like the COVID-19 pandemic. The lack of a consistent, widely applied system for the translation of medical terms into arabic hinders linguistic precision, delays public understanding, and compromises interregional coordination. The research answers these persistent inconsistencies and seeks to understand the reasons, translation processes, and institutional deficiencies impacting the translation of medical terms into Arabic.

Objectives of the Study

This study aims at examining the translation of medical terminology from English into Arabic both theoretically and practically. Its main objectives are:

- To unveil the linguistic and morphological problems of medical terminology in translation.
- To assess the effectiveness of the different translation strategies in real medical contexts.

- To evaluate the roles and contributions of arabic language institutions such as ALECSO and the Arab Medical Union in the standardization of medical terminology.
- To compare clinical, academic, and public health translation practices.
- To provide recommendations on how to develop greater consistency and clarity in arabic medical terminology.

Through these objectives, the study aims to promote improved translation practices and greater comprehension of medical information within arabic-speaking communities.

Research Questions

- What are the challenges faced in translating english medical terminology into Arabic?
- How effective are the different translation strategies in ensuring terminological clarity and consistency?
- What role do Arab language institutions play in the standardization of arabic medical terminology?
- How do translation inconsistencies impact healthcare communication in Arabic-speaking communities, especially during health emergencies like the COVID-19 pandemic?

Research Hypotheses

- The use of direct translation strategies such as borrowing, calque, and literal translation leads to terminological inconsistency and reduced clarity in arabic medical translations.

- Adaptive and communicative translation strategies enhance the cultural appropriateness and comprehensibility of medical terminology for non-specialist Arabic audiences.
- The lack of coordination among Arab institutional bodies significantly contributes to the variability of arabic medical terminology.
- Corpus-based analysis of COVID-19-related terminology reveals a high level of inconsistency in Arabic equivalents, indicating systemic deficiencies in the process of unifying medical terms.

Research Methods

This research adopts a qualitative and corpus-driven methodology. A bilingual corpus of approximately 500 medical terms—general medical terms and COVID-19-specific terminology—was compiled from reliable sources such as the Unified Medical Dictionary, WHO translations, and Arab institutional glossaries. The translation strategies were collected and categorized based on their typology. Each term was then analyzed with regard to accuracy, clarity, consistency, and cultural appropriateness. Comparative dictionary analysis was also conducted to contrast terminological consistency among UMD, Arabterm, and Almaany. Content analysis constitutes the foundation of the study to reveal patterns, spot institutional lacunae, and ascertain real-world translation performance.

Structure of the Thesis

The thesis revolves around three general chapters. Chapter one presents the theoretical framework of the translation of medical terminology. It introduces fundamental concepts, historical development, lexical and morphological contrast between English and Arabic, and major translation strategies. It also highlights the contribution of the Arab institutions to the standardization of medical terms. Chapter two deals with practical applications. It outlines the

research design, corpus selection, analytical framework, and evaluates dictionary use and strategy efficacy in real translation contexts. Special attention is given to terminological inconsistencies and contextual variation. Chapter three is a case study of COVID-19 terminology. It discusses specific terms, compares translation outcomes between domains, and explains sociopolitical processes influencing translation choices during a global health crisis. The chapter concludes with practical recommendations for future crises. The chapters collectively offer a full view of the english-arabic medical term translation, combining linguistic analysis with institutional critique and practical recommendations.

CHAPTER ONE: Foundations of Medical Translation

Introduction

The english into arabic medical translation is a crucial but demanding task in the translation field in this current times. With medical science changing, clear and uniform medical terms gain even more importance. The contribution of Arabic to medical and scientific discourse, especially during the period of the Abbasids, was remarkable, given that greek medical works were widely translated to create a foundation for scientific literature in Arabic. This illustrates that Arabic can cope with sophisticated medical notions provided appropriate translation methods are adopted (Didouche-Zidi, 2013).

Medical vocabulary is complicated as a result of its etymology, which comes from Greek and Latin. Both languages have contributed significantly to modern medical english, making translation into other languages such as Arabic very challenging (Larbi, 2016). The medical community continues to introduce new words to identify diseases as well as treatments, a phenomenon that has accelerated with outbreaks such as the COVID-19 pandemic. For instance, words such as "asymptomatic," "booster," and "social distancing" required rapid translation into Arabic to make it understandable to, as well as obey by the public (Maouche & Moulay, 2023).

One of the biggest challenges for translators in respect to medical terms is the multitude of available Arabic equivalents. Researchers such as Sieny (1987, as cited in Alhussaini, 2021) note that the abundance of synonyms in Arabic, as well as a lack of standardization by linguistic experts, creates inconsistency which can confuse both medical workers and members of the public, compromising communications as well as threatening patient health. For example, "jaundice" can, in Arabic, be translated as "اليرقان" (al-yaraqān) or

"الصفار" (al-ṣafār), depending on the regional conventions as well as practices (Bouchair & Azizi, 2020).

In order to address these challenges, multiple strategies have risen. Literal translation and borrowing are common strategies, though both have their limitations. Literal translation can result in inconvenient sentences or deceptive equivalents as a result of contrast in English to Arabic (Beddiaf & Aggoun, 2023). Borrowing involves utilizing foreign terms directly in Arabic, which can compensate for a lack of appropriate equivalents in the Arabic language but can isolate those who have not encountered medical english or latin-based terms (Larbi, 2016).

The next area of concern is the divide between medical experts and the public. The terms have to be understandable for non-professional readers, a point which is often ignored in the language translation in Arabic. Audience perception of medical terms has a considerable impact both on translation quality as well as effectiveness. Thus, making terms understandable ranks equally as high as the linguistic accuracy (Alhussaini, 2021).

In light of these complex challenges, this chapter introduces the fundamentals of medical terminology translation. It first examines the history and creation of the medical terms, investigating their lexical characteristics and etymology. The history of Arabic translation and arabization is also be examined, noting organizations such as ALECSO and Arab Medical Union in standardizing medical terms. Lastly, translation methods are examined, referencing established theory as well as real-life examples from medical practice.

Finally, this chapter attempts to provide a better understanding of medical term challenges in translation as well as their corresponding solutions positively impacting translation practices in the arabic language as well as in the medical community.

1.1 Terminology and Lexical Features

1.1.1 Definition and Types of Terminology

Medical terminology is the professional language employed in health care to describe accurately medical notions, diseases, symptoms, and treatments. General vocabulary differs from medical terms, medical terms have a specific meaning that is unambiguously grasped by health professionals. Didouche-Zidi (2013) points out that medical terminology ensures proper standardized communication among health professionals, which in turn enhances outcomes in terms of patients.

Most of the medical terms used today originate from Greek and Latin, echoing the history of medical development. Larbi (2016) points out that approximately 75% of terms used in medicine have descended from these ancient languages, bringing uniformity to ensure worldwide comprehension. For instance, "cardiology" (science of the heart) and "dermatology" (science of the skin) have Greek origins, while in Arabic, they are "طب القلب" (ṭibb al-qalb) and "طب الجلد" (ṭibb al-jild), respectively.

Medical terms can be grouped into a variety of different kinds, which have distinct roles to play in medical communications. These include scientific terms, technical terms, as well as procedural terms, each with its distinct purpose.

Initially, scientific medical terms explain theoretical notions and biological processes, which are common in academic literature. Such terms express fundamental notions about medicine as well as biology. For example, "homeostasis" and "metabolism" have their corresponding Arab equivalents "التوازن الداخلي" (al-tawāzun al-dākhilī) and "الايض" (al-ayḍ) (Maouche & Moulay, 2023).

Second, medical technical terms refer to instruments, devices, medicines, or technology used in the health field. These terms assist experts in recognizing and employing unique instruments accurately. Some examples include "endoscope," "dialysis machine," and "defibrillator," which in Arabic correspond to "منظار داخلي" (minḍār dākhilī), "جهاز غسيل الكلى" (jihāz ghasīl al-kulā), and "جهاز مزيل الرجفان" (jihāz muzīl al-rajafān) (Beddiaf & Aggoun, 2023). Technical terminology aims to promote clearness and accuracy in descriptions of treatment.

Third, medical terminology can pertain to precise medical process and procedure. These terms directly relate to treatment, diagnostic, and therapeutic processes, such as examples of "angioplasty" and "cesarean section", which in the arabic language correspond to "رأب الوعاء" (raʾb al-wiʿāʾ) and "عملية قيصرية" (ʿamalīya qayṣarīya) (Bouchair & Azizi, 2020). This terminology aids in precise conveyance among health teams and providers.

In addition, medical vocabulary can be grouped by levels of specialization as well as audience. Registers of medical terms, as identified by Wright (2012), exist based on audience. There is a specialized vocabulary for medical practitioners, half-specialized vocabulary for educated members of the amateur public, and everyday medical vocabulary for the public. This classification indicates a requirement to make adjustments in vocabulary depending upon who receives information as well as with what level of understanding they have (Wright, 2012).

For instance, the specialized term "hypertension" (ارتفاع ضغط الدم, irtifāʿ ḍaghṭ al-dam) can be replaced by a more general term "high blood pressure" (ضغط الدم المرتفع, ḍaghṭ al-dam al-murtafiʿ) in talking to a common audience (Larbi, 2016). This change makes it easier for patients to understand, enhancing education and the communication between the doctor and the patient.

In summary, medical terminology is an important resource in the health care context, surrounding scientific, technical, and procedural language. Recognizing these areas and the role of each one of them provides translators and health care providers with the useful information needed to make proper use of the medical terms in health care dialogue. This precise classification assists in filling language gaps, provides for consistency, and improves the quality of the health care.

1.1.2 Lexical Features in English and Arabic

The knowledge of english and arabic medical terminology features is essential in order for translators to come up with clear and precise translation. Both english and arabic medical terms display certain features that have a great impact on translation habits and uniformity.

Most english medical terms derive from Latin and Greek, accounting for approximately 75% of medical vocabulary (Larbi, 2016). This etymology provides english medical terms with precision and clarity, which facilitates international scientific exchange. For example, words such as "cardiology," "gastritis," and "neurology" indicate greek or latin origins, combining a prefix, root, and suffix to express precise meanings. Body parts are often represented by roots (e.g., "cardio-" means heart), conditions or areas of study by suffixes (e.g., "-itis" indicates inflammation, "-logy" indicates a field of study), and aspects of location or status by prefixes (e.g., "hyper-" indicates excess). Such building blocks make medical professionals understand complicated vocabulary with confidence by drawing from only a limited set of pieces (Didouche-Zidi, 2013).

However, unlike other languages, arabic medical terminology operates in a different manner. The root-pattern system used by Arabic forms words by rearranging three-consonant roots in different ways (Beddiaf & Aggoun, 2023). The root "ق ل ب" (q-l-b), for example,

generates words such as "قلب" (qalb, heart) and "قلبي" (qalbī, cardiac). Likewise, "ع ص ب" (ʿ-ṣ-b) generates terms such as "عصب" (ʿaṣab, nerve) and "عصبي" (ʿaṣabī, nervous) (Larbi, 2016). The versatility in word formation here forms a central part of Arabic vocabulary, which can generate many terms related to the root consonants.

Nonetheless, specialized English words prove difficult to translate into Arabic due to structural variations in their forms. english medical terms contain a high percentage of borrowings, eponyms, as well as newly formed terms that lack equivalents in Arabic, promoting either borrowings or literal transfers (Bouchair & Azizi, 2020). Borrowing, while convenient, can still result in transliterations that is not easily understandable to outsiders. For example, "أستروجين" (asturūjīn, estrogen) and "بكتيريا" (baktīryā, bacteria) represent literal transliterations without valid meanings to native speakers of the arabic language (Bouchair & Azizi, 2020). This transliteration can create confusion and inconsistency among translators.

Conversely, literal translation produces wordy phrases. The English word "antibiotic" often becomes "مضاد حيوي" (muḍādd ḥayawī), which conveys the same meaning but in a wordier English translation (Larbi, 2016). Although these translations accurately convey their meanings, their wordiness can make them difficult to use in a clinical or academic context.

Furthermore, compounding and abbreviation can create additional challenges. English assembles compound terms like "cardiovascular" or "gastroenterology" into a single word. The opposite applies to Arabic, which in turn splits them into more extended descriptive phrases, such as "أمراض القلب والأوعية الدموية" (amrāḍ al-qalb wa-al-awʿiya al-damawiyya, cardiovascular diseases) and "أمراض الجهاز الهضمي" (amrāḍ al-jihāz al-haḍmī, gastroenterology) (Didouche-Zidi, 2013).

The following table summarizes the essential lexical differences in medical terminology between English and Arabic:

Table 01:

The Essential Lexical Differences in Medical Terminology Between English and Arabic

Lexical Trait	English Medical Terminology	Arabic Medical Terminology
Root System	Greek/Latin-based roots	Arabic triconsonantal roots
Borrowing	Extensive use of borrowed Latin and Greek terms	Limited borrowing; transliteration from English or other languages
Morphology	Morpheme-based (prefixes, roots, suffixes)	Root-pattern morphological structure
Compounding	Frequent compound terms (e.g., cardiovascular)	Descriptive phrases instead of compact compounds
Examples	"Neurology," "Gastritis," "Cardiology"	"طب الأعصاب," "التهاب المعدة," "طب القلب"

Medical English eponyms, terms derived from an individual's or place's name, pose great problems to translation. Phrases such as "Parkinson’s disease" and "Alzheimer’s disease" have no meaningful significance in themselves, which requires literal transliteration: "مرض ألزهايمر" (maraḍ alzihāymir) and "مرض باركنسون" (maraḍ bārkinson) (Bouchair & Azizi, 2020). Although convenient, these transliterations have little to add to comprehension and can make things easier for the Arabic-speaking readers.

These lexical disparities have a great impact in terms of accuracy, concision, and uniformity of medical term translations. Due to inherent structural disparities between Latin/Greek-derived English and root-pattern-based Arabic, translations rarely succeed in

terms of concision, accuracy, or unity. Translators have to juggle linguistic accuracy and intelligibility for both Arab medical professionals and Arab-speaking patients while remaining faithful to the original medical concept. Understanding these lexical features is vital to overcome translation inconsistencies in the medical communications in different languages and cultures (Larbi, 2016; Beddiaf & Aggoun, 2023).

1.1.3 Word Formation and Morphological Systems

Medical terms have specific morphological aspects in English and Arabic, which have a great impact on translation. English medical terms mostly employ systematic word elements from Greek and Latin. These elements comprise prefixes, endings, as well as root words, which together accurately classify anatomical entities, diseases, diagnostic processes, as well as treatment modalities. On the other hand, the arabic language employs a different system depending largely on a root-and-pattern system, in which patterns of derivation and internal transformations play a sensitive role. These disparities create challenges as well as require great attention in the translation from English into Arabic (Larbi, 2016; Didouche-Zidi, 2013).

English medical terms have three components: roots, prefixes, and suffixes. The roots carry the basic meanings, which often refer to body parts or functions. For instance, "cardio-" indicates heart, "neuro-" indicates nerves, and "dermato-" indicates skin (Larbi, 2016). Prefixes express details in terms of place or increase, e.g., "hyper-" (excessive) or "hypo-" (under normal). Suffixes express conditions or interventions, such as "-itis" in case of inflammation or "-ectomy" in case of surgical excision. English terms, therefore, have a systematic structure, which facilitates health practitioners to interpret them. For instance, "endocarditis" disassembles into "endo-" (within), "cardi-" (heart), and "-itis" (inflammation), evidently indicating inflammation in heart (Didouche-Zidi, 2013).

Compounding is a highly productive process in english medical terminology, where roots and affixes from Latin and Greek are combined to form precise and complex terms such as "gastroenterology" and "cardiovascular." These compounds enable concise communication among medical professionals but often create challenges in translation, particularly into languages that lack equivalent single-word terms and thus require paraphrasing or descriptive phrases (Džuganová, 2013).

Arabic medical terminology uses a root-pattern system, known as non-concatenative morphology. This system primarily involves three-consonant roots that create related terms through specific vowel and consonant patterns (Larbi, 2016). For example, the root "ج ر ح" (j-r-ḥ) connects to wounds and surgeries, allowing related words like "جرح" (jarḥ, wound) and "جراحة" (jirāḥa, surgery).

Although this flexibility is in favor of semantic productivity, it poses problems in translation. English words from Latin or Greek sources tend to have no equivalents in terms of morphology in Arabic. Accordingly, translators have to resort to more wordy phrases or borrow words. For example, "neurology" is a specialty in disorders of the nervous system, yet its translation into Arabic involves a phrase such as "طب الأعصاب" (ṭibb al-aʿṣāb, literally "medicine of nerves") contains more words than the English equivalent (Larbi, 2016).

The table below provides illustrative examples comparing morphological structures in english and arabic medical terminology:

Table 02:

Morphological Structures in English and Arabic Medical Terminology

Morphological Type	English Example	Arabic Equivalent	Arabic Root
Prefix+Root+Suffix	**Endocarditis (endo + cardio + itis)**	**التهاب الشغاف (*iltihāb al-shighāf*)**	**ل ه ب (*l-h-b*) inflammation**
Compounding	**Cardiovascular (cardio + vascular)**	**أمراض القلب والأوعية الدموية (*amrāḍ al-qalb wa al-awʿiya al-damawiyya*)**	**ق ل ب (*q-l-b*) heart, و ع ي (*w-ʿ-y*) vessels**
Procedural Term	**Appendectomy (appendix + ectomy)**	**استئصال الزائدة الدودية (*istiʾṣāl al-zāʾida al-dūdiyya*)**	**ص أ ل (*ṣ-ʾ-l*) removal**
Specialization	**Dermatology (dermato + logy)**	**طب الجلد (*ṭibb al-jild*)**	**ج ل د (*j-l-d*) skin**

Borrowed words in Arabic translation deal with the differences in the word formation and the vocabulary deficiencies, that occur in the specialized vocabulary that is newly introduced. For example, words such as "بكتيريا" (baktīryā, bacteria) and "فيروس" (fayrūs, virus) are literally transliterated, closely matching their sounds in phonetics but avoiding native forms in word formation. Although drawing from borrowed words can be appropriate in describing new concepts, it can still result in inconsistencies since different translators adopt different forms of transliteration (Bouchair & Azizi, 2020).

The contrast among English morpheme-based systems and Arabic's pattern-and-root methods determines accuracy in translation and uniformity in the term usage. English terms tend to be more explicit and to the point, as compared to Arabic, which can be more adaptable and meaningful. This requires translators to rely on multiple strategies such as literal translation, borrowing, descriptive terms, as well as transliteration. Knowing these morphological variations can help translators in addressing challenges, enhancing terminology accuracy, and integrating English as well as Arabian medical discourse better (Didouche-Zidi, 2013; Larbi, 2016).

1.2 Historical Context of Medical Translation

1.2.1 Translation of Medical Literature Through the Ages

Medical translation history is rich, influencing modern medical terminology and practices in both the european languages and Arabic. The history needs to be comprehended in order to appreciate current challenges in translating medical terms from English into Arabic.

Medical translation started during Classical Antiquity, where greek works dominated the academic learning. Greek manuscripts by influential figures such as Hippocrates (460–377 BCE) and Galen (129–210 CE) established standards upon which medical knowledge rested. Their greek manuscripts formed a foundation for future works to be translated (Fischbach, 1986, as cited in Didouche-Zidi, 2013).

The actual development in medical translation occurred in the Islamic Golden Age, particularly toward the period from 8th to 13th century, characterized by cultural and scientific developments in the Abbasid Caliphate, more precisely in Baghdad. It was Caliph

al-Ma'mun (786-833 CE) who established House of Wisdom ("بيت الحكمة") with a center for scholarly activities and translations (Didouche-Zidi, 2013).

Big scholarly translators such as Hunayn ibn Ishaq (809-873 CE) played crucial roles in importing medical information from Greek and Syriac into Arabic. Hunayn specialized in translations of Galen's works, taking efforts to cross-check manuscripts and double-check those terms in Arabic that remained clear. His works became standard reference works in the Arab-Islamic world, such as "On the Usefulness of the Parts of the Body" and "The Method of Healing" (Larbi, 2016; Didouche-Zidi, 2013).

Other translators, such as Qusta ibn Luqa (820-912 CE), specialized in pharmacological and anatomical works, which added to the vocabulary in Arab medicine, making Arabic a dominant scientific language in such a period (Larbi, 2016). The translations also didn’t only reflect greek thoughts, but they encouraged innovations as well. Such works were used by other scholars like al-Razi (Rhazes, 865-925 CE) and Ibn Sina (Avicenna, 980-1037 CE) to develop new works, such as Ibn Sina's "Canon of Medicine" ("القانون في الطب") that served as a standard in medical education in Islamic as well as in European cultures (Beddiaf & Aggoun, 2023).

During the 12th and 13th centuries, the emphasis on translation shifted. It was in these centuries that Latin translations of works in Arabic started to find their way as european scientists desired to have access to their advanced works. Some of these great translators such as Gerard of Cremona (1114–1187 CE) translated key works, among them Ibn Sina’s "Canon," into Latin that was dominant in European medical education until their decline in the 17th century, illustrating the secondary impact of terms in Arabic upon european languages (Larbi, 2016; Didouche-Zidi, 2013).

This historical context still shapes the current practices of medical translation. Modern english medical vocabulary, which in most cases comes from Latin and Greek, continues to have overtones the Arabic translations of the Islamic Golden Age Era. The translation standards and practices set by such translators as Hunayn ibn Ishaq still remain relevant to translators today, upholding accuracy and context comprehension as top priorities.

But this historical inheritance still presents challenges. The original medical works from the Arab history draw on a root-and-pattern arrangement which is different from english terms that are derived from Latin and Greek. Therefore, translators in the modern days encounter challenges in translating modern english medical terms into Arabic. This setting indicates that medical translation is much more than just a language process, it is also an exchange of information from one culture to another that still impacts the current translation practices of terms (Bouchair & Azizi, 2020).

In conclusion, medical translation history points to the intercultural nature of medical knowledge sharing. Understanding this continued historical connection as well as cultural context providing the current translators with key areas to consider for challenges in medical translation from English into Arabic. Appreciation for history in translation efforts sheds light on precision, cultural context, and an organized process as essential for the successful current medical translation practices.

1.2.2 Institutions and Policies (ALECSO, Arab Medical Union)

Efficient translation of medical terms from English into Arabic largely depends upon specialized Arab organizations, especially in standardizing the vocabulary and in arabization. The Arab League Educational, Cultural, and Scientific Organization (ALECSO) and Arab

Medical Union (AMU) have a crucial role in establishing a modern vocabulary of medicine in the Arab world (Larbi, 2016).

The Arab League founded ALECSO in 1970, and it played a big role in uniting language and cultural development between the Arab nations. The organization aimed to promote education, science, and culture through collective arabization efforts and unifying the terminology used in different lines of sciences, especially in medicine. The linguistic policies of ALECSO deal with filling terms gaps and inconsistencies that resulted from the rapid developments in the field of medicine and health (Larbi, 2016; Didouche-Zidi, 2013).

One of ALECSO's more notable programs is its arabization Coordination Bureau, which oversees the management of arabization of scientific terms. The Bureau regulates, collects, and distributes the new or complex arabic medical terms that were initially introduced in English. Doing so by providing authoritative sources for each of the terms, ALECSO ensures the unity of translation and linguistic consistency the regions that speak Arabic. For example, standardized terms such as and "diabetes mellitus" to "مرض السكري" (maraḍ al-sukkarī) "hypertension" to "ارتفاع ضغط الدم" (irtifāʿ ḍaghṭ al-dam). These terms now widely accepted among the Arab public, courtesy of ALECSO's tireless efforts (Larbi, 2016).

ALECSO has initiated a number of significant terminology projects as well as established specialized dictionaries and glossaries. One of its most notable achievements is the Unified Medical Dictionary (UMD), which was produced in combination with several institutions with the sole purpose of establishing uniformity in medical terminology. The UMD has been vital in ensuring uniformity in medical translations, significantly impacting terms used in medical concepts by the Arabic-speaking medical community (Bouchair & Azizi, 2020). Despite these efforts, challenges still arise, in part in keeping up to date with

rapid changes in the medical field, proved by the COVID-19 pandemic, which involved new terms that required rapid and unified translation (Maouche & Moulay, 2023).

Alongside the efforts by ALECSO, the Arab Medical Union (AMU), which was formed in 1962, also strongly assists in promoting the medical field in Arab countries. As a professional association of medical practitioners in Arab nations, the AMU works towards standardizing and spreading Arab medical terms. The AMU works towards unifying terms by conducting workshops, conferences, and publications that make medical professionals aware of standardized terms in Arabic (Larbi, 2016; Didouche-Zidi, 2013).

The primary contribution of AMU includes facilitating medical experts to come to terms with appropriate Islamic equivalent terms for specialized English. Collaborating with ALECSO and regional medical associations, AMU ensures standard terms obey to the actual clinical requirements. This collaboration fills gaps among linguists, translators, and physicians to ensure proper and functional terms. Some examples include "MRI" (Magnetic Resonance Imaging) as "التصوير بالرنين المغناطيسي" (al-taṣwīr bi-al-ranīn al-mighnāṭīsī), and "AIDS" (Acquired Immune Deficiency Syndrome) as "متلازمة نقص المناعة المكتسبة" (mutalāzima naqs al-manāʿa al-muktasaba) illustrating the success of arabization through AMU-sponsored efforts (Beddiaf & Aggoun, 2023).

In spite of such an important achievement, both AMU and ALECSO still experience existing challenges in arabizing and standardizing terminology in Arabic. One of which is the variety of the linguistic feelings in different Arab-speaking areas, that presents different terminology choices. Regional dialects and language variations make it difficult to unify the medical terms, given that the Arab nations usually have different terms or forms of transliteration. Administrative delays in responding to rapidly evolving medical terms also

prevent such organizations from coming up with fast and widely accepted standards of terms (Larbi, 2016).

Also, lack of coordination among linguistic organizations, schools, and health providers contributes to make the standardization more challenging. For instance, in the translation of the new terms related to the fresh technologies and diseases in the time of the COVID-19 pandemic, it was discovered that lack of quick international agreement over unified Arab terms such as "social distancing" ("التباعد الاجتماعي", al-tabāʿud al-ijtimāʿī) and "asymptomatic" ("لا أعراض له", lā aʿrāḍ lahu) was a problem. The delays in agreement as well as disputes proved that there was a pressing necessity for better coordination and cooperation between linguistic, medical, and governmental organizations (Maouche & Moulay, 2023).

In short, ALECSO and AMU have key functions in arabizing and standardizing arabic medical terms. The collaboration of these two organizations enhances translation effectiveness and accuracy. Despite all, they still experience tough challenges, such as regional variations in terms, administrative problems, and swift scientific developments. For improved effectiveness of arabic medical terms and translation, it's essential to resolve these challenges by having better coordination, prompt reactions, and improved cooperation.

Table 03:

Roles and Challenges of ALECSO and The Arab Medical Union in Medical Terminology Standardization

Institution	Founded	Role & Contributions	Challenges
ALECSO	1970	Arabization Coordination Bureau; Unified Medical Dictionary (UMD); Standardization of terms	Regional linguistic variations; slow updates
Arab Medical Union (AMU)	1962	Consensus-building among medical professionals; Workshops & conferences	Administrative inefficiencies; lack of timely responses

1.3 Translation Strategies

1.3.1 Direct Translation Strategies

The direct translation is often a used approach in medical translation, mostly cases of specialized or new medical terms. It focuses on emulating the original text's choice of words and sentence structure ensuring a correct terminology and coherence. Three main methods for translating english medical terms into Arabic are borrowing, calque, and literal translation. Each method has distinct features, benefits, and drawbacks that influence their use depending on the medical context. Borrowing and calque often help maintain the original term’s specificity, while literal translation can sometimes result in awkward or inaccurate equivalents. These strategies are applied variably to address the challenges posed by linguistic and cultural differences between english and arabic medical terminology (Alhussaini, 2021; Bendob & Bouresk, 2023).

Starting with borrowing, it is about taking terms from the original source language then apply them to the target language with little to no change. It is usually used when there is no exact Arabic equivalents. Some examples of such words include "فيروس" (fayrūs, virus), "بكتيريا" (baktīryā, bacteria), and "كورتيزون" (kūrtīzūn, cortisone), where sounds from the original words are retained in Arabic (Bouchair & Azizi, 2020). Borrowing ensures international identification and facilitation in identification by medical practitioners across languages. But borrowing can still contain make it difficult for non-specialist Arabic speakers to handle the unfamiliar terms. Additionally, different standards of transliteration can result in variations in spelling (Larbi, 2016).

For example, the English word "hormone," that translates into "هرمون" (hurmūn) in Arabic. While professionals recognize it, publics who aren't familiar with English or Latin terms might have difficulty understanding it without further explanation (Beddiaf & Aggoun, 2023). Therefore, careful thought is needed regarding audience Comprehension and consistency in transliteration.

The second direct translation strategy, calque that is also known as loan translation translates the term's individual parts directly into the target language while trying to maintain the original structure. This creates parallel terms in Arabic through piece-by-piece literal translation. For example, "immune deficiency" translates to "نقص المناعة" (naqs al-manāʿa), where "immune" (مناعة, manāʿa) and "deficiency" (نقص, naqs) are directly translated, mirroring the English compound structure (Larbi, 2016; Bouchair & Azizi, 2020).

Calque proves useful in terms of increasing understanding because it directly translates each component, making medical vocabulary more understandable to Arab-speaking readers. An example is "blood pressure", which in translation becomes "ضغط الدم" (ḍaghṭ al-dam), with no loss of significance or structure. Calque translation, however, can at

times make a phrase sound inappropriate, given English-Arabic cultural discrepancies. For example, "heart failure" as "فشل القلب" (fashal al-qalb) speaks to accuracy but can confuse nonmedical readers because "failure" in everyday Arab usage carries a different meaning (Beddiaf & Aggoun, 2023).

Moreover, some complex medical terms can become overly long through calque translation. For example, "Gastroesophageal reflux disease" (GERD) that becomes " مرض الارتجاع المعدي المريئي" (maraḍ al-irtijāʿ al-maʿidī al-marīʾī), which accurately describes the condition but complicates everyday clinical communication due to its length (Larbi, 2016). Therefore, it is important to carefully find a balance between the realism of calque translations with the clarity and accuracy.

The third approach is literal translation, it directly interprets phrases and sentences with a close resemblance to the wording and the sentence structure of the original language. More than focusing on complex terms, as in calque, literal translation most often occurs with short or basic medical terms. For instance, "white blood cells" literally means "خلايا الدم البيضاء" (khalāyā al-dam al-bayḍāʾ). This approach shines in maintaining a clear, easily identified meaning, which significantly assists in medical education as well as in explaining to patients (Larbi, 2016; Didouche-Zidi, 2013).

However, literal translation cannot be possible or efficient at all time, especially when facing idiomatic or culturally oriented expressions. Such terms can lose their original purpose, demanding other methods. Literal translation can cause confusion or sound abnormal, which is why it is decisive that the context must be examined. For example, "chickenpox" can be sufficiently translated to "جدري الماء" (judarī al-māʾ) where it clearly conveys the medical meaning. But for "cold turkey", which implies ceasing drug usage abruptly, the medical

implication is lost through literal translation, indicating different strategies in such instances (Bouchair & Azizi, 2020).

The comparative table below summarizes the three direct translation strategies:

Table 04:

Definitions and Examples of Borrowing, Calque, and Literal Translation in Medical Contexts

Strategy	**Definition**	**English Example**	**Arabic Equivalent**	**Usage Context**
Borrowing	Direct transfer of foreign terms into Arabic with minimal adaptation	Virus, Bacteria, Cortisone	فيروس، بكتيريا، كورتيزون	New concepts, international recognition needed
Calque	Component-by-component literal lexical translation	Immune deficiency, blood pressure	نقص المناعة، ضغط الدم	Transparent concept representation, compound terms
Literal	Direct translation preserving original lexical and syntactic structure	White blood cells, chickenpox	خلايا الدم البيضاء، جدري الماء	Clear and simple descriptive medical terms

In short, borrowing, calque, and literal translation are principal direct translation methods used in translating english medical terms into Arabic. Each of them has strengths, like meanings that are explicit, international acceptability, and a clear structure. But they also have their shortcomings, which consist of unnatural wording, possible confusion, as well as complex terms. These make proper attention to audience understanding, consistency in

terminology, and usage context necessary in making translation decisions. Understanding each method's strengths and limitations helps medical translators learn useful information that ensures they come up with understandable, appropriate, and accurate translation in Arab medical communications (Larbi, 2016; Didouche-Zidi, 2013; Beddiaf & Aggoun, 2023).

1.3.2 Adaptive and Communicative Translation Strategies

Adaptive and communicative translation strategies are important in translating medical terminology from English into Arabic, where methods such as borrowing, calque, or literal translation can fail to reach the wanted meaning. In contrast, adaptive and communicative strategies' purpose is to convey a clear meaning, contextual appropriacy, and cultural significance. These strategies help filling the linguistic and the cultural gaps by changing the words for the medical terms in a target language, making sure that people who speak Arabic receive an information that is easy to understand (Larbi, 2016; Beddiaf & Aggoun, 2023).

It requires modifying the terms from the source language to suit linguistic, cultural, and communications standards in the target language. Such method prioritizes the expression of function and meaning over the strict devotion to the form. Translators who use this method tend to make use of descriptive phrases, paraphrases, or implicit changes in meaning to make terms more understandable and proper culturally. This is crucial in cases where original terms happen to be culturally unique, metaphoric, or have no exact equivalents in Arabic (Didouche-Zidi, 2013; Larbi, 2016).

For example, a medical term like "stroke" is translated into Arabic as "السكتة الدماغية" (al-sakta al-dimāghiyya), literally "cessation of the brain." Instead of a literal translation that can cause confusion, using a phrase that describes the affected region and the condition itself gives a better understanding in Arabic. Another example is a "heartburn" that is translated into

Arabic as "حرقة المعدة" (ḥurqat al-maʿida), or "burn in the stomach," which explains the symptom in a way that people who speak Arabic understand (Bouchair & Azizi, 2020).

Adaptive translation proves to be most useful in idiomatic medical terms, in which a word-for-word translation can make things more confusing. For example, the English "athlete's foot," that is a term that describes a fungus, is translated as "سعفة القدم" (saʿfat al-qadam). This process resolves any ambiguity resulting from the word-for-word translation and expresses more directly the nature of the condition without employing new idioms (Larbi, 2016; Didouche-Zidi, 2013).

Conversely, communicative translation aims at producing the same impact to the target audience that a given term produces to the source audience. This translation strives to be clear, accessible, and engaging, prioritizing reader comprehension over faithful translation to the original text. Translators give priority to expressing medical information in a clear, practical way by making their translation suit the reader's level of education, background, and context (Larbi, 2016; Beddiaf & Aggoun, 2023).

An example of the communicative translation is having the english medical phrase "high blood sugar" translated to "ارتفاع مستوى السكر في الدم" (irtifāʿ mustawā al-sukkar fī al-dam). It presents clearly understandable meaning to both medical practitioners as well as the general public. Just the same, "renal failure" can be translated to "الفشل الكلوي" (al-fashal al-kilawī), which explicitly states the affected organ to ensure proper communication (Larbi, 2016).

The indirect communicative and adaptive strategies are generally preferred over literal translation where accuracy and understanding by the patient matter. Patient education materials, public health communications, and health brochures generally require these types

of translation to make medical terminology understandable, minimizing the likelihood of miscommunication that can impact care of the patient. This is particularly necessary in health emergencies or addressing diverse populations since these types of strategies tremendously facilitate health communications and can have a positive impact on patient outcomes as well as compliance to health advice (Maouche & Moulay, 2023).

Adaptive translation still has some dangers. The biggest challenge to overcome is maintaining consistent terms in order to avoid losing the crucial delicacies in the source language. Over simplifying a word can alter its specific medical meanings, making experienced professionals who are used to literal translation misled. Therefore, translators must make sure to balance precision and lucidity, modifying terms in moderation while guaranteeing scientific accuracy (Larbi, 2016).

The following comparative table summarizes the definitions, purposes, and examples of adaptive and communicative translation techniques:

Table 05:

Definitions, Purposes, and Applications of Adaptive and Communicative Translation Strategies in Arabic Medical Terminology

Translation Technique	**Definition/Approach**	**Primary Purpose**	**English Example**	**Arabic Equivalent**	**Effectiveness Context**
Adaptive	Modifying terms to align culturally and linguistically	Achieving semantic clarity and cultural relevance	Athlete's foot	سعفة القدم (*saʿfat al-qadam*)	Idiomatic or culturally specific terms
	Using descriptive phrases for complex concepts	Enhancing comprehension	Stroke	السكتة الدماغية (*al-sakta al-dimāghiyya*)	Terms lacking direct Arabic equivalents
Communicative	Prioritizing immediate, clear comprehension	Effective communication for diverse audiences	High blood sugar	ارتفاع مستوى السكر في الدم (*irtifāʿ mustawā al-sukkar fī al-dam*)	Public health messages, patient leaflets
	Tailoring translation for specific audiences	Maximizing clarity and reader accessibility	Renal failure	الفشل الكلوي (*al-fashal al-kilawī*)	Educational materials, patient communication

In conclusion, using adaptive and communicative translation strategies is vital in english-into-arabic medical translation. These methods prioritize semantic accuracy, cultural relevance, and clear communication. By applying these strategies, translators can effectively close linguistic and cultural gaps, which greatly improves medical communication and helps patients understand better. While there are challenges, such as potential loss of specific terms, using adaptive and communicative approaches enhances the overall quality of medical translations, especially for varied and non-specialist Arabic-speaking audiences (Larbi, 2016; Didouche-Zidi, 2013; Beddiaf & Aggoun, 2023).

Conclusion

This chapter has explored the most salient features in order to grasp the subtleties of translating english-based medical terms into Arabic. It began by establishing what constitutes medical terminology, both in terms of its scientific exactitude, systematicity, as well as its dependence upon greek and latin origins. English medical terms have a distinct pattern of prefix, root, and suffix, which allows accurate medical communication. This differs from medical terms in Arabic, which operate under a different system of morphology, which produces related terms through different kinds of derivational processes (Larbi, 2016; Didouche-Zidi, 2013). The morphological variations raise considerable translation challenges that dictate which choices translators make, necessitating strategies that transcend mere linguistic equivalence.

The chapter also examined lexical aspects of medical terms in both languages, which revealed salient contrasts in linguistic as well as cultural practices. English generally employs borrowed terms as well as standard units from Latin and Greek, but in contrast, Arabic employs transliteration as well as descriptive phrases to complete gaps in terms. These contrasts make it challenging to have uniform terms and necessitate translators to adopt a

rigorous approach to guarantee clarity as well as readability in Arabic-speaking medical environments (Beddiaf & Aggoun, 2023).

Historically, medical text translation contributed to current translation practices. Translators such as Hunayn ibn Ishaq, during the Islamic Golden Age, ensured methodological sophistication and accuracy by translating Greek medical works into Arabic. These eventually formed the foundation for medical studies in Europe through Latin translations, highlighting Arabic's crucial position as a conduit of scientific information (Larbi, 2016). Understanding this history is useful because it demonstrates that previous translation processes is still operative in the modern days.

The chapter also points out the functionalities of modern Arab institutions such as ALECSO and the Arab Medical Union in the unifying and the Arabizing processes. The organizations work to eliminate inconsistencies in terminology through concerted dictionaries as well as collective efforts. Despite that, challenges such as regional variations in language as well as administrative challenges still exist, suggesting that there should be more cooperation as well as prompter responses (Larbi, 2016; Didouche-Zidi, 2013; Beddiaf & Aggoun, 2023).

Additionally, the chapter examined the major translation strategies for translating english medical terms into Arabic. Including direct strategies like borrowing, calque, and literal translation that provide exact equivalents but can run into pragmatic communicative problems. Adaptive strategies that prioritize semantic explicitness and cultural importance which is proven to be useful especially for idiomatic or intricate terms. Translators of medical texts into Arabic need to balance translation strategies by considering the target audience’s comprehension level and the pragmatic functions of the text. This careful selection aims to improve clarity and usability, especially in complex medical documents such as patient information leaflets (Sharkas, 2023).

By presenting the theoretical, historical, and linguistic models of medical terminology and translation practices, the first chapter lays a solid ground for the second chapter. Chapter two shifts from conceptual ideas to a concrete analysis, examining the actual translation problems and inconsistencies through an in-depth corpus study.

CHAPTER TWO: Translation Strategies and Terminology in Practice

Introduction

While chapter one examined medical terminology's theories, surrounding the linguistic forms and the processes of translation, chapter two aims more of a practical perspective, seeing practical matters in the translation of medical terms from English into Arabic. Good medical translation exceeds the word-by-word translation, it also involves keeping the terminological accuracy, cultural appropriateness, and the proper communication, mainly in the medical environments (Larbi, 2016; Didouche-Zidi, 2013). This chapter addresses professional translators handling sophisticated medical terms in real-life contexts, such as in hospitals, education to patients, as well as health information messages.

Translators, at some point or other, find themselves in a situation where they have to apply theoretical information to a specific clinical or communicative requirement. For instance, in translating diabetes information leaflets, a translator must choose whether to translate "insulin resistance" as "مقاومة الإنسولين" (muqāwamat al-insūlīn), a technically accurate but perhaps not easily intelligible to non-specialist patients, or as "عدم استجابة الجسم للأنسولين" (ʿadam istijābat al-jism lil-insūlīn), or "the body's lack of response to insulin," where exactness is sacrificed in preference for lucidity (Beddiaf & Aggoun, 2023). This illustrates the fine balancing act translators have to achieve among accuracy, comprehensibility, and cultural appropriateness.

The chapter also discusses principal methods employed to examine how translators handle medical terms in practice. It elaborates on how terms to be analyzed are chosen, the terminological structure of a terminology database, as well as the analytical framework employed to assess translation strategies. There is also an emphasis placed upon the use of

medical dictionaries, as well as specialized resources such as the Unified Medical Dictionary (UMD) and those funded by ALECSO. Even though these dictionaries play a key role in ensuring consistency, they also raise challenges, such as various different equivalents in Arabic as well as inconsistencies that translators have to deal with (Larbi, 2016; Bouchair & Azizi, 2020).

Additionally, this chapter also highlights the typical problems in medical translation, such as ambiguity, terms missing, and cultural inconsistencies. Such problems show up mostly in the situations where new medical terms appear or during sudden health crises, like the COVID-19 case, which required an instant need for a fast and accurate translation (Maouche & Moulay, 2023).

By shifting from theory to a real-world analysis, chapter two bonds the linguistic theory to the professional application. The translators' real-world experiences inform efficient terms translation strategies that simplify the medical communication and make it more comprehensible in different languages and cultures. This practical approach does not only validate chapter one's insights but also creates the groundwork for the next chapters that examine actual case studies in medical terminology translation.

2.1 Methodology and Corpus Design

2.1.1 Corpus Design and Selection

The selection and design of a proper corpus are crucial in examining translation strategies of the english medical terms into Arabic. For the purpose of this research, a specialized bilingual corpus was compiled to represent the complexity of medical terms used in real-life situations as they occur. The corpus' resources in this case include multiple officially translated documents and bilingual dictionaries, with a focus on a more updated

materials such as the COVID-19 pandemic. The addition of the COVID-19 terms was decisive due to its level of current relevance, vocabulary richness, and the high necessity for a rapid translation into Arabic (Maouche & Moulay, 2023; Larbi, 2016).

When determining the selection of principles in this corpus, multiple factors came into consideration. The first being relevance, the corpus required to have a terminology representative of the current medical discourse, both the areas of traditional medicine and new health concerns. With COVID-19 as a worldwide health issue, taking related materials for selection provided for real-time relevance, presenting ways in which translators deal with pressing terminological demands. Representativeness was equally a consideration. The corpus was carefully compiled to have diverse medical texts—ranging from clinical reports to scientific papers, as well as to health literature for the public—so as to have balanced representation in both professional as well as common communicational environments. The diversity provides a better comprehension of ways in which translation strategies differ in accordance with target groups and communicational aims (Didouche-Zidi, 2013; Larbi, 2016).

Terminology density was a concern in building the corpus. Since medical translation may involve complex words, a high density of specialized words was required. Standardized medical bilingual dictionaries like the Unified Medical Dictionary (UMD) were useful here as they supplied standardized equivalent words in Arabic for english medical terms, especially those from Greek and Latin origins. The standardized dictionaries allowed for equal and uniform translation as well as correct terminology in multiple resources. The sources also included translated medical guidelines as well as government-approved Arab medical publications and glossaries from well-established organizations like ALECSO so that the corpus would be comprised of authentic terminology resources (Bouchair & Azizi, 2020; Larbi, 2016).

The difficulty in translating also played a significant role in picking the corpus. In order to be able to better explore challenges faced by the translator, having words and phrases which are commonly difficult to translate, such as idioms, culturally bound words, and newly emerging medical words and phrases was essential. As an example, during the COVID-19 pandemic situation, words like "asymptomatic," "booster dose," and "social distancing" were challenging translations as they did not previously exist in Arabic. Incorporating such terms enabled a closer examination of how translators deal with the vocabulary gaps, cultural subtleties, and communicative clarity (Maouche & Moulay, 2023; Beddiaf & Aggoun, 2023).

The corpus contained a blend of standard medical vocabulary and specialized COVID-19 vocabulary. Standard vocabulary came principally from the Unified Medical Dictionary (UMD) as well as from Arab Medical Union and ALECSO official guidelines. For vocabulary related to COVID-19, top sources comprised bilingual glossaries as well as official Arab translations from health ministries, together with WHO guidelines translated into Arab. The diversity of origins ensured a balanced corpus that reflected a broad variety of medical translation contexts, from health environments to health information messaging (Larbi, 2016; Didouche-Zidi, 2013).

Even with a cautious planning, limitations will always exist. For starters, though the corpus had a big coverage, variation in terms used in different Arab regions caused some problems. National health authorities sometimes used different forms of Arabic for terms referring to a similar English word, complicating the comparison. Secondly, because the COVID-19 terms are still of new usage relatively, there was a limited number of sources and reference, limiting the comparisons over time. finally, the corpus captured mostly formal translation, possibly missing out on informal translation or colloquial expressions used in casual language (Bouchair & Azizi, 2020; Larbi, 2016).

In short, corpora used in this research have been constructed to mirror current medical language and practical translation problems accurately. The materials chosen carefully considered relevance, representativeness, terminological density, and translation difficulty, which formed a sound foundation for extensive analysis of translation strategies and terminological coherence. The awareness of the scope and boundaries of this corpus provides a refined understanding of its potential in analysis, which paves the way for scientific investigation of medical translation practice from English to Arabic (Larbi, 2016; Maouche, & Moulay, 2023).

2.1.2 Analytical Framework

In order to measure the effectiveness of the translation strategies for english medical terms into Arabic, this research employed a systematic analytical framework illustration upon the theoretical frameworks and the practical problems acknowledged in the existing literature. Escalating with linguistic observations from the first chapter, the framework has to examine the translation of the english medical terms into Arabic in a variety of real-life documents. The aim was to determine which translation strategies have been applied and to determine to what extent each translation was functional and linguistically appropriate for medical discourse.

The quantitative as well as qualitative analysis were conducted. Quantitatively, a total of approximately 500 bilingual terms and phrases from standard sources such as Unified Medical Dictionary (UMD), WHO's Arabic translation, as well as COVID-19 health documents, was used in the corpus in Section 2.2.1. The data was organized by translation approach employed—such as borrowing, calque, literal, adaptive, or communicative. The term was recorded along with its source, context, as well as noted Arabic equivalent, providing a quantitative snapshot of usage by approach in the corpus.

Qualitatively, it is suitable to give attention to determining the accuracy of translation's, clarity, consistency, and cultural suitability. The standards used to assess these qualities came from Larbi (2016), Beddiaf and Aggoun (2023), and Didouche-Zidi (2013), who highlighted the semantic accuracy and the reader's comprehension as an important requirement in medical translation. This qualitative examination was used to decide whether a word, even if translated, suited the communicative as well as cultural needs of Arab-speaking populations, particularly in health as well as clinical contexts.

Accuracy was seen as how well the Arabic translation preserved the essential scientific meaning of the English term. For example, "hypertension" needed to be accurately translated as "ارتفاع ضغط الدم" (irtifāʿ ḍaghṭ al-dam) instead of "ضغط" (ḍaghṭ), which could cause confusion (Bouchair & Azizi, 2020). Clarity analyzed the understanding of the translation to the intended audience, especially non-specialists. Some terms needed reformulation for better clarity; for instance, "asymptomatic" was translated as "لا تظهر عليه الأعراض" (lā taẓhar ʿalayhi al-aʿrāḍ, meaning "shows no symptoms"), which, although longer, was clearer in public health settings (Maouche & Moulay, 2023).

Consistency was determined through whether or not arabized equivalents remained constant in various documents. This was necessary in cases where a word was used in different documents with different forms of translation. For example, "booster dose" was intermittently translated as "جرعة معززة" (jurʿa muʿazziza) but as "الجرعة الإضافية" (al-jurʿa al-iḍāfiyya) in other cases, which reflected problems in terminological standardization (Larbi, 2016). Consistency analysis provided information on the translators' use of reference sources such as the UMD or more improvised solutions.

Cultural appropriateness was centered around alignment with Arabic linguistic and cultural conventions. Untranslated words directly adopted from English, such as "كورونا"

(corona), can be linguistically acceptable but sometimes lack contextual description to make them understandable to non-specialized people. More contextually appropriate culturally sensitive equivalents or explanatory translation like "مرض فيروس كورونا المستجد" for COVID-19 retained scientific precision while catering to audience expectations (Beddiaf & Aggoun, 2023).

Each term in the corpus was analyzed through this framework, and the findings were recorded using a structured coding sheet that included the following categories:

Table 06:

Analytical Framework for Evaluating Medical Term Translations

Component	Description
English Term	The source term as it appears in medical or public health texts
Arabic Equivalent	The observed or proposed Arabic translation
Translation Strategy	The strategy applied (borrowing, calque, literal, adaptive, communicative)
Accuracy	Rated as high, moderate, or low based on semantic faithfulness
Clarity	Assessment of intelligibility to general Arabic-speaking users
Consistency	Whether the term is used consistently across different Arabic sources
Cultural Relevance	Degree to which the term aligns with cultural and linguistic expectations

This table format provided a systematic comparison of terms and their translation, yielding more general trends in the corpus. For instance, terms that used strategies of borrowing were high in accuracy but low in clarity or cultural pertinence, particularly for non-

specialist audiences. Conversely, communicative/adaptive strategies yielded more reader-friendly translations but sometimes compromised terminological accuracy.

The system also allowed comparisons to be made among different sources (such as official dictionaries and health ministry brochures), illustrating institutional preference influencing translation solutions and uniformity. This was especially visible in COVID-19 vocabulary, as rushed public announcements occasionally translated into inconsistent or overly word-for-word solutions. For instance, early translation of "lockdown" as "إغلاق كامل" (ighlāq kāmil) lacked subtlety in comparison to subsequent phrases such as "تقييد الحركة" (taqyīd al-ḥaraka, restriction of movement) (Maouche & Moulay, 2023).

Finally, the analytical framework we employed in this research provided a sound method for english-arabic medical term translation assessment. Combining quantitative classification with qualitative assessments of principal factors—accuracy, clarity, consistency, and cultural appropriateness—the framework enabled us to gain a better grasp of real-life translation strategies. The approach not only substantiates analysis in chapter two, but it provides a foundation for determining optimal practices as well as potential challenges in medical terminology translation in the Arab world.

2.2 Use of Dictionaries (UMD, Arabterm, Almaany)

In specialized vocabulary, in particular in medical terminology, bilingual and monolingual dictionaries play a vital role. Medical vocabulary is a complex one, with a lot of terms drawn from Greek and Latin, new words, acronyms, and specialty uses, making it necessary for translators to refer to credible resources. There are three fundamental dictionaries widely used by medical translators in the context of the Arabic language, namely, the Unified Medical Dictionary (UMD), Arabterm, and Almaany. Each of these resources

plays a distinct role in influencing translation decisions, providing varying levels of richness in vocabulary, specificity to certain domains, and standardization. This section examines their practical usage, examining their strengths, limitations, and contributions to translation accuracy, consistency, and usability.

The Unified Medical Dictionary (UMD)

The Unified Medical Dictionary (UMD), created with support from the World Health Organization (WHO) and ALECSO, is a key reference for medical terminology in the Arab world. It aims to unify and standardize medical terms across Arabic-speaking countries, helping medical professionals and translators by providing standardized equivalents for thousands of english terms (Larbi, 2016; Didouche-Zidi, 2013).

The UMD is comprehensive and detailed, offering different versions of medical terms that differentiate between specialist jargon and common language. For example, "hypertension" is translated as ارتفاع ضغط الدم (irtifāʿ ḍaghṭ al-dam) and "ischemia" as نقص التروية (naqṣ al-tarwiyya), reflecting its medical precision. Terms like "hepatitis" are organized by type (e.g., التهاب الكبد ب for "hepatitis B"), illustrating the UMD's focus on small details in the terminology (Alhussaini, 2021).

However, the UMD contains some drawbacks. Alhussaini (2021) noted that inconsistencies can arise between the UMD and other Arabic sources, mostly with the new or the regional terms. The interface and accessibility can also be challenging for translators, particularly in urgent situations where quick navigation is essential. Moreover, the UMD is effective but still slow in adapting new terms, such as the ones in the COVID-19 pandemic, where terms like "social distancing" or "booster dose" were either missing or poorly translated (Maouche & Moulay, 2023).

Arabterm

Arabterm is a multilingual terminological portal that was built in a partnership between ALECSO along with the German Federal Ministry for Economic Cooperation and Development. While UMD exclusively addresses medical terms, Arabterm covers a number of technical and scientific domains, such as medicine, engineering, as well as ICT. It was built in accordance with terminology theory to facilitate arabization as well as reduce reliance upon foreign terms in scientific discourse (Beddiaf & Aggoun, 2023).

The medical part of Arabterm is less extensive than UMD's but still contains useful definitions, along with contextual usage. For example, "diabetes mellitus" is translated as داء السكري (dāʾ al-sukkarī), which can be used both in clinical and in public health. The site occasionally provides the readers with some explanations or classifications, which can make refined meanings clearer. Arabterm prefers arabized or clear equivalents in general, emphasizing its objective to maintain linguistic identity. While some of the resources retain terms like "cholesterol" in transliteration forms, Arabterm employs الكوليسترول as well as provides the technical term مركب دهني في الدم (murakkab duhnī fī al-dam) to make it more understandable (Didouche-Zidi, 2013).

However, Arabterm lacks in its relatively limited number of medical entries compared to UMD, and some of its translations may not have enough detail to suit highly specialized medical text. Arabterm also struggles to keep up in quickly evolving domains like virology or immunology, leaving gaps for translators in new situations. The interface also isn't very user-friendly, making it a problem for whoever needs to make quick lookups in a translation task (Larbi, 2016).

Almaany

Almaany is a widely used online English-Arabic dictionary used by both ordinary users as well as users with specialized requirements. It's not institutional in its origins, as in UMD or Arabterm, but rather a community site that draws upon publicly available sources to compile definitions. Not originally built for medical translation, it contains an increasing variety of medical terms, which is a useful tool for translators working with documents of a mixed domain or those unable to use institutional dictionaries (Bouchair & Azizi, 2020).

One of Almaany's greatest assets is a user-friendly interface and quick search functionalities. Users can easily search and cross-reference multiple translation entries. For example, "anemia" retrieves فقر الدم (faqr al-dam), while "epidermis" returns البشرة (al-bashara). The entries sometimes contain examples of use as well as alternate terms, making it particularly useful for translators working with materials related to general health or with diverse populations.

Yet, Almaany's open format has some drawbacks. The inconsistencies in term accuracy represent a serious problem since terms can be given without specifying standard usage. Moreover, lack of filtering by domain can lead to ambiguity, especially for terms with different meanings depending on context. For instance, "resistance" can mean both مقاومة (muqāwama) and ممانعة (mumānaʿa), missing specifications about what medical context to apply to "antibiotic resistance." Such ambiguity can cause errors, especially among translators who are not familiar with medical terminology (Beddiaf & Aggoun, 2023).

Comparative Overview

The following table offers a comparative summary of features across the three dictionaries:

Table 07:

Comparison of Features Across Arabic Medical Terminology Dictionaries

Feature	UMD	Arabterm	Almaany
Institutional Backing	WHO, ALECSO	ALECSO, German	Private, crowd-sourced
Domain Focus	Exclusive medical terminology	Multidisciplinary (includes medical)	General and mixed domains
Depth of Entry	High (includes categories, variants)	Moderate (some definitions/context)	Variable (context sometimes missing)
Standardization	Strong (officially recognized)	Promotes arabization	Inconsistent
Update Frequency	Moderate	Low to moderate	High (community-fed)
Usability/Interface	Moderate (formal, structured)	Less intuitive	Highly accessible and fast
Example: *Hypertension*	ارتفاع ضغط الدم	ارتفاع ضغط الدم	ارتفاع ضغط الدم
Example: *Booster dose*	جرعة معززة (late update)	الجرعة الإضافية (if available)	الجرعة المنشطة / معززة (non-standard mix)

Practical Implications for Translators

In reality, most translators don't use a single dictionary. Professionals check at least two or more sources to ensure the meaning, achieve consistency, and identify the appropriate setting equivalents. UMD is used as the main dictionary to use for standardized medical vocabulary, mostly in academic and institutional writings. Arabterm works for policy or formal arabization translators, while Almaany assists translators in urgent translation needs.

Yet, as analysis reveals, over-reliance upon any single source becomes a problem. The translator must be more than a practitioner in language familiarity; in addition, translators must also serve as terminological negotiators—keeping in mind source, audience, and context in order to make intelligent decisions. Finally, though these dictionaries exist, it is up to the translator to ensure the clarity, accuracy, and the consistency through personal professional judgment and awareness of the context.

To summarize, UMD, Arabterm, and Almaany each played a crucial role in the english–arabic medical translation. When combined, they allow translators to better deal with challenges in this rapidly evolving field.

2.3 Observed Challenges in Terminology

2.3.1 Lack of Unified Equivalents

One of the perennial problems in English to Arabic translation of medical terms involves inconsistency of equivalents among different resources, organizations, and contexts. The problem isn't limited to lexicography—it directly affects medical communications, precision, education, and standardization of terms in the Arab region. Various translators, dictionaries, and regional practices produce different available Arabic equivalents of a given

English term with no rationale provided in support of their decisions. The lack of consistency generates confusion among experts, as well as among members of the public, and complicates efforts towards constructing a uniform Arabic vocabulary in medicine.

This problem is most visible with words with no prior use in Arabic or for which there are new concepts, as in cases of newly occurring health emergencies such as the COVID-19 pandemic. With no centralized regulation, translators apply various strategies—such as transliteration, descriptive translation, and adaptation—each resulting in a different word. The absence of coordination among the arabic language standards and translation organizations, as Larbi (2016) and Beddiaf and Aggoun (2023) note, leads to disparate terms in medical, education, and public health disciplines.

For instance, English uses "placebo" to describe an inert substance used in clinical trials, but there exist different arabic words depending upon which dictionary or translation tool you consult. The Unified Medical Dictionary (UMD) used العلاج الوهمي (al-ʿilāj al-wahmī), highlighting the psychological factor of the case. On the other hand, Almaany used دواء وهمي (dawāʾ wahmī), which is a more of a literal translation. Some medical literature in Arab nations, though, uses عقار غير فعّال (ʿiqār ghayr faʿʿāl), or "inactive drug," which is more formal but less widely known (Bouchair & Azizi, 2020). Such variation indicates different translation strategies and emphasizes more generally the debate on whether to use culturally familiar or technically exact translations.

A case in point is the word “asymptomatic,” which became a buzzword during the COVID-19 pandemic to refer to people infected but exhibiting none of the symptoms. There are large variations in the translation in Arabic, with most often being بدون أعراض (bidūn aʿrāḍ), which means “without symptoms,” used in most public health communications. There have also been used لا تظهر عليه الأعراض (lā taẓhar ʿalayhi al-aʿrāḍ, “symptoms do not show on

him") as well as مصاب غير عرضي (muṣāb ghayr ʿaraḍī, "non-symptomatic patient"), with the latter used more in medical documents (Maouche & Moulay, 2023). These variations not only impact how readable the terms are but also have different levels of understanding different groups of people, from medical professionals to the common public.

The following table illustrates these variations in translation:

Table 08:

Variation in Arabic Translations of English Medical Terms

English Term	Arabic Equivalent	Source/Context	Translation Type
Placebo	العلاج الوهمي (*al-ʿilāj al-wahmī*)	Unified Medical Dictionary (UMD)	Descriptive translation
	دواء وهمي (*dawāʾ wahmī*)	Almaany dictionary	Literal, simplified version
	عقار غير فعّال (*ʿiqār ghayr faʿʿāl*)	Arab academic journal usage	Technical expression
Asymptomatic	بدون أعراض (*bidūn aʿrāḍ*)	Public health posters, COVID-19 campaigns	Simplified communicative
	لا تظهر عليه الأعراض (*lā taẓhar...*)	Official health ministry pamphlets	Paraphrased
	مصاب غير عرضي (*muṣāb ghayr ʿaraḍī*)	Scientific articles, formal reports	Medical register
Booster Dose	جرعة معززة (*jurʿa muʿazziza*)	WHO and Arab ministries of health	Standard official term
	الجرعة الإضافية (*al-jurʿa al-iḍāfiyya*)	Early COVID-19 vaccination material	Functional alternative
	الجرعة المنشطة (*al-jurʿa al-munashshiṭa*)	Almaany, some Arabic media	Semi-technical adaptation

Here are examples of how varying terminology causes issues. Within professional environments, various terms can hamper teamwork among institutions and nations. Medical learning is dependent on standardized vocabularies. With universities and textbooks using varying terms for similar ideas, students struggle to integrate learning and end up with misunderstandings or confusion over clinical material (Larbi, 2016). This becomes more challenging in multilingual learning environments with Arabic as a language that is often not used for primary instruction, with students being required to cope with English source material and multiple translations in Arabic.

Clinically speaking, inconsistency also generates friction between health workers and patients. For example, a physician might employ a technical word or a transliteration that a patient is used to instead of using a complicated or explanatory language in health messages so the public domain will be unable to understand. Such decision weakens health counseling and complicates patients' decision-making, mostly important in cases that involve medication directions or vaccination protocols (Beddiaf & Aggoun, 2023).

At a more general level, inconsistent nomenclature causes particular difficulties for health policy and regional standardization and makes organizations' efforts to arabize more complicated, including those of ALECSO and the Arab Medical Union. These organizations intend to standardize medical terminology so as to increase co-operation in research and increase access to information in science in Arabic. However, Didouche-Zidi (2013) noted that if the enforcement agency is missing, numerous variations circulating freely make institutional efforts less effective and sustains terminological uncertainty.

In summary, the absence of common Arabic words for english medical terms is more than a minor problem, it is a problem that affects systemically and threatens clarity, reliability, and efficiency in the healthcare communication, education, and even the core policy

throughout the Arabic world. Translators are plagued by decisions among rival terms, each with a different degree of legitimacy and appropriateness for various audiences. Addressing the challenge calls for more than steady terminology databases and joint regulations but also an applied approach that balances medical precision with plain language and good communication. Only through concerted efforts and mutual agreement can arabic medical translation achieve precision and consistency necessary in worldwide medical dialogues.

2.3.2 Variability Across Contexts

Arabic translation of medical words is not a simple affair. Context largely governs such as communicative context, audience, tone, and purpose. Which is an ideal choice in a clinical context is unsuitable for use in a public health announcement or a piece of legal text. Such variation necessitates that translators balance understanding and accuracy and decide contextually. An understanding of how term choice is connected to context is vitally important to attain quality in medical translation.

Medical translation ranges from clinical to academic, media, and legal translations, each with specific requirements. For clinical contexts in which health practitioners interact with each other, technical terms and adherence to standard terminology is given priority and thus technical terms come into use. However, for public health communication for general audiences, it is necessary to use simple terms (Beddiaf & Aggoun, 2023).

Use the word "hypertension." In technical and research settings, it is usually rendered as فرط ضغط الدم (faraṭ ḍaghaṭ al-dam), an exact word that matches the medical definition. In patient pamphlets and media initiatives, translators could use ارتفاع ضغط الدم (irtifāʿ ḍaghaṭ al-dam), an expression more easily comprehensible to the general population (Didouche-Zidi,

2013). Both forms are correct, but their application is subject to how well-informed about medical terms the audience is.

A similar trend is seen with "myocardial infarction." While in academic writing the formal term احتشاء عضلة القلب (iḥtishāʾ ʿaḍalat al-qalb) is utilized, in discharge summaries from the hospital or in emergency directions النوبة قلبية (nawba qalbiyya, heart attack) is more frequent and more understandable to patients (Larbi, 2016). The tone and register determine the choice here: the first term is appropriate to formal diagnostic tone, while the second is more direct.

Variability due to context is also evident in translating novel or crisis-specific terms. "Lockdown" during the COVID-19 period appeared in various forms: إغلاق تام (ighlāq tāmm, total closure) in official declarations, حظر التجول (ḥaẓr al-tajawwul, curfew) in legislation, and البقاء في المنزل (al-baqāʾ fī al-manzil, stay at home) in awareness-raising efforts (Maouche & Moulay, 2023). Each rendition indicates diverse purposes—legal precision, institutional influence, or people's engagement—emphasizing translation selection's sensitivity to context

Register also comes into play in deciding whether to use technical terms with Latinate and Greek roots in formal science and academic prose to give formality, while ordinary audience translations apply modern standard Arabic with less complex vocabulary. For instance, "epidemiology" is علم الأوبئة (‘ilm al-awbi’a in academic contexts, while being referred to as انتشار الأمراض (intishār al-amrāḍ, spread of disease) in wider language and media use, with emphasis on visible effect.

Tone also plays a role in term choice. Precision is necessary in technical terms in formal documents such as policy and law, so technical terms remain intact. In humanitarian or patient communication, empathy and ease take priority over precision, however. For example,

"palliative care" might be rendered as الرعاية التلطيفية (al-riʿāya al-taltīfiyya) in formal contexts, but as الرعاية لتخفيف الألم (al-riʿāya litakhfīf al-alam, care to alleviate pain) in patient pamphlets, highlighting its purpose over its technical designation.

Lastly, the purpose for which a term is intended to be used determines translation strategy. A medical research paper term must meet international academic standards. Translations for health apps, posters, and physician-patient conversations, on the other hand, must be more comprehensible at times at the expense of precision. This is crucial for translators working in various settings, e.g., from clinical reports to media in the field of public health, as different approaches must be used (Bouchair & Azizi, 2020).

The following table illustrates how certain english medical terms are translated differently depending on context:

Table 09:

The Contextual Difference in Arabic Translations of English Medical Terms

English Term	**Clinical Context**	**Academic/Research**	**Media/Public Health**	**Translation Strategy**
Hypertension	ارتفاع ضغط الدم (*irtifāʿ ḍaghaṭ al-dam*)	فرط ضغط الدم (*faraṭ ḍaghaṭ al-dam*)	ارتفاع ضغط الدم (*same as clinical*)	Register adjustment
Myocardial infarction	نوبة قلبية (*nawba qalbiyya*)	احتشاء عضلة القلب (*iḥtishāʾ ʿaḍalat al-qalb*)	أزمة قلبية (*azma qalbiyya*)	Register and tone shift
Lockdown	إغلاق تام (*ighlāq tāmm*)	حظر التجول (*ḥaẓr al-tajawwul*)	البقاء في المنزل (*al-baqāʾ fī al-manzil*)	Functional adaptation
Palliative care	الرعاية التلطيفية (*al-riʿāya al-taltīfiyya*)	same as clinical	الرعاية لتخفيف الألم (*litakhfīf al-alam*)	Communicative explanation
Epidemiology	علم الأوبئة (*ʿilm al-awbiʾa*)	same as clinical	انتشار الأمراض (*intishār al-amrāḍ*)	Simplification for public audience

These differences underline the call for contextual sensitivity in medical translation. Most of the times a translator might ignore the target audience or the application, therefor end up using terms that are too technical to be understandable to anyone else or so oversimplified as to be inappropriate for clinical contexts. Medical language must be specific and fulfill its communicative purpose—there is more to translation than replacing words; translation is a contextual activity subject to linguistic, institutional, and cultural factors according to Didouche-Zidi (2013).

Translators must take a context-responsive framework that examines the genre of the document, the medical literacy level of the target audience and intended tone. This demands more than language expertise and requires an awareness of particular discourse conventions in given fields. For example, "quarantine" could be translated as حجر صحي (ḥajr ṣiḥḥī) in formal settings but as عزل المرضى (ʿazl al-marḍā, isolating the sick) in outreaching efforts targeting rural or low-literacy populations (Larbi, 2016).

In summary, translating medical terminology into Arabic requires an attention to the context. One English word might have different arabic equivalents that are all acceptable depending on the context, the audience, and the purpose. Register, tone, and intended application all affect translation approach and require flexibility and appreciation for cultural sensitivities as well as accuracy. For medical translators, context is not an afterthought, it is an essential component for the production of clarity and meaning in their translations.

Conclusion

Chapter two presents an in-depth examination of the applied aspects of english medical term translation into Arabic. With its theoretical foundation from chapter one as its starting point, chapter two transitions into applied analysis with design and selection of an

exemplary medical corpus played as its first move. To address a variety of medical situations and terminological difficulties, this corpus was chosen based on reliable multilingual references such the Unified Medical Dictionary (UMD), Arabterm, Almaany, and official COVID-19 papers (Larbi, 2016; Maouche & Moulay, 2023). The selection placed a strong emphasis on contextual diversity, terminology density, and applicability in high-demand domains like clinical communication and public health as well as real-world settings.

Both statistical and qualitative methods were combined in this corpus analysis framework. Based on established research and practice-based translation expectations, the terms were assessed for correctness, clarity, consistency, and cultural fit (Beddiaf & Aggoun, 2023; Didouche-Zidi, 2013). This made it possible to map the translation strategy statistically and evaluate in-depth how the translation approach functions in different institutional and linguistic contexts.

The chapter also emphasized the contributions of major terminological resources in translation practice. The UMD, funded by WHO and ALECSO, lends depth and standardization to medical terminology. Arabterm is less complete but represents concerted efforts to arabize technical terms. Almaany is user-friendly and updated regularly but contains inconsistencies owing to its eclectic provenance (Bouchair & Azizi, 2020). These resources collectively are essential for arabic medical translators but their various outputs also reflect a wider issue of systemic fragmentation.

Two primary issues resulted from the analysis: the lack of uniform Arabic equivalents and the variation in translations according to contexts. Such disagreement among dictionaries and organizations became evident through examples such as "placebo," "booster dose," and "asymptomatic," appearing in variant Arabic according to source or translator (Larbi, 2016;

Alhussaini, 2021). Such inconsistency hinders institution-to-institution communication as well as patient comprehension and medical training.

Moreover, meaning and definition of medical terms differed greatly depending on context—clinical, academic, media, or legal. Translators used terms differently depending on the level of understanding and intention behind their message. For example, "myocardial infarction" became formal احتشاء عضلة القلب in academic contexts and نوبة قلبية in clinical and media contexts (Larbi, 2016). Such flexibility is required but also calls for translators to be more aware and for more coordination among institutions to maintain accuracy and understanding.

These findings show that translating medical terms from English into Arabic is complex. Issues such as terminology inconsistency, context variation, and resource reliability remind us that choice of strategy and experienced linguistic judgment are necessary in actual translation practice.

This foundation prepares for chapter three, in which translation approaches and challenges shall be tackled using a close case study on translating medical terms related to COVID-19. This chapter applies analytical tools crafted here to discuss a particular corpus of terms related to the pandemic and take closer look at how translators responded to an emerging global health condition—an exemplary context to analyze terminology in crisis mode.

Chapter Three: Case Study – COVID-19 Terminology in Translation.

Introduction

The early 2020 outbreak of COVID-19 as a global health crisis came with a dual purpose: it was both a health crisis and a moment dominating terminology. Quite rapidly, the pandemic ushered in novel words into common language, into clinical language and academic language—words to be invented, to be translated and disseminated into languages and cultures. The crisis presented for Arabic translators a special challenge: conveying novel english medical words into Arabic with accuracy and sensitivity to their native language and culture in short time frames. Chapter three examines this challenge through using as a case study the outbreak of COVID-19 and applying concepts and analytical structures developed in earlier chapters.

The crisis nature of the pandemic hastened the adoption of formerly rare words in public health terminology. Phrases such as “asymptomatic,” “booster dose,” “flatten the curve,” “herd immunity,” “lockdown,” and “social distancing” found their ways into policy and into public health messaging. Additional technical words, including “cytokine storm,” “RT-PCR testing,” and “variant of concern,” entered into common use. These phrases tended to originate among organizations including the World Health Organization (WHO) and necessitated accurate and transparent Arabic translations to allow for public comprehension and health action (Maouche & Moulay, 2023; Larbi, 2016). Translating these words challenged Arabic’s flexibility as well as regional homogeneity.

This chapter draws on previous chapters' discoveries regarding medical terminology and translation approaches and examines how these approaches—literal, adaptive, communicative, and borrowed—were practiced under duress in times of crisis. The context of

COVID-19 enables real-world observation of applications of tools such as the Unified Medical Dictionary (UMD), Arabterm, and Almaany in dealing with novel medical words (Alhussaini, 2021; Beddiaf & Aggoun, 2023).

The chapter begins with an examination of how terms related to COVID-19 evolved, following their introduction into English, adoption by health agencies, and spread among Arabic-speaking nations. A particular focus is dedicated to WHO documents and their translations into Arabic with a view to identifying attempts at standardizing terminology. The second part discusses translation approaches to specific terms related to COVID-19 and exhibit translators' choices contingent upon context, intelligibility, and audience.

In addition, the chapter touchs upon political and societal sensitivities that intervened in translation choices. Phrases such as “quarantine,” “variant,” and “COVID passport” tended to have legal and ethical connotations that played a part in how they translated into Arabic, especially in spaces with diverse policies and trust among citizens. Last but not least, it addresses terminology issues such as inconsistencies, delay in standardization, and absence of equivalent expressions during critical phases of the response to the pandemic.

Through this case study, the dissertation moves from broad theory to a particular instance of terminology under strain. The COVID-19 outbreak is used as a linguistic and social phenomenon here to give meaningful insights into how the translator acts as a conduit from quick science language and into people's understanding. This chapter highlights that flexible but standardized solutions need to be employed in order to translate medical language in crisis situations.

3.1 Development of COVID-19 Terminology

3.1.1 Evolution of Terms

The COVID-19 pandemic represented a milestone in modern medicine not only for its medical consequences but also for its implications on language. As rapidly emerging scientific discoveries ensued, the pandemic ushered in a wave of terms to be added to common conversation and language use, both newly coined and existing medical terms that took on altered meaning and application. For translators handling Arabic, it presented a special challenge: many terms did not yet have set equivalents except that they needed ready and accurate and appropriate translations so communication is facilitated effectively in health, media, and clinical settings. Examples such as "booster," "asymptomatic," "social distancing," "contact tracing," and "PCR" demonstrate language change in crisis and translators' crucial role in solving urgent gaps in terminology.

For example, "booster" came into common use when discussing COVID-19 vaccination. Historically describing an additional dose that boosts immunity, it came into common use in 2021 and 2022 as nations rolled out additional doses. Translations into Arabic were initially varied, with some using الجرعة المعززة (al-jurʿa al-muʿazziza, "enhancing dose") and others using الجرعة الإضافي (al-jurʿa al-iḍāfiyya, "additional dose") or الجرعة المنشطة (al-jurʿa al-munashshiṭa, "stimulating dose"), depending on context. All three versions conveyed subtle variations, and when standards were not followed consistently (Alhussaini, 2021), it created some inconsistency in public health communication.

The adjective "asymptomatic" also underwent change. Previously, it was primarily applied in clinical contexts to denote patients who were afflicted with a disease but were asymptomatic. In the context of COVID-19, its application grew as officials informed citizens

about the dangers of transmission by asymptomatic carriers. The most frequent Arabic translation became بدون أعراض (bidūn aʿrāḍ, "without symptoms"), a simple expression. But formal documents could also use غير عرضي (ghayr ʿaraḍī) or لا تظهر عليه الأعراض (lā taẓhar ʿalayhi al-aʿrāḍ, "symptoms do not appear on him"), options that differ in their level of intelligibility (Bouchair & Azizi, 2020). The lack of a codified translation resulted in disparate use, especially from reports byprofessionals and outreach materials.

"Social distancing" became a global concept as a preventive practice during the pandemic. Although the term existed in epidemiology, few people outside academies ever referred to it. The most standard Arabic translation used wasالتباعد الاجتماعي (al-tabāʿud al-ijtimāʿī, “social distancing”). But according to some critics, these words might suggest separation emotionally from society rather than physical space. As a reply, some institutes began to use التباعد الجسدي (al-tabāʿud al-jasadī, “physical distancing”) to show explicitly its intended meaning (Larbi, 2016). This indicates that translators also reinterpret words to improve understanding.

“Contact tracing,” a technical term used to manage outbreaks at first, entered common language as governments described their processes for identifying exposure to viruses. Translations such as تتبع المخالطين (tatabbaʿ al-mukhāliṭīn) and رصد جهات الاتصال (raṣd jihāt al-ittiṣāl) appeared in Arabic for circulation. While the latter approach is more straightforward and may sound too professional for the general public, the former is more informal and targets those who have had intimate contact with infected individuals. These choices show how, in times of shared concern, translators must strike a balance between accuracy and emotional connection (Didouche-Zidi, 2013).

Finally, during the pandemic, the term "PCR" (polymerase chain reaction), which was previously only used in lab settings, became widely used. The term was used exactly as it was

in most Arabic media, demonstrating how rapidly words may become part of a common language.

To put it briefly, the COVID-19 incident serves as an example of how language and translation evolve during times of crisis. New technical ideas entering medical arenas for the first time, changes to existing terms to accommodate them, and the demand for instantaneous translations all created an ever-evolving language context over which translators tested their creativity and ability to be responsive. Their decisions—balancing fidelity and context and striving for precision—determined how Arabic-speaking populations heard and responded to an international health crisis. Translation approaches during this period are discussed in subsequent parts of this chapter as valuable contexts for understanding more generally about medical translation in rapidly evolving contexts.

3.1.2 WHO Guidelines and Arabic Equivalents

During the pandemic period of COVID-19, the World Health Organization (WHO) played an instrumental part in developing and disseminating uniform public health lexicon in diverse languages. As the primary authority on health communication, WHO issued changing terms and guide documents that influenced health policy and medical translation worldwide. For Arabic nations, WHO directions became crucial in standardizing terms for diagnosis, prevention, and response. Although most WHO-approved terms were adopted straightforwardly or with minor adjustments, inconsistencies even appeared in Arabic translations among various national institutes and websites. This part discusses how WHO terms were translated into Arabic, their consistency with original terminology, and their impact on standardization and citizens' understanding.

The WHO began to produce COVID-19-related terms early during the outbreak, providing glossaries and briefs in various languages, including Arabic. These publications were intended to provide clear, accessible, and standardized worldwide public health communication (Maouche & Moulay, 2023). The regional office of the WHO collaborated with translators and specialists in public health to generate terms in line with Modern Standard Arabic and avoid dialectal fragmentation. Therefore, WHO Arabic equivalents tended to be the primary formal Arabic versions of new english terms.

The commonly used term used in this case was “contact tracing,” translated by WHO as تتبع المخالطين (tatabbaʿ al-mukhāliṭīn), indicating “tracking of those in contact.” The translation was both accurate and effective in that it employed common words in Arabic without causing ambiguity (Beddiaf & Aggoun, 2023). Various Arab nations, including Egypt and Jordan, used this version in their official campaigns and advocated for common terminology. But some official agencies selected more literal translations, such as رصد جهات الاتصال (raṣd jihāt al-ittiṣāl), accurate as it may be but less comprehensible to wider audiences.

An alternative term "social distancing" was rendered as التباعد الاجتماعي (al-tabāʿud al-ijtimāʿī). Although an otherwise accepted term, some health communicators and linguists voiced concerns that it implied social separation rather than physical distancing. Therefore, some health organizations resorted to using التباعد الجسدي (al-tabāʿud al-jasadī, "physical distancing") in order to maintain accuracy and avoid ambiguity. The modification raised concerns about various interpretations regarding WHO's intention and questioned whether devotion to terminology is an indicator of clarity (Larbi, 2016).

The English term "COVID-19" became standardized and its Arabic translation is كوفيد-19 (Kūfīd-19), a consistently used transliteration in WHO documents. While its acronym remained intact in most Arabic materials, its pronunciation and spelling differed and hence

resulted in inconsistency that influenced searchability and official communication (Bouchair & Azizi, 2020).

One of the most controversial words was “variant of concern.” WHO gave its Arabic equivalent تحور مثير للقلق (taḥawwur muthīr lil-qalaq), reproducing accurately the meaning conveyed by the source term. This term went broadly into circulation in WHO briefs and Arabic-language press. In a few contexts it also appeared as تحور خطير (taḥawwur khaṭīr, “dangerous variant”), with an added severe connotation not necessarily implied by its english equivalent. Such a change in connotation is capable of influencing perception and potentially over-amplifying concern or erasing distinctions that differentiate categories, particularly in press reporting (Didouche-Zidi, 2013).

The World Health Organization also adopted people-friendly language such as "flatten the curve," a previously unknown metaphor to arabic scientific lexicon. The translation into official language as تسطيح المنحنى (tasṭīḥ al-munḥanā), attempted both to preserve the metaphor and to make it accessible. This term tended to be accompanied by clarifications in WHO publications to guarantee understanding since its idiomatic meaning might be incomprehensible to Arabic speakers.

In short, although WHO recommendations significantly shaped early arabic terms for COVID-19, their implementation unveiled issues with consistency and understanding.

To summarize, the WHO guidelines were importantly useful especially when offering standard Arabic translations for the new COVID-19 terms. Many Arab nations used their words in their official reports and public communications. But changes and alternative translations came from the various linguistic and cultural situations in the Arab region on occasion. These adjustments, as helpful as they were for the public understanding, helped

highlighting the need for a better collaboration among organizations and the constant updates of the terminology practices. Such dynamics impacted translation approaches throughout the duration of the pandemic and exposed gaps in terminology governance throughout arabic language areas, as discussed in the following section.

3.2 Terminological Analysis

3.2.1 Selected COVID-19 Terms

The COVID-19 pandemic led to a surge of new medical terms that quickly entered everyday language. Arabic translators had to act fast, often without pre-existing words to use. As discussed earlier, this urgency resulted in different strategies—some were direct translations, while others adapted or communicated the ideas based on the context, audience, and the source of the translation. In this section, we look at seven important COVID-19-related terms, each showcasing unique choices in terminology. These examples highlight how translators dealt with language gaps, cultural nuances, and the need for clear communication amid widespread uncertainty and global interaction.

Booster Dose

Arabic: الجرعة المعززة (*al-jurʿa al-muʿazziza*)

The word “booster dose” became important as vaccination rolled out. Initially, there wasn't a standard Arabic equivalent. Various translators employed different words such as الجرعة الإضافية (al-jurʿa al-iḍāfiyya, "additional dose") or الجرعة المنشطة (al-jurʿa al-munashšiṭa, "stimulating dose") (Maouche & Moulay, 2023). One that eventually gained acceptance among WHO and health ministries—الجرعة المعززة (al-jurʿa al-muʿazzaza)—was selected on grounds that it accurately conveyed and increasingly became commonly used. Nonetheless,

that translation created some ambiguity. Many at first misinterpreted it as referring to a new or alternative vaccine rather than an additional dose. To try and avoid this mix-up, translators tended to insert clarifications in all messages for the public so that all could hear

Strategy: Initially literal, followed by communicative support through contextual explanation.

Asymptomatic

Arabic: بدون أعراض (*bidūn aʿrāḍ*), غير عرضي (*ghayr ʿaraḍī*)

The word "asymptomatic" was unknown to most Arabic audiences prior to the pandemic. Translators in media campaigns preferred using more common phrases such as بدون أعراض ("without symptoms") in their translations. However, medical reports also used it as غير عرضي, a more formal term that is more in line with medical jargon (Beddiaf & Aggoun, 2023). This contrast resulted in some confusion when various reports used both words without definition. Culturally speaking, the concept that "healthy-looking" individuals transmit disease alarmed people because it is counterintuitive to conventional understanding that associates illness with obvious symptoms.

Strategy: Primarily adaptive, balancing accuracy with accessibility depending on the audience.

Social Distancing

Arabic: التباعد الاجتماعي (*al-tabāʿud al-ijtimāʿī*), التباعد الجسدي (*al-tabāʿud al-jasadī*)

Initially, "social distancing" was translated into Arabic as التباعد الاجتماعي by WHO, but this version was criticized by Arabic linguists and epidemiologists. They contended that it

implied being socially disconnected rather than physically keeping a distance (Larbi, 2016). Several ministries and media then began to use التباعد الجسدي, as it expressed correctly the desired preventive practice. However, since the initial term was utilized early in the epidemic, both terms were utilized over the duration of the pandemic. This discussion illustrates that a direct translation is not always sufficient to fulfill either cultural or communication requirements.

Strategy: Initially literal, later adapted based on public feedback and contextual reconsideration.

Lockdown

Arabic: إغلاق تام (*ighlāq tāmm*), الحجر الصحي (*al-ḥajr al-ṣiḥḥī*), البقاء في المنزل (*al-baqāʾ fī al-manzil*)

The word "lockdown" presented different translation issues because it is so broad and context-dependent in its meaning. Legal and policy contexts might see إغلاق تام ("total closure"), while in medical contexts الحجر الصحي ("health quarantine") indicated limited movement by people who got infected. Public communications tended to go with البقاء في المنزل ("stay at home") so as to soften the tone (Didouche-Zidi, 2013). Though understandable in context, they created inconsistent public perception about each phrase's legal and health implications.

Strategy: Mixed—literal, descriptive, and communicative depending on the communication channel.

Contact Tracing

Arabic: تتبع المخالطين (*tatabbaʿ al-mukhāliṭīn*), رصد جهات الاتصال (*raṣd jihāt al-ittiṣāl*)

"Contact tracing" became necessary to contain the pandemic but its translation into Arabic differed. The WHO and most ministries utilized تتبع المخالطين, an idiomatic and easy-to-grasp choice. But others made formal reports use رصد جهات الاتصال, an accurate but less comprehensible expression for common people (Bouchair & Azizi, 2020). This raised the problem of reconciling formal language with common understanding, particularly because the word stirred privacy and observation concerns in some places.

Strategy: Predominantly adaptive, with occasional literal renderings in official contexts.

Flatten the Curve

Arabic: تسطيح المنحنى (*tasṭīḥ al-munḥanā*)

This metaphorical expression was distinctive in its figurative connotation. Translated literally by WHO and similar organizations as تسطيح المنحنى, it retained imagery but required additional explanation, particularly in early awareness efforts (Alhussaini, 2021). Because the term referred to an image concept (reducing infection numbers to avoid overloading healthcare systems), most public health messages added imagery or additional phrases to give context clues. This expression indicates the challenges in translating metaphors from one language and concept to another.

Strategy: Literal, supplemented with contextual explanation due to low cultural familiarity with metaphor.

Variant of Concern

Arabic: تحور مثير للقلق (*taḥawwur muthīr lil-qalaq*), تحور خطير (*taḥawwur khaṭīr*)

As mutations started to show up in viruses, "variant of concern" became an official term. The WHO employed the translation تحور مثير للقلق that best suits its guarded nature and accurately describes the intention behind the original term. Unfortunately, some media chose تحور خطير meaning "dangerous variant," inadvertently increasing public concern (Didouche-Zidi, 2013). This illustrates how crucial tone is to medical translation and to preserving both meaning and intention.

Strategy: Mostly literal in institutional use; modified in media contexts with unintended connotative shifts.

Summary Table

Table 10:

The Strategies and Challenges in Translating Chosen COVID-19 Terms

English Term	Arabic Equivalent(s)	Strategy Used	Notes on Challenges
Booster Dose	الجرعة المعززة، الإضافية، المنشطة	Literal + Communicative	Multiple versions caused initial confusion; clarity improved over time
Asymptomatic	بدون أعراض، غير عرضي	Adaptive	Required balancing technical accuracy and lay comprehension
Social Distancing	التباعد الاجتماعي، التباعد الجسدي	Literal → Adaptive	Semantic ambiguity led to adjusted terminology
Lockdown	إغلاق تام، الحجر الصحي، البقاء في المنزل	Mixed	Context-specific meanings demanded tailored translations
Contact Tracing	تتبع المخالطين، رصد جهات الاتصال	Adaptive	Audience knowledge influenced choice of term
Flatten the Curve	تسطيح المنحنى	Literal + Explanation	Metaphorical nature made understanding difficult without visual or textual support
Variant of Concern	تحور مثير للقلق، تحور خطير	Literal → Modified	Tone and media framing altered risk perception

In summary, selected terms reflect the intricate nature of arabic medical translation during the COVID-19 pandemic. Translators made rapid yet context-dependent choices under unclear directions most times. These balancing acts favored both literal accuracy and flexible reformulation as well as easy-to-communicate messages due to their drive to provide rapidly evolving scientific information to specialists and the general populace. These examples evidence that translators do more than act as language go-betweens but also as active participants in public health understanding.

3.2.2 Strategy Mapping

The flood in COVID-19 terms caused the search for a fast and united translation solutions in clinical, governmental, media, and educational contexts. As covered in Section 3.3.1, translators handled newly defined medical terms while try at the same time to balance accuracy, intelligibility, and cultural appropriateness. This section charts the translation approaches employed for primary COVID-19 terms and classifies them as borrowing, calque, literal translation, adaptation, and communicative approaches. The chart is based on nine source documents and includes institutional translations (such as WHO and UMD) as well as local health communication.

The term's definition, target audience, and degree of communication urgency all had a role in the strategy choice. "PCR" and "COVID-19" were commonly borrowed due to their technical nature and worldwide familiarity, while culturally specific terms "lockdown" and "booster dose" were adapted or translated according to context. Literal and calque translations were employed in early WHO documents but as trends developed with the progression in the pandemic, more audience-friendly practices appeared in public health communication indicating a change in preferred strategy over time (Alhussaini, 2021; Maouche & Moulay, 2023).

Borrowing

Borrowing is normally reserved for specific words and acronyms that lack direct Arabic equivalents or are more commonly referred to in their English form. For example, “PCR” is utilized as PCR in most health materials in Arabic because it promotes scientific accuracy and keeps up with worldwide diagnostic conventions (Bouchair & Azizi, 2020). "COVID-19" is also transliterated as 19-كوفيد because it follows global conventions and preserves the structure of the acronym.

However, although borrowing is used to preserve correctness in meaning, it is likely to make things obscure to general readers. To counteract this tendency, borrowed terms tend to be supplemented by short definitions or paraphrases in general-audience writing (Didouche-Zidi, 2013).

Calque

Calque, otherwise referred to as loan translation, entails translating parts of a term directly while preserving its internal structure. This technique was employed in case of obvious terms such as “social distancing” (التباعد الاجتماعي) and “flatten the curve” (تسطيح المنحنى). These translations bear a close resemblance to their respective originals in terms of structure and meaning as well, despite their literal translations being confusing at times. In particular, التباعد الاجتماعي faced criticism for not conveying the intended message, prompting some organizations to use التباعد الجسدي as a clearer option (Larbi, 2016).

Despite this drawback, calque was a popular choice in early translations because there was an urgent need for immediate lexical equivalents.

Literal Translation

Formal language and academic reports employed a lot of literal translation since it served well for words with distinct meanings and linguistic counterparts. For example, "booster dose" came out as الجرعة المعززة, literally expressing its meaning with an arabic equivalent providing the concept of "boosting" (Maouche & Moulay, 2023). Similarly, "asymptomatic" tuned into غير عرضي or بدون أعراض, both terms describing a lack of symptoms while being easier to comprehend for common crowds.

Although literally translated sentences were grammatically correct, they occasionally required additional context to avoid ambiguity, particularly with metaphorical and technical words.

Adaptation

Adaptation came into play when direct translation risked losing meaning or when emotion and cultural implications were indispensable. The term "lockdown" is a case in point. It was translated as الحجر الصحي, إغلاق تام, or البقاء في المنزل, each drawing attention to alternate aspects depending on context (Didouche-Zidi, 2013). In judicial contexts, إغلاق تام took the power of complete closure, whereas البقاء في المنزل carried a softer, more empathetic message to the general public. This style allowed translators to keep the message updated and to point by accommodating the term according to the target audience's perception and messaging objectives. It mostly worked better for words that were driven by behavior or culturally sensitive that required more than a simple direct translation.

Communicative Techniques

Communicative approaches emphasize expressing the intended meaning behind a term over its form. For instance, the WHO rendered "variant of concern" as تحور مثير للقلق and kept its cautious tone while being comprehensible to the layperson. However, some media reported it as تحور خطير ("dangerous variant"), overestimating a threat and potentially causing undue fear (Beddiaf & Aggoun, 2023).

Effective communicative approaches must accommodate both tone and intention behind the original term while preserving its meaning at a scientific level.

Strategy Mapping Table

Table 11:

The Strategies Used in Different Contextual COVID-19 Terms

English Term	Arabic Equivalent	Strategy Used	Context or Notes
COVID-19	كوفيد-19	Borrowing	Standardized global term; consistent across WHO and media channels
Social Distancing	التباعد الاجتماعي / التباعد الجسدي	Calque → Adaptation	Shifted from literal to culturally adjusted translation due to public interpretation concerns
Flatten the Curve	تسطيح المنحنى	Calque + Explanation	Metaphor translated literally; required visual/contextual support
Booster Dose	الجرعة المعززة / المنشطة / الإضافية	Literal + Adaptation	Variation based on context (clinical vs public communication)
Lockdown	إغلاق تام / الحجر الصحي / البقاء في المنزل	Adaptation	Multiple renderings based on tone, legal implications, and public comprehension
Asymptomatic	بدون أعراض / غير عرضي	Literal + Communicative	Literal term paired with simpler form for wider audiences
Variant of Concern	تحور مثير للقلق / تحور خطير	Communicative	Tone-sensitive translation; alternate versions introduced connotative shifts

Conclusion

The translation of terms related to COVID-19 reveals a dynamic translation context in which accuracy must be balanced with clarity, local cultural sensitivity, and understanding by target audiences. Borrowing was utilized regularly for acronyms and names that must be used consistently worldwide. Initial documents from WHO utilized calque and literal translation predominantly. However, as the pandemic continued, adaptation and communication methods became more important, especially for public engagement and emotional support.

The success of these strategies depended on the communication goal, audience literacy, and the specific terms. Translators needed to be not just skilled linguistically but also aware of the context, adjusting their methods for both accuracy and usability. This flexibility emphasizes the vital role of translators as cultural and medical mediators—connecting languages and communities during a global crisis.

3.3 Sociopolitical and Standardization Issues

3.3.1 Politicization and Sensitivities

Medical terms translation during the period of the COVID-19 crisis went beyond being based on language and science, it evolved into a cultural, a highly politicized, and a sensitive activity. Their translation hinged upon more than accurate language alone as health terms appeared in media, government briefings, and social media. Ideologies, national agendas, religious stances, and sentiments also influenced their translations. For English to Arabic translators, that added dimension because selecting the “right” term wasn't just linguistically faithful but also entailed ethical responsibility and social cohesion to prevent public suspicion or controversy.

Some words from the corona pandemic became charged politically and even culturally. "Quarantine," "isolation," "COVID-positive," and "variant of concern" developed meanings that went beyond their technical definition. In the arabic societies, some words touched religious views while others evoked fear, disgrace, and suspicion depending on how they were being publicly discussed (Beddiaf & Aggoun, 2023). Translators were not only challenged in translating the words faithfully, but they also faced problems navigating how would people receive them in various spheres of diverse cultures.

For example, the word "quarantine" translated as الحجر الصحي (al-ḥajr al-ṣiḥḥī), both a medical and literally accurate term. But it also raised strong historic and religious meanings in the Islamic and the arabic societies, where حجر could remind them of eras of plagues (Larbi, 2016). This generated suspicion and hesitancy among some populations, especially when linked with enforced confinement. In order to reduce its negative implications, public health efforts in some nations used alternatives such as العزل الوقائي (al-ʿazl al-wiqāʾī, "preventive isolation") or simply العزل (al-ʿazl, "isolation") to make it more precautioned than penile (Didouche-Zidi, 2013).

The term "COVID-positive" also became stigmatized. Though literally meaning infection, in common speech it rapidly picked up a stigma, particularly in conservative communities because illness might be perceived as a vulnerability. The arabic equivalent حالة إيجابية (ḥāla ājābiya) was accurate but misleading since the term إيجابي ("positive") normally implies a desirable result in Arabic. This occasionally required some conditions with words like مصاب بكوفيد (muṣāb bi-Kūfid, "infected with COVID") or حالة إصابة مؤكدة (ḥālat iṣāba muʾakkadā', "confirmed infection case") to minimize misunderstandings (Bouchair & Azizi, 2020).

Naming the "variants" of the disease itself presented challenges as well. The avoidance by the WHO of geographic designations created Greek letter designations (e.g., "Delta variant," "Omicron variant"), officially translated directly into Arabic (e.g., متحور دلتا, mutaḥawwir Diltā). This adjustment decreased the likelihood of nationalist reaction, but previous designations such as "UK variant" had already been applied by some media outlets. These geographic designations created tension as regional governments resented being associated with perceived outbreak origins (Maouche & Moulay, 2023). Translators were confronted with a dilemma between adopting the updated WHO designations or retaining the commonly accepted media terminologies, a choice that held implications about fairness and stigmatization.

Religious sensitivities also influenced the terms' translation. The idea of "mass testing" or "mass vaccination" was connected to public fears of coercion, especially in areas where people hesitated to get a vaccine. Phrases like التطعيم الإجباري (al-taṭʿīm al-ijbārī, "mandatory vaccination") were avoided in official documents due to their authoritative tone. Alternatives like التطعيم الوطني (al-taṭʿīm al-waṭanī, "national vaccination") or برنامج التطعيم الشامل (barnāmaj al-taṭʿīm al-shāmil, "comprehensive vaccination program") were preferred to highlight the collective benefits instead of a governmental enforcement (Alhussaini, 2021).

Here, translators were not merely language specialists but moral mediators as well. They needed to consider how a term might be heard, its implications, and how to keep the essence intact while staying away from public resistance and misunderstanding. That involved a balance between technical terminology and sensitivity towards local contexts and, therefore, required an excellent grasp of both medical terminology and sociopolitical context.

The table below summarizes several key terms that posed politicization or sensitivity challenges in Arabic translation:

Table 12:

COVID-19 Terms Posing Political or Sensitive Challenges

English Term	Arabic Translation	Translation Notes	Nature of Sensitivity
Quarantine	الحجر الصحي (*al-ḥajr al-ṣiḥḥī*)	Accurate but evoked religious/historical fear; alternatives like *العزل* used	Religious connotations, stigma
COVID-positive	حالة إيجابية (*ḥāla ījābiyya*)	Misleading due to positive/good connotation in Arabic	Semantic ambiguity, stigma
Variant (e.g., Delta)	متحور دلتا (*mutaḥawwir Diltā*)	WHO Greek labels helped neutralize politicized geographic terms	National identity, blame attribution
Mass vaccination	التطعيم الإجباري (*al-taṭʿīm al-ijbārī*)	Avoided in favor of *الوطني* or *الشمولي* due to authoritarian tone	Political resistance, vaccine hesitancy
Lockdown	الإغلاق الكامل (*al-ighlāq al-kāmil*)	Often replaced by *البقاء في المنزل* for softer communication	Public distrust, authoritarian association

These examples illustrate how, during the pandemic, language, politics, and cultural values became linked. Although translation is frequently thought of as a simple, technical task, the COVID-19 pandemic brought to light how crucial it is for impacting how the general population views and reacts to information. While careless, context-aware translation could improve understanding and promote compliance, incorrect term selection could make tensions, cause responses, or impede public health initiatives.

In conclusion, political issues and cultural sensitivities had a big impact on how COVID-19 terms were translated into Arabic. Translators had to deal with both the linguistic hurdles and the social implications of specific words in various communities. Their role went beyond just accuracy to include ethical choices, risk management, and effective communication. As the pandemic showed, translation in a crisis is about more than just passing on information, it's about creating meaning that connects, reassures, and mobilizes the public. The next sections looks closely at how these translation dynamics interacted with institutional practices and ongoing efforts to standardize arabic medical terminology during this fast-changing global period.

3.3.2 Standardization Gaps

The COVID-19 crisis not only highlighted the pressing need for translating novel medical terms but also revealed a serious problem in arabic medical translation: lack of standardization. With various organizations all over the Arab region—from health ministries to news organizations—hurriedly trying to come up with Arabic translations for english medical terms, inconsistencies spread quickly. This fragmentation led to competing meanings, multiple terms for one word, and unequal clarity based on source. Gaps in standardization complicated communication, misled people, and occasionally presented hazards in clinical and educational contexts.

Translators during the outbreak created Arabic translations for novel english terms hastily and without a lot of thought. Translators did not have a guiding center in arabic medical terminology; therefore, they made independent choices. As noted by Beddiaf and Aggoun (2023), some translators resorted to using formal dictionaries such as the Unified Medical Dictionary (UMD), while others used more readily available tools including Almaany or Arabterm. Ministries and media under time pressures came up with improvised

translations or adopted borrowed terms from local agencies thus causing overlapping and contradictory uses.

A clear example of this inconsistency is the term “booster dose,” which had three main arabic equivalents in official use: الجرعة المعززة (al-jurʿa al-muʿazziza), الجرعة المنشطة (al-jurʿa al-munashshiṭa), and الجرعة الإضافية (al-jurʿa al-iḍāfiyya). Each term has slightly different meanings. “Muʿazziza” suggests strengthening the immune response, “munashshiṭa” implies stimulation, and “iḍāfiyya” means simply an additional dose. Different ministries used various terms in official documents while media outlets reported others, causing public confusion over whether these terms represented different procedures or synonyms (Maouche & Moulay, 2023).

The word "lockdown" also yielded diverse arabic equivalents. In judicial writings, الإغلاق الكامل (al-ighlāq al-kāmil, "complete closure") tended to be preferred to express an authoritative tone. Meanwhile, media campaigns employed البقاء في المنزل (al-baqāʾ fī al-manzil, "stay at home") to express a more moderate tone. Alternative sources resorted to using الحجر الصحي (al-ḥajr al-ṣihhī, "health quarantine"), which actually relates more specifically to quarantining infected people. This convergence generated uncertainty as to whether citizens were being invited to remain at home, quarantine because they were infected, or comply with more expansive curbs (Didouche-Zidi, 2013).

The "variant of concern" also exhibited gaps in standardization. Documents to be distributed in Arabic by WHO employed تحور مثير للقلق (taḥawwur muthīr lil-qalaq), and they conveyed their intended risk classification. The media tended to jump to تحور خطير (taḥawwur khaṭīr, “dangerous variant”), however, an emotionally more evocative but less accurate term. The lack of regulation in their use promoted shifting perceptions about risk, sometimes increasing fear and misrepresenting the subtlety of science (Bouchair & Azizi, 2020).

Inconsistent nomenclature in clinical settings can have severe consequences. For instance, "asymptomatic" was rendered in various ways: غير عرضي (ghayr ʿaraḍī), بدون أعراض (bidūn aʿrāḍ), and لا تظهر عليه الأعراض (lā taẓhar ʿalayhi al-aʿrāḍ). Although all express lack of symptoms, which term to use varied by source. Clinical reports tended to employ more formal language, while public announcements tended towards less technical language. But inconstant application on common platforms—such as test results or medical applications—meant patients and even some health officials could misinterpret the status or risk associated with an expression (Larbi, 2016).

The problems resulting from their standardization gaps were exacerbated by the decentralized nature of planning for Arabic. In contrast to language countries with strong central governments, arabic countries tend to use diverse national organizations, universities, or independent translators to lead in terms of terminology. Therefore, even sincere arabization efforts by organizations like ALECSO or the Arab Medical Union fail to achieve consistency (Didouche-Zidi, 2013). During the COVID-19 outbreak, all this fragmentation came into play as different versions of a single term went into circulation and diluted the credibility of messages and made interborder coordination more difficult.

The table below summarizes several key COVID-19 terms that were inconsistently translated, along with examples of where and how they appeared:

Table 13:

Inconsistently Translated COVID-19 Terms

English Term	Arabic Translations	Used By	Context / Notes
Booster Dose	الجرعة المعززة / المنشطة / الإضافية	WHO, ministries, media outlets	Confusion over nuance: strength vs stimulation vs quantity
Lockdown	الإغلاق الكامل / الحجر الصحي / البقاء في المنزل	Governments, news outlets, NGOs	Mixed messages regarding legal vs voluntary isolation
Variant of Concern	تحور مثير للقلق / تحور خطير	WHO vs media	Emotional tone shift; scientific accuracy compromised in informal usage
Asymptomatic	بدون أعراض / غير عرضي / لا تظهر عليه الأعراض	Health apps, clinics, public notices	Technical vs simplified expressions; misunderstanding of infection risk
Social Distancing	التباعد الاجتماعي / التباعد الجسدي	WHO, linguists, media	Shift from literal to more semantically accurate term

These inconsistencies made it difficult to understand each other as well as delayed attempts towards standardizing Arabic medical terminology. Public health training, reporting in science, and electronic health tools all require consistency to establish trust and support

accurate transfer of knowledge. When different organizations apply different definitions for the same term, it undermines both the translation and the message as a whole.

In summation, the COVID-19 crisis highlighted major lacunae in the arabic medical terminology standardization. While translators and organizations responded rapidly and creatively to meet urgent linguistic demand with alacrity during the crisis, the absence of a concerted and centralized system created ambiguity over core terms. While understandable in crisis circumstances, this inconsistency serves to highlight genuine need for more collaborative and flexible terminology bodies capable of offering timely and trustworthy counsel. As noted, standardization is not a special case, but a vital requirement to maintain health communication, expert accuracy, and populace trust, particularly in times of worldwide crisis.

3.4 Recommendations for Future Pandemics

The translation challenges during the COVID-19 pandemic highlight the crucial need for timely, consistent, and context-sensitive medical terminology in handling public health emergencies. As discussed in this chapter, the rise of new terms, inconsistencies across institutions, politicization, and the lack of unified arabic equivalents greatly affected how effectively we communicated. To tackle these ongoing issues and boost our readiness for future pandemics, we can suggest several practical recommendations based on this analysis. These proposals aim to improve collaboration among translators, medical professionals, and policymakers, ensuring that our responses are precise, accessible, and ethically managed.

Establish Centralized Terminology Coordination Bodies

One major challenge mentioned in Section 3.4.2 is the fragmented arabic medical terminology across various institutions. The existence of different and sometimes conflicting translations for essential terms like booster dose, lockdown, and asymptomatic shows the lack of a central organization to standardize and approve Arabic medical terms (Larbi, 2016; Beddiaf & Aggoun, 2023). For better pandemic readiness, it's crucial to either create or officially empower such a body—potentially led by ALECSO, the Arab Medical Union, and regional WHO offices.

This organization should function as a rapid response unit to:

• Validate arabic terms for new concepts

• Provide official glossaries to translators, health ministries, and media outlets

• Collaborate with national language academies and universities to ensure linguistic accuracy and scientific integrity

Having this entity would not only unify terminology but also lessen confusion across countries and help prevent the spread of misleading or repetitive terms (Didouche-Zidi, 2013).

Foster Real-Time Collaboration Between Translators and Health Experts

Many inconsistencies—like variations in how terms for variants of concern or mass testing are translated—come from translators not having real-time input from medical experts. As Alhussaini (2021) points out, this disconnect can result in misunderstandings, especially

when translators aren't up to speed with the latest medical jargon. To fix this, translation processes during health crises should include subject-matter experts from the beginning.

Recommended actions include:

• Embedding trained translators in emergency response teams

• Forming multilingual task forces with doctors, linguists, and public communication officers

• Offering ongoing training for translators in current medical terms through webinars or digital courses organized by WHO and ALECSO

This collaborative approach makes sure that translations are not only accurate but also relevant and meaningful in context.

Promote Early Standardization and Unified Messaging

The delay in agreeing on terms like social distancing (التباعد الاجتماعي vs. التباعد الجسدي) and lockdown shows the importance of standardizing them early on. Having a unified term quickly, especially from organizations like WHO and health ministries, is essential for clear public understanding (Maouche & Moulay, 2023). To foster early standardization, public health agencies should anticipate terminology needs and create multilingual glossaries at the start of an outbreak.

This process can be helped by:

• Sharing early draft glossaries for input from translation networks and healthcare communicators

• Providing guidelines on how to use terms, tone, and style for different public platforms

• Focusing on terminology that is easy to understand for all literacy levels while keeping it scientifically accurate

Getting aligned early on decreases the chances of misinformation, mixed messages, and translation issues across different channels.

Leverage Artificial Intelligence and Corpus-Based Tools Responsibly

Using AI in translation can speed up workflows, but it needs to be managed ethically and with proper context. Tools like translation memory systems and automated glossary builders can help human translators, especially with large amounts of quickly changing content. However, depending too much on these tools—without human supervision—can lead to errors or miss important cultural details (Bouchair & Azizi, 2020).

To use AI responsibly, we should:

• Create arabic medical term databases with help from linguists and medical experts

• Add reliable terminology databases (like UMD and Arabterm) into translation systems

• Set up quality control processes where trained human translators review and correct AI outputs

These steps will improve consistency while maintaining the nuance and accuracy needed in health communication.

Summary Table: Challenges and Recommendations

Table 14:

Challenges and Recommendations for Medical Translation

Observed Challenge	Recommendation
Terminological inconsistency across institutions	Establish a centralized Arabic terminology coordination body (e.g., ALECSO-WHO)
Disconnection between translators and medical experts	Embed translators in health response teams and provide cross-training opportunities
Delayed adoption of unified terminology	Initiate early standardization protocols with multilingual glossaries
Semantic ambiguity and public confusion	Develop context-aware guidelines for register and tone per term and target audience
Over-reliance on unvalidated digital tools	Combine AI tools with curated Arabic corpora and human post-editing workflows

In conclusion, the COVID-19 experience highlights the urgent need for better management of terminology in the Arabic-speaking world. By creating centralized organizations, encouraging collaboration across fields, standardizing terms early, and using AI wisely, we can build a translation system that is not only quicker and more consistent but also sensitive to linguistic and cultural needs during future pandemics. These steps would greatly enhance the ability of Arabic translators to play a vital role in global health communication, ensuring that critical information is both accurate and accessible to everyone.

Conclusion

This chapter discussed the COVID-19 crisis as a special case study in learning about the challenges in translating english-to-arabic medical terminology. It pointed out that the crisis raised both novel terminological challenges and a valuable opportunity to test existing arabic medical translation approaches. When terms such as booster dose, asymptomatic, lockdown, and variant of concern entered circulation and evolved, translators were required to be quick to respond—many times in the absence of standard equivalents—to provide correct public communication (Beddiaf & Aggoun, 2023; Maouche & Moulay, 2023).

WHO recommendations helped to standardize how medical terms were translated into Arabic. Their early translations—such as التباعد الاجتماعي for social distancing and تحور مثير للقلق for variant of concern—helped establish a level of consistency. These translations weren't always applied consistently throughout Arab facilities and were occasionally altered for ease of understanding and local sensitivity, as in the alteration of التباعد الاجتماعي to التباعد الجسدي (Larbi, 2016; Didouche-Zidi, 2013).

Section 3.3.2 highlighted how translators utilized different approaches, ranging from literal translation to borrowing and adaptation. Although borrowing succeeded for technical jargon terms such as PCR, more conceptual terms tended to need adaptation and communicative approaches. Contextual need, audience awareness, and communicative urgency shaped translation strategy, showing that pandemic-era translation required adaptive decision-making, not one-size-fits-all rules (Fischbach, 1986; Olohan, 2016).

Deeper concerns about politicization have also surfaced. Quarantine, being COVID-positive, and mass vaccination took on social or political connotations and needed to be handled delicately to prevent a backlash among the general public. Translators were

confronted with an ethical balancing act in which accuracy must be reconciled with social responsibility.

In addition, gaps in standardizing terminology contributed to inconsistencies among Arabic-speaking nations. Various Arabic translations for a single English term contributed to ambiguity and eroded trust in health communication. The lack of unity—demonstrated in words such as booster, lockdown, and asymptomatic—emphasized the need for centralized arabic medical bodies and improved collaboration among health officials and translators (Bouchair & Azizi, 2020).

In general, the case study of COVID-19 indicated that translating into Arabic during an international health crisis is complicated and demands language capability as well as an understanding of context, cultural subtleties, and coordination among institutions. What is learned in this chapter highlights system-based challenges and stresses that more rigorous structures, ethical standards, and collaborative approaches must be developed with haste. These discoveries set the stage for the concluding chapter to synthesize the research and recommend improvements to arabic medical translation practices that guarantee future responses remain linguistically equipped and socially aware.

General Conclusion

The aim of the research is to explore the translation of medical terminology from English into Arabic, a task that has been far more complex than simple lexical substitution. Underpinned by theoretical underpinnings, institutional practice, and pragmatic criticism, the research attempted to tease out the major linguistic, structural, and contextual challenges that continue to undermine the quality and consistency of medical translations in the Arab world. With three detailed chapters, this dissertation elaborated on historical outlooks, translation strategies, terminological resources, and real translation examples, particularly in COVID-19 pandemic times, to provide a complete picture of the state of the art of medical terminology translation.

Among the main findings reached is that medical translation is by no means a neutral or mechanical process. Instead, it is extremely depending on the context, purpose, and target audience's needs. The study has illustrated how the complexity of english medical terminology—a significant proportion of which is Latin and Greek in origin—poses serious challenges in attempting to find accurate and culturally acceptable equivalents in Arabic. The Arabic language, with its root-based morphological system and its varied regional applications, requires a careful and flexible response to dealing with complex or evolving medical terminology.

A second principal finding is the discrepancy between institutional effort and translation output. Each of these resources, i.e., the Unified Medical Dictionary (UMD), Arabterm, and Almaany, has a beneficial contribution to make, yet none of them offers a fully standardized, context-sensitive, and updated reference for translators. This lack of cohesion across the sources was mirrored in the corpus-based analysis of COVID-19 terminology, where terminological inconsistencies, tonal inconsistencies, and audience adaptation failures

were rampant. This calls for an urgent need for greater institutional coordination, regular updating of terminological databases, and training translators in context-sensitive decision-making.

The research also highlighted how translation strategies dictate the coherence and usability of medical terminology. While borrowing, calque, and literal translation remain dominant, the study confirmed that adaptive and communicative strategies are more likely to render translated material medically accurate and culturally appropriate. More so in a time of public health crisis, where confusing or contradictory terms heighten confusion, misinformation, and reduce public compliance.

Lastly, the research highlights the need for a translator's critical judgment. The translation of medical terms is not simply an exercise in finding linguistic equivalents, but also an exercise in understanding purpose, audience, urgency, and cultural ramifications. Medical translators must operate at the intersection of science and communication, and their output has informational and ethical ramifications.

In conclusion, the arabic translation of english medical terms is a vital but under-standardized field. This thesis goes one step further with the comprehensive evaluation of its problems, approaches, and institutional frameworks. It is hoped that this research will not only direct future scholarship but also assist translators, educators, and decision-makers in formulating more consistent, precise, and context-sensitive solutions for medical terms. Continuous studies and coordination between linguistic experts, medical experts, and translation agencies will be required to improve the quality and impact of arabic medical translation in the years to come.

List of References

Alhussaini, (2021) English-Arabic Translation of Medical Terminology in Saudi Arabian Hospitals: A Functional Theory-Based Investigation. PhD thesis, University of Leeds. https://etheses.whiterose.ac.uk/30400/

ALECSO, (n.d.). *Arabterm: Multilingual technical dictionary*. https://www.arabterm.org/

Almaany. (n.d.). *Arabic-English medical dictionary*. https://www.almaany.com/

Beddiaf, M., & Aggoun, M. (2023). An Analysis of the Inconsistency Problem in the Translation of Medical Terms from English into Arabic.. [Master's thesis, University of Ouargla]. DSpace at University of Ouargla. https://dspace.univ-ouargla.dz/jspui/handle/123456789/33502

Bendob, M., & Bouresk, A. (2023). *Strategies of translating English medical terms into Arabic* [Master's thesis, University of Ouargla]. University of Ouargla Repository.

Bouchair, Z., & Azizi, L. (2020). *Students' difficulties in translating medical terms in scientific texts* [Master's thesis, University of Jijel]. DSpace at University of Jijel. http://dspace.univ-jijel.dz:8080/xmlui/handle/123456789/7560

Didouche-Zidi, S. (2013). *Medical translation in Arabic* [Master's thesis, University of geneve]. Archive Ouverte.Unige. https://archive-ouverte.unige.ch/unige:29153

Džuganová, B. (2013). English medical terminology – different ways of forming medical terms. *JAHR – Journal of Applied Health and Research, 4*(7), 55–69. https://hrcak.srce.hr/file/162511

Fischbach, H. (1986). Translation, the interpretive model. In R. Belhumeur (Ed.), *Scientific and technical translation* (pp. 95–112). American Translators Association.

Larbi, N. (2016). *Mechanisms of Translating English Medical Terms into Arabic* [Master's thesis, University of ouargla]. DSpace at University of Ouargla. https://dspace.univ-ouargla.dz/jspui/handle/123456789/12102

Maouche, S., & Moulay, A. (2023). *Translating Diseases Names from English into Arabic*. [Master's thesis, University of Ouargla]. DSpace at University of Ouargla.

Olohan, M. (2016). *Scientific and technical translation*. Routledge.

Sharkas, H. (2023). Translation methods used in Arabic translations of medical patient information leaflets. In *Translation methods used in Arabic translations of medical patient information leaflets* (pp. 85–102). Routledge. https://doi.org/10.4324/9781351000390-6

Unified Medical Dictionary. (n.d.). *Unified Medical Dictionary*. Arab Medical Union. https://archive.org/details/umdwho

World Health Organization. (2020). *Naming the coronavirus disease (COVID-19) and the virus that causes it*.

Wright, S. E. (2012). Scientific, technical, and medical translation. In Y. Gambier & L. van Doorslaer (Eds.), *Handbook of translation studies* (Vol. 3, pp. 141–148). John Benjamins.

ملخص

تتناول هذه الدراسة التحديات والاستراتيجيات المتعلقة بترجمة المصطلحات الطبية من اللغة الإنجليزية إلى اللغة العربية. وتستعرض التعقيدات اللغوية والصرفية والثقافية التي يواجهها المترجمون نتيجة للاختلافات البنيوية بين اللغتين، لا سيما مع المصطلحات ذات الأصل اللاتيني أو اليوناني. كما تحلل الدراسة طرق الترجمة مثل الاقتراض والترجمة الحرفية والاقتباس والترجمة التكيفية والتواصلية، مبيّنة مزايا وعيوب كل أسلوب. بالإضافة إلى ذلك، يتم تقييم دور المؤسسات الرئيسة مثل الألكسو واتحاد الأطباء العرب في توحيد المصطلحات الطبية العربية وتعزيز الاتساق الاصطلاحي. ومن خلال استخدام مدونة ثنائية اللغة تحتوي على نحو 500 مصطلح – بما في ذلك المصطلحات المتعلقة بجائحة كوفيد-19 – تم تحليل حالات ترجمة واقعية لتقييم الدقة والوضوح والملاءمة الثقافية. كما تم مراجعة القواميس الطبية مثل "المعجم الطبي الموحد" و"أراب تيرم" و"المعاني" -لتحديد مدى موثوقيتها واتساقها الاصطلاحي. وتبيّن أن التفاوت في المصطلحات بين المصادر، واختلافات اللهجات الإقليمية، وغياب المعايير الموحدة تؤثر سلبًا على جودة الترجمة. وتخلص الدراسة إلى ضرورة اعتماد المترجمين نهجًا حساسًا للسياق ومراعيًا للجمهور لضمان الوضوح والدقة في التواصل الطبي، كما تؤكد على أهمية التعاون المؤسسي وتحديث قواعد المصطلحات لتحسين جودة الترجمة الطبية في البيئات الصحية الناطقة بالعربية.

الكلمات المفتاحية: الترجمة، الترجمة من الإنجليزية إلى العربية، المعجم الطبي الموحد، كوفيد-19، الترجمة الطبية إلى العربية.

Résumé

Cette étude examine les défis et les stratégies liés à la traduction des termes médicaux de l'Anglais vers l'Arabe. Elle analyse les complexités linguistiques, morphologiques et culturelles rencontrées par les traducteurs, notamment en raison des différences structurelles entre les deux langues, en particulier pour les termes d'origine latine ou grecque. La recherche explore diverses méthodes de traduction, telles que l'emprunt, le calque, la traduction littérale, la traduction adaptative et la traduction communicative, en mettant en évidence leurs avantages et leurs limites. De plus, elle évalue le rôle des institutions clés comme l'ALECSO et l'Union Médicale Arabe dans l'unification du vocabulaire médical arabe et dans la promotion de la cohérence terminologique. À l'aide d'un corpus bilingue de 500 termes, y compris du vocabulaire lié à la pandémie de COVID-19, l'étude analyse des cas pratiques de traduction pour évaluer la précision, la clarté et la pertinence culturelle. Les dictionnaires médicaux tels que le Dictionnaire Médical Unifié, Arabterm et Almaany sont également examinés pour évaluer leur fiabilité et de leur cohérence. Les résultats montrent que le manque d'équivalents unifiés, les variations régionales et l'incohérence terminologique nuisent à la qualité des traductions. L'étude recommande une approche contextuelle et centrée sur le public, ainsi qu'une meilleure collaboration institutionnelle et une mise à jour continue des bases terminologiques.

Mots-clés: Traduction, Traduction anglais-arabe, Dictionnaire Médical Unifié, COVID-19, Traduction médicale en arabe.