Grappling with Cultural Sensitivity of Culturally Specific Concepts in English-Arabic Medical Texts

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Abstract

Problems relating to cultural aspects, linguistic differences and religious implications can complicate medical language communication. The present study delves into the challenges of translating culturally specific medical concepts between English and Arabic, focusing on cultural sensitivity in medical translation. The need to explore this area in the context of English for Specific Purposes (ESP) stems from the needs of the majorly multicultural-multilingual social fabric of modern Saudi Arabia. The study uses a random corpus of fifty medical prescriptions in English and their human-translated Arabic versions for detailed analysis. The corpus are then analyzed for four features: Cultural Sensitivity and Appropriateness, Direct Equivalents, Medical Practices and Beliefs, and Translating Specific Medical Terms to establish translation efficacy. Content analysis by medical translation experts revealed that of the four areas under study, ensuring cultural sensitivity and appropriateness was least assured in the translation of medical prescriptions. Semi-structured interviews with a smaller set of translators helped identify the challenges in translation and some recommendations for tackling them. The study is likely to transform the focus and curriculum of ESP and translation courses in Saudi Arabia as well as other similar multicultural-multilingual environments healthcare services focus on effective language strategies and communication. Finally, the identification of the key problems and issues will contribute to optimizing the experience towards building culturally grounded medical language translation practices.

1. INTRODUCTION

Medical translation is an important field which is hinged on the attainment of Sustainable Development Goals (SDGs) (Sipido & Nagyova, 2020). The language terms in medicine raise common barriers to delivering health and social services to the people (Dahal & Aoun, 2023; Masin, 2024). The translation of medical jargon, procedures, and healthcare advice from English to Arabic typically demands a profound understanding to prevent misinterpretation that might affect patient results (Mohamad, 2024).

With Saudi Arabia being one of the countries having a diverse population, the need for translation is pivotal. Differences need to be addressed to provide the fundamental right of every citizen to quality health services. Among the problems this essential service is currently experiencing is the language barriers in the medical field, which can lead to poor health service provision, low level of patient satisfaction, and the prevalence of misunderstanding and miscommunication (Masin, 2024, , Walkowska et al, 2023; Al-Wasy & Mohammed, 2024). For example, a blind person may be called a "visionary" in Saudi Arabia, and "a person with disability" may be called "a person with determination": what appears to be an ameliorative euphemism in Arabic can be described as a sarcastic oxymoron, or at least inaptly condescending, in English, medical, and United Nations terminology in general (The Convention on the Rights of Persons with Disabilities, 2006). Despite efforts to address such a problem, there remains a pressing need for effective medical language communication plans and strategies to improve language awareness in the medical sector (Habib et al., 2023; Jin et al., 2023; Almakrob & Al-Ahdal 2020). Furthermore, the presence of traditional medical beliefs and practices are also common which is in clash with modern medical services. Addressing this issue will ensure the attainment of SDG and equality and quality health service in Saudi Arabia. Therefore, this project will aim to answer the following questions.

2. LITERATURE REVIEW

Cultural competency in language is defined as an important aspect of quality human communication. Many experts have noted the need to use language effectively for its specific purposes (Qobilovna, 2023). Research relating to the role of language and healthcare services is an important and significant perspective when a country would like to improve its social services (Spiegel et al, 2024). The delivery of basic health services encompasses a package of scientific communication with the people. Among the studies shown are the pitfalls of science and health services fall on the deplorable condition of miscommunication and misunderstanding (Al-Ahdal, 2020; Apers, Nöstlinger & Van Praag, 2023; Weaver et al, 2023). Within the health service that a country with diverse employees and citizens needs is the development of a translation model to provide professional translation of medical reports and documents between English and Arabic.

Habib et al. (2023) studied the communication challenges occurring between patients and health service providers in South Africa. The study revealed that healthcare entities should select interpreters who ensure the satisfaction of patients. Alasbahy and Shamsi (2023) examined the plight of rendering medical terms between English and Arabic. The study

explored a corpus of 24 pharmacy-related terms. The findings of the study pointed out that translating medical terms is challenging for both medical students and researchers alike. Therefore, this study is anchored on sociolinguistic competence in the medical field, which refers to proficiency in the use of language in the medical context. It is perceived that in the medical field, the need to adhere to responsible patient-provider communication is a factor to enhance trust and provide better health outcomes. Sociolinguistic competence will help tailor the need for effective communication for the patients as well as taking into consideration their cultural context and background. Health communication experts and scholars are among the proponents of sociolinguistic competence in medicine. Fostering a sense of understanding and competence requires the ability of medical experts to communicate properly and tactfully with patients and clients. On theoretical parlance, cultural linguistics is an important framework looking at the interplay of cognition, language and culture.

While some translators or medical practitioners may resort to the use of AI for translating medical prescriptions, the practice has its own problems. Boulanger (2024) summarized the benefits and drawbacks of using generative AI and neural machine translation in medical translation while also offering a look back at the development of translation technology. These need to be carefully studied before resorting to AI tools as an easy way out.

The issue of translating medical words from English to Arabic, especially those pertaining to the COVID-19 pandemic, is the focus of Alduhaim and Alkhaldy (2023). To clarify the significance of neologism in medical discourse, it first looks at medical terminology in English, considering how such terms are generated or invented. Many scholars have looked at the significance of translating medical terminology into Arabic and developing new equivalents rather than directly copying foreign words into Arabic, even if English continues to be the lingua franca of science and medicine. Therefore, the purpose of this essay is to first clarify new terms that have surfaced during the COVID-19 epidemic and then examine the translations that are most frequently used for them. The data consists of four common words that have been extensively used during the pandemic. The study concluded that most of these terminologies are translated using a descriptive method, or Arabicization. The article further highlights the importance of creating a consistent medical terminology base in Arabic.

Siddig (2022) highlighted the difficulties in translating medical document variants that contain standard terms used in pharmacology, medicine, and healthcare contexts and documents and focused on the inconsistency of acronyms and abbreviations used in the medical context. Some medical acronyms in English have several medical meanings or variants of acronyms and

abbreviations that need to be translated into Arabic, the study uses a descriptive methodology to investigate these. Documents commonly used in hospital medical settings, such as graphic signs, medical reports, admission forms, and prescriptions, comprise the samples taken into consideration in this study. Eighteen medical acronyms and abbreviations were contained in the documents, which needed to be translated from English into Arabic. The findings showed that the acronyms and abbreviations showed discrepancies while translating, also there were various versions of translations were available. Consequently, the results supported the primary difficulties in translating acronyms and abbreviations from English as a source language to Arabic as a target language, as well as the importance of educating medical translators to conquer these difficulties. The study concludes that medical initialisms, acronyms, and abbreviations are more common, multi-version, and inconsistent across a variety of documents, including medical reports, which causes a lot of problems. Additionally, this could result in inaccurate translations. Therefore, it is advised that translators become more vigilant to overcome the barriers that prevent accurate translation.

Moreover, when cognitive debriefing interviews were conducted with 30 native healthy Arabic speakers to assess the clarity and comprehension of translated items. Most items were well understood, but two items related to cognitive ability and four related to physical functions required revision to address participant confusion. The translations were refined based on the participants' feedback and expert recommendations. This study followed a rigorous translation process and included cognitive debriefing interviews to ensure linguistic and cultural equivalence. The availability of these tools in Arabic enhances cross-cultural research and practice in healthcare and contributes to a global understanding of cognitive and physical functions.

Almohaya et al. (2024) set out with the specific goal to translate and culturally modify two item banks from the Patient-Reported Outcome Measurement Information System (PROMIS): the Physical Function for Samples with Mobility Aid Users and the Adult Cognitive Function Abilities item banks. To guarantee linguistic and cultural relevance, this study used the Functional Assessment of Chronic Illness Therapy (FACIT) multilingual translation process. Expert evaluations, forward and back translations, and finalization by a language coordinator were all part of the translation process.

Alhussaini (2021) fills a knowledge gap by examining how translation might be used to effectively convey medical information. Functionalist theories, specifically Nord's 1997 Loyalty Principle and Hans Vermeer's 1989 Skopos theory, provide the theoretical foundation

for this study's investigation and analysis of data taken from three primary sources: questionnaires, interviews, and medical reports. To ascertain (1) the kind of equivalents used to translate English medical terms into Arabic, (2) the methodology that translators employ when translating these terms, and (3) the degree to which patients comprehend the Arabic equivalents used to translate English medical terms, data was gathered from four hospitals and analyzed. This study offers a paradigm for creating functional translations that the end users, who are primarily laypeople, could understand. The primary players in the translation process—the author of the source text, the translator, and the recipient of the target text—are included in the study. Instead of using the top-down methods recommended by other research, the study presents a bottom-up method to handle the terminological problems associated with medical translation. Furthermore, the information gathered from this study could serve as a foundation for upcoming initiatives aimed at enhancing the creation and application of medical terminology.

The primary features of medical discourse, namely medical terminology, that have a direct impact on the translation process of medical literature are the focus of Khalil (2023). Four chosen English medical texts from the Cleveland Clinic website make up the data. There is a discussion of three fundamental problems with medical terminology. Common meanings interfering with specialized meanings is the first problem. The second problem is that there are two levels of medical terminology: common medical phrases and highly specialized medical terms. The employment of Latin and Greek affixation, which is thought to be a particularly distinctive aspect of medical language, is the subject of the third issue. Relevant theoretical background is given to support the concepts put forth. Given the extremely specialized nature of medical discourse, it is anticipated that one of the difficulties faced by translators who specialize in medical translation is terminology. The study concludes that in order to produce competent and high-quality medical translations, a specific understanding of medical terminology is essential. Additionally, medical translators must be current on the most recent developments in the medical profession as well as the pertinent terminology.

English is used as the primary language of instruction in all Gulf Cooperation Council (GCC) medical schools. The purpose of this study was to investigate medical students' opinions regarding the use of Arabic medical terminology in an English-based curriculum. Design, technique, and strategy Preclinical second- and fourth-year students in the Arabian Gulf University's College of Medicine and Medical Sciences (n = 407) were the focus of this descriptive study in the academic year 2022–2023. Students were given access to Arabic medical terminology in the English-taught pharmacology teaching materials for units I (second

year) and VIII (fourth year). A self-administered questionnaire was used to gather the opinions of the students after these two units.

There were 263 responders (response rate 64.1%: 77.8% females, 22.2% males). Arabic was the primary language of instruction for most participants (78.8%). A sizable portion of students (79.8%) said that having Arabic terminology available aided their study. Most students (71.3%) expected to have trouble in the future when explaining pharmacological treatment to their patients if pharmacology is taught solely in English. Most respondents (86.7%) thought this intervention would improve their ability to communicate with patients, and 82.2 percent said they would like to see it included in the clinical skills training. Students in their second year and those whose primary language of instruction was Arabic were more likely to support the intervention.

There is a noticeable lack of AI-related knowledge and training among Arab medical students. Nevertheless, according to Allam et al (2024), they have a favourable opinion of the use of AI in radiology and medicine and clearly recognize its importance for the healthcare system and medical education.

2.1. Research Questions

1. In what way does cultural difference influence the translation of medical concepts from English to Arabic?
2. What cultural challenges arise while translating medical terms and concepts from English to Arabic?
3. What model of communication plan can best ensure culturally sensitive and accurate translations of medical texts?

3. METHODOLOGY

The study employs a mixed methods research design aligning its core components into two important sub-methods, these are (1) textual analysis of 50 randomly chosen medical transcripts in English version to be compared with Arabic translation. All of these transcripts came from locally situated medical practitioners though their patients were a mixed cultural group with a comparable number of local and foreign nationals. The focus of the analysis was on the healthcare terms that were likely to have perceptional variance (by virtue of their being seen as 'sensitive' in the Saudi culture). The second, qualitative component was the interview with six medical translators and experts working in English-Arabic medical translation. These interviews focused on their distinct experiences, problems and challenges, particularly in

translating culturally loaded medical content. All translation requests that they received were in the online mode.

4. FINDINGS AND ANALYSIS

In this analysis, we gathered data through translated texts and interviews to dive into three key research questions about translating medical concepts from English to Arabic. The study looks at: (1) how cultural differences shape medical translations, (2) the cultural hurdles faced when translating medical terms, and (3) a communication plan model aimed at ensuring translations are both culturally sensitive and accurate.

1. In what way does cultural difference influence the translation of medical concepts from English to Arabic?

Influence of cultural differences on medical translations cultural differences between English and Arabic-speaking societies significantly affect how medical concepts are translated. Insights from interviews with professional translators and medical experts showed that cultural norms, religious beliefs, and historical contexts play a crucial role in how medical information is understood and communicated. The most interesting example of this was when reproductive health, topics like contraception, fertility treatments, or sexual health were approached by the doctors. Given the traditional Saudi ethos, and prevailing religious and social norms, this sensitivity influenced how translators navigated these subjects, and ensured that the translated materials resonated with the cultural expectations of Arabic-speaking audiences. Sometimes, medical terms that seemed neutral in English took on culturally loaded meanings in Arabic. This often required translators to opt for euphemisms or more indirect language to keep things culturally appropriate. For instance, phrases like "genetic testing" or "mental illness" might be seen as taboo or carry a stigma in certain Arabic-speaking communities, prompting translators to adjust these terms or their explanations in the translations. These cultural subtleties highlight the need for translators to possess not just linguistic skills but also a deep cultural understanding to make sure that medical information is both clear and acceptable to the intended audience.

2. What cultural challenges arise while translating medical terms and concepts from English to Arabic?

Cultural challenge is by its very nature an inevitable part of the translation process, perhaps becoming more so in the medical translation field where accuracy can mean the difference between life and death. This fact was also one of the leading themes in the interviews with the translators and the analysis of translated materials (Azizova, 2023).

Many of the common medical terms contemporarily have roots in Western contexts: This makes translation a difficult ground to tread. In the interviews, three translators pointed out that the terms like "psychotherapy" or "placebo," were rather tricky to translate(Unschuld, 2012). The end products sometimes lead to misunderstandings. Additionally, the interviews highlighted that translators frequently encounter ethical challenges when dealing with sensitive medical topics, this finding is consistent with that of Song (2025), who introduces significant ethical difficulties for medical translators, who must align accuracy, confidentiality, and cultural sensitivity.. For example, when discussing issues like terminal illness or palliative care in an Arabic context, it's crucial to be mindful of the religious and cultural perspectives surrounding death, indeed death is itself a cultural event in ancient cultures. It is then natural for them to feel inclined to use less direct terms to present the harsh reality as subtly as possible in the Arabic context in this regard Strandqvist, et al., (2018) who stressed on the employment of similar euphemisms, cultural adaptation, explication, and other translation strategies, taking into account the target audience and particular communicative goals., Accuracy may then take a back seat, but this is also seen as unavoidable. The real challenge lies in striking a balance between preserving the integrity of the medical information and ensuring it is at least culturally acceptable, in line with this finding Abdi and Mouzaoui (2024) who claimed that the importance of balancing between fidelity to the source material and cultural adaptation, where translators must prioritize the preservation of the humor's intent and impact over literal accuracy to ensure the content resonates with the target audience.

Even in the Arab context, translators reported challenges with variance in dialects and regions. At least one translator disclosed a tricky situation when the MSA translation of a medical document was received unfavourably by a client due to the dialectal interpretation, this notion goes hand in hand with the finding of Aladeemy, et al (2024) who reported that 'it is crucial to develop additional resources and construct new Arabic sentiment lexicons that account for the various dialects within Modern Standard Arabic (MSA)" (p.1) To conclude, an Arabic term that works well in one area might be misinterpreted or have a different meaning in another.

3. **What model of communication plan can best ensure culturally sensitive and accurate translations of medical texts?**

Translation falls in the domain of language, which in turn, falls in the domain of culture. For robust translation practices to develop, it is of utmost importance that cultural sensitization and adeptness be kept at the forefront as Rubiés,(2017) who asserts that the cultural interactions did not end here: in parallel to these complex acts of local translation, missionaries also 'translated' cultural diversity in another direction... Analysis of the transcripts and participant

interviews showed that medical term translation involves cultural difficulty owing to non-direct equivalents, differences in medicine and beliefs practices, and also requiring cultural consciousness to have accurate, proper, and respectful communication. Thematic analysis of the interview transcripts showed that medical translation challenges were the outcome of

1. Lack of Direct Equivalents

Given the difference in cultures, finding equivalence was often a problem with the participants. Consequently, they resorted to close substitutes that exactly or precisely relay the intended content, but definitely not precise fits.

2. Differences in Medical Practices and Beliefs

The Arab culture has its own unique set of beliefs (stemming from culture and heritage) pertaining to health, sickness, and medical interventions. As a result, perceptions and meanings of medical information are influenced in the translation process.

3. Poor training in Cultural Sensitivity and Appropriateness as translational targets

All the participants in this study reported poor emphasis on cultural training in their formal education. As a result, they struggled with understanding the dynamics of cultures to accurately and respectfully convey information. This encompassed knowledge of cultural norms, values, and communication patterns to prevent misinterpretations or offence. They reported that the Arabic language and culture, both are indirect in their nature, directness is interpreted as a lack of values, however, medical translation hinged on directness. This created serious communication barriers in the translation of medical content.

4. Challenges in Translating Specific Medical Terms

This was reported to be the least of the challenges, thanks to globalization. Translators reported that drug names, medical acronyms and abbreviations, eponyms, etc. are a challenge but a small one in modern times as the internet has made it possible to access adequate and reliable information while translating such content.

4. CONCLUSIONS

Translation of medical content in multicultural-multilingual environments is a challenging task fraught with many pitfalls. The deep inroads of AI into all aspects of modern life have further complicated issues as the tools are yet in nascent stages of development. Because there are several Arabic equivalents for English medical terminology, translating medical books presents several difficulties for undergraduate student translators. There are multiple Arabic equivalents for medical terminology such clinical, critical care, etc. With a large vocabulary that includes words that might not have exact translations in other languages, Arabic is a rich language. Since translation involves at least two languages and their cultures, it falls under the category of

contrastive linguistics. As concluded in this study, contrastive linguistics (the process of translating text from one linguistic system to another) frequently requires the use of imaginative methods to preserve the original text's depth in the translated version. However, to stay in the League of developed nations, the Arab world will benefit from the strategic improvement of medical translators' educational journey and comprehension as well as the preservation of cultural identity. In addition to this, quality assurance is important to ensure that medical translations are accurate and of high quality because even small mistakes can have adverse effects. Taking this forward, the availability of qualified medical translators who understand medical terminology and cultural know-how is imperative, onus for this lies with the translation teachers, curriculum developers, and policymakers.

a. Recommendations

The results of this study will contribute to improving the healthcare translation services of Saudi Arabia, and improve the healthcare communication of the country in the form of policy briefs and policy plans. The findings will also enhance the medical curriculum of the related departments by including courses for training the health service providers with strategies for health communication plan. Also, a positive effect will find its way into the job-training performance of prospective medical providers in the higher education curriculum; and lastly, the findings will propose a health communication plan and strategies for the context of Saudi Arabia. By offering these insights, this project will venture on the identification of best practices in translation and healthcare communication across linguistic and cultural boundaries. In this background the following recommendations are suitable:

1. Communication should be included as a field of study for the translators.
2. Student translators should be encouraged to grasp parallel linguistic cultures in the Arab region.
3. Student exchanges with dominant cultures should be encouraged as a matter of policy to ensure that translators are maximally sensitized to other cultures.

Limitations

The study scope was limited to the English-Arabic language pair, therefore, its findings may not apply to other linguistic flora. In future replications, a larger sample size of materials and participants should be encouraged.

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