

Determinologisation in Medical Texts Within the Framework of Community Translation: A Corpus-Based Study

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Abstract

This paper presents the preliminary findings of an ongoing post-doctoral research investigating the phenomenon of determinologisation of medical terminology in texts intended for the general public, specifically targeting refugee women. Building upon research demonstrating that language barriers and low health literacy hinder their healthcare access, this corpus-based piloting study examines specialised and lay English medical texts on maternity (breastfeeding), aiming at identifying determinologisation strategies. This study seeks to contribute to a better understanding of how to effectively communicate complex medical information to diverse populations, thereby improving health literacy and promoting equitable access to healthcare.

Keywords

Community translation, determinologisation, medical texts, corpora, refugee mothers, health literacy

1. Background of the Research

Access to quality healthcare is a fundamental human right. However, discrimination on the basis of ethnicity and the lack of translation services within healthcare settings significantly impede access for many, particularly refugee mothers. This is underscored by studies highlighting that refugee mothers face significant barriers to fair and effective healthcare due to language and cultural differences, lower health literacy, and limited access to information (Gil-Salmerón et al., 2021, Logotheti, 2023, Hirani, S.A.A., 2024).

Community translation or translation for public services (Taibi, 2011; Angelelli, 2015; Ruiz-Cortés, 2021; Gonzalez et al., 2023) is the provision of direct and reverse translation of texts produced by public institutions, hospitals, and non-governmental organisations, in any language combination in order to facilitate relationships between foreign language speakers (Vyzas, 2017: 336). Notably, community translation encompasses a wide range of texts, including crucial medical information such as guides on disease prevention (e.g., vaccinations, hygiene rules, prevention guidelines). Terminology is not the main element determining community translation, as the textual genre and especially the communicative context, with its inherent power relations between the state and foreign language speakers, are very important parameters (Vyzas, 2017: 337). While the key role of community interpreting in addressing these challenges has been widely acknowledged, the importance of community translation in healthcare and refugee settings remains underappreciated. This oversight is evident in the limited attention given to the role of translation within broader language policies, despite numerous studies on language rights and migrant integration. This gap is

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critical, as translation services can significantly complement and support interpretation services in overcoming communication barriers and improving access to healthcare for refugee populations.

Popularised medical texts are informative texts (Reiss, 1981) that address health issues to build further knowledge in health promotion, prevention, control of unhealthy behaviours and understanding of basic information for the layperson. These texts, whether in print or digital form, aim to empower individuals with different levels of education and health literacy to make informed decisions about their health (Smith et al., 2009).

2. Theoretical Framework

Determinologisation is a complex and multidimensional linguistic phenomenon that is closely associated with term variation and exemplifies the interaction between general and specialised language. In fact, the concept of determinologisation encompasses two distinct meanings. The first refers to the increasing integration of specialised terms into every day non-specialised discourse, which may lead to a less precise use of these terms (Ungureanu, 2006; Renouf, 2017; Humbert-Droz, Picton and Condamines, 2019). An illustration of this is offered by Honová and Holeš (2023) in their study about psychiatric terminology used into non-specialised contexts. The second meaning describes the process of simplifying terminology, in a non-specialist context, which involves explicitation of scientific terms as well as replacing scientific terms with lay terms (Hill-Madsen, 2017; Lambrechts and Verplaetse, 2018). In this second sense, determinologisation is closely linked to strategies of popularisation and vulgarisation, which aim to facilitate the broader dissemination of knowledge and enhance comprehension among lay readers. Furthermore, this phenomenon is related to both interlingual and intralingual translation, which is why it is also examined within the framework of translation studies.

When providing health information to newly arrived refugees and asylum seekers, it is important to ensure that the content is clear, concise and culturally sensitive. To reduce the technicality of a text so that it can be understood by non-specialists, popularisation strategies can be used in the process of cross-language translation. Through these strategies, specialised scientific terminology can be transformed into lay terminology to ensure what Hill-Madsen call ‘the skopos of enhanced accessibility’ of the text (2017: 92).

In relation to intralingual translation from technical to non-technical texts, Hill-Madsen distinguishes four types of lexical strategies used when dealing with terms:

- 1) Decrease-in-technicality: replace the technical term by a non-technical,
- 2) Decrease-in-formality: use of less official register,
- 3) Non-technical paraphrase: rendering freely the source text,
- 4) Explicitation: making explicit what in the source text is implicit.

According to Lambrechts and Verplaetse (2018: 37-38), determinologisation (or popularisation) strategies can operate at the level of the term, replacing the scientific term with a popularised one. More specifically, Lambrechts and Verplaetse examined the method of popularisation in drug instruction leaflets and distinguished the following strategies:

- 1) scientific term + popularised term,
- 2) popularised term + scientific term,
- 3) popularised term without the addition of a scientific term or explanation,
- 4) scientific term + explanation,
- 5) popularised term + explanation.

This paper focuses on the phenomenon of determinologisation, the process of simplifying complex medical terminology to make it understandable for non-specialists, specifically within the context of medical information for refugee mothers. By analysing the strategies employed to simplify medical information, this research aims to contribute to the development of more effective and inclusive healthcare communication for diverse populations.

3. Research Aims and Questions

The general aim of this post-doctoral research, being conducted at the Aristotle University of Thessaloniki, is to study the phenomenon of determinologisation in medical texts written in English, French, and Greek addressed to the general public, i.e. to non-specialists. More specifically this research aims to identify, analyse and compare the strategies employed in these three languages in medical texts to simplify terminology for refugee mothers.

For this reason, the following questions will be addressed:

- 1) Are the strategies described above observed in our study?
- 2) What terms are popularised in our study?
- 3) What linguistic and/or textual factors influence determinologisation?

4. Research Methodology

In order to study determinologisation strategies, and in particular the strategies of term substitution and explanation this research will employ a corpus-based approach to analyse a collection of medical texts, both technical and non-technical. As to the language studied, this paper will focus exclusively on the English language, as it will present the results of a piloting study.

4.1. Corpus Design

For this pilot, the corpus design involved the careful selection of two distinct text types to represent the target domain: specialised texts and lay texts:

- **Specialised texts:** Texts written by medical professionals for other professionals (an expert-to-expert communication setting), such as breastfeeding guides for the medical profession. As argued by Julie Humbert-Droz, Aurélie Picton, and Anne Condamines (2019) specialised texts “constitute the primary material on which linguistic analyses are carried out, mostly from a tool-based approach” of determinologisation.
- **Lay texts:** Comparable texts, i.e. belonging to the same subject matter, intended for the general public (guides for mothers drawn by the WHO, UNHCR, and La Leche League International).

In both categories, the focus will be on texts related to breastfeeding (some key issues are breast conditions in the breastfeeding mother, anatomy of the breast, lactation, weaning, etc.). The selection of texts for inclusion is based on their relevance to the subject matter and the identity of the author (whether an individual or an organization).

4.2. Corpus Compilation

Following the collection of texts, we will construct a specialised and a lay text corpus using Sketch Engine.

The specialised corpus will be based on the subject-specific publication *Breastfeeding: a Guide for the Medical Profession* (Lawrence and Lawrence, 2022), and will serve for extracting terminology frequently used in this subject matter.

The lay text corpus will be further divided into two sub-corpora according to the addressee:

- 1) texts written by experts (such as midwives, pediatricians) or semi-experts² (lactation consultants) for non-experts (English-speaking mothers all over the world),
- 2) texts published by international humanitarian organisations for non-experts, with special focus to refugee women.

² According to Humbert-Droz, Picton and Condamines (2019: 5), *semi-experts* are considered to have some knowledge of a domain, although non-experts are considered to have none (or almost none).

These two sub-corpora, which deal with the same subject matter, will both be compared to the corpus of specialised texts to identify determinologisation strategies, as well as to each other. The inclusion of texts addressed to different audiences is expected to provide a more comprehensive representation of determinologisation in non-specialised texts. Regarding the period considered in our corpus analysis, we focus on the present and the recent past, as our study is primarily synchronic.

4.3. Data Analysis

Firstly, corpus analysis tools in Sketch Engine will be used for automatic term extraction (e.g., keyword extraction). Once the list of candidate terms (CTs) is extracted, it will be refined by removing duplicates, eliminating noise, etc.

Next, the list will be reviewed in collaboration with experts in the field of breastfeeding to ensure further refinement. Once a representative list of terms for this field has been established, we will analyse node words in their context (e.g., using concordancers and word sketches) within the specialised corpus.

In the following step, the lay corpora will be analysed. During this stage, the terms identified in the corpus of specialised texts will be examined in the lay texts. This analysis will involve searching for exact terms as well as synonyms, near synonyms, and lay variations (cf. Loupaki 2018; Vezzani et al., 2018).

5. Expected Results

One of the expected outcomes of this research is to shed light on the phenomenon of determinologisation and the strategies used when communicating medical information, in the languages studied.

Furthermore, one of the expected results will be the development of a list of lay-friendly terms related to breastfeeding, which could be used when addressing populations unfamiliar with specialised medical terminology. This list could serve as a valuable tool, when translating interlingually and/or intralingually within the framework of public services.

In this regard, the study is expected to further highlight the role of community translation in healthcare and refugee settings, particularly for languages where research on community translation remains limited.

Declaration on Generative AI

During the preparation of this work, the authors used ChatGPT-4 for grammar and spelling checks. The authors have subsequently reviewed and edited the content and take full responsibility for the publication's final version.

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