

## THE HISTORY, PECULIAR TERMINOLOGY AND TRANSLATION PROBLEMS OF THE LANGUAGE OF MEDICINE

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*Abstract: The aim of this article is to cover the issue of English as the lingua franca of medicine and its influence on other languages. Besides linguistic aspects, we attempt to offer a survey of translation problems and difficulties, as these are viewed by some of the authors who have dealt with this topic. We also wish to cover some aspects of the historical evolution of medical terminology and issues related to the way medical terms have appeared and spread over the centuries.* **Keywords:** language of medicine, terminology and terminography, translating medical texts, linguistic peculiarity

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The language of medical sciences is used in contexts where failures in communication or mistakes in expressing oneself may lead to disastrous results. It is said that medicine is the king of all professions. Today, the *lingua franca* of medicine is English, as the most widely cited medical journals are in English. Practitioners have to be able to master this new *lingua franca* of medicine, not only to communicate (with their patients or the other members of the medical staff), but also to improve professionally, to have access to the most recent discoveries.

### History of medical terminology

Every profession and every science builds up its own specialized language use and terminology. Scientific terminology differs from the terminology of professions in being more systematic and based on taxonomy. One of the most important battles medicine has ever had was its striving to turn, from *ars mechnica* i.e. profession into *ars liberalis*, i.e. science. With the advent of medicine as science, it had to implement a more regulated and systematic terminology and conceptual framework.

The history of European medical terminologies goes back to ancient Greece, the 6-5th centuries BC. The first medical activities were carried out in ancient Greece, Rome and Egypt. Today's famous *Hippocratic Oath* dates back to the times of Hippocrates, who is considered the Father of Medicine. His cures and healing methods differed from those of the priests of his time, as, unlike these, Hippocrates believed that illnesses were not caused by angry gods, but they had natural causes. Frînculescu summarizes the history of medicine in the following way: „Latin was the *lingua franca* of Western medical writing for several centuries. The roots of Western medicine lie in Greek. Medical learning was transmitted in Latin translations of Greek and Arabic texts, mostly by translators whose first language was not a European vernacular, but Arabic or Greek. Galen's texts became available in the 13th century in Latin commentaries, with several layers of additions. Medical texts began to be translated into vernacular languages such as French, English, German, Portuguese, and Catalan in the 14th and 15th centuries, almost simultaneously in different parts of Europe. However, at that time, Latin retained its strong position as a pan-European language of

science. The situation started to change in France, at the end of the 16th century, and in England, at the end of the 17th century, when several authors began to publish in both vernacular languages and Latin. But Latin still retained its position longer in other parts of Europe, for example in German-speaking countries” (Frînculescu, 2009:4).

Thus, in ancient times, the language of medicine was Greek. The first important collection of medical writings is the so-called *Corpus Hippocraticum*, a collection of 60 studies. The terminology of these books stands at the basis of today’s medical terminology. Even some of the linguistic phenomena that operate in these ancient writings are similar to the ones that operate today: for instance, the word *metastasis*, initially meaning *exodus*, *moving out*, was not used in its general meaning, but suffered a change of meaning and started to be used with its medical meaning, i.e. *change*, *alteration*.

Among the first medical dictionary writers András László Magyar (2009) mentions Xencritos, Callimachus, Tanagraios, etc. Their dictionaries were monolingual and focused on the explanation of words. Claudios Galenos (2nd century BC) played an important role in the systematization and canonization of the Greek medical terminology. Another important moment in the evolution of medicine was the Middle Ages, when different medical schools, like the of the University of Montpellier, started to perform dissections of human bodies. In the Middle Ages, more precisely towards the end of the 15th century, the first medical treatises in French were published. French became the new *linga franca* in the 16th century, and again in the 18th when Louis Pasteur and Claude Bernard became famous.

This ancient Greek medical terminology survived and was handed over to modern European medical terminologies via three intermediaries: the Arab medical translations and their Latin re-translations, the Byzantine medical terminology (also in Greek) and the European Latin-based medical activities, carried out especially in the network of Catholic monasteries.

Among the first Arab translators of medical texts Magyar (2009) mentions the name of Huanin ibn Ishak al-Ibadi whose Latin name was Johannitius (808-877), and who was the son of of rich chemist from Syria. He is the founder and the creator of the Arabic medical terminology. The Arabs’ medical dictionaries are the first plurilingual dictionaries in the field.

The role of the Byzantine Empire is also tremendous, in point of terminology but also in point of medical instruments. For instance, the term *arteriosclerosis* comes from the writings of Teophylos Protospatarios, while the first description of the medical symptomatology of *hepatitis* is due to Simeon Seth, who also introduced the term itself. The institution of hospitals also appeared in the Byzantine culture. .

From 529 onward, the Benedictine monasteries developed an intense medical activity. Between the 6th and 12th centuries these monasteries became the training and schooling centers for doctors, pharmacists and other medical professionals, being, in the same time, the places where medical books and treatises were written. The first hospitals in Western Europe appeared in these religious institutions. Their role in the development of medical sciences is related mostly to the development of the institutional frames of health services.

The crusades brought about the import of new medical branches, surgical procedures, names of medical plants and medical instruments. Theodorus Borgogogni’s *Cyrurgia* lists the names of certain medical and surgical instruments for the first time, while the first data related to forensic medicine and autopsies also date back to the 14th century. Among the most

important translators who translated medical texts we mention Constantinus Africanus, Petrus Hispanus and many others. Due to their work, in the 9th and 14th centuries Latin becomes the *lingua franca* of medicine.

In Europe, the first dictionaries and glossaries became known as the *Synonyma Stephani*, a dictionary elaborated by Stephanus of Antiochia in 1127. Another dictionary from the Early Middle Ages is the one written by Matthaëus Sylvaticus, *Opera pandectarum medicinae* (Magyar, 2009: 180-186).

The huge amount of Arab and Greek medical texts translated into Latin in the 9-13th centuries led to the appearance of the first medical universities in Europe and the development of medical literature. Teaching of medical sciences basically meant reading and explaining the works of ancient Greek or Arab writers. There were four main types of medical texts: *commentaries* (explanatory texts), *compendium* (Latin summaries of Greek or Arab writings), *herbaria* (books of herbs and recipes based on medical plants), and *consilia* or *regimen* (advice books) (Magyar, 2009: 186). The medical literature of that time is characterized by terminological inconsistencies, the predominance of Latin, alongside with the appearance of the first medical texts in vernacular languages (German, French, Italian, etc).

Gutenberg's invention revolutionized the medical field as well, as printing led to the standardization of medical terminology. It was the dawn of a critical approach to medical texts and translations, and translation started to become a profession that one could live on. The medical professionals of the Renaissance period strived to introduce the principle of standardized medical terminology; it is the time when terms of Greek origin started to be used with Latin suffixes or prepositions or with Latin spelling: *dehydratio*, *haemolysis*, *dyspnoe*. The first medical dictionary of the Renaissance was Symphorien Champer's or Campigeius's *Vocabulorum medicinalium ac terminorum difficilium explanationes* (published in Lyon in 1508). The same period brought about the appearance of the Spanish dictionary writer's, Antonius Nebrissensis' work, *Lexicon artis medicae* or that of Laurentius Phrisius, *Synonyma und gerecht Usslegung der Worter* (Strasbourg, 1519).

Another plurilingual medical dictionary that can be understood and explained today is the work of the Swiss Michael Toxites, *Onomastica II Primum Philosophiae et medicae, alterum Theophrasti Paracelsi vocum explicatio* (Strasbourg, 1574). In 1555 Bartholomaeus and Petrus Rostinus published the first dictionary-like version of the Hippocratic corpus of medical texts, with the entries arranged in alphabetical order. Henric Stephanus's *Dictionarum medicum* (Paris, 1564) is not plurilingual (it gives only Latin explanations), but in point of methodology and a philological approach to dictionary writing is the work of a pioneer in the field.

In the second half of the 16th century, the very first medical encyclopedias were published. Bartholomeus Castellus's *Lexicon medicum graeco-latinum* (Venice, 1607) is a bilingual dictionary that lists the Greek and Latin versions of medical terms, but it includes not only the terminology launched by ancient writers, but also contemporary names of surgical procedures and pharmaceutical products. The purpose of this dictionary was not to be read as a philological work, its aim was rather practical and pragmatical, addressing medical professionals. The end of the 17th century brought about the appearance of the most popular and cheapest, thus most widespread medical lexicon, namely Stephanus Blancardus's

*Lexicon medicum novum graeco-latinum* (Amsterdam, 1679). It was completed and republished by Johann Heinrich Schultze in Halle in 1739, who included in this improved version not only the explanations of the terms, but also their etymology.

The first dictionary of anatomy was published in Basel in 1551 (Josephus Amerarius' *Dikokeuke onomastike. Diligens exquisito nominum, quibus partes corporis humani appellari solent*, followed in 1591 by another dictionary of anatomical terms, written by Caspar Bauhinus. The first dictionary of specialized medicine was Jean Duvelle's *Onomatologie chirurgicale* (Lyon, 1644), followed by *Prodromus lexici utrisque medicinae practicae*, written by J. L. Hannemann in Hamburg, in 1662. In 1612 the first dictionary of medical chemistry and alchemy was published in Frankfurt by Martinus Rulan, *Lexicon alchimiae, sive dictionarum alchemisticum*. (Magyar, 2009: 187-188).

Between the 17th and the 19th centuries, several branches of medical sciences appeared (pharmacology, physiology, pathology, toxicology, etc.). Their terminology contributed largely to the enrichment of the medical vocabulary. New terms were borrowed from other sciences (physics, chemistry, zoology, botanics, biology), while other terms were coined. Attempts to make up taxonomies of the clinical terminology date back to the 17th-18th centuries. The first linnean taxonomies were created by J. B. M Sagar in his *Systema morborum symptomaticum*, (Vienna, 1783) or by F. Boissier de Sauvages in his *Nosologia methodica, morborum classes juxta Sydenhami mentem et botanicorum ordinem*, (Amsterdam, 1768), based on previous taxonomies created by Thomas Sydenham or Carl von Linné. A new discipline was introduced in the curricula of medical schools and universities: the science of prescription.

In the 17th century public health care was implemented as a new field of medical activities, hence new terms like *politica medica*, *policlinica*, *quarantine* were introduced. The same century witnessed the separation of medicine as *ars mechnica* from medicine as *ars liberalis*, the scientific medical texts and non-scientific or secular medical texts become two distinct genres. This latter variant, which included texts that aimed to promote medical information for average people, was mainly linked to vernacular languages, while the *lingua franca* of scientific medical texts was still Latin and/or Greek. In these highly specialized texts only the names of illnesses were sometimes given in vernacular languages, while the forensic, anatomical, physiological or pharmacological terminology was Latin.

Another reason of the enrichment of medical terminology was the technical development and the new referents that appeared (*enzyme*, *baccilus*, *mental hygiene*, *stethoscope*, *bronchoscope*, etc). The most important feature of the medical language in the 18th and 19th century was a high degree of specialization. David Crystal lists some of the scientific terms that appeared over the centuries in the English medical terminology. Thus, in the 16<sup>th</sup> century we note terms like: *cornea*, *cranium*, *glottis*, *mumps*, *temperature*, *tibia*, in the 17<sup>th</sup> century terms like: *cardiac*, *microscope*, *pharynx*, *rheumatism*, In the 18<sup>th</sup> century: *antiseptic*, *molecule*, *neurosis*, *thyroid*, in the 19<sup>th</sup> century words like *aphasia*, *chromosome*, *cirrhosis*, *laryngitis*, *metabolism*, while in the 20<sup>th</sup> century the Oxford English Dictionary recorded terms like: *allergy*, *genetics*, *penicillin*, *vitamin*. (Crystal, 1997: 386)

The 19th century brought about the first visible progress in medicine as a scientific activity. The 20th century, and the period that followed the 2nd World War brought about significant progress in the field. In the interwar period German was a good candidate to

become the *lingua franca* of medicine, in the 50s-60s French medical literature gained field. The emergence of the United States as the leading economic power of the world and the increasing impact of the Anglo-American culture led to the spread of English all over the world. In the era of the Internet and the World Wide Web, English has become the most important vehicle for transmitting information, and it has turned into the dominant language of international scientific communication as well, which implies multiple linguistic contacts between English and other vernacular languages.

### Terminological peculiarities

Among the most important ways of creating medical terms are narrowing and extension of meaning, (*auscultation, pelvis*), word creation (*enzyme*, created based on the Greek word *enzyme*, *tuberculosis*, created from the Latin *tuberculum* and the Greek ending *-is* or the term *gas* created and introduced by the Flemish scientist Van Helmont). Another way of creating medical terms is through eponyms, i.e. using proper names to create common nouns. Thus, there are names of illnesses and syndromes or other common nouns like *roentgen*. Another, less common means is the creation of metaphorical terms that rely on the similarities of objects or phenomena (*elephantiasis, cancer*).

Medical terms present a wide range of types: disease processes, anatomy, physiology, medication names. Magyar refers to six main groups of medical terms:

1. anatomical terms (*cranium, mandibulum, mamma*)
2. names of symptoms and syndromes (*apoplexia, fibrillation*)
3. names of illnesses (*influenza, typhus*)
4. names of materia medica, i.e. medical materials (*bolus armenicus, theriaca, opium*)
5. tools and instruments used in medical procedures (*forceps, gastroscope*)
6. verbs connects with medical activities, processes, and physiological phenomena (*collapsus, exitus, palpatio*) (Magyar, 2009: 181).

In the writings of Hippocrates and Galenus, the most frequent terms belong to the 2nd, 3rd, 4th and 6th groups. Yet, it must be said that the percentage of terms related to surgical instruments and tools was far poorer in their time than it is today, as the number of referents was significantly smaller. Because of this, today, the words related to the physiology and/or pathology of the human body are of Greek origin, while the anatomical terms and names of medical instruments were created in the 14th century or after, and are of Latin origin.

After analysing a number of English texts on medical topics, we have identified the following specificities of English for Medicine:

- the large amount of terms of Latin origin (*Infarct*- Lat. *Infarcio*= to stuff into, to obstruct; *tumour*- Lat. *Tumere*= to swell; *pulse*- Lat. *pulsus*= a pushing or a beating or Greek origin ( *coma*- Gr. *Koma*= deep sleep; *nausea*- Gr. *Naus*= ship; *anorexia*- Gr. *An*= without+ *orexis*= appetite, *necrosis*- Gr. *Nekrosis*= deadness) or even combinations like *cardiovascular*- Gr. *cardia* = heart + Lat. *Vasculum*= a vessel;
- the use of Present Simple when describing processes, mechanisms and/or functions of the organism (*Patients who suffer from asthma exhibit virtually identical symptoms to those who suffer from airflow limitation caused by chronic bronchitis*;



*The pupil contracts when light falls on the eye; The external and internal intercostal muscles occupy the space between the ribs);*

- the use of Past Tense and Present Perfect for asking questions about the patients' medical history, past illnesses, childhood or adult diseases (*How long have you had this cough? When did these spots appear? Have you ever been hospitalized?*) and Present Simple in questions connected with their lifestyle and attitude (*Do you smoke?*);
- the use of Present Perfect to refer to recent discoveries/ medical procedures or experiments (*„Greenhill has noted an increasingly common cause of tubal pregnancy, namely previous plastic operation on the tube”*) Dobrovici-Bostaca, 1999, 223);
- the extensive use of acronyms and abbreviations: *AB-abortion, Ab-antibody, ABLB- alternate binaural loudness balance/test, a.d.- aurio-dextra/Latin term for right ear, AIDS-acquired immunodeficiency syndrome, BP- blood pressure; British Pharmacopoeia; boiling point* (the context is vital for the understanding of the terms and for deciding upon the proper meaning of the abbreviation), *CLA- Certified Laboratory Assistant, RN- Registered Nurse, VSD- ventricular septal defect, WBC- white blood cell, y.o.- year old, etc.*
- Another aspect of medical English is the use of synonyms: whereas more largely used terms like *remedy* or *medical history taking* can have synonyms (*medicine, cure, treatment* in the case of *remedy* or *anamnesis* in the case of *medical history taking*), the majority of the more specialized terms (especially noun phrases) do not have synonyms, this leads to the use of *this/that/these/those* or *which* or to the repetition of the same word in one sentence: *„Symptomatology may also be based on morphologic alteration of the tissues, which gives rise to characteristic types of lesions; these are divided into so-called elementary or primary lesions and secondary lesions, which occur consecutively in consequence to the primary lesions”* (Dobrovici- Bostaca, 1999, 133). Another aspect of the use of synonyms is when they use the English variant alongside with the Latin version, such as *uterine tube* or *fallopian tube* and *tuba uterina Fallopii* (*Lat. Tuba= trumpet* or *in toto/overall*, completely such as in *„This concept is difficult to accept in toto”* (Dobrovici-Bostaca 1999: 223);

English for medicine resembles English for horticultural sciences or biology in the large number of nouns with irregular plural forms, such as nouns of Latin origin:

-us → i: *bacillus-bacilli, locus-loci, stimulus-stimuli*

-us → es: *virus-viruses*

-us → both -i and -es ended plural forms: *fungus-funguses/fungi, nucleus-nucleuses/nuclei*

-a → ae: *larva-larvae*

-um → a: *bacterium-bacteria, ovum-ova, stratum-strata*

Another set of irregular plurals derive from Greek words:

-is → es: *diagnosis-diagnoses, axis-axes, synopsis-synopses*

Passive Voice is largely used in medical English: *Penicillin was discovered by Alexander Fleming in 1926; Insulin is a hormone produced by the islets of Langerhans; Very little is known about the reasons of the shifts, changes and fluctuations of diabetes; Needle biopsy is used to examine kidney and prostate tissue;*

The use of modal verbs is another issue of medical English, the most frequently used modals are *can* and *should* or *must*. *Can* is mainly used to expose possible scenarios in the evolution of the disease or physiological process: *Occasionally fulminant hepatic failure can occur; Jaundice can occur if the patient takes contraceptive pills.* The alternative to *can* is *may* in the same type of contexts: *The abuse of tobacco may result in dimness of vision; Tobacco may act as an allergen.*

*Should* and *must* are used in nursing manuals and instructions for looking after patients, to describe processes and procedures of nursing, namely when giving advice on how different medical procedures should be carried out properly: *The bath should begin with the area of the eyes; Before a patients' temperature is taken, the thermometer should be carefully cleaned; The hot-water container should never be placed directly against the skin of a patient; it must be covered with soft material to protect against burns.* (Nagy, 2011: 271-284).

The taxonomy of names related to illnesses and diseases is a more complex problem, and this is due to the large amount of disease names in vernacular languages, which can be subject to changes depending on historical periods and/or countries. According to László András Magyar, in point of form, the names of illnesses and diseases may be categorized as follows:

- metaphorical names: *elephantiasis, carcinoma, bursitis*
- topographic names (recalling the position of the illness relative to the of organs): *pneumonia, endocarditis*
- etiological names (with reference to the pathogenic agent): *histoplasmosis, brucellosis*
- eponyms (derived from proper names): Basedow's disease, Kaposi's sarcoma
- symptomatic names: *burning feet syndrome, hirsutism, androtrichia*

Some disease names convey negative connotations: *leprosy* is today being replaced by *Hansen's disease*.

### **The influence of English on Romanian medical terminology and translation problems**

The influence of English on today's Romanian medical terminology is tremendous: English has affected all levels of the language: vocabulary (word borrowing being the most common phenomenon), but also the semantic, syntactic and pragmatics levels.

Iulia Cristina Frînculescu's article focuses on the negative outcomes of such linguistic transfers in the field of Romanian medical language. There is a long list of English neological terms in the Romanian medical language that have been listed in Romanian medical dictionaries as well, proving that they have been accepted and fully used by the Romanian medical communities: *banding, borderline, bridge to recovery, floppy, bridge to transplant, bypass, clubbing, pacemaker, end-stage, flail, flapping tremor, flutter, follow-up, graft, guideline, patch, marker, rash, scallop, prick, pattern, screening, scratch, thrill, turnover, slice, stripping, trigger, shunt, stem cell, target, feedback.* The lexemes of the above list are

examples of universal lexical Anglicisms with geminated vowels and consonants (e.g. flutter, patch, pattern, scratch), multiverbal lexical Anglicisms with consonant groupings (e.g. feedback), compounds that contain a noun and a particle, generally considered difficult to translate adequately (e.g. follow-up, bypass, turnover), phrases with nouns related by a preposition, also considered difficult to translate (e.g. bridge to transplant, bridge to recovery), and -ing simple and compound terms, extremely popular with specialist writers (e.g. banding, screening, stripping) (Frînculescu, 2009: 5).

Among the most important negative aspects of Anglicisms, Frînculescu mentions *false friends* (Engl. *dramatically* - Rom. *dramatic*; Engl. *murmur* - Rom. *murmur*; Engl. *insult* - Rom. *insultă* etc.), polysemantic words (*switch*, *cleft*, *marker*, *management*), inadequate calques, either lexical or grammatical (Engl. *in the population* - Rom. *în populația*), and English doublets (synonymous variants) for already existing words in Romanian (Engl. *rash* / Rom. *erupție*; Engl. *pacemaker* / Rom. *stimulator cardiac*) (Frînculescu, 2009: 5-6).

Yet, we have to admit that neologisms are inextricably linked to language evolution and they penetrate the language at high speed. One of the non-linguistic causes is globalization, among the linguistic reasons we have to mention: lack of a monosemantic Romanian term to designate a referent (new reality), short character, international spread. Another reason could be a so-called linguistic snobbishness (Butiurcă, 2007: 46)

Among other categories of English borrowings and or calques Doina Butiurcă mentions:

1. common nouns with medical or pharmaceutical referent: rom. *abazie* < engl. *abasia*; rom. *acardie* < engl. *acardia*; rom. *amebom* < engl. *amoeboma*; rom. *bradilalie* < engl. *bradylalia*; rom. *cafeină* < engl. *caffeine*.

2. proper nouns (eponyms): usually a noun phrase consisting of a common noun and a proper name of a person connected to discoveries in histology, anatomy, physiology: *canale Havers*, *Discuri Merkel*, *metoda Sorensen*, *piramida lui Malphighi*, *reactivi Edman*, *simptomul Emery-Dreifuss*. What is even more interesting is that there are synonymic pairs, both of them being such proper noun-common noun combinations: *simptomul Madelung* = *simptomul Launois* – *Bensuade*. Such compounds that follow the English pattern are different from other, non-English like forms, in which the noun is in the Genitive: *trompa lui Eustachio*, *tendonul lui Achile*.

Besides calques such as *glande bulbouretrale* (engl. *bulbourethral glands*), *sonogramă transabdominală* (engl. *transabdominal, sonogram*), *terapie cognitivă* (engl. *cognitive therapy*), one must mention free translation or equivalence in cases like *terapie de comportare* (eng. *behavioral therapy*), *greafă de os* (eng. *bone grafting*).

Another field of prolific borrowings from English is represented by acronyms, abbreviations and symbols. Besides the large number of Greek or Latin acronyms (which impose a fixed word order), *ad pond. om.* (*ad pondus omnium*), *ad sat.* (*ad saturatio*); *add* (*addetur*); *admov.* (*admoveatur*); *adst. feb.* (*adstante febre*); *noct. maneq* (*nocte maneq*), Butiurcă mentions a relatively small number of English acronyms (with less rigid word order): *hosp* (cf. *hospital*); *wt* (cf. *weight*) (Butiurcă, 2007: 47-48).

The growing number of this type of English borrowings is caused by the growing number of referents that have to be designated in different fields of avant-garde medicine. The sign and the phrase it refers to are perfect synonyms. Abbreviations in medical English are



mainly used on lab tests and prescriptions. Even medical magazines have their own English name and abbreviation.

### The influence of English on Hungarian medical terminology and translation problems

In a very interesting article on the presence of the English element in contemporary Hungarian texts belonging to the field of medicine Éva Németh resents, just as Butiurca does, the preference for the English variant, although there is a Hungarian term as well: *tarsal tunnel-tarsalis alagút szindróma*, *score-pontszám*, *up-to-date- naprakész*, *staging-stádiummeghatározás*, *compliance-együtműködés*, *study-tanulmány*, *mapping-feltérképezés*, *core biopszia- hengerbiopszia*, *hairy cell- hajás sejtes leukaemia/ adult T-sejtes leukaemia*, *short tau inversion recovery szekvencia-*, *hard copy film- nyomtatott felvétel*, *marker- jelölő*, *non-responder- nem válaszoló beteg*, *grade- szövettani malignitási fokozat*, *graft- átültetett szövet*, *bypassműtét- kerülőműtét*, *gap-junction- réskapcsolat* (Németh, 2004: 822-4).

Another case of loan word usage is the one when English terms are borrowed as such, without any attempt to create or to use a Hungarian equivalent: *remodelling*, *stentgraft*, *leukocytarolling*, *Toll-like-receptor*.

According to the author, the spread of English is not limited only to professional books and articles or other scientific writings, but it also affects the everyday language usage, the normal, daily communication between workers in the medical professions: notices requesting a second opinion, lab tests, analyses results, final reports. The reason for using the English terms or combined English-Hungarian terms instead of full Hungarian translations are numerous: among these we mention, just as with Romanian, the willingness to use short terms (English words and expression may be shorter indeed), the English words being more accurate (less connotative, as denotation, lack of metaphorical or connotative aspects is essential in ESP) but also professional snobbishness might play a certain role in this. There have been attempts to Hungaricize terms and impose the mother tongue variant, but language usage habits are not easy to change, especially in ESP.

Another rather strange situation in Éva Németh's view is the use of the English variant in brackets after the Hungarian version: this may sound rather awkward in the case of interdisciplinary words or sentences like *a felvételeket „az előjegyzés (worklist) alapján” készítik elő; az indikációt „csak individuális módon (case-by-case alapon) lehet megítélni”*. Giving the English term is definitely fruitful in the case of abbreviations and acronyms. Still, in Hungarian texts English acronyms might raise difficulties in point of pronunciation and definite article usage or suffixation (*NSAIDs nonsteroidal anti-inflammatory drugs: the NSAIDs- az (NSAID-ok=ensaid-ok or enszed-ek; ICS International Continence Society: the ICS- a/az ICS)* (Németh, 2004: 822-4).

When translating acronyms, sometimes the abbreviation of the last word (especially the ones ending in *t* or *s*) must be given in Hungarian as well, even if the acronym itself contains the terms *virus*, *test* or *study*: thus, in Hungarian we will have structures like: *HIV vírus* or *GTT vizsgálat (GTT-glucose tolerance test)*

Mistranslations might occur at the level of word combinations or compound nouns as well: when translating NNT, *number needed to treat* as *kezelendő betegszám* instead of *kezelendő beteg szám* we make a mistake as we count the patients and not their number, while

a total number of patients should be translated as *összes beteg száma* and not *összes betegek száma*, as in Hungarian the determiner *összes* goes with a singular noun.

Another interesting case of terminology usage is the one that combines words of Latin, Greek, English and Hungarian words as well, as in the examples *mucosa associated lymphoid tissue, large granular lymphocyte leukaemia, painful anal fissures tünetegyüttes* (Németh, 2004: 822-4).

English for Medicine involves the medical terminology (description, diagnosis, treatment), implying a lot of terms related to anatomy or physiology (mainly of Latin or Greek origin), but it also involves the language used in the communication between the people involved in the process of curing. When teaching or designing curricula/ teaching materials for English in Medicine, we have to have in mind the specificities of the communication between the main actors of this kind of communication, as well as the linguistic features of this very special/ specialized language. Terminology is not only a linguistic phenomenon, it is an issue of communication and information. In point of English loan words, the authors that we have mentioned earlier seem to echo, at least to a certain degree, Zauberga's cautious attitude, i.e. neologisms and word borrowings are normal, overusing foreign words might be dangerous for the *health* of the language: „a society that must continuously import techniques, science and technology, and which is the recipient of knowledge created by others in other languages may want to control the entrance of adapted or direct borrowings if he wants to ensure that its own language is not overwhelmed by foreign structures” (Zauberga, 2005, 115).

László András Magyar underlines, in his article on the history of the language of medicine, two aspects of this specialized language: its grammar and more precisely its syntax may not be unique or peculiar, but its terminology and vocabulary are definitely unique. The history of the language of medicine basically means the history of the medical terminology (Magyar, 2009: 179). The most important feature of all European medical languages is the Greek and Latin origin. The majority of French and English medical terms are of Latin origin. The English influenced other languages not only in point of terminology, but also in point of spelling, inflection, pronunciation and tendency to abbreviate. In what medical English is concerned, it „forces a confrontation between scientific and everyday language... Language is involved at all points in the medical consultation” (Crystal, 1997: 386)

## Bibliography

- Antic, Zorica. 2010, “Analysis of Students’ Errors in English for Medical Purposes.” In *Acta Facultatis Medicae Naissensis. Scientific Journal of the Faculty of Medicine in Nis*, (27): 159-163.
- Butiurca, Doina. 2007. “Limbajul medical. Influenta engleza.” In *Distorsionari in comunicarea lingvistica, literar si etnofolclorica romaneasca si contextul european*. Bucuresti: Editura Alfa.
- Crystal, David. 1997. *The Cambridge Encyclopedia of Language*. Cambridge: Cambridge University Press.
- Dobrovici, Viorica –Bostaca, Ioan. 1999. *English in Medicine. A Text Book for Doctors, Students in Medicine and Nurses*. Iasi: Polirom.

Frinculescu, Iulia Cristina. 2009. "The physiology of English as a lingua franca in medicine." in *Fiziologia-Physiology*. 19.2 (62): 4-6.

Magyar László András. 2009. *Az európai orvosi nyelv története*. In *A magyar orvosi nyelv története*, edited by Bősze Péter. Budapest: Medicina Könyvkiadó. <http://www.orvosinyelv.hu>, accessed on 06.03.2012

Nagy Imola Katalin, *Terminology issues and guidelines for teaching English for Special Purposes*, in Doina Butiurcă- Inga Druță- Imre Attila (eds), *Terminology and Translation Studies. Plurilingual Terminology in the Context of European Intercultural Dialogue*, Scientia Publishing House, Cluj-Napoca, 2011.

Németh, Éva, 2004. "Magyarul nem megy ? Anglicizmusok a magyar orvosi nyelvben." in *LAM*,14 (12): 822-4, <http://www.lam.hu/folyoiratok/lam/0412/1.htm>, accessed on 02.22. 2011.

Zauberga, Ieva. 2005. "Handling terminology in translation." In *New Trends in Translation Studies*, edited by Krisztina Károly and Ágota Fóris. Budapest: Akadémiai Kiadó.