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STANBUL 29 MAYIS ÜNİVERSİTESİ
SOSYAL BİLİMLER ENSTİTÜSÜ
ÇEVRE BİLİMİ (NİMLİZCE) ANABİLİM DALI

TIBBİ ÇEVİRİMEN OLMAK: UZMANLAR KİMİDİR?

BECOMING A MEDICAL TRANSLATOR:
WHO ARE THE EXPERTS?

(YÜKSEK LİSANS TEZİ)

Svetlana FİLATOVA

Danışman:

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BEYAN

Bu tezin yazılmasında bilimsel ahlak kurallarına uyuldu unu, ba kalarının eserlerinden yararlanılması durumunda bilimsel normlara uygun olarak atıfta bulunuldu unu, kullanılan verilerde herhangi bir tahrifat yapılmadı ını, tezin herhangi bir kısmının bu üniversite veya ba ka bir üniversitedeki ba ka bir tez çalı ması olarak sunulmadı ını beyan ederim.

Svetlana F LATOVA

Tarih: 13.12.2017

ABSTRACT

As time goes by, more and more health tourists from different countries over the world have come to Turkey to get more affordable health care or receive better medical treatment. As the number of medical tourists has been increasing in the recent years with marketing activities by the medical tourism sector, the demand for medical translation is also gradually increasing. Meanwhile, it is the reality today that time pressure exists in every aspect of business world. Hence, in order to compete with the time needed to provide adequate translation services to the increasingly globalized business as medical tourism, translation industry demands the competent translators who can meet the needs of the translation sector. In this regard, at one side there is the increased demand for the speed in the delivery of translations and on the other side, as incompetently done medical translations can have an adverse effect on people's lives, most of the time, there is the requirement for quality in translation. Therefore, there is an issue to consider: who are the experts in writing good-quality medical translations within set time and cost: physicians? translators with/without medical background? physicians with translation background? or translators, specializing in medical translations? The aim of this thesis is to go a step further in this perspective of thinking and find out the answers of the following questions: "what does it take to become a medical translator and who are the experts?".

Key words: medical tourism, medical translation, medical genres, translation competence, EN ISO 17100:2015

ÖZET

Zaman geçtikçe, dünyadaki farklı ülkelerden giderek daha fazla sayıda sağlık turisti daha uygun fiyatlı sağlık hizmetleri veya daha iyi bir tıbbi tedavi almak için Türkiye'ye gelmektedir. Son yıllarda sağlık turizmi sektörünün pazarlama faaliyetleri ile birlikte sağlık turisti sayısı arttıkça, tıbbi çeviriye olan talep de giderek artmaktadır. Aynı zamanda, günümüzdeki dünyasının her alanında zaman baskısının varlığı da bir gerçektir. Bu nedenle, sağlık turizmi olarak giderek küreselleşen alana uygun çeviri hizmetleri sunmak için gereken süre ile rekabet edebilmek amacıyla çeviri endüstrisi, çeviri sektörünün ihtiyaçlarını karşılayabilecek yetkin çevirmenler talep etmektedir. Bu bağlamda, bir taraftan çevirilerin teslim edilme hızına olan talebin artması, diğer taraftan da eksik bir şekilde yapılan tıbbi çevirilerin insanların hayatlarını olumsuz yönde etkileyebileceği üzere, çoğu zaman, çeviride kaliteye gereksinim vardır. Bu bakımdan göz önünde bulundurulması gereken bir husus bulunmaktadır: Belirli bir zaman ve maliyet dahilinde kaliteli tıbbi çeviriler yapabilen uzmanlar kimlerdir? Hekimler mi? Tıbbi geçmişi olan/olmayan çevirmenler mi? Çeviri geçmişi olan doktorlar mı? Yoksa tıp çevirilerinde uzmanlaşmış çevirmenler mi? Bu tezin amacı, bu düşünce perspektifinde bir adım daha ileri gitmek ve "tıbbi çevirmen olmak için neler gereklidir ve bu uzmanlar kimlerdir?" sorularının cevaplarını bulmaktır.

Anahtar kelimeler: sağlık turizmi, tıbbi çeviri, medikal türler, çeviri yetkinliği, EN ISO 17100: 2015

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LIST OF ABBREVIATIONS

CAT	computer-aided translation
cf.	compare
e.g.	for example
ed.	editor
eds.	editors
et al.	and others
etc.	and the others
i.e.	that is, in other words
ibid.	in the same place
M.D.	Doctor of Medicine
rev. ed.	revised edition
s.v.	under the word
sic	thus it was written
ST	source text
TDK	Turkish Language Institution
trans.	translator
TT	target text
vol.	volume
vs.	against

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Figure 1. ICD-10 Version: 2016

Figure 2. International Classification of Health Interventions

Figure 3. *BÜYÜK TIP SÖZLÜ Ü*, 4th ed., s.v. “M KROENEMA”

Figure 4. Professional competences of translators (ISO 17100:2015)

Figure 5. International Classification of Diseases

STATE-OF-THE-ART

Hi Sabiha. I hope you are well. Listen, I have a friend of mine who is going to go to Poland for a surgery. Therefore, she needs the English translation of her PET/CT report written below:

Klinik bilgi : Kasım 2013'te meme ca nedeni ile opere edilen hastada, T12 vertebrada yeni lezyon saptanması üzerine yeniden evreleme amacı ile istendi.

ICD kodu : C50

Radyofarmasötik : 0,1 mCi/kg 18F-Florodeoksiglukoz (FDG)

Görüntüleme zamanı : Enjeksiyondan 60-90 dakika sonra

Bazal glukoz düzeyi : 90 mg/dL

Cihaz : Philips Gemini T

Farmakolojik uygulama : Yok

Görüntü alanı : Vertekesten uyluk orta kesimine dek supine pozisyonda.

** SUVmaks: maksimum standart uptake de eri. Kar ıla tırmalı görüntülerde üstte yer alan görüntü yeni incelemeye aittir.*

Kar ıla tırmalı veriler: Yok

Bulgular:

Ba boyun:

Vokal kordda fizyolojik artımı 18F-FDG tutulumu izlenmektedir.

Ba ve boyun bölgesinde patolojik düzeyde artımı 18F-FDG tutulumu izlenmemektedir.

Toraks:

Sol pektoral alanda port izlenmektedir. Sa meme operasyona sekonder izlenmemekte olup, operasyon lojunda patolojik 18F-FDG tutulumu izlenmemektedir. Sol memede patolojik 18F-FDG tutulumu izlenmemektedir. Her iki aksiller alanda patolojik aktivite tutulumu gösteren lenf nodu izlenmemektedir.

Çıkan aorta dilate olarak izlenmektedir (45mm). Sa akci er alt lob mediobazal segmentte izlenen büyü ü 5mm çaplı iki adet nodüler plevral kalınlı ma alanında patolojik 18F-FDG tutulumu izlenmemektedir. Sa akci er alt lob posterobazal segmentte subplevral alanda izlenen milimetrik nodülde patolojik 18F-FDG tutulumu izlenmemektedir. Sol akci er lingular segmentte izlenen atelektazik parankim alanında ve alt lob superior segmentte izlenen subsantimetrik buzluçam dansitesi alanlarında patolojik 18F-FDG tutulumu izlenmemektedir.

Abdomen & pelvis:

Midede hietal herni mevcuttur.

Sol böbrekte BT görüntülerinde izlenen kortikal kistlerde patolojik 18F-FDG tutulumu izlenmemektedir. T12 vertebrada izlenen metastatik lezyona kom u sol retrokurral lenf nodlarında dü ük düzeyde patolojik artımı 18F-FDG tutulumu izlenmektedir (SUVmaks: 4,8). Ba ırsak anslarında fizyolojik artımı 18F-FDG tutulumu izlenmektedir.

Sa inguinal alanda izlenen sınırları vasküler yapılardan net olarak ayırt edilemeyen lenf nodunda dü ük düzeyde artımı 18F-FDG tutulumu izlenmektedir (SUVmaks: 3,6) (reaktif?). Karaci erde, böbreklerde, sol böbrek üstü bezinde, pankreasta, dalakta ve ürogenital sistemde patolojik 18F-FDG tutulumu izlenmemektedir.

Kas-iskelet sistemi:

Sol 6.kosta posteriorunda dü ük düzeyde patolojik artımı 18F-FDG tutulumu izlenmektedir (SUVmaks: 3,5). C6 vertebra sol transvers prosesinde dü ük düzeyde patolojik artımı 18F-FDG tutulumu izlenmektedir (SUVmaks: 3,1). T7 vertebra sa pedinkülü ve korpus sa kesiminde

(SUVmaks: 4,6), T9 vertebra korpusunda (SUVmaks: 4,2), T11 vertebra korpusunda (SUVmaks: 3,9) patolojik artımı 18F-FDG tutulumu izlenmektedir. T12 vertebra korpusundan her iki pediküle uzanım gösteren, çevre retrokrural alanda yumu ak doku komponenti bulunan metastatik lezyonda yo un patolojik artımı 18F-FDG tutulumu izlenmektedir (SUVmaks: 9,5). L1 vertebra korpusunda patolojik artımı 18F-FDG tutulumu izlenmektedir (SUVmaks: 7,4). L2 vertebra korpus ve sol pedikülünde patolojik artımı 18F-FDG tutulumu izlenmektedir (SUVmaks: 8,7), L3 vertebra kopu sol kesiminde patolojik artımı 18F-FDG tutulumu izlenmektedir (SUVmaks: 9,4). Pelvik kemiklerde ve her iki femur boynunda nonhomojen tarzda dü ük düzeyde artımı 18F-FDG tutulumu izlenmektedir (SUVmaks: 2,8).

Yorum:

1. skelet sisteminde multiple metastatik tutulumlar izlenmektedir.
2. T12 vertebra korpus ve her iki pedikülünde izlenen metastatik tutulumun, perivertebral alanda yumu ak doku komponenti bulunmaktadır. Ayrıca kom ulu unda retrokrural lenf nodlarında metastaz ile uyumlu bulgular izlenmektedir.
3. Sa sürrenal glandda fokal rölatif artımı metabolik aktivite izlenmektedir. (fizyolojik?)
4. Tüm vücut di er alanlarında tipik metastaz lehine bulgu izlenmemektedir.

I know you are very busy at school. But I don't have friends who other than you know English. Please, could you help my friend? She really needs that translation as soon as possible. I definitely think it is not a big deal for you darling. You have been teaching English for 20 years and you will see, there is not so much text to translate.

Hello, Murat. How are you doing? How is your medical school? This is your last year, isn't it? I am sorry if I'm bothering you but I need an English translation of the operative note from my discharge summary. It is given below:

AMEL YAT NOTU

GAA, kur un koruma sonrası litotomi poz'da UST ve SÖS 7F ureteroskop ile sol üreterdeki DJ stent yabancı cisim forsepsi ile çıkarıldı, sol üretere guide wire yerle tirildi, guide wire üzerinden 9.5F 12cm UAS yerle tirildi, UAS cilde tespit edildi. FlexX2 storz ureteroskop ile orta poldeki yakla ık 15 mm'lik ta painting kırıldı, üst poldeki ta kırıldı, alt poldeki ta basket ile pelvise ta unda painting kırıldı, alt pol alttaki ta a ula ıldı, kırıldı ancak i lem süresi ve ta n pozisyonu (infindubulopelvik açı darlı ı) nedeniyle i leme son verildi, 4.7F 16 cm DJ yerle tirildi, 8F foley kondu, i leme son verildi, komplikasyon olmadı.

It is 09.46 a.m now. Could you translate it till 12:00 a.m.? I really urgently need it. Thank you in advance. Take care. Bye.

Good morning Dr. Ozcan,

I am writing to you from the department of Ophthalmology. Your colleague from the department of Cardiology Dr. Murat gave us your email address. He said that you could help us with translation. We have a Georgian patient who urgently needs an English translation of his discharge summary that is written below:

Epikriz

Yakınması/ ikayeti uza ı ve tyakını ıyı gorememe

Hastalık Öyküsü/Hikayesi kg: Gurcu

Soygeçmi öz. yok

Alerji Yok

Alı kanlıklar Yok

laçlar Yok

Geçirdi i Operasyonlar Yok

Muayene Bulguları vıs: 1.0/1.0

ORF1/1(-0.75x175)

bio: N/N

fundus: N/N

GH:N

Tedavi Bakım Planı grv

Reçete

Tanılar

Ön Tanı (H35) Retina bozuklukları, di er

Kesin Tanı (H52.0) Hipermetropi

Kesin Tanı (H52.2) Astigmatizma

Kesin Tanı (H52.4) Presbiyopi

Kesin Tanı (H52.4) Presbiyopi

16.06.2016 GÖZ AMEL YATI NOTU

GAA sa göz, korneal kesi sonrası ön kamaraya viskoelastik verildi. CCC tamamlanıp fako ile lens temizlendi. I/A sonrası VES ile bag olu turulup G L (21.0D) implante edildi. 20 gauge 4 port giri yapıldı. Kor vitrektomi sonrası arka hiyaloid kaldırılıp temizlendi.Makulanın ileri derecede hasarlı oldu u izlendi. Membran soyuldu vitreus taban temizli i yapıldı efk yapıldı Sıvı-hava; hava-silikon ya ı de i imi yapılp sklerotomi ve konjonktiva kapatıldı. Subkonjonktival vigamoks+onadron yapılp ameliyat sonlandırıldı.

GAA sol göz, korneal kesi sonrası ön kamaraya viskoelastik verildi. CCC tamamlanıp fako ile lens temizlendi. I/A sonrası siliyer sulkusa tek parçalı G L implante edildi. 20 gauge 4 port giri yapıldı. Kor vitrektomi sonrası arka hiyaloid kaldırılıp temizlendi. vitreus taban temizli i yapıldı efk yapıldı Sıvı-hava de i imi yapılp sklerotomi ve konjonktiva kapatıldı. Subkonjonktival vigamoks+onadron yapılp ameliyat sonlandırıldı.

Best Regards,

Bilal Yaran, MD
Ophthalmologist

Well, is there any problem here? What does it take to become a medical translator? Who are the experts? Let the meta-investigation begin...

1. GENERAL SCOPE

As time goes by, more and more people are discovering the benefits of medical tourism which is the process of travelling abroad in order to receive medical care. The high cost of health care, long waiting time for some procedures, lack of high-quality treatment or certain treatment options and etc. are among common factors why the popularity of medical tourism is growing these days. Thanks to widespread use of communication tools and social media, it has become easier to find and contact hospitals and medical centers overseas. And Turkey is not an exception.

Health tourists from different countries over the world including Azerbaijan, Bulgaria, Kazakhstan, Georgia, Ukraine, Libya, the US, Germany, the UK and etc. have come to Turkey to get more affordable health care or receive better medical treatment. According to official statistics of 2014, the annual number of medical tourists, received by Turkey, has exceeded a half million of people.¹ Moreover, according to Turkish Healthcare Travel Council data, Turkey welcomed 746,000 health tourists in 2016². In this regard, the demand for medical translation is also gradually increasing, as time goes by.

Meanwhile, it is the reality today that time pressure exists in every aspect of business world. And translation industry is not an exception. Therefore, in order to compete with the time needed to provide adequate translation services to the increasingly globalized business as medical tourism, translation industry demands the competent translators who can meet the needs of the translation sector. In this regard, at one side there is the increased demand for the speed in the delivery of translations and on the other side, as incompetently done medical translations can have an adverse effect on people's lives, most of the time, there is the requirement for quality in translation. Therefore, there is an issue to consider: who are the experts in writing good-quality medical translations within set time and cost: physicians? translators with/without medical background? physicians with translation background? or translators, specializing in medical translations?

1. <http://dosyamerkez.saglik.gov.tr/Eklenti/10947,05pdf.pdf?0>. Accessed December 28, 2016.

2. <https://www.imtj.com/news/health-tourists-spend-10-times-more-turkey/>. Accessed December 4, 2017

The aim of this thesis is to go a step further in this perspective of thinking and explore what it takes to become a medical translator who can produce competently written translations of medical texts. More specifically, the main hypothesis I will attempt to demonstrate here is that competently written medical translations are produced not by people who claim that they know two languages or have the medical background, but by *bicultural experts* (Vermeer, 1996:6) with the advanced level of translation competence (successful application of linguistic and textual competence, research and information acquisition competence, cultural competence, technical competence and domain competence when it is necessary), who have knowledge about how to translate, acquire unknown information and when other participants (e.g. colleagues, revisers, interpreters, physicians, health managers, project managers and etc.) must be involved during the translation process. Throughout the thesis, I will try to demonstrate the practicality of essential professional competencies of medical translators in order to fulfill the gap between the theory and practice. And by doing so, the hypothesis presented above will be justified.

Moreover, by depicting the complexity of translation of medical texts, discussing specifics and problematic aspects of the medical English and Turkish languages and proposing guidelines related to medical translation, I hope that my thesis will shed light on methodological framework on how the medical translation should be taught. In this regard, I hope my thesis will be a useful reference or guide for the beginners, whose aim is to become a professional medical translator of competently written translations.

Zooming in, the second chapter of this thesis is devoted to understanding medical written communication. In this context, specifics, problematic aspects of medical English and Turkish languages and solutions towards those problematic aspects will be discussed. As the result, possessing awareness in terms of the discussed issues from the side of a medical translator while producing medical texts will be stressed because s/he should not eliminate the ability of language to serve its function by rendering meaning in an appropriate way. Going further, any writer before formulating his/her thoughts into writing

will firstly decide on the communicative purpose of his/her intended text because his/her vocabulary, syntax and phraseology must be in compliance with the text function and potential reader-audience. Likewise, a translator (writer of the target text) also has to decide about the function of the target text and audience before s/he actually starts to produce any text. Therefore, in the following sections of the chapter, topics such as “text functions” and “intended audience” will be examined. Moreover, as medical texts are written by different participants including health policy makers, medical students, physicians, nurses, surgeons and other medical practitioners, whose communicative purpose varies from each others, different genres of medical texts, which may embody one or more functions, may come out as the assignment for medical translators. In this context, understanding the conceptual framework of genres is a key in the medical communication and a competent translator will have to be familiar with genres of the texts, with which s/he is working, for the adequate understanding of the message and not to miss out the functional equivalence of the target text by simply following the conventions of the source text. Therefore, medical genres will also be discussed in the ensuing section of the chapter. Finally, taking into consideration all the data come out from the translation³ analyses of real examples (excerpts from different discharge summaries) discussed in this chapter, the last section is devoted to the overall conclusions.

The third chapter of the thesis is devoted to pursuing the way that will lead to the answer of the questions “what does it take to become a medical translator and who are the experts?”. In this regard, first of all, the concept of translation competence will be explored in detail with focus on its impact on such profession as medical translator. In the first section of the chapter, the theoretical overview of translation competence will be presented. This part will be followed by translations of “real” examples, taken from one of the medical genres as “discharge summary”, which will be examined in the scope of Skopos theory and ISO 17100:2015 (requirements for translation services). The main emphasis will be put on

3. I must specify that if it not specified otherwise, the English translation of all excerpts of Turkish source texts will be done by me.

professional competences of translators which are an indispensable variable in the pursuit of competently written medical translations that serve the target readers in an adequate way. In this regard, the applicability of six professional competences of translators, which are stated in the ISO 17100:2015 as the necessity that translation industry has required nowadays, will be examined in the scope of real examples taken from different discharge summaries.

In line with the aforesaid, the final chapter presents overall conclusions arrived at as the result of all analyses made throughout the thesis.



2. UNDERSTANDING MEDICAL WRITTEN COMMUNICATION

2.1. General Overview

Language is the dress of thought.

Dr. Samuel Johnson⁴

We think and reflect our ideas in words by using linguistic features of the language and grammar. Since the time of Hippocrates, discoveries and inventions in any medical field have required specific words to name them (Montalt & Davies, 2007: 232). For instance, in 1970 the acronym AIDS did not exist. It became known only after the discovery of the Human Immunodeficiency Virus which had been identified as being the cause of the syndrome⁵. Since the very ancient times, modern languages have borrowed scientific terminology from Greek and Latin, mainly through the activity of translators (ibid., 232). In fact, the terminology of physical science was developed in Latin and Latinized Greek because Latin was position as the *lingua franca* of western scholars in the post-Renaissance world (cf. Dirckx, 1976:81). Likewise, just as Latin was the unifying language after the Renaissance, so has English today undertaken the important role as being often used as an international language of medicine or in other words, perceived as the *lingua franca*.

Basically, the fundamental element of scientific medical terminology in any language is constituted by simple combining forms that have been inherited from Greek and Latin. For instance, there are a lot of terms in modern anatomy that are eventually Greek in origin (Dirckx, 1976:57). Meanwhile, modern surgery has borrowed the names for many of its instruments directly from classic Latin. For example, the *scalpellum* (or

4. Dr. Samuel Johnson (1709-1784) – an English writer, poet, essayist, moralist, literary critic, biographer, lexicographer and editor.

5. <https://www.avert.org/professionals/history-hiv-aids/overview>. Accessed January 3, 2017.

scalpellus), which is a diminutive of *scalprum*=*cutting tool*, is mentioned by Cicero as a surgical knife (cf. Dirckx, 1976:49).

As international communication among physicians and scientists is now almost entirely in English and there is the continued coinage of new terms from Latin and Greek, understanding the specifics of medical English and the basic rules for building and breaking down the medical terms will help translators of medical texts (from English or into English) both to build and translate many different words in a shorter period of time. On the other hand, as communication among medical professionals or communication between patient and doctor within individual countries are still conducted in the local mother tongues, examining the specifics of the medical Turkish language (the official language of Turkey where I live) of medicine will also be beneficial for translators who write medical translations in Turkish or translate from the Turkish language.

Needless to say that the language is an indispensable tool that we use while communicating with each others. However, if the language tool fails to do the job of communication through the words and phrases, no successful communication can be achieved. How the silver may be hidden in the more common and inexpensive metal and the only a chemist can identify it, the sense of what was written or said may also be hidden by using so unsuitable, intelligible and sophisticated words, that no one except philosophers can understand. Hence, the translator has not to undermine the ability of language to carry out its function – conveying our experience into meaning. In this respect, the competent medical translator should be aware of specifics and common problematic aspects of English and Turkish languages of medicine that will be examined in the following sections of this chapter.

2.2.English Language of Medicine

2.2.1. Specifics

In this section my intention is not to venture very far into all details of English language of medicine. I have only dealt with some of its specifics, of which the competent medical translator must be aware while producing medical texts.

Thanks to the medical language, which is the language spoken by health care professionals, it is possible to establish efficient and accurate communication in the field like medicine. However, understanding language for medical purposes at first look may appear to be complicated for many people because the medical field uses specific words and learning them is similar to learning a new language. Nevertheless, learning some principles of the basic medical language, mainly medical terminology, can help translators to understand the logical puzzle of what was written.

The medical language includes medical terms (2.2.1.1), acronyms and abbreviations (2.2.1.2) and they are often very specialized and are kind of a uniform medium, with the help of which the mutual understanding must be reached, so the miscommunication is minimized. Moreover, stacked noun phrases (2.2.1.3) and medical argot (2.2.1.4) are other notable characteristics of the English language of medicine. And needless to say, all well-established disciplines have the tendency to standardize (2.2.1.5) their terminology to be coherent and a discipline like medicine is not an exception.

2.2.1.1. Medical Terms

Medical issues, disease stages, treatments, lab or other test results and etc. are described using medical terminology, most of which consist of roots (i.e. the foundation of a word), prefixes (i.e. an affix occurring at the beginning of a word) and suffixes (i.e. an affix occurring at the end of a word) of Greek and Latin languages, with the help of which the basis of fundamental medical terminology is formed. And whether we like it or not, “the use of Greek and Latin etymological forms still is and will continue to be one of the principal ways in which we can create, store and communicate new medical knowledge” (Montalt and Davies, 2007: 232) because they are precise and internationally understandable. Therefore, knowing what a certain prefix or suffix means, can help us to

decode any medical term inclusive of such. The suffix *-gram* is “an all-purpose ending for the name of a diagnostic procedure” (John H. Dirckx, 1976:84). For example, *cardiogram*, *electroencephalogram*, *mammogram* and etc. Medical terms can be analyzed structurally and divided into basic parts. For example, the root “hepat-” means “liver” (in Greek) that we can add to words and form new words that are related to the liver, such as hepatitis, hepatectomy, hepatotoxin, hepatomegaly, hepatoma and etc. For instance, let’s focus on the medical term “hepatitis” and break it down. The term “hepatitis” consists of the root *hepat-*, and a suffix *-itis*, meaning “inflammation”. If we were to say that a patient has hepatitis, this would mean that there is the inflammation of the liver and that is a pathological condition. Apparently, the process of breaking down the terms and learning their meanings can help medical translators easily navigate in the seemingly complicated language of medicine.

Understanding basic medical terminology and knowing how to breakdown a word by its prefix and suffix makes it easier and quicker for the translator to grasp the meaning of the context in which that term was used. Therefore, needless to say that studying medical terminology is useful for the people who do medical translations.

On the other hand, apart from Greek and Latin, medical English is full of borrowings from the modern foreign languages including German, French, Italian and Arabic. For example, in his book “The Language of Medicine” John H. Dirckx, MD writes that borrowings from French outweigh borrowings from German:

In clinical medicine we have *bruit*, *chancre*, *goitre*, *grand mal* and *petit mal*, *grippe*, *malaise* and *rale*; in surgery, *bougie*, *curette*, *orthopaedis*, *douche*, *lavage*, *rongeur* and *tamponade*. The radiologist (who calls a film holder a cassette) describes a *niche en plateau* and a *coeur en sabot*, the dermatologist speaks of *café au lait* spots and *forms frustes*. The clinical pathologist may use a *urette* to determine a *titre*, and even if he possesses a very powerful *loupe* he will probably need to resort to a microscope to see *organelles* and *rouleaux*. The physical therapist employs *massage* and its more esoteric brethren *effleurage* and *pétrissage* (Dirckx, 1976:68).

Therefore, the translator of medical context has to be aware of the complexity of medical language in terms of prevalence of words, the etymology of which is rather than Latin, Greek or pure English.

2.2.1.2.Acronyms and Abbreviations

Acronyms and abbreviations are other features of the medical language. They are used as the universal forms of shorthand in order to save time. Physicians used them everywhere in the medical field including medical records, instructions for the patient, prescriptions or in other items related to a disease, syndrome or disorder. An acronym is a word built up from the first letters of other words. For example, ALL (Acute Lymphoblastic Leukemia), IBS (Irritable Bowel Syndrome), TSH (Thyroid Stimulating Hormone) and etc. are some of the most common acronyms that are universally used within the medical profession. When it comes to abbreviations, they are initials of the words for instance, CV (cardiovascular), bld (blood), C/O (complaint of), CC (chief complaint), CT (chemotherapy), D/C (discontinue (for example a drug)), DC (discharge from the hospital), DDX (differential diagnosis) and etc. They are often used while naming the diseases or diagnostic/therapeutic procedures (e.g. PID = pelvic inflammatory disease, CXR = Chest x-ray, CPR = Cardiopulmonary resuscitation and etc.). In addition, abbreviations in medicine are used by the medicians when it is required to minimize the content, so it is fitted on a printed form or wherever (e.g. APTT = activated partial thromboplastin time /is written on a result of a lab test/, AAA = apply to affected area /is written on a prescription sheet/ and etc.). On the other hand, there are no standards or approved lists by medical professional to search for medical acronyms or abbreviations⁶, as in the case of international classification of diseases used to name diagnoses⁷. Hence, understanding the context where the abbreviations or acronyms have been used is important in order to prevent misinterpretation of the given message.

6. http://www.medicinenet.com/common_medical_abbreviations_and_terms/article.htm#medical_abbreviations_what_do_they_mean. Accessed January 4, 2017.

7. <http://www.wolfbane.com/icd/icd10h.htm>. Accessed January 4, 2017.

2.2.1.3.Stacked Noun Phrases

In English language of medicine nouns can be used as adjectives without any change in the form. For example, *body mass* index, *lung* metastasis, *stem cell* transplant. And there are English nouns that do not form adjectives. For example, “heart disease”. In his book *The Language of Medicine* John H. Dirckx, MD expresses his concern about this issue:

The unavailability of adjectives formed from native English material is just as likely to be the result as the cause of the practice of using nouns as adjectives. Even when an adjective is readily available, we often use a noun form instead: *bile* pigment, *sex* differentiation, *virus* infection. Only occasionally is there any cogent reason for doing so, as when we say *rectus spasm* to avoid the confusion that might be engendered by *rectal spasm* (Dirckx, 1976:32).

Obviously, it is not a rarity to encounter with the usage of stacked noun phrases (when one noun modifies another, e.g. baby body) in the medical context in English. Which is another aspect of the medical language that the medical translator has to be aware of.

2.2.1.4.The Argot of Medicine

Like in any other profession and trade, the usage of language for special purpose consists of not only technical terminology used in the related area but also informal and unconventional jargon that is difficult to understand by non-professionals and that cannot be found in the dictionaries. The medical argot is frequently used by the medical professionals including physicians, nurses and so forth. For example, nurses use the expression “yellow submarine” for an obese patient with jaundice (visit: <https://www.nursebuff.com/medical-slang/> for more medical slang used by the nurses). Similar to almost all argots, the medical argot has its own characteristics and dynamic conventions. Within the time, medical slang

expressions can be extinct, gain very popular usages or may even get legitimized especially when used for a long period of time.

Basically, medical slang expressions are derived: by using acronyms or abbreviations (e.g. *ALS* = absolute loss of sanity /related to the crazy patient/; *APM* = aye-aye-aye-aye's per minute) due to the need for abbreviations in recurrent texts; by using a metaphor ("house red" = blood); by using an alternative of a conventional word (orthopod = orthopaedist) or by using common English words applied in a different way (e.g. the preposition "on" is used instead of saying "under treatment with" / She was "on" dialysis.)

Meanwhile, there are a number of usages that physicians would not regard as unorthodox. For example, "secondary to" often not only means "following after" but also "caused by".

Obviously, using different types of medical slang may unnecessary confuse the translator who should be aware of those kinds of usages. On the other hand, it is not possible that the translator possesses the knowledge about all possible variations of the medical slangs of the ST and TT. Therefore, it is better, if the translator has an opportunity to communicate with the author of the ST for the clarification.

2.2.1.5. Terminology Standardization

Last but not least, another specific of the English language of medicine is that it also consists of units of specialized knowledge that have been standardized by different organizations (e.g. World Health Organization) that are in the aim of achieving healthy international communication. According to National Committee on Vital and Health Statistics, "If information in multiple locations is to be searched, shared, and synthesized when needed, we will need... common vocabularies for personal, clinical and public health information". Obviously, standardized terminology in healthcare information systems is one of the important aspects which should not been missed if you are dealing with writing of medical texts.

As an example, some of the biggest systematized nomenclatures (i.e. lists of terms that were standardized and agreed on by a scientific community of experts in a particular specialist field) that are related to medical field are as follows: International Classification of Diseases (ICD) (at <http://www.who.int/classifications/icd/en/>), Classification of Functioning (at <http://www.who.int/classifications/icf/en/>), Classification of Health Interventions (ICHI) (at <http://www.who.int/classifications/ichi/en/>), Systematized Nomenclature of Medicine (SNOMED) (at <http://www.snomed.org/>) which determines global standards for health terms.

So, let's look at some of the specific examples of nomenclature systems mentioned above. The first example has been taken from the International Classification of Diseases:

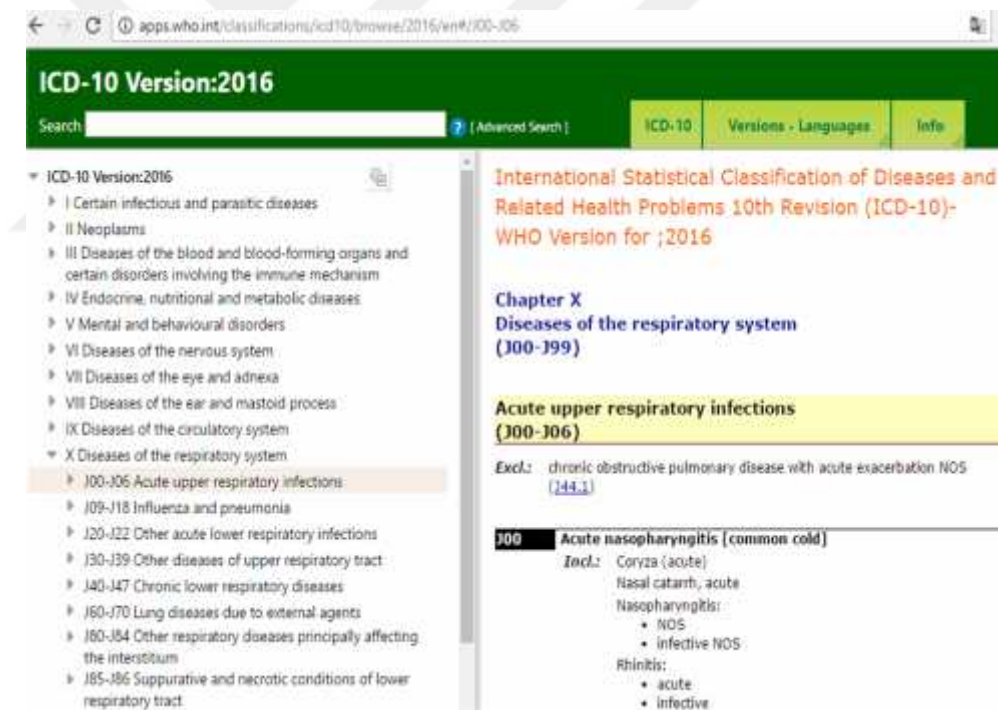


Figure 1. ICD-10 Version: 2016. **Source:**

<http://apps.who.int/classifications/icd10/browse/2016/en#/J00-J06>. Accessed February 12, 20017

The second example has been taken from the International Classification of Health Interventions:

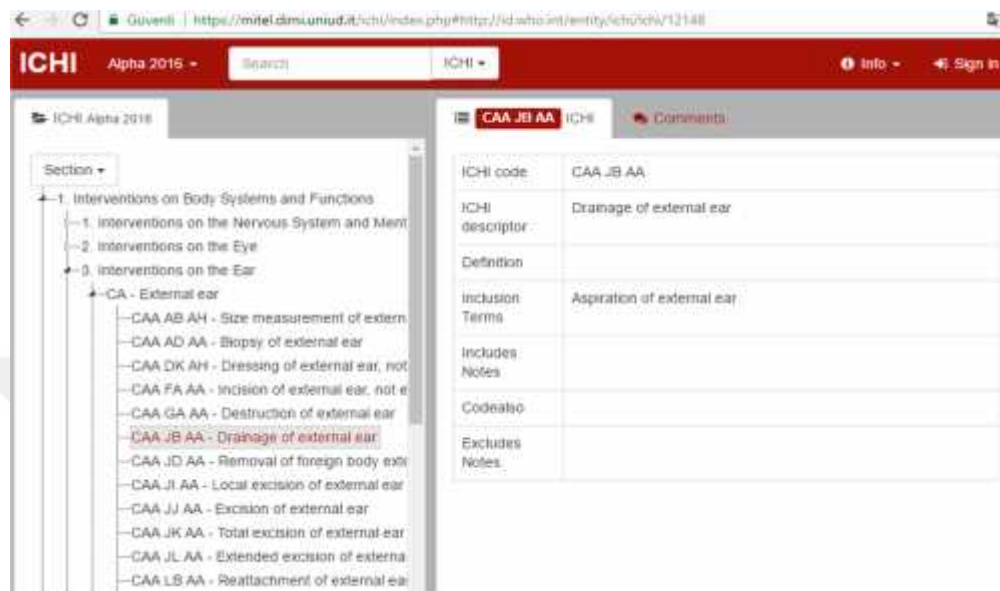


Figure 2. International Classification of Health Interventions. **Source:** <https://mitel.dimi.uniud.it/ichi/index.php#http://id.who.int/entity/ichi/ichi/12148>. Accessed February 12, 2017

These kinds of nomenclature systems are commonly used by the medical professionals especially in clinical records. In this regard, it is important that the medical translator is aware of the existence of such terminological standardization mentioned above, especially while transmitting knowledge on the international scale.

On the other hand, although it seems that these kinds of nomenclatures are fixed, they are not completely fixed at all because the state of knowledge is not static, in fact it is dynamic. The knowledge is always improving as the result of the performed research. For example, the name of bacterium *Campylobacter pyloridis* is now called *Helicobacter pylori* (cf. Montalt and Davies, 2007:249). For this reason, translators should not be indolent and rely on only on the information given in the source text but also check for the updated version of the entities if they need to use nomenclatures in a given assignment.

2.2.2. Problems & Solutions

“In that case,” said the Dodo solemnly, rising to its feet, “I move that the meeting adjourn, for the immediate adoption of more energetic remedies—”

“Speak English!” said the Eaglet. “I don’t know the meaning of half those long words, and, what’s more, I don’t believe you do either!”

Alice’s adventures in wonderland, Lewis Carroll

Most of the time, all medical texts that have to be translated have certain specific problems that may prevent the medical translator from producing a high-quality target text or from meeting the deadline. In this part of the chapter I have described some problematic aspects of the use of the medical English language including spelling mistakes of medical terms (2.2.2.1), inconsistency in the formation of medical terms (2.2.2.2), stacked noun phrases (2.2.2.3), abbreviations (2.2.2.4), lack of intelligibility (2.2.2.5), naming new phenomena (2.2.2.6) and variations of the medical language usage (2.2.2.7). My aim here is not to discuss all possible problematic aspects of the English medical language, instead, to show some very common matters with which the medical translator may deal and of which the competent translator should be aware before producing text of medical context. In addition, I have offered some solutions to deal with those problems.

2.2.2.1. Spelling Mistakes of Medical Terms

Needless to say that the right spelling of medical terms is really important. However, there might be cases when the spelling of a medical term may sometimes be deliberately confused and used inaccurately. Especially, spelling mistakes are often encountered in the dictated clinical records written in discharge summary reports. For example, the word *ileum*, which is a part of the small intestine, is often spelled or confused with the word *ilium*, which is a part of the pelvic bone. They are homophones. And their actual meaning is understood when they are integrated in the context. Therefore, the medical translator should be aware of such type of confusions or misspelling in the source text and act accordingly while producing the target text. Google search skills can help translators to identify the

spelling mistakes in the source text. On the other hand, in case of the contradictory cases translators also need the confirmation from the author of the source text.

2.2.2.2. Inconsistency in the Formation of Medical Terms

It was mentioned above that the basis of fundamental medical terminology consists of roots, prefixes and suffixes of Greek and Latin languages and knowing what a certain prefix or suffix means, can help medical translators to decode any medical term including it. However, it should be pointed out that there are cases of inconsistency. For example, let's break down the term "carcinoma" which is a malignant tumour that occurs in the epithelial tissue (Ann Ehrlich, Carol L. Schroeder, Laura Ehrlich, Katrina A. Schroeder, 2015:182). It consists of the root *carcin-* that means "cancer" and the Greek suffix *-oma* that means "tumour". However, the suffix *-oma* in the term "glaucoma", which means a disease of the eye caused by fluid accumulation and elevated pressure in the eye⁸, does not imply an eye cancer. Another example, which is worth to consider is the family of *-phili*as:

In *necrophilia*, we see the Greek word in its literal meaning, *love or attraction*. *Hemophilia*, however, cannot be considered an analogous use except the exercise of considerable imagination. *Argyrophilia* and *basophilia* are metaphorical extensions of the notion of attraction; but *eosinophilia* and *neutrophilia* are in present-day use far more often applied not to the cells whose cytoplasmic granules show affinity for eosin and neutral stains, but to conditions in which the numbers of these cells in the blood are increased. Medical dictionaries contain whole dynasties of *-emias*, *-penias*, *-oses*, *-urias* and *-algias*, in each of which the stem word has several loosely related meanings (Dirckx, 1976:82).

It is clearly seen from the following examples that there are irregularities, the existence of which medical translators should keep in mind while understanding the source text that must be translated into another language. This is the exact the case, where the research competence, which the medical translator must possess, is should be put into practice.

8. <https://www.thoughtco.com/biology-prefixes-and-suffixes-oma-373770>. Accessed June 27, 2017

2.2.2.3.Stacked Noun Phrases

Using the stacked noun phrases (when a long string of nouns or modifiers is used) may surely create difficulty while understanding the intended meaning of the message. Because, it causes ambiguity or obscurity of what was said as several meanings can be ascribed. For example, let us look at Dirckx's example:

Hypokalemic conduction defect and *interventricular conduction defect* look like parallel construction at first glance, but upon analysis they prove to have entirely different internal relations. The first means *a defect, caused by hypokalemia, of conduction*; the second, *a defect of interventricular conduction*. That is, in the first example the first adjective modifies *conduction*, and in the second it modifies *defect*. [...] When a patient is advised to avoid oily hair preparations, does that mean he should avoid hair preparations that are oily, or preparations that are for oily hair? If *iron* and *tendon* are adjectives in *iron nails* and *tendon reflexes*, what are they in *iron deficiency* and *tendon transplant*? Grammarians might debate this question until the end of time and reach unanimity (Dirckx, 1976:34).

It is clearly seen from given examples that constructions with too many nouns might surely challenge the medical translators, whose main concern is to avoid ambiguities and several meanings in the target text, except if it is truly the intention of the author of the source text. Eventually, in order to transmit the message in the less abstract and more common sense syntax it is better if the stacked noun phrases are paraphrased by turning them into the verbal forms.

2.2.2.4.Abbreviations

Although abbreviations are very useful in terms of saving the time, they do not make a sense until they have been made comprehensible. Moreover, they can sometimes be dangerous as misunderstanding of the used abbreviation can lead for example, to unsuitable treatment or wrong medical intervention of the patient. "When a physician's admitting note indicates that *the patient had PE 6 months ago*, the fact may be reassuring or ominous

depending on whether the *PE* was a *physical examination* or *pulmonary embolism*” (Dirckx, 1976:90).

On the other hand, the applied meaning is usually understood from the context in which it appears. For instance, different meanings of AMS abbreviation including “Atypical Measles Syndrome”, “Acute Maxillary Sinusitis” and “Acute Mountain Sickness” can be understood in the context in which they are given. Nevertheless, there are cases when it is impossible to understand the intended meaning from the context, and the only way remains is to contact the physician by who it was written.

For instance, let’s examine the following statement written in Turkish by a cardiologist in the conclusion part of a peripheral angiography report: “SONUÇ: PAH”. I had to translate this report into English as soon as possible. However, translating the abbreviation “PAH” into English was a challenge for me. Since the author of the report used abbreviations throughout the report both in Turkish and English, I was not 100% sure whether the abbreviation “PAH” was in Turkish or in English. So, I ended up with two meanings in my mind which are “Pulmonary Arterial Hypertension” (in case this abbreviation was written in English) and “Periferik Arter Hastalığı” (in case this abbreviation was written in Turkish). This is exactly the case when the medical translator must consult the author of the report in order to avoid misinterpretation. After asking the cardiologist⁹ about this abbreviation, I learned that the abbreviation was in Turkish. And eventually, I translated the abbreviation PAH as “Peripheral Artery Disease” and achieve 100% of accuracy (so, I can have a sound sleep now). Needless to say that the medical translator should know how and when to seek for the cooperation with the specialists of the related field.

2.2.2.5.Lack of Intelligibility

Medical professionals can sometimes use words and expressions in an unintelligible way. For example, the word “multiple” is often confused with the word “many”. As the word

9. Throughout the thesis my aim is to demonstrate the importance of cooperation with medical professionals during the translation process when it is needed. Therefore, I preferred not to specify the names of the medicians to whom I had consulted in the past.

“multiple” is used in the sense of “manifold” and its antonym is “simple”, saying for example “multiple epileptic episodes” is nonsense (cf. Dirckx, 1976:122).

Another example that is worth to be discussed is the word “normal” that is very often used in the clinical records. Dirckx argues that the word “normal” must not be used as an outcome of the sign (e.g. Homan’s sign) or diagnostic procedure (e.g. Abduction External Rotation Test). Instead, he suggests using the words “present” or “absent” for a sign and the words “positive” or “negative” for a diagnostic procedure. Therefore, the medical translator should pay attention on unintelligible usages in the source text and not to render them back in the target language.

2.2.2.6. Naming New Phenomena

When for instance a new disease emerges and biomedical research (experimental medicine) advances, the new knowledge, which must be conceptualized, is generated. In order to establish concepts and name them, “terminologizing” is used. And terminologizing the new concepts allows us to organize, store and make the medical knowledge available for communication. There is the constant production of new terms in order to keep pace with the progress of medicine.

On the other hand, finding and agreeing on ways of naming and transmitting new terms is one of the most challenging aspects of the activity of people who write medical translations. For instance, not agreeing on ways of naming new terms can lead to variation in medical terms when more than one word exists to express the same concept, which may lead the translator to confusion while comprehending the source text and creating the target text. Most of the time, it occurs when the translator tries to solve problems related to the lack of terms in the target language or produces the alternatives for the same neologism.

Meanwhile, the problem also arises when it is come up with a “new” word which already means something else:

Dermatome, coined from two Greek words meaning skin and cut, is perfectly satisfactory term for a surgical instrument designed to cut skin in preparation for grafting. But besides that meaning, it has an entirely different

one: a zone of the skin surface supplied by sensory branches of a single spinal cord segment. *Scaphoid=boat-like* is the name of two different bones, one in the wrist and the other in the ankle, both of which are more frequently called *navicular*, from the Latin for *little boat*. We also speak of a scaphoid abdomen by a simile of very different purport (Dirckx, 1976:61-62).

Hence, awareness of these kinds of issues before naming a new term or transmitting a neologism to the target language can minimize uncontrolled terminological proliferations. Obviously, it is better if medical professionals in the particular field collaborate with the translator in solving such problems with terminology. In fact, the translator's time and efforts can be saved if there are official bodies who are responsible in dealing with naming new phenomena.

2.2.2.7. Variations of the Medical Language Usage

There are different variations of the medical language usage between the medical professionals themselves. Some medical professionals use complex (with hedging modifiers, gobbledegooks and etc.) language, whereas others are for using more plain language (easy to read, understand and use; without complicated and verbose words or phrases). And others hover between them.

It seems that this is really a controversial subject between the professionals. For example, in the book *Medical Writing – A Prescription for Clarity* Goodman and Edwards state that the medical writing is “muddied by superfluous words” (Goodman & Edwards, 2006:95). According to them, words like “basis”, “case”, “conditions”, “essentially”, “feature”, “function”, “grounds”, “nature”, “situation”, “type”, “very” generally do not add anything. They suggest deleting them and rephrasing the sentence once we have recognized them. Using them creates unnecessary obscurity and evasion of clarity. Let's consider the book's example:

The abdominal pain is essentially colicky across the lower abdomen...

(Goodman & Edwards, 2006:97)

According to the authors of the book, “basically”, “essentially” and “fundamentally” are generally used as padding during the verbally produced utterances in order to give speakers time to think. However, as we have a time to think during writing using padding is unnecessary. It is suggested in the book that as the pain is described across the lower abdomen, the abdominal is redundant. Therefore, writing only “There is colicky lower abdominal pain” is simply enough.

Furthermore, unnecessary usage of adverbs in combination with some sort of words such as “abolish”, “eliminate”, “fatal”, “prevent”, “vital” is seen among medical professionals. For instance, let’s consider another books’ example:

The response is totally abolished in Group 1 patients by. . . (ibid.,101)

As such verb as “abolish” and is per se already implies the meaning of totality, modifying it with the adverbs of degree is unnecessary. It is not sensible to say about partial abolition. The intended message in the given example is that the response was abolished in Group 1 patients but not in Group 2 patients.

In addition, the repetition of words is also a nuance on which medical translator should pay attention. Sometimes, medical professionals unwarily write the same thing twice:

The results are plotted graphically. (ibid.,101)

Here, Goodman and Edwards suggest omitting the word “graphically” because the word “plotting”¹⁰ already gives the meaning of the drawing of the graph.

Furthermore, it is also worth to mention about the hedging modifiers, the usage of which creates unnecessary vagueness and complexity in terms of comprehension. Most of the time, we can encounter with them in written or dictated clinical records. In his book,

10. *THE FREE DICTIONARY BY FARLEX*, s.v. “plotting,” accessed June 22, 2017, <http://www.thefreedictionary.com/plotting>.

Dirckx expresses his concern and draws our attention on the use of the hedge phrases that are used by some medical professionals. He criticizes a radiologist who wrote two different conclusions (conclusion 1: Normal dorsal and lumbar spine; conclusion 2: Findings would suggest an essentially normal dorsal and lumbar spine at this time) for the spine films with the same findings of two different patients. The “extraordinary” discourse analysis of Dirckx for the second conclusion is given below:

Would and *suggest* rob the second report of conviction; *essentially* and *at his time* hint at exceptions to *normal*. Here is what the radiologist is really saying: “The patient has clinical signs of organic disease of the spine; something abnormal ought to be visible on these films, but I see nothing. Another radiologist, reviewing these films and comparing them with later ones, may see incipient changes here that I have overlooked. A report of absolute normalcy may seem to justify omission of further diagnostic studies, and may later seem to reflect on my abilities, yet I cannot identify the slightest variation from normal on these films.”

It seems like Dirckx solved the *real* reason of deliberate using of hedge phrases that create ambiguity in terms of comprehension and that obviously may challenge the translator who is trying to produce a competently written TT.

Meanwhile, according to Peter Medawar, “people who write obscurely are either unskilled in writing or up to some mischief” (Medawar, 1990:15). However, writing obscurely in such a way does not help people. If you talk in Spanish in front of people who do not understand Spanish, it does not matter what you are talking about.

Taking into the consideration all these matters, it is understood that clarity is the *must* variable/criteria for good medical writing. Medical texts should be written in a simple style and convey the intention of the writer (and no more), be honest and it should not distort the information. Nebulous and elusive words must be avoided by medical professionals themselves, so that they do not create additional problems for the translator. In this regard, before the real action of rendering information to another language, firstly, it is very important that the message is clearly understood. Therefore, not only the translator-“professional reader” (cf. Lefevere, 1992:4) should be aware of the issues discussed above,

but also medicians themselves should pay attention to such criteria while writing the source text, especially if they are going to be translated into another language.

In fact, according to International Medical Interpreters Association, “a source document should not be only carefully and factually written, but it should also be edited for content accuracy and language correctness. (...) The document should be very clear, and free of ambiguity...”¹¹.

2.3. Turkish Language of Medicine

The bond between national feeling and language is very strong. A national and rich language has the major role in the development of national feeling. The Turkish language is one of the richest languages, as long as this language is processed mindfully. The Turkish Nation that knows how to protect its country and its high independence must redeem its language from the oppression of foreign languages as well.¹²

Gazi Mustafa Kemal

2 September 1930

Similar to the English language, the Turkish language of medicine also consists of medical terms, acronyms, abbreviations and medical argot, the general characteristics of which were discussed in the section 2.2.1.

In this section my aim is to present some specifics of Turkish language of medicine, of which the medical translator must be aware while producing medical texts or translating from Turkish to another language.

11. <http://www.imiaweb.org/uploads/pages/438.pdf> . Accessed July 25, 2017

12. “Millî his ile dil arasındaki ba çok kuvvetlidir. Dilin millî ve zengin olması millî hissin inki afında ba lıca müessirdir. Türk dili, dillerin en zenginlerindedir; yeter ki bu dil, ûrula i lensin. Ülkesini, yüksek istiklâlini korumasını bilen Türk milleti, dilini de yabancı diller boyunduru undan kurtarmalıdır.”

But before digging further, it is worth to look at the brief overview of the history of the Turkish language of medicine per se in order to understand its complexity and later, problematic aspects that occur due to its complexity.

2.3.1. Historical Overview

Different foreign languages including Arabic, Persian, Latin, Greek, French and English contributed to the formation of the Turkish language of medicine as it is now today. During the Middle Ages the Turkish physicians wrote medical books in Arabic and Persian which were the scientific languages during those days. Meanwhile, the tradition to write works on medicine in Arabic was carried on also during the époque of Ottoman Empire (cf. Mihçio lu, 1997:1). Moreover, Latin terms, which appeared in the medical works that were translated into Turkish during those days, were transmitted through the transliteration method (letter-by-letter reproduction). With the beginning of westernization and opening the medical schools similar to the schools in Europe, the French language became the *lingua franca* in medicine. Therefore, during the Ottoman Empire the language of medicine was also French and it was the official language in medical schools. Students of medical schools had to memorize the Arabic, Latin, French, pure Turkish and even Persian and German equivalents of medical terms. As might be expected, a great number of words in French origin entered the language of medicine during those days. Nevertheless, the usage of the French language as the official language in medical schools lasted until 1871 because students could not benefit enough from the education in French and this was the period when it was decided that the education language in medical school should be in pure Turkish and therefore translation activities of medical works (e.g. dictionaries, manuals and etc.) from French to Turkish were started.

Before the foundation of the Republic of Turkey, the Turkish medical language consisted of the mixture of Arabic, Persian, French, Latin and Turkish languages. It was inconsistent and difficult to understand (ibid.,7). Attempts of turning the language of medical language into Turkish also continued after the foundation of the Republic of Turkey in 1923. Meanwhile, within the Language Reform, which started by Mustafa Kemal

Atatürk, it was also aimed to purify the Turkish language from popularized foreign loans and to produce new words when needed. Physicians, scientists and scholars of those days endeavoured to work hard (devoted their souls) for nativization of the Turkish language as the language of medicine in Turkey. For instance, the Turkish words such as “beyin” (brain), “böbrek” (kidney), “kas” (muscle), “kemik” (bone), “sa lık” (health) and etc. were created during that period.

Some works, important in terms of the formation of the Turkish language of medicine, were created during the period of Turkish Republic including *Türkçe Hekimlik Terimleri Üzerine Bir Deneme* (Bursa, 1944-1948)¹³, *Hekimlik Dili Terimleri* (1945)¹⁴, *Latince-Türkçe-Osmanlıca Anatomi Sözlü ü ve Anatomi Terimleri* (1946)¹⁵, *Hekimlik Terimleri Kılavuzu I* (1978)¹⁶ and *Hekimlik Terimleri Kılavuzu II* (1980)¹⁷ in which various strategies (e.g. transliteration, transcription, translation) were used in order to contribute to the formation of the Turkish language of medicine. And understanding of those strategies is important in terms of the comprehension of morphological aspects of the Turkish language of medicine processing. Hence, they are going to be discussed this issue will be discussed in a more detailed way in the following section.

2.3.2. Specifics

It had been mentioned above that the English language has undertaken the important role as the international language of medicine nowadays. Today, the communication on the international level is provided via the English language. Therefore, as times go by, more and more words of the English origin have entered into the language of medicine of different countries in which Turkey is not an exception. For example, words such as by-

13. efik brahim çil, MD and Ali Ulvi Elöve, *Türkçe Hekimlik Terimleri Üzerine Bir Deneme* (Bursa: Turkish Language Institution Press, 1944-1948)

14. Prof. Salim Ali Dilemre, MD, *Hekimlik Dili Terimleri* (Ankara: Turkish Language Institution Press, 1945)

15. Zeki Zeren, MD, *Latince-Türkçe-Osmanlıca Anatomi Sözlü ü ve Anatomi Terimleri* (Istanbul: Hüsnütabiat Press, 1946)

16. *Hekimlik Terimleri Kılavuzu I* (Ankara: Turkish Language Institution Press, 1978)

17. *Hekimlik Terimleri Kılavuzu I* (Ankara: Turkish Language Institution Press, 1980)

pass, check-up, graft and stent are popularized foreign loans from the English language. Meanwhile, Latin language is the language of International anatomical terminology (*Terminologia Anatomica*) that was developed by the Federative Committee on Anatomical Terminology (FCAT) and the International Federation of Associations of Anatomists (IFAA) in 1998. Hence, non-English speaking countries try to produce the local equivalents of popularized English words and international anatomical terminology in order to catch up with the technological and scientific advances of the medical industry. Let's Let us examine in detail which strategies were and are used in producing medical terms that are a core part of the Turkish language of medicine.

The international medical terms (Greek, Latin, French and German words) were and are conveyed into Turkish medical language by using one of the following strategies which are borrowing, transliteration and translation. As the result, new medical terms are constantly formed and become a part of the Turkish language of medicine. Therefore, those strategies deserve to have a close look on them (it is worth to examine them one by one).

4.3.4.1.BORROWING

Borrowing involves the direct transfer of terms without any change from one language to another. Basically, it is the simplest type of translation. Because there are no Turkish equivalents for all Latin words listed in the *Terminologia Anatomica*, “borrowing” method is often used by medical professionals, writers or translators. For example, the word “septum” (English) is rendered into Turkish as “septum”; *n.medianus* (Latin) is conveyed as *n.medianus*; “atrium” (English) is transferred into Turkish as “atrium”.

Meanwhile, generally, borrowed foreign medical terms that are directly used in the Turkish statements are written in such styles such as bold, italic or are put between quotes or are underlined. For example:

Tuberositas tibiae, deri altında kolayca palpe edilebilir.

Tuberositas tibiae, deri altında kolayca palpe edilebilir.

Tuberositas tibiae, deri altında kolayca palpe edilebilir.

“Tuberositas tibiae”, deri altında kolayca palpe edilebilir.

There is not a standard preference for a particular style for the foreign words occurred in the Turkish statement. However, most of the time foreign terms are written either in italic or put between quotes when they are directly transferred to Turkish text.

2.3.2.2. Transcription

Transcription strategy involves phonological adaptation of the loanwords from native phonology of the source language to corresponding characters of another language phonological system. For example, let's look at some examples of adaptations of loanwords from different languages to Turkish language:

enterography (English) → enterografi (Turkish)

scalp (English) → skalp (Turkish)

infection (French) → enfeksiyon (Turkish)

ambulance (French) → ambülans (Turkish)

quarantina (Italian) → karantina (Turkish)

pompa (Italian) → pompa (Turkish)

(Arabic) → balgam (Turkish)

بطن (Arabic) → batin (Turkish)

Transcription strategy has been very often used while rendering the English or French medical terms into Turkish. For instances, if we look at one of the English-Turkish and Turkish-English medical dictionaries¹⁸, we will see the transcription strategy at work:

18. Prof. smet Dökmeci, MD, and Handan Dökmeci, *BÜYÜK TIP SÖZLÜ Ü*, 4th ed., s.v. “M KROENEMA” (Istanbul: Nobel Tıp Kitabevleri Tic. Ltd. ti. Press, 2014)

MİKROENEMA

MİKROENEMA [Ing. **Microenema**]. Bkz. *Enema*.

MİKROFAGOSİTOZ [Ing. **Microphagocytosis**]. Mikropların fagositozu.

MİKROFAJ [Ing. **Microphage**; Yun. *mikros*; *phagein*, yemek]. Küçük çaplı fagosit. Bunlar akut enfeksiyonlarda görülen polinükleer nötrofil lökositler ve eozinofillerdir.

MİKROFAKİ [Ing. **Microphakia**; Yun. *mikros*, küçük; *phakos*, mercek]. Eş. a. *Mikrolentia*. Gözde lens'in çok küçük olması.

MİKROFALUS [Ing. **Microfallus**]. Bkz. *Mikrokauli*.

MİKROFARAD [Ing. **Microfarad**]. Farad'ın milyonda birine eşit elektrik gücünde ünite. $1 \mu\text{F} = 10^{-6} \text{ F}$.

MİKROFAUNA [Ing. **Microfauna**]. Belirli bir bölgede değişik mikroorganizmaların oluşturduğu topluluk.

MİKROFİLAREMİ [Ing. **Microfilaremia**]. Kanda mikrofilaryaların bulunması.

MİKROFİLARYA [Ing. **Microfilaria**]. Flaryaların embriyoner şekli.

MİKROFİLARYAL [Ing. **Microfilarial**]. Mikrofilariyalardan ileri gelen; mikrofilariyalarla ilgili.

MİKROFİT [Ing. **Microphyte**]. Bitkisel mikroorganizma.

MİKROFİZİK [Ing. **Microphysic**]. Elementer partikülleri inceleyen fizik dalı.

MİKROFLORA [Ing. **Microflora**]. Belirli bir bölgede mikroskopik canlıların (bitki ve hayvan) topluluğu.

MİKROFOLİKÜLER [Ing. **Microfollicular**]. Cilt, mukoza ya da dokularda oluşan küçük keseciklerle ilgili.

MİKROFONİ [Ing. **Microphony**]. Sesin cılız olması.

MİKROFOTOGRAFİ [Ing. **Microphotography**]. Mikroskopik preparatların fotoğrafı.

M

MİKROFTALMİ [Ing. **Microphthalmia**]. Gözlerin doğuştan çok küçük olmasıyla karakterize malformasyon.

MİKROGAMET [Ing. **Microgamete**]. Eş. a. *Gammon*. Erkek gamet (eşey hücresi). Makrogametleri dölleyen bazı patojenlerin üreme kamçıları.

MİKROGAMETOSİT [Ing. **Microgametocyte**]. *Plasmodium* cinsi parazitlerin erkek gametosidi.

MİKROGAMİ [Ing. **Microgamie**]. Genç ya da somatik hücrelerden daha küçük eşey hücrelerin birleşmesi ya da füzyonu.

MİKROGASTRİ [Ing. **Microgastria**; Yun. *mikros*, küçük; *gaster*, mide]. Doğuştan midenin küçük olması.

MİKROGENİ [Ing. **Microgenia**; Yun. *mikros*; *généton*, çene]. Alt maksiller kemiğin tam gelişmemiş şekli.

MİKROGENİTALİZM [Ing. **Microgenitalism**]. Dış genital organların küçük olmasıyla karakterize durum.

Figure 3. *BÜYÜK TIP SÖZLÜ Ü*, 4th ed., s.v. “M KROENEMA”. Source: Prof. smet Dökmeci, MD, and Handan Dökmeci, *BÜYÜK TIP SÖZLÜ Ü*, 4th ed., s.v. “M KROENEMA”. Istanbul: Nobel Tıp Kitabevleri Tic. Ltd. ti. Press, 2014

In fact, in essence, many of the medical terms in Turkish medical language are phonetic and morphological adaptations of the foreign terms or in other words, terms transferred by using the transcription strategy that allows loanwords become the part of the native vocabulary.

2.3.2.3. Translation

Translation is another method that contributes to the formation of Turkish language of medicine. The method involves rendering of a foreign word by substituting it with a corresponding national term (if it already exists, if not, producing of a term in a national language while introducing a foreign term to the target audience). Although this method is the most challenging one, in fact, it is obviously the most recommended method if we look from the national perspective of a particular country. Needless to say, it contributes to the development of the national language and eases comprehension of the target readers. It should be pointed out that transferring of source terms into target terms by substituting them with the existing national terms, preconditions the revision of existing terms in the same linguistic community because there may be various terms or different forms of the term for one particular source term.

Translators of medical texts from time to time may deal with the lack of terms in the Turkish language or with the multiplicity of alternatives for the same neologism because advances in the medical science have rapidly been developed and there is a need for more terminological planning and control in Turkey. Meanwhile, creating a corresponding term for a source term in a national language is very crucial and therefore requires some certain competencies on the part of the translator such as language, research and creativity. Therefore, translators or source text writers who do not have any desire to bother while producing a corresponding term in the national language, cut corners and transfer the foreign terms into the national language using such methods as “borrowing” or “transliteration-transcription” which are mentioned above. On the other hand, producing corresponding

terms for the foreign ones in a national language requires some set of standards and effort which can be provided under the supervision of the experts at an institution or organization.

2.3.3. Problems & Solutions

In this part of chapter I have described some basic problematic aspects of the use of the Turkish language of medicine, with which the medical translator may encounter including borrowing foreign terms (2.3.3.1), inconsistencies in phonological adaptations of loanwords (2.3.3.2), abbreviations and acronyms (2.3.3.3) and should know how to deal with them. I will also propose some solutions towards solving those problematic aspects.

2.3.3.1. Borrowing Foreign Terms

As time goes by, more and more medical terms have been borrowed from English into the Turkish language of medicine. For example, “bilateral”, “bypass”, “benign”, “sling” and etc. And it is not an unusual situation, with which many medical professionals, translators and interpreters face with. Needless to say that international communication among physicians and scientists is now nearly only in English. On the other hand, it should be pointed out that English language is not 100% recognised as the language of science. Instead, it is often used as the language of science for the sake of the mutual understanding between medical professionals on the international arena.

At the same time, directly borrowing source terms into the target system occurs as the easiest way of transmitting information from one linguistic community to another. By doing so, you do not have to produce a new term in a national language and it has also been perceived that using a foreign term (for instance, in English) inside the text, written in a national language, makes other people think that you are competent in that language or in other words, by using terms in English, for instance, instead of existed national terms, you are simply showing off. In addition, some medical professionals use foreign terms instead of national ones for the sake of being scientific. However, in this case, it is important to distinguish whether those foreign terms are really scientific or very commonly used terms

on international area. Using “nazal wall” instead of “nasal duvari” does not make it scientific.

Why is it so? Even languages, the origin of which is the Latin, such as Italian, French, Spanish, Portuguese, adapted Latin medical term to their national language according to phonetic features of the national language. For example, the English term “pyelitis” (inflammation of the pelvis of the kidney) is “pielitis” in Spanish, “pielite” in Italian and “pyélite” in French. Moreover, in his book John H. Dirckx expresses his concerns related to non-English terms in the following paragraph:

Most internal organs and tissues have native English designations also: *gallbladder, liver, spleen, blood, bone, fat*. The anatomist is obliged to use non-English terms for only two kinds of structure: those whose existence was not generally known to laymen during the formative period of the language, and those for which the available native English word is not sufficiently specific. *Adrenal, ovary* and *prostate* are in the first category, as are all the structures revealed by the microscope. To the second category belong such terms as *duodenum, jejunum, ileum* and *colon* (which convey more specific information than a general work *bowel*). (Dirckx, 1976:24)

It is clearly seen, that usages of non-national terms is a delicate issue even for English speaking medical professionals as well. Therefore, I believe that we should not preconceive towards using national terms when it is necessary.

When it comes to translation process, the medical translator should be aware that using too many foreign words in the Turkish sentence causes difficulty in reading and comprehension of what was written and that medical professionals sometimes may confuse and write terms in a wrong way. Let’s examine the following example which is a small extract from the PET/CT¹⁹ report that I had to translate into English:

19. Positron Emission Tomography and Computed Tomography

T7 vertebra sa pedinkülü ve korpus sa kesiminde (SUVmaks: 4,6), T9 vertebra korpusunda (SUVmaks: 4,2), T11 vertebra korpusunda (SUVmaks: 3,9) patolojik artımı 18F-FDG tutulumu izlenmektedir.

The most problematic aspect in this part of the PET/CT report was the word “pedinkül” (peduncle). First of all, according to medical dictionary²⁰, there is no such word as “pedinkül”. Instead, there is a word “pedüinkül” (peduncle) which has two meanings “a band of white matter joining different parts of the brain” (for example, cerebral peduncle) and “a narrow stalk by which a tumor or polyp is attached”²¹. Most probably, the writer of the report intended the word “pedüinkül”; however, wrote the “pedinkül” that is another phonological adaptation²² of the term “peduncle” which is not included in published medical dictionaries. Was it only a problem, checking from a reliable source as the published medical dictionary would be enough. However, the problematic part was that the writer of the PET/CT report confused and made the mistake by writing “pedinkül” (peduncle) instead of “pedikül” (pedicle). The word “peduncle”, the meaning of which I had mentioned above, is used when it is spoken about brain. Whereas the term “pedicle” in the used context means “the basal part of each side of the neural arch of a vertebra connecting the laminae with the centrum”²³. After doing more research on the Internet I has become 100% sure that the difference between the terms ”peduncle” and “pedicle” is that “peduncle” is used more in the context when brain is mentioned and the “pedicle” is used when vertebra (related to spine) is mentioned . Let us go back to the source text of the PET/CT report. It was written:“T7 vertebra sa pedinkülü” (the right peduncle of the T7 vertebra). Obviously, there is a problem here. Since it is written about the vertebra, the word “pedicle” must be used instead of the word “peduncle”. After I had realized that there was the term confusion, I called the physician who had written the report and told my

20. Prof. smet Dökmeci, MD, and Handan Dökmeci, *BÜYÜK TIP SÖZLÜ Ü*, 4th ed., s.v. “PEKELHARING” (Istanbul: Nobel Tıp Kitabevleri Tic. Ltd. ti. Press, 2014)

21. Merriam-Webster Online, s. v. "peduncle," accessed July 31, 2017, <http://www.merriam-webster.com/dictionary/peduncle>.

22. I mentioned in detail about variations in phonological adaptations of non-Turkish medical terms in the section 2.3.3.2 of this chapter.

23. Merriam-Webster Online, s. v. "pedicle," accessed July 31, 2017, <http://www.merriam-webster.com/dictionary/pedicle>.

concerns about those terms. After discussing for a while, the physician accepted that I was right about my concerns. He approved that I can change the word “peduncle” to “pedicle” and thanked me for asking him for help. He also said that he would correct the source text and pay attention on this nuance when writing the PET/CT reports in the future.

Such confusions with the terminology is a very natural occasion since students of Medical School in Turkey must mechanically memorize loads of non-Turkish terms, the Turkish version of most of which is not given. The concerns about this issue were also expressed by Prof. Recep Mesut, MD in his book *Tıbbi Terminoloji*²⁴ (Medical Terminology). Another reason of such kind confusion happens due to inconsistencies in phonological adaptations of loanwords which I am going to describe in the following section.

2.3.3.2. Inconsistencies in Phonological Adaptations of Loanwords

Thanks to globalization *époque*, borrowing and interchanging of words from one language to another has become increasingly common. Each language deals with this issue by using its own strategies that involve different processes of adaptation used on words taken from one language. According to TDK, many foreign terms have been transferred into Turkish language by using transcription method that preconditions adaptation of the source terms to the target system taking into consideration how they are written and pronounced in the source language. For example, “serous” (English) is transferred to Turkish as “seröz”; “synovial” (English) is transferred to Turkish as “sinoviyal”; “cardiac” (English) is transferred to Turkish as “kardiyak”. There are some provided by TDK online dictionaries²⁵ which can be useful during the checking the right spelling of the adaptation forms of the loanwords.

24. Prof. Recep Mesut, MD and Assoc. Prof. Selman Çıkmaç, MD, *Tıbbi Terminoloji*, 2nd ed. (Istanbul, 2014), vii

25. http://tdk.gov.tr/index.php?option=com_hemsirelik&view=hemsirelik. Accessed August 22, 2017

On the other hand, as time goes by, one encountered chaotic situations in creating and using different adaptations of the loanwords for the same source term in the target system. For instance:

cicatrice → sikatris, skatris

bistouri → bisturi, bistüri

infection → enfeksiyon, infeksiyon

jejunojejunostomy → jejunojejunostomi, jejenojejenostomi, jejuno-
jejunostomi

rotablator → rotablätör, rotabilätör

vasoconstriction → vazokonstrüksiyon, vazokonstriksiyon

Let's consider the French word "infection", the target term of which was accepted by the Turkish Language Institution (TDK)²⁶ as "enfeksiyon". Obviously, the target term is the phonological adaptation of a French word. Meanwhile, it should be pointed out that the adaptations are not randomly made, but are instead systematic. However, turning back to our example, using "infeksiyon" instead of "enfeksiyon" (most probably for the sake of the resembling it into English for certain reasons) shows irregularity that creates confusion. Moreover, there are other variations of inconsistencies in adaptation of foreign medical terms using transcription method as in the case with such words as "rotablator" and "jejunojejunostomy". Furthermore, it may happen that three different Turkish writers may use different medical terms for the same words in the same context.

Most of the time, wrong usages of the terms occur due to differences of Turkish phonology in comparison to that of English or lack of knowledge in phonological system of the source language. It is the common problem among Turkish speaking medical professionals, most of whom have not expertised in morphological and phonological systems of a particular foreign language. However, the medical translator, who must be competent at least in two languages, should pay attention on such variations and wrong

26. TDK is the official regulatory of the Turkish language, established on July 12 in 1932 by the initiative of Mustafa Kemal Atatürk.

usages of the terms and use right forms in the target language. This is also exactly the time when knowing how source medical terms (mixture of Latin or/and Greek) are formed and having competence in research, ease the ways to figure out the patterns of an unfamiliar word, find out the right term and meet the deadline on time.

2.3.3.3. Abbreviations and Acronyms

Needless to say that medical professionals use abbreviations and acronyms very often while doing their job because they are practical in terms of saving the time. For example, let's look at some of the frequently used abbreviations and acronyms that are used by the Turkish speaking physicians:

BOS (beyin-omurilik sıvısı) → CSF (cerebrospinal fluid)

KA (intercostal aralık) → ICS (intercostal space)

G S (gastro-intestinal system) → GIS (gastro-intestinal system)

KC (karaciğer) → liver

.V. (intravenosus) → IV (intravenous)

K BAS (kafa içi basınç artışı sendromu) → IHS (intracranial hypertension syndrome)

Abbreviations and acronyms are only comprehensible in the context. Without context they are meaningless. Therefore, the context in which they appear should be perceived. For example, let's examine two sentences in which the abbreviation "K" is appeared:

Hastanın tedavi planı yapılmadan önce **K** incelemesine gereksinim duyulmaktadır. (1)

(Translation: The **bone marrow** examination is needed before the treatment plan is designed for the patient.)

ER(-), PR(-), c-erb B2 negatif, **K** 67:%42. (2)

(Translation: ER(-), PR(-), c-erb B2 is negative, **Ki**- 67 proliferation index is 42%.)

These two statements demonstrate how the meaning of “**K**” is differently interpreted according to the context. In the first sentence it means “bone marrow” but in the second sentence it means “Ki-67” which is the proliferation marker that is a prognostic parameter in breast cancer patient. In fact, the second sentence is an extract from the pathology report in which findings in terms of breast cancer were concluded. However, during the two-year experience working in the hospital as the medical translator I saw some incompetently done translations in which “**K**” was translated as “bone marrow” in the context of “Ki-67: 42%”.

On the other hand, there are cases when it is impossible to understand what an abbreviation means only by looking only at the context, and the only way remains is to contact to the physician by who it was written. First of all, using abbreviations or acronyms in Turkish instead of abbreviations in English or international ones is already a challenge for the translator who tries to meet the deadline. It is true that finding out the meaning of the needed abbreviation or acronym in English is easier than finding out it in Turkish. The primary reason of that is there are more web sites and online documentation in English than in Turkish. Moreover, using both English and Turkish abbreviations throughout one document, written in Turkish for example, puts more pressure on the translator as in that case it becomes ambiguous whether that abbreviation was written in Turkish or in English. For instance, let’s examine this problematic aspect in the following statement which was written in Turkish by a cardiologist in the conclusion part of a peripheral angiography report: “SONUÇ: PAH”. I had to translate this report into English in the shortest possible time. However, translating the abbreviation “PAH” into English was a challenge for me. Since the author of the report used abbreviations throughout the report both in Turkish and English, I was not 100% sure whether the abbreviation “PAH” was in Turkish or in English. So, I ended up with two meanings in my mind which are “Pulmonary Arterial

Hypertension” (in case if this abbreviation was written in English) and “Periferik Arter Hastalığı” (in case if this abbreviation was written in Turkish). This is the exactly the case when the medical translator must to consult to the author of the report in order to avoid misinterpretation. After asking the cardiologist about this abbreviation, I learnt that the abbreviation had been written in Turkish. And eventually, I translated the abbreviation PAH as “Peripheral Artery Disease” and achieve 100% of accuracy (so, I can sleep calm now). Therefore, it should be pointed out that the medical translator should know how and when to seek for the cooperation with the specialists of the related field.

In fact, I suggest that it would be better if writers of the source texts write near the acronym, written in Turkish, the English or international equivalent of the acronym when it is possible, so as to eliminate the challenge from the side of the translator.

In addition, in case of translation of discharge summaries, the list of allowed shorthand, abbreviations and acronyms should be created (in which the expansion of the abbreviations and etc. is given) and share with medical professionals and translators. There are such hospitals where such list exists. Otherwise, using non common shorthands, abbreviations and acronyms in own way, will cause misinterpretation and delay the delivery of the translation in time. Let’s examine the following extract from the anamnesis section of a discharge summary that was written by a specialist of Internal Diseases:

“kolon: normal, **g2 hem-** rutinler istendi.”

The problematic aspect for me in this statement was “g2 hem” because obviously the writer did not use the universally common shorthand. Eventually, after asking the specialist, who had written the report, I ended up with that the actual meaning of “g2 hem” is “grade 2 internal haemorrhoids”. This is a good example of how such usages of shorthands cause the problem to the medical translator. On the other hand, the professional medical translator should also know who to deal with such types of problems. In this particular example, the problem only could be solved after communicating with the physician who had written the report.

2.4. Medical Communication Forms

2.4.1. General Outlook

In this chapter up to now, I discussed the medical language and issues related to its usage mostly on the level of individual words and expressions. However, it is time to embrace the very dynamic nature of medical communication and examine it in more detail. First of all, the translator should always have in mind that medical texts are written by different participants including health policy makers, medical students, physicians, nurses, surgeons and other medical practitioners whose communicative purpose varies from each other. In this regard, different genres of medical texts (2.4.4), which may embody one or more functions (2.4.2), come out as the assignment for medical translators. However, it should be pointed out that writing is shaped not only according to the text function but also according to the intended audience (2.4.3) which is an important variable that affects the language that is used to generate any text.

2.4.2. Text Functions

Needless to say that any writer before formulating his/her thoughts into writing will firstly decide on the communicative purpose of his/her intended text, i.e., functionality of the text – whether s/he is going to inform, instruct, convince a reader because his/her vocabulary, syntax and phraseology must be in compliance with the text function and potential reader-audience. Likewise, a translator (writer of the target text) also has to decide about the function of the target text before s/he actually starts to produce the text.

According to Fischbach²⁷, the function of medical texts can be broadly divided into two categories: medical texts are written either for the sake of information or promotion or the text may be written to serve two functions at the same time (cf. Fischbach, 1962:462). Meanwhile, Reiss distinguishes three types of functions: informative, expressive and operative, each of which requires particular use of the language (cf. Reiss, 2000:163). She

27. Henry Fischbach (1921–2008) was the co-founder, charter member, and honorary member of the American Translators Association and the author of *Translation and Medicine* (1998) book.

also points out the individuality of the text and stresses that these functions may be realized as a mixture of each other either due to the text variety or due to having plural intentions (ibid., 164). In this regard, depending on purpose and reader, this list can be extended and it can be said that there are four functions that the medical text can comprise: inform, instruct, convince and attract. On the other hand, the combination of two or more function is possible as well. Let us briefly discuss each.

The informative text function is the most frequent function that the medical text can embody. A medical translator may encounter these kinds of texts everywhere, in medical reports, magazines, text books, newspaper articles, patient information leaflet and etc. When it comes to the instructive text function, it is also frequently embodied in the medical texts including guidelines on how to use a particular medicine or on how to do exercises, prescribed by the physiotherapist, after the patient's discharge from the hospital. Most of the examples given in this thesis are the extracts from the discharge summaries (see section 3.3) that I previously translated. The text function of discharge summaries embodies the combination of informative and instructive functions which in fact, may often be found in different medical genres (see section 2.4.4). Another function of medical text that is worth discussion is the convincing function. For example, patients might be convinced for giving their consent for the implementation of surgical treatment by signing a consent form or they might be convinced to buy a certain type of medicine and etc. In this regard, a medical translator must be able to use such wording, in order to convince a reader through the text. Last but not least, attracting a reader is another function that a medical text can embody. For example, such texts can be seen in the advertisements, editorials or in the push notifications that appear in smartphones. Therefore, in this context, if it is required that the target text embodies the function to attract a reader, the translator must adopt the particular style of the text in order to write an attractive text. For example, in case of writing the push notifications, it is important that the text is kept short, catchy and is easily comprehensible by the reader. Apparently, a medical translator must not miss the aspect of text functions and be aware of the pitfalls s/he can encounter while producing the target text.

To conclude, if a translator decides that the functional equivalence must be achieved, s/he will have to achieve the same functionality in the target text as it is in the source text. For example, if the source text was written to give the information and at the same time to instruct the reader, the target text also must embody the same function, i.e., to give the information and to instruct. In this regard, before the actual analysis and producing of the text is started, it is important that the text function is specified. Moreover, it should be pointed out that the determination of the text function goes parallel with the determination of the intended reader who even more can challenge the translator during producing the target text. This issue is going to be covered in the next section.

2.4.3. Intended Audience

I have already pointed out above that before a writer generates his/her thoughts into writing s/he will certainly have in his/her mind a target reader and function (s) the intended text will embody. In this regard, his/her writing is shaped not only according to the text function but also according to the target audience which is an important variable that affects the language that is used to generate a text.

The target audience may include readers who are laymen, students or experts. And apparently, each type of reader requires different approach by taking into consideration the preliminary knowledge of the subject matter and the literacy skills of the readers. In this regard, for example, using too complex vocabulary and long sentences while writing a handbook of allogeneic bone marrow transplant for patients and their family may cause that your writing will not resonate with your target audience and as the result, many of your readers may miss the intended message. Likewise, using lay terms while writing a scientific article for experts may cause that it will not be read pleasantly or even might not get published at all. Therefore, if a writer of source text or a translator (writer of a target text) would win the audience, s/he must be a conscious writer who considers his/her target reader before s/he actually starts to write. Bearing that in mind, for instance, a writer of a consent form should use lay terms as much as possible. For instance, it is recommended to use the

words “helpful”, “assisting” or “aiding” instead of the word “adjuvant” when writing a consent document which is addressed to the patient who is in the group of the laymen. Below, I will mention some tips that can help medical translators to ensure that the target text resonates with their intended audience.

To begin with, after determining the target audience, it is important to be aware of the readability expectations of the intended reader. If for instance, a translator is going to translate the consent document for patients and their representatives, s/he can benefit from the glossaries of lay terms²⁸ that are easily found on the Internet. In addition, translators can measure the readability level of their written text by using the free readability formulas²⁹ given below:

1. Automated Readability Index
2. The Flesch-Kincaid Grade Level
3. The Coleman-Liau Index
4. The SMOG Index
5. The Fog Scale (Gunning FOG Formula)
6. The Flesch Reading Ease formula
7. Linsear Write Formula

They can help translators to make their writings more readable and compliant with the target audience. Moreover, in case of translating the leaflets or handbooks for the patients, sometimes there may not be a substitution of the term or may be the translation commission preconditions to teach patients the terms because their health care professionals might be using them during the care. In that case, there are some common strategies that translator

28. <http://ors.umkc.edu/docs/irb/glossary-of-medical-to-lay-terms.pdf>. Accessed August 30, 2017

https://www.neomed.edu/wp-content/uploads/IRB_GlossaryofLayTerms.doc. Accessed August 30, 2017

29. <http://www.readabilityformulas.com/>. Accessed August 30, 2017

should be aware. For example, s/he can firstly explain the medical term with the lay terms and then introduce a term and at the same time provide with the simple pronunciation of the term which certainly might be helpful. Let's conceptualize this on an example. Supposedly a translator needs to introduce the term "apnea", which means "to stop breathing", in the following sentence: "You may experience stopped breathing, or apnea (ap-ne-a) during the night after this surgical procedure."

Nevertheless, it is difficult sometimes to exactly identify when a reader is no longer a layman and entered the group "students" or whether a student is no longer a student but expert. Therefore, the distinction of target audience to three groups such as laymen, students and experts is only a kind of departure point. In case of ambiguity, a translator should not leave this aspect in abstract and seek for the help. Moreover, it is better if a translator tries to please only one type of audience at a time. On the other hand, if it is required to write the text for more than one group of audience, discussing the consequences with the "commissioner"³⁰ (employer) is under the responsibility of a competent translator.

In the next section I am going to examine such an important aspect as medical genres, the competency of which helps translators a lot in doing better translations.

2.4.4. Medical Genres

The word "genre" is originally a French word that means "kind". Meanwhile, it universally has been used under a specialist meaning as "kind of text" for a long period of time. Genre is "a kind of text that derives its form from the structure of a (frequently repeated) social occasion, with its characteristic participants and their purposes." (Kress, 1988:183).

Understanding conceptual framework of genres is a key point in the medical communication. It helps translators to identify the participants in the texts and power connection between them. Genres do not belong to individuals. Instead, they project some kinds of characteristics of the discourse of a community they belong to and that medical

30. Vermeer, 1996:5

discourse emerges in relation to medical practice per se. In this regard, written medical texts give translators hints about how medical professionals of a particular area constitute themselves and how they perform their duties by looking at the generated medical knowledge. Moreover, source and target cultural knowledge is also acquired by recognizing intercultural values through attributes that distinguish the communicative content and discourse that are recognized by means of examining the genre of the text to be translated. On the other hand, changes in social-cultural needs condition genres for change. For example, in 1925 prescriptions were written in French in Turkey (cf. Mihçio lu, 1997:33).

The translator of medical text should pay attention not only to the source text itself but also take to the genre of the original text and then logically to the genre of the target text because his/her translation strategies are determined according to those genres. Competency in structural elements in working genres eases the comprehension of the source text and for what the translator should look for while trying to understand the source text. Apparently, this is an important aspect in translation process per se as after adequate understanding of the source text, the translator must convey the corresponding meaning of the message into the target system.

It should be also pointed out that although the genre of the source text might be the same as the genre in the target text, there might be some distinctions how they are presented while transmitting message from one system to another. For example, differences may be in conventional structure of the source text (there may be the necessity in changing paragraph divisions or order of paragraphs) or in order to eliminate the ambiguity the translator may need to divide very long sentences into smaller ones or open up the shorthands. Needless to say that the degree of sameness or difference in the genres is closely related to the assignment the medical translator will have to accomplish.

The competent translator will have to be familiar with genres of the texts, with which s/he is working, for the adequate understanding of the message and not to miss out the functional equivalence of the target text by simply following the conventions of the

source text. In addition, most of the time translator of medical texts will encounter with medical genres which consist of sub-genres that show various linguistic features. Some sub-genres of the discharge summary will be demonstrated in the section 3.3.5.2.

Last but not least, throughout the career as the medical translator, s/he might encounter with different medical genres such as anatomical maps, clinical guidelines, discharge summary, informed consent, patient information leaflet, case report, clinical trial protocol, lab results, manuals end etc. Needless to say, that the degree of difficulty in dealing with these types of medical genres varies; however, by understanding the communicative purpose, participants, structure of the genres and the situation where these genres are used, a competent translator can achieve to write accurate translations.

In the following chapter I am going to examine in details such well-established medical genre as discharge summary, with which I encounter every day during my working day as the medical translator in the hospital in Turkey.

2.5.Conclusion

In the sections 2.2 and 2.3, I examined some of the specifics and problematic aspects of English and Turkish languages of medicine of which the competent medical translator must be aware while producing medical texts in order not to eliminate the ability of language to serve its function by rendering meaning in an appropriate way. Throughout those sections some solutions towards those problematic aspects were proposed as well.

First of all, the specifics of English language of medicine including medical terms, acronyms, abbreviations, stacked noun phrases and medical argot were discussed. It was shown that the process of breaking down the Greek or Latin originated medical terms and learning their meanings can help medical translators quickly navigate in the language of medicine that is perceived so complex for comprehension. However, the English language of medicine consists not only from Greek, Latin and English originated terms, but also there are loanwords from French and German languages as well. Acronyms and

abbreviations are seldom used by medical professionals. They are meaningless without context and there are no standards or approved lists to which medical translators may refer. Therefore, understanding the context in which they are prevailed is crucial in order to avoid the failure to understand the intended meaning of the given message. In addition, it was mentioned about stacked phrases, informal and unconventional jargon of English language of medicine that also may confuse the medical translator while producing target text. In that case, it is better if the translator consult to the writer of the source text when it is possible. This is an exact the case when the competent translator should contact to the author of the source text and ask for the help. In addition, the terminology standardization was also discussed. Needless to say, standardized terminology in healthcare information systems is very important aspect which should not been missed out if you are dealing with writing of medical texts. Some nomenclature systems such as International Classification of Diseases (ICD) and Classification of Health Interventions (ICHI) were mentioned. Moreover, translators should not be indolent and rely on only on the information given in the source text but also check for the updated version of the entities if they need to use nomenclatures in a given assignment. What's more, some certain problematic aspects of the use of the English language of medicine such as spelling mistakes of medical terms, inconsistency in the formation of medical terms, stacked noun phrases, abbreviations, lack of intelligibility, naming new phenomena and variations of the medical language usage were discussed. As time goes by, Google search skills have eased the way how professional translators deal with those problems. On the other hand, some cases when the professional translator has no way but to consult to the writers of the text to be translated were highlighted above throughout related sections.

When it comes to Turkish language of medicine, various foreign languages including Arabic, Persian, Latin, Greek, French and English contributed to the formation of the Turkish language of medicine as it is now today. Apparently, the complexity of the language is self-explanatory. Similar to English language, the Turkish language of medicine also consists of medical terms, acronyms, abbreviations and medical argot. Since the English language has become the *lingua franca* for research in medicine (most probably

because important developments in medical field and technology occur in the English speaking countries such as United States of America and United Kingdom), more and more words of the English origin have entered to the language of medicine of different countries in which Turkey is not an exception. Therefore, there are a lot of terms imported from English into the Turkish language. It was pointed out that international medical terms (Greek, Latin, French and German words) were and are conveyed into Turkish medical language by using one of the following strategies which are borrowing, transliteration and translation. On the other hand, nothing so simple as it seems to be. Some problematic aspects of the use of the Turkish language of medicine such as borrowing foreign terms, inconsistencies in phonological adaptations of loanwords, abbreviations and acronyms were discussed. Furthermore, translators of medical texts from time to time may deal with the lack of terms in the Turkish language or with the multiplicity of alternatives for the same neologism because advances in the medical science has been rapidly developed and there is a need for more terminological planning and control in Turkey. For this reason, it would be better if translators justify their decisions on reasonable criteria which can be used while dealing with any neologism. It was also stressed that non-national terms is the delicate issue even for English speaking medical professionals as well. Therefore, we should not preconceive towards using national terms when it is necessary. When it comes to translation process, the medical translator should be aware of not only that using too many foreign words in the Turkish sentence causes difficulty in reading and comprehension of what was written but also that medical professionals sometimes may confuse and use wrongly written terms. Moreover, as time goes by, it has been encountered with chaos in creating and using different adaptations of the loanwords for the same source term in the target system. Furthermore, it may happen that three different Turkish writers may use different medical terms for the same words in the same context. However, the medical translator, who must be competent at least in two languages, should pay attention on such variations of the terms and use right forms in the target language. This is also exactly the time when the research competence skills of the translator ease the ways to figure out the patterns of an unfamiliar word, find out the right term and as well as meet the deadline at

time. What's more, some challenging situations with usage of abbreviations and acronyms were highlighted and examined as well. The examples demonstrate that possessing translation competency is the must for the medical translators in order to write good medical texts without ambiguity which is like "muddy water".

Moreover, it should be pointed out that findings information in English on the Internet about particular subject of medicine, whether you need a particular medical term, abbreviation or context, is much easier than when you research in Turkish. I have encountered many times with "0" search results on such a popular search engine as Google when I researched a medical term or statement in Turkish. Needless to say, as most research medical journals are published in English, there are more web sites in English than in Turkish. Therefore, this situation of course is problematic for the medical translator who is trying for instance to decipher an abbreviation or a shorthand in Turkish. Therefore, I would propose that in order to avoid the misinterpretation of the abbreviations and help translators to deliver translation in time, hospitals in Turkey should create the list of abbreviations that are permitted to use by medical professionals and definitely share it with translators and interpreters who work in the related hospital.

What's more, a translator of medical texts should always have in mind that medical texts are written by different participants including health policy makers, medical students, physicians, nurses, surgeons and other medical practitioners whose communicative purpose varies from each other. In this regard, different genres of medical texts, which may embody one or more functions, come out as the assignment for medical translators.

Moreover, it should be pointed out that writing is shaped not only according to the text function but also according to the intended audiences and expectations of these audiences which are the important variables that affect the language that is used to generate any text.

The main point that I would stress here, is that the professional translator should be aware of those problematic aspects, which were presented above, and must know how to

deal with them and how to eliminate those constraints in a very effective manner. To conclude, I hope I could manage to show how language competency in both source and target systems, genre competency and research competence are some of the indispensable criteria the professional medical translator must have because as it was clarified above in the discussion throughout related sections, there are potential pitfalls in medical texts, with which the translator may encounter every day. Moreover, it also should be pointed out that the professional medical translator will have to know how and when to seek for the cooperation with medical professionals.

3. WHAT DOES IT TAKE TO BECOME A MEDICAL TRANSLATOR?

“A lack of formal medical training is not necessarily an insurmountable obstacle to the budding medical translator. What is essential is not a medical degree, but a broad understanding of the fundamentals and knowledge of how to acquire, in the most efficient manner, an understanding of other elements as and when necessary.” Judy Wakabayashi (1996:357)

3.1.General Outlook

To begin with, I have mentioned so far about some competencies (language competence, genre competence, research competence) that certainly help translators in crafting better translations of medical texts. And now, it is time to start further digging up in order to find out what does it take to become a medical translator and who are the experts. In this regard, the concept of translation competence needed to be explored in more detailed nature of its impact on such profession as medical translator. First of all, the theoretical overview of translation competence will be presented. Afterwards, translations of “real” examples, taken from a medical genre as “discharge summary”, will be examined in the scope of Skopos theory and ISO 17100:2015 (requirements for translation services). The main stress will be put on professional competences of translators which are an indispensable variable in the pursuit of writing competently done medical translations that serve the target readers in an adequate way. In this regard, the applicability of six professional competences of translators, which are stated in the ISO 17100:2015 as the necessity that translation industry has required nowadays, will be examined in the scope of real examples taken from discharge summary. As the result, I hope this chapter will shed the light on what does it take to become a medical translator and who are the experts.

3.2.Theoretical Overview of Translation Competence

To begin with, before discussing about the translation competence, let me first of all mention about what the notion of “competence” means in general. For example, it deserves showing what Wikipedia says about “competence”:

Competence is the ability of an individual to do a job properly. (...). Some scholars see "competence" as a combination of practical and theoretical knowledge, cognitive skills, behavior and values used to improve performance; or as the state or quality of being adequately or well qualified, having the ability to perform a specific role.³¹

In this regard, competence is not just one quality. It serves as a route, which requires certain knowledge and skills, for better performing a specific job. Being competent in one domain means that you are in a state of being able to perform (no more, no less) the job. For instance, if you are a competent translator, you are trusted that you can translate properly.

When it comes to the notion of translation competence, many scholars (see e.g. Toury (1995), Neubert (2000), Presas (2000), Fraser (2000), Pym (2003)) have differently described what translation competence is and how it should be developed. However, they all tried to point out that an individual who is fluent in a foreign language is not necessarily an effective translator. For example, in his article Pym³² presented the sets of extraordinary descriptions of what the translation competence is:

Bell (1991) describes translator competence as a huge summation: target-language knowledge, text-type knowledge, source-language knowledge,

31. [https://en.wikipedia.org/wiki/Competence_\(human_resources\)](https://en.wikipedia.org/wiki/Competence_(human_resources)). Accessed March 28, 2017.

32. Pym, 2003: 481–497

subject area (“real-world”) knowledge, contrastive knowledge, then decoding and encoding skills summarized as “communicative competence” (covering grammar, sociolinguistics and discourse). Virtually everything that any kind of linguistics wanted to talk about was tossed into the soup. (...) Neubert (1994: 412) offers “language competence,” “subject competence” and “transfer competence” as the three main components. (...). Hewson (1995) adds something called “cultural and professional elements” (108), where the “professional” part refers to “remuneration [...] access to and use of proper dictionaries and data banks, access to equivalent material in the second language, practical knowledge of word-processors and peripherals, and so on” (*ibid.*). (...) Kautz (2000: 20) takes a slightly different approach, recognizing that translators need knowledge of two languages, world and field knowledge, translation theories and methods, (...). Mayoral (2001: 109) insists on components including “common sense (above all), curiosity, ability to communicate, capacity for self-criticism, meticulousness, ability to synthesize, etc.” Anything else? In Douglas Robinson’s *Becoming a Translator* (1997) we find serious attention to the real-world necessities of good typing speeds, Internet discussion groups, and working with a computer in a room at the right temperature (*sic*).

What is more, some research groups have tried to describe the notion of translation competence and it also deserves mentioning about definitions proposed by the PACTE research group³³ and EMT expert group³⁴.

According to PACTE, translation competence is an expert knowledge needed to translate and it is made up of a system of sub-competencies (language sub-competence in two languages; extra-linguistic sub-competence; instrumental/professional sub-competence; psycho-physiological sub-competence; transfer sub-competence; strategic sub-competence) that are inter-related, hierarchical and that these relationships are subject to variations (cf. PACTE Group, 2003:47-48).

33. PACTE research group (Proceso de Adquisición de la Competencia Traductora y Evaluación – Process in the Acquisition of Translation Competence and Evaluation) was formed in October 1997 at the University of Barcelona (Departament de Traducció i d’Interpretació). Its main goal is to investigate Translation Competence and its acquisition in written translation in order to improve the teaching of translation.

34. EMT (European Master’s in Translation) Project is funded by the European Commission and its aim is to ensure that the required quality is provided by the translation services to meet the needs of translation sector in multilingual/cultural environment in the European Union.

When it comes to the EMT expert group, it sees the competence as “the combination of aptitudes, knowledge, behaviour and knowhow necessary to carry out a given task under given conditions. This combination is recognised and legitimised by a responsible authority (institution, expert).” (EMT expert group, 2009: 3). EMT expert group has developed a model of competences of a translator. The model consists of six interdependent competences including translation service provision competence, language competence, intercultural competence, information mining competence, thematic competence, technological competence (mastery of tools) (cf. *ibid*, 2009:4-7).

Zooming in, describing the “translation competence” as a single entity is nearly impossible as, obviously, the task of the translator is quite complex. In this regard, the complexity of translation competency in the scope of the medical translation arises from the complexity of translating medical texts per se, the complexity of which comes from many sides, primary the language of medicine, the complexity of which I was tried to present in the previous chapter.

Now, to go a step further for the sake of pursuit of my investigation, the examinations of translations of “real” examples, taken from a medical genre as “discharge summary”, will be examined in the scope of Skopos theory and ISO 17100:2015 (requirements for translation services). However, before it, we need to understand first of all the characteristics of the medical genre as discharge summary, what the Skopos theory and ISO 17100:2015 International Quality Standard are all about.

3.3. Discharge Summary

“Ask and it will be given to you; seek and you will find; knock and the door will be opened to you. For everyone who asks receives; he who seeks finds; and to him who knocks, the door will be opened.” (Luke 11:9-10)

3.3.1. General Outlook

A discharge summary is one of the very common medical genre with which a medical translator may encounter. It is the history of the patient's hospitalization (from admission to discharge) which consists of mandatory and non-mandatory components (they vary from hospital to hospital) including medical records about all diagnostic studies, procedures and surgical treatments (if there are any) that were performed and their results. In addition, a discharge summary may include consultation notes from specialists, control notes, used and prescribed medications, as well as the patient's condition when s/he left the hospital. It can be one page long or a multipage report.

A discharge summary is completed by different physicians and nurses during the patient's stay or being diagnosed or treated in the inpatient or outpatient settings. It is required at the time of discharge of the patient from hospital. A discharge summary mainly includes medical records about all diagnoses of the patient and diagnostic and treatment procedures which were performed over the course of the patient's stay in the hospital. The examples of discharge summaries of different hospitals are given in the Appendix section of this thesis.

It should be pointed out that every hospital in Turkey has its own layout and format of the discharge summary that is standardized and approved by the related hospital. Generally, hospitals in Turkey use their own software programs that enable the medical professionals to enter the medical records into specified sections about their patients. The program is organized in such a way that it should be compliant with the national health information standards such as ICD-10 diagnosis classification, national surgical procedure coding and etc. The discharge summary of each patient is electronically stored and can be accessed by the medical professionals who are involved in the patient's care.

As mentioned before, the main purpose of the discharge summary is to provide the information to the patient's general physician about his/her hospital visit/stay that includes: why the patient was admitted to the hospital; the results of any diagnostic procedures the

patient had, received treatment, medications (used, changed or discontinued), follow-ups and etc. Generally, the discharge summary is given to the patient before s/he leaves the hospital. Most of the time, the English translation of the discharge summary is provided to the international patients, so that they have an opportunity to inform their physicians (abroad) about what has been done during their hospital course. In addition, the discharge summary can also be used for insurance claims, SGK³⁵ or for consulates which pay for the patients' hospital expenses.

The context of a discharge summary consists of technical terminology, medical argot, slang and gibberish. Meanwhile, shortness (using short lexical and syntactic forms, acronyms, redundancy, abbreviations, consecutive noun phrases and etc.) is the main characteristic of the language that is used in the discharge summary. It helps medical professionals to render the information quickly and efficiently (e.g. “kc”-karaci er (liver); “ac”-akci er (lung); “bb”-böbrek (kidney); “c/o” – complaint of). Sometimes the whole sentences are reduced to a couple of initial letters or doctors have not enough time to write notes clearly. Moreover, I have observed that sometimes lay terms of patients or incompetent interpreters get into the physicians records, mainly in the section “Hastalık Öyküsü” (History of Present Illness) which is one of the sub-genres of the discharge summary. Therefore, they may sound odd and may be problematic in terms of the intended meaning if for example, an anatomic term was inaccurately used.

Needless to say, competently done translation of the discharge summary is very vital for the patients as it helps them to receive the best and suitable care when they need it. As a discharge summary is to be given to the patient before s/he leaves the hospital, there is a high demand in not only an adequately done translation but also in that this translation should be done in the shortest possible period of time. In this regard, a medical translator must have a required level of translation competency to accomplish those demands. Therefore, in order to concretize this “required level of translation competency” I would invite you to examine some basic specifics and common problems, which such a medical genre as a discharge summary can provide, of which a medical translator must be aware

35. SSI (Social Security Institution – Turkish National Health System)

and know how to tackle them in order to write better medical translations. However, before going further it is worth to discuss about how translators can benefit from the translation theories such as “Skopos theory” in order to write better translations by showing its applicability on a real example.

3.3.2. Skopos Theory

Needless to say that making a pertinent analysis of the text in terms of translating process per se, is a fundamental decision that a professional translator will take before starting to translate - which is done certainly on purpose. Apparently, the analysis of the source text allows a translator to reveal problematic parts in a text and by doing so s/he will have a clear picture of difficulties of the text and which parts require more research or whether there is a need of cooperative work with medical professionals. In this regard, as I mentioned in the previous chapter, questions such as what the purpose of the translation and who the intended reader will be, are the common questions on which every professional translator should reflect before starting to translate. And it is time now to dig this aspect up more deeply.

Before “theory” and “practice” come together as one entity, let’s first of all examine what a translation theory as “*Skopos* theory” gives us in order to better understand the issue with which translators encounter every time. And by doing so, I hope it will shed the light on how to write better medical translations.

To begin with, Skopos theory was constructed by the German translator Hans J. Vermeer in 1978. He believes that “all acting is goal-oriented” and therefore, “has a purpose” (cf. Vermeer, 1996:12). The word *skopos* is a Greek word that means “goal, aim or purpose”. In his discourse, Vermeer uses the word *skopos* in the meaning of “aim or purpose of a translation”. In his book “A Skopos Theory of Translation (Some arguments for and against)” (1996) he states that translating is such an action that embraces the purpose and aim, the output of which leads to the target text. This aim, purpose and the usage of which translation strategies will be required to produce a target text are decided in

the translation commission which consists of some instructions and additional material to generate a target text (ibid., 5). The translation commission is set by a commissioner or by a translator himself/herself whom Vermeer in his Skopos theory sees as “bi-cultural expert who knows how to produce a text for a certain purpose and for target-culture” (ibid., 6). Meanwhile, the target text is shaped not only according to the text function (see section 2.4.2) but also according to the target audience which is an important variable that affects the language that is used to generate a text. In this regard, depending on the purpose, a translator (bi-cultural expert) may need to adjust the source text to a different group of readers that may be restricted by the translation commission. In this regard, different target audience and text function requires some changes in the target text.

In order to adjust the text to a particular audience, a change of register, lexis or syntax may be required from the translator. Meanwhile, these adjustments are closely related to the medical genres as well. For example, according to set *skopos* a translator may need to adjust an informative article about angina disease to the patient’s leaflet. Therefore, a medical translator should be competent at least in most common medical genres. On the other hand, the successful realization of the translation commission depends on the following circumstances given bellow:

skopos (purpose, aim; cf. above) of translating, target-culture recipients’ conditions (including habits, conventions, expectations), commissioner’s cultural conditions (including habits, conventions, expectations), translator’s cultural conditions (...!), relation of target-culture to source-culture conditions, professional arguments concerning the above factors, etc.; time, cost, research, arguments concerning these factors, etc.; arguments referring to decision procedures and their conditions, etc. (ibid., 14)

Obviously, those circumstances are so complex, that is impossible to list all circumstances. However, the awareness of those circumstances definitely gives a professional translator an opinion about the degree of complexity of the translation commission that will help to set priorities in terms of which translations strategies are

particularly suitable for each particular case. According to Skopos theory, before the translation starts a “translator and commissioner must agree upon the purpose and the strategy for designing a translation” (ibid., 6). As a translator is seen as a “bi-cultural expert”, finding out all required information related to translation commission if it is not provided by a commissioner (because s/he may not always know or aware about all necessary information a translator may need in order to accomplish the translation commission) is his/her responsibility. Last but not least, there are important aspects that should be set up in the *skopos* which must be considered when the translation commission is specified: what kind of target text (genre) a commissioner does need? What will be the target text function? For which readership group the target text is going to be generated? In which communicative situation the target text will be used? Are there are any legal requirements, which have to be taken into consideration, when the target text is generated.

In this context, setting up the *skopos* (purpose of the translation commission) is the important aspect that should be taken into consideration during analysis of source text and reflections on target text production.

Hence, apparently, Skopos theory can be applied during the production of target medical texts as it leads to the pragmatically useful decisions.

3.3.3. Practical Application of Skopos Theory

Let’s see the applicability of Skopos theory on a real example, which is an excerpt from the “Hospital Course” section of a discharge summary which was written by an anaesthesiology and reanimation specialist who works in the General Intensive Care Unit:

ST: 23.08.2016:

DÜZEY:3

TANI: NTRASEREBRAL HEMORAJI, H PERTANS YON, KOMA

DZy.GrKç: OTE.MV.KOMA.

GENEL DURUM KÖTÜ, UUR KAPALI, GKS:E1M2V1:4/15, IR:-/-
OROTRAKEAL ENTÜBE, SIMV-PS MODDA MEKAN K
VENT LASYON UYGULANIYOR. BATIN RAHAT, BARSAK SESLER
NORMOAKT F.

TT: 23.08.2016:

LEVEL 3 ICU

DIAGNOSIS: INTRACEREBRAL HEMORRHAGE,
HYPERTENSION, COMA

LEVEL OF JUSTIFICATION: OROTRACHEAL INTUBATION-
MECHANICAL VENTILATION - COMA.

THE GENERAL CONDITION OF THE PATIENT IS BAD; HE IS UNCONSCIOUS; GLASCOW COMA SCORE: E1M2V1:4/15; IR:-/-; THE PATIENT IS OTRACHEALLY INTUBATED AND RECEIVED MECHANICAL VENTILATION AT SIMV-PS MODE. ABDOMEN IS SOFT AND BOWEL SOUNDS ARE NORMOACTIVE.

To begin with, the “Hospital Course” section, as one of the sub-genre of the discharge summary, describes the patient’s progress and treatment (starting from admission and ending with discharge from the hospital) arranged in chronological order. Before going further, I would pointed out that the “Hospital Course” section is written slightly differently by the Intensive Care Unit staff than it is written by other medical departments of the hospital. The main difference is that three lines (DÜZEY (LEVEL):... TANI (DIAGNOSIS):... DZy.Grkc (LEVEL OF JUSTIFICATION :...)) are written on the top of the description of each day of patient’s staying in the hospital.

When I first encountered with these three lines, some questions arose in my mind. I wondered, why the same three lines were repeated on the top of each day in the “Hospital Course” section; about which “DÜZEY” (LEVEL) it was written and what is meant by the number behind the “DÜZEY” (LEVEL) which is “3”. Moreover, I did not have any ideas about what does “DZy.Grkc” mean in Turkish.

The first step, which I did, was to google some information related to those questions. Unfortunately, I could not find any information on the Internet which could help me to interpret the intended meaning of those writings. In fact, I expected that I might find nothing, as information, which I was looking for, was in Turkish language.

I have already discussed this issue in the “conclusion” section of the previous chapter: findings information in Turkish about specific area of medicine on the Internet is much harder (even impossible) than when you search it in English. It is the reality that as

most research medical journals are published in English, there are more web sites in English than in Turkish. Therefore, this situation of course is problematic for the medical translators who are trying, for instance, to decipher an abbreviation or a shorthand in Turkish. Therefore, I have not any option other than to contact with the writer of the source text to find out answers on my questions, so as to eliminate misinterpretation and to meet the expectations of the target readers. In this regard, my next step was to send an email to the physician whose name was written on the discharge summary and ask my questions one by one. Fortunately, the physician was quite gracious and cooperative. I was lucky and he quickly answered my questions. Nevertheless, in order to be sure 100% that I really understood the explanations of the physician I called him and confirmed the answers by asking the same questions in a different way. Surprisingly, the physician gave different answers to some questions, which pushed me to another research journey on the Internet. However, I was lucky at this time, because I was provided with more information, learned from the physician, which helped me to find out all the required information to eliminate my doubts and uncertainties. As the result, I obtained more information, needed to craft the target text, than the physician could provide me with. Finally, let's see the answers to my questions in order to produce accurately written translation of the excerpt which is given above.

First of all, what I have learnt is that the purpose and the function of these three first lines included in the “Hospital Course” section of the source text is to inform the Social Security Institution of the Turkish National Health System about the general condition of the patient and the reason of the patient's stay in the Intensive Care Unit (ICU) under the level “3”³⁶. The writer of those lines stated that writing these three lines (DÜZEY

36. There are 3 levels of Intensive Care Unit: Level 1 ICU is where nursing care is provided to the patient who does not need any organ support (for instant, s/he just may need oxygen through the face mask or noninvasive monitoring); Level 2 ICU is where a high level of invasive monitoring and observation is provided to the patient who needs a single organ support and where two patients are staffed with a nurse for a short period; Level 3 ICU is where the constant comprehensive critical care is provided to a patient who needs two or more organ support or needs mechanical ventilation alone and where each such a patient is staffed with a nurse and physician

for 24 hours. For more information visit

http://webarchive.nationalarchives.gov.uk/20121014090959/http://www.dh.gov.uk/prod_consum_dh/groups/dh_digitalassets/@dh/@en/documents/digitalasset/dh_4082872.pdf. Accessed August 28, 2017.

(LEVEL):... TANI (DIAGNOSIS):... DZy.Grkç (LEVEL OF JUSTIFICATION :...) are needed for the patient's invoice payment which is provided by the SSI of the Turkish National Health System. From the information provided in these three lines it is understood that the patient is in coma and has the brain hemorrhage and that is why he needs the constant critical care in the Level 3 ICU (where the constant comprehensive critical care is provided to a patient who needs two or more organ support or needs mechanical ventilation alone and where each such a patient is staffed with a nurse and physician for 24 hours.). According to the writer of the source text, this convention of writing is specifically only used for the Social Security Institution of the Turkish National Health System and is not needed for the international patients whose discharge summary will be translated into English in order to provide their physicians abroad about their patient's hospitalization details. He also added that these first three lines are kinds of "ciphered codes" that are used in communication between the hospital and the Social Security Institution (SSI). Therefore, the statements are not universal and if they are translated nobody will understand them. In this regard, he stressed that they should not be translated. And it sounds reasonable, especially if we consider that the payment of the patient's hospital stay was provided not by SSI but by Libyan Embassy Health Office. In short, the translated discharge summary will not be used for SSI because the payment for hospital expenses will not be provided by SSI.

Moreover, if we look at the text that is provided after those three lines, we will see that the same information is also provided in other parts of the "Hospital Course" section and the same information is also provided in other sections of the discharge summary as well. Nevertheless, when I called the writer of the source text after a while, he said that just to be on the safe side, translate these first three lines only once for one day stay description. On the other hand, taking into consideration the translated version of the discharge will not be used for SSI, I proposed him translating only the first line, in which it was indicated that the patient stayed in Level 3 ICU, because this information was not included in other sections. I also explained him that translation of "TANI (DIAGNOSIS) and DZy.Grkç (LEVEL OF JUSTIFICATION) is unnecessary because the patient's diagnosis has already written above and information that is included in "DZy.Grkç" (LEVEL OF

JUSTIFICATION) was given below those three lines. After concurring with the physician (writer of the source text) I eventually translated only “DÜZEY:3” as “LEVEL 3 ICU” (I added “ICU” in order to indicate that the “level 3” is related to the classification of the intensive care unit and not to something else. I found many parallel texts (3.520 results on Google) on the web³⁷ where it is written in this way).

To conclude, the competent translator has to be familiar with genres of the texts with which s/he is working for the adequate understanding of the message and not to miss out the functional equivalence of the target text by simply following the conventions of the source text. By examining a real example, I tried to justify the applicability of Skopos theory, in which a translator is accepted as a “bi-cultural expert who knows how to produce a text for a certain purpose and for target-culture” (cf. Vermeer, 1996:6). In this context, a competent translator (bi-cultural expert) is made responsible for the final output (target text) and therefore, has to know how to deal with problems occurred while crafting the target text. However, a medical translator must have a required level of translation competency in order to fulfill his/her responsibilities in an efficient manner. Therefore, in order to concretize this “required level of translation competency” in this time, I would invite you to examine in the scope of ISO 17100:2015 (requirements for translation services) some real examples from discharge summaries, of which a medical translator should be aware and know how to tackle them in order to write better medical translations by using his/her translation competence which consists not just of simply the ability to translate because “translating” is not a linear process.

3.3.4. EN ISO 17100:2015 Translation Services – Requirements for Translation Services

Before going further into topic, let’s look at what a word “standard” means. The Oxford dictionary³⁸ defines a word standard (noun) as “a level of quality or attainment”, “a

37. <https://lifeinthefastlane.com/ccc/icu-design-and-staffing/>. Accessed September 2, 2017.
[http://www.jccjournal.org/article/S0883-9441\(16\)30240-4/pdf](http://www.jccjournal.org/article/S0883-9441(16)30240-4/pdf). Accessed September 2, 2017.

38. <https://en.oxforddictionaries.com/definition/standard>. Accessed September 2, 2017.

required or agreed level of quality or attainment”, “something used as a measure, norm, or model in comparative evaluations” and so on. Meanwhile, according to British Standards Institution (BSI), a standard is “a document, established by consensus and approved by a recognised body. It provides rules, guidelines or characteristics for activities or their results so that they can be repeated. They aim to achieve the greatest degree of order in a given context”³⁹. In this context, it is understood that a standard briefly refers to the “quality”, “requirements”, “measurements”, “comparisons”, “results”, “activities” and “approval”.

It goes without saying that different types of industries worldwide have been involved in quality management and improvement programs through standardization process in order to raise the efficiency and compete with other companies of the same sector. And translation services industry is not an exception. In translation services industry standards play as important role as in any other industry. Therefore, standards specific to the translation services, which cover the translation process per se, the way the translator does the translation, required competences, translation quality, necessity for revision, project management and etc., have been developed.

On the other hand, one certainly would ask “Do we really need standards?” Well, if the quality of the translated material is requested, certainly one would care about the quality. For example, you would expect that translation of a medical text be translated with the accurate medical terms, would not you? In my experience, most of the time the requested level of quality is not further defined or formally stated. Is competently done translation is only about using “right” terms? Who decides what is “right” or “wrong”?

Moreover, when it comes to the word “quality”, divisions along “quality” lines are deepening and we are doubting more and more how much we have in common when we reflect on “quality”. Everybody has their own opinion on quality. Everybody puts their own meanings on “quality” and everybody has their own understanding of what the quality is. So, this is the exactly the case when standards come into play because they help us to

39. <https://www.gov.uk/government/publications/standardisation/standardisation>. Accessed September 2, 2017.

identify variables that affect the quality of translation and lead us to follow the certain path, certain set of requirements in order to achieve the translation *skopos* (see 3.3.2). Needless to say, translating is not a liner process and the way the translation is done affects the end-product.

In this thesis, my aim is not to cover and examine all standards related to the translation services. It definitely would be a useful study for another thesis. Instead, my aim is to examine in the scope of ISO 17100:2015 (requirements for translation services) some variables, mainly professional competencies of translators, which are required preconditions if someone concerns about attaining better medical translations.

Generally, the ISO 17100:2015 International Quality Standard “specifies requirements for all aspects of the translation process directly affecting the quality and delivery of translation services. It includes provisions concerning the management of core processes, minimum qualification requirements, and the availability of resources.”⁴⁰ The particular attention is paid to the areas of competence of translators, reviewers and proof-readers. My main concern in this thesis is the competences related to the translators. The excerpt⁴¹ from ISO 17100:2015 related to six professional competences of translators is given bellow:

40. <http://www.iso17100.net/iso-17100-translation-service-providers/>. Accessed September 6, 2017.

41. http://www.eurocom.at:8080/vmapplicants/docs/Excerpt%20from%20ISO_17100_2015.pdf
Accessed September 7, 2017.

3.1.3 Professional competences of translators

Translators shall have the following competences.

- a) **Translation competence:** the ability to translate content in accordance with 5.3.1, including the ability to address the problems of language content comprehension and language content production and the ability to render the target language content in accordance with the client-TSP agreement and other project specifications.
- b) **Linguistic and textual competence in the source language and the target language:** the ability to understand the source language, fluency in the target language, and general or specialized knowledge of text-type conventions. This linguistic and textual competence includes the ability to apply this knowledge when producing translation or other target language content.
- c) **Competence in research, information acquisition, and processing:** the ability to efficiently acquire the additional linguistic and specialized knowledge necessary to understand the source language content and to produce the target language content. Research competence also requires experience in the use of research tools and the ability to develop suitable strategies for the efficient use of the information sources available.
- d) **Cultural competence:** ability to make use of information on the behavioural standards, up-to-date terminology, value systems, and locale that characterize both source and target language cultures.
- e) **Technical competence:** the knowledge, abilities, and skills required to perform the technical tasks in the translation process by employing technical resources including the tools and IT systems that support the whole translation process.
- f) **Domain competence:** the ability to understand content produced in the source language and to reproduce it in the target language using the appropriate style and terminology.

Figure 4. Professional competences of translators (ISO 17100:2015). **Source:** http://www.eurocom.at:8080/vmaplicants/docs/Excerpt%20from%20ISO_17100_2015.pdf . Accessed September 7, 2017.

In the next section of the chapter let's see whether those six competences can be really justified in practice or not by examining them in the scope of the real examples taken from such a medical genre as discharge summary.

3.3.5. Applicability of EN ISO 17100 Translation Standard

The preliminary knowledge about the discharge summary was discussed in the section 3.3. Therefore, I am going to approach the subject directly.

3.3.5.1. Translation Competence

“Translation competence” is the first competence according to ISO 17100:2015 translators must possess:

Translation competence: the ability to translate content in accordance with [5.3.1](#)⁴², including the ability to address the problems of language content comprehension and language content production and the ability to render the target language content in accordance with the client-TSP agreement and other project specifications.⁴³

Here, it is understood that the translator must be capable to translate according to the purpose of the translation project and it is expected that the target-oriented approach is to be followed. In this regard, it can be admitted that according to the Standards, the translator as a “bi-cultural expert” (Vermeer’s point of view) must write his/her translations according to the specified *skopos*. The example related to the applicability of requirement related to compliance with the purpose of translation project or *skopos* is given in the section 3.3.3. Therefore, let’s move on the next professional competence that a translator must possess according to the International Standard.

However, before moving further, it deserves pointing out that, if we closely look at the section 5.3.1 of the Standard, we can see that “translation competence” in fact, includes the ability to use and apply all other five competences specified in the Standard taking into consideration the purpose of the translation project or in Vermeer’s term – *skopos*. Therefore, I see other five competences as the sub-competencies of the translation

42. It is stated in the section 5.3.1 of ISO 17100:2015 standard that “The translator shall translate in accordance with the purpose of the translation project, including the linguistic conventions of the target language and relevant project specifications. Throughout this process, the translator shall provide a service conforming to this International Standard with regards to the following:

- a) compliance with specific domain and client terminology and/or any other reference material provided and ensuring terminological consistency during translation;
- b) semantic accuracy of the target language content;
- c) appropriate syntax, spelling, punctuation, diacritical marks, and other orthographical conventions of the target language;
- d) lexical cohesion and phraseology;
- e) compliance with any proprietary and/or client style guide (including domain, language register, and language variants);
- f) locale and any applicable standards;
- g) formatting;
- h) target audience and purpose of the target language content.

The translator shall raise any uncertainty as a query with the project manager.”

43. http://www.eurocom.at:8080/vmaplicants/docs/Excerpt%20from%20ISO_17100_2015.pdf

Accessed September 7, 2017.

competence. However, I will examine them one by one in order, as they are specified in the Standard.

3.3.5.2.Linguistic and Textual Competence in the Source Language and the Target Language

According to ISO 17100:2015 translators must have:

Linguistic and textual competence in the source language and the target language: the ability to understand the source language, fluency in the target language, and general or specialized knowledge of text-type conventions. This linguistic and textual competence includes the ability to apply this knowledge when producing translation or other target language content.

It is apparent that, understanding the source language and attain the fluency of the message in the target text are one of the indispensable variables towards the pursuits of writing the competent translations. If we are going beyond the language per se, we will see that there is something more than that. There is something more than just exchanging terms and phrases during the translation process. This standard demands that translator must also pay attention to the text-type conventions which determine which phrases are used to describe a particular medical situation. Therefore, text-type conventions are closely related to genre conventions. Meanwhile, a genre can be consists of sub-genres. For example, a discharge summary is one of the medical genre a translator may encounter during his her carrier. A discharge summary consists of sub-genres, the number of which changes according to target culture.

Understanding the conceptual framework is a key point in the medical communication. It helps translators to identify the participants in the texts and power connection between them. Let's see on the real examples (taken from different discharge summaries) how the linguistic and textual knowledge helps translators in such a complicated and challenging work as translating.

First of all, it should be pointed out that a standard discharge summary (see section 3.3) consists of sub-genres including chief complaint, history of present illness/ brief history, past medical history, social history, allergies, family history, physical examination, laboratory, hospital course, hospital procedures, course of treatment, diagnoses, medications and discharge status. The number of sub-genres prevailed in the discharge summary varies according to the patient's medical condition or according to hospital conventions. Therefore, the discharge summary may be one page or many pages long. I call components of a discharge summary "genres" as because translation of each component requires different approach because each component has its own text-type conventions. In this regard, translation of such genre as a discharge summary has its own complexity as it consists of specific sub-genres which require the certain competences from the translator. In this section, I would discuss about translation of two sub-genres of a discharge summary as "Soygeçmi" (Family History) and "Tanılar" (Diagnoses) in order to see how linguistic and textual competence in the source language and the target language help translators in solving challenges they may encounter with.

3.3.5.2.1. "Soygeçmi" (Family History)

"Soygeçmi" (Family History) is one of the sub-genres of a standard medical genre as discharge summary. It provides health information about the patient's close relatives (parents, brothers and sisters, children, aunts and uncles and etc.). Generally, medical conditions recorded in this section are used by the medical professionals to indicate whether the patient has a family member or relatives who have any heart disease, high blood pressure, diabetes, certain cancers and etc. that may be related to the patient's current medical condition or to determine the risks of developing a particular condition. Generally, short lexical and syntactic forms, abbreviations and consecutive noun phrases are used. For example, let's look at the example bellow:

(ST) **Soygeçmi** Anne - meme Ca; baba - HT, DM, anneanne - SHK

(TT) **Family History** Mother - breast Ca; father - HT, DM, maternal

grandmother – SCC

By reading this information about the patient's family medical history a physician will understand that the patient's mother has breast cancer, father has hypertension and diabetes mellitus and the maternal grandmother has squamous cell carcinoma.

On the other hand, there are cases when instead of writing the information related to the patient's family history, physicians in Turkey have a habit to write only “**Soygeçmi öz.yok**” the English translation of which requires some extra effort from a translator. Why is it so?

First of all, the translator must understand what “öz.yok” means in Turkish. On the word level it means “özellik yok” (nothing special, no feature). However, what does it mean? The second step is to understand the purpose and discourse of the usage of this kind of textual pattern. Therefore, I asked some physicians who frequently use this kind of discourse in “Soygeçmi ” (Family History) section. And I have learnt that some physicians use this pattern as a default record in the text area designed for filling in the information related to the family history in the special computer software program, though they have not reviewed the patient's family history. Otherwise, the program will not allow saving the discharge summary because it requires that all fields are to be filled in. Whereas some physicians use this textual pattern when they want to specify that there are no known certain important diseases in the review of illness or health status of patient's immediate family (however, it is still unclear what was addressed: did a physician ask specific conditions such as any family history of stroke and etc.). Meanwhile, some physicians use this pattern when there is no medical necessity in documenting more extensive past medical history of the patient by reviewing the family history as well (for instance, a patient is young and healthy and s/he has only a short visit to the physician) or maybe family history could not be obtained because the patient was unconscious (in fact, it would be better if such information was documented). In this context, it is understood that the same textual pattern “öz.yok” is used for different purposes in the mind of a physician. Isn't it

confusing? Certainly, it is. Even the translator with high linguistic and textual competence in the source language neither can know what was in the mind of the physician who wrote “öz.yok”, nor has always the opportunity to ask each physician about whether they actually reviewed the family history or not or “öz.yok” was just used for the sake of simply writing something (generally, I encounter with “öz.yok” approximately 20 times a day during translation of discharge summaries). In this regard, another question arises: how a translator should solve this issue?

Basically, it is pretended that physicians document the family history of their patients by reviewing it through asking certain questions to them and obviously it is not appreciated if the physician will skip family history. Therefore, in order to avoid any confusion that could be used by using of the phrase “öz.yok”, it will be better if physicians use more precise textual patterns that eliminate any confusion whether they have really reviewed the patient’s family history or not.

When it comes to the English translation of the phrase “öz.yok”, firstly linguistic and textual competence of the target language will definitely help a lot. After solving what “öz.yok” means in Turkish, it is time when a translator uses his/her skills to attain fluency of the intended message in the target language. Apparently, if a medical translator encounters for the first time with kind of textual pattern, s/he may need a certain time to figure out the problems. In this regard, by being a “bicultural expert”, a translator will know how to solve the particular problem by being aware of the delicacy of the situation and by knowing which wording is to be used to reach to the relevant information in the target language.

First of all, I examined some medical reports (the links are given below⁴⁴) in English in order to learn how family history is documented. I have learnt that the

44. <http://www.mtsamples.com/site/pages/sample.asp?Type=49-ortho...&Sample=2790-Back%20Pain%20-%20Discharge%20Summary>. Accessed September 11, 2017.
<http://webdev.med.upenn.edu/contribute/gastro/intranet/documents/HUPnewvisitnote1-2016.pdf>. Accessed September 11, 2017.

commonly used verbiage in English for the phrase “öz.yok” is the textual pattern “non-contributory”. On the other hand, I have found many online resources, in which the usage of the phrase “non-contributory” has been criticized by different organizations and individual professionals. Therefore, before translating the phrase “öz. yok” as “non-contributory” I decided to examine these debates and concerns in order to make an optimal decision about what I am going to write in the target language. In this regard, below, I decided to quote some of those concerns in order to justify my later decisions:

1. “Neither CMS⁴⁵ nor any of the regional Medicare Administrative Contractors (MAC) have stated that they will accept those phrases. In fact, most of them flatly state that they will not give credit for a family history that is documented as ‘noncontributory.’ This is because this phrase does not indicate what was addressed. Did the nurse or physician ask specific questions (any family history of heart disease?)”⁴⁶
2. “When a physician writes that family history is “noncontributory,” what does that mean? Does it mean that the physician believes the family history wasn’t relevant to his or her review because of the patient’s condition? Or does it mean that the history was reviewed but not pertinent to the patient’s condition?”⁴⁷
3. “My practice has always been "non-contributory" is a vague statement, (...). It could mean that the provider DID ask about family history

<https://www.coursehero.com/file/p4o1sej/FAMILY-HISTORY-Noncontributory-PHYSICAL-EXAMINATION-In-general-the-patient-is/>. Accessed September 11, 2017.

<https://books.google.com.tr/books?id=WiPxAAwAAQBAJ&lpg=PA154&ots=ipOs2HnjHm&dq=%22family%20history%20noncontributory%22&hl=tr&pg=PA154#v=onepage&q=%22family%20history%20noncontributory%22&f=false>. Accessed September 11, 2017.

<https://books.google.com.tr/books?id=ROA1B08OwxMC&pg=PA207&lpg=PA207&dq=%22family+history+noncontributory%22&source=bl&ots=XGX9KR0GA8&sig=b1T9nqVtUVtI1M78nxR7fLJy7N8&hl=tr&sa=X&ved=0ahUKEwj7jKKbm-HWAhWCQBoKHSCKkQ6AEIPjAE#v=onepage&q=%22family%20history%20noncontributory%22&f=false>

Accessed September 11, 2017.

45 .The Centers for Medicare & Medicaid Services (CMS) is a federal agency within the United States Department of Health and Human Services.

46. <https://www.medsafe.com/blog/is-non-contributory-for-family-history-acceptable-1>. Accessed September 11, 2017.

47. <https://www.todayshospitalist.com/How-to-avoid-common-coding-misconceptions/>. Accessed September 11, 2017.

and it was not pertinent, or that they didn't ask at all because they really didn't want to know."⁴⁸

In this context, from the above given concerns, the usage of the textual pattern “non-contributory” is problematic. There should be something else than just simply writing “non-contributory”. For example, if a patient was admitted to the hospital with the chief complain of having seizures, it would be more accurate to write “Family History: non-contributory; there is no family history of seizures”. On the other hand, obviously, as a translator I cannot alone add this kind of additions alone without consulting the writer of the source text. Moreover, if a translator encounters with type of problematic aspect in discharge summaries for more than 20 times a day, receiving immediate feedback from physicians (writers of source texts) is a dream. Therefore, in order to meet the deadline on time I tried to dig for more optimal solutions up than asking physicians all the time.

Well, what it is recommended to write? Let's examine the following recommendations from the professionals:

1. Write "Reviewed - non contributory" or something to that effect to indicate that the work was indeed performed.⁴⁹
2. Here's a better alternative: “reviewed and non-contributory to patient's illness.”⁵⁰
3. Either document the Family History or make a statement of "the patient's family history was reviewed and does not contribute to this illness/injury.”⁵¹

Finally, taking into consideration all above findings related to the issue of finding appropriate correspondence for the phrase “öz.yok”, I have ended up with writing “Family

48. <https://www.aapc.com/memberarea/forums/21936-pfsh-contributory.html>. Accessed September 11, 2017.

49. <https://www.aapc.com/memberarea/forums/21936-pfsh-contributory.html>. Accessed September 11, 2017.

50. <https://www.todayshospitalist.com/How-to-avoid-common-coding-misconceptions/>. Accessed September 11, 2017.

51. <https://www.aapc.com/memberarea/forums/21936-pfsh-contributory.html>. Accessed September 11, 2017.

History: reviewed and non-contributory to patient's illness". Moreover, I also consulted with the physician, from whom I got 100% approval concerning my translation.

3.3.5.2.2. "Tanılar" (Diagnoses)

"Tanılar" (Diagnoses) component of the hospital discharge summary is another sub-genre that is worth to be discussed. All diagnoses types (preliminary or final diagnosis) of the patients are mostly written in this section. The result of any procedure documented in the discharge summary is not recorded as a diagnosis. Instead, it serves as the supporting documentation for the diagnosis written in the "Tanılar" (Diagnoses) section in which each written diagnosis has to be stated with the international diagnostic coding system ICD (International Classification of Diseases)⁵² which is maintained by the World Health Organization (WHO). ICD has been translated into 43 languages⁵³. It has been increasingly used by the physicians, nurses, health information managers and workers, policy makers, insurers and etc. worldwide. I would also point out that nowadays the most updated version of ICD coding system is ICD-10. Meanwhile, and it is under revision and the release date for ICD-11 is 2018.

The main conventions in the definitions of ICD coding are that the usage of articles (a, an, the) is avoided and that agreed international medical terminology is used. Let's look at one example of the "Tanılar" (Diagnoses) part taken from a discharge summary:

(ST) Ön Tanı (W46) Yabancı cisim veya cismin deri yoluyla girmesi

(TT) Preliminary Diagnosis (W46) Foreign body or object entering through skin (copied from ICD-10 Version: 2016)

52. <http://apps.who.int/classifications/icd10/browse/2016/en>. Accessed August 29, 2017

53. <http://www.who.int/classifications/icd/en/>. Accessed August 29, 2017

Thanks to international classification of diseases, a medical translator actually does not need to translate this part of the discharge summary because ICD has already provided with the definition of the disease code written in the brackets. In my example I have a code “W46” which is sufficient in order to find its definition in the online version of ICD-10:

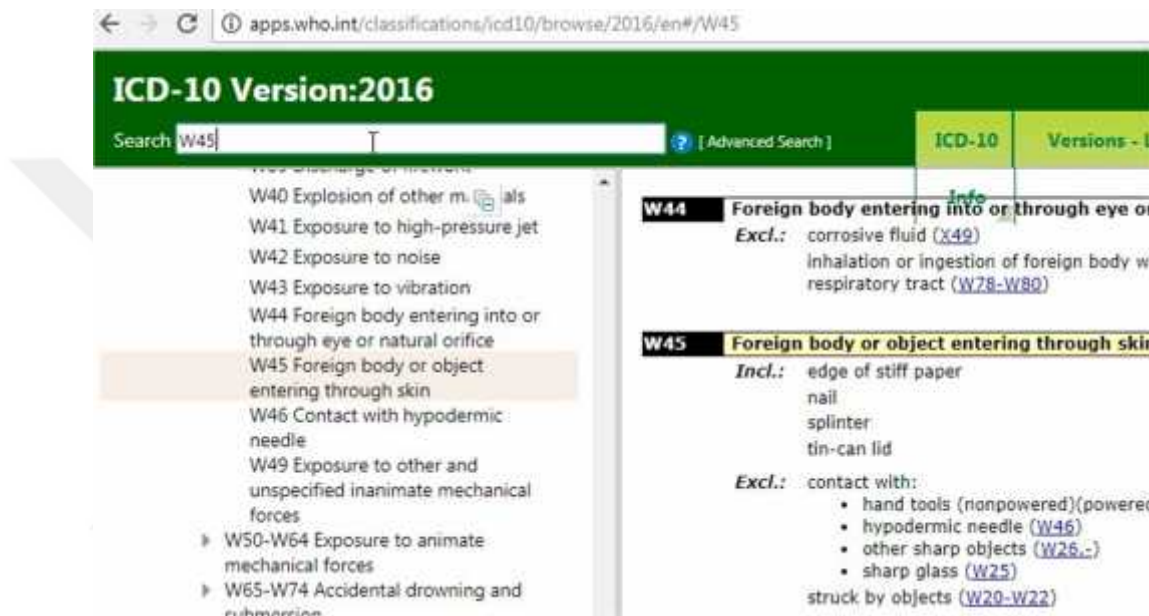


Figure 5. International Classification of Diseases. **Source:**

<http://apps.who.int/classifications/icd10/browse/2016/en#/W45>. Accessed August 29, 2017

However, throughout my career as the medical translator I have observed how incompetent translators made an effort to translate the context of the sub-genre “Tanılar” (Diagnoses) and such translations as “(W45) Foreign object or transcutaneous entrance of foreign object” or “(W45) Foreign body or percutaneous entrance of foreign body were made.”

Meanwhile, sometimes I encounter with such cases when the translated definition of the disease code in the source text (in Turkish) does not completely correspond to the definition in English, the update version of which is checked online. The following example is such a case:

(ST) Ön Tanı (G40.1) Lokalize (fokal) (kısmi) semptomatik epilepsi ve epileptik sendromlar

(TT) Preliminary Diagnosis (G40.1) Localization-related (focal)(partial) symptomatic epilepsy and epileptic syndromes

From ICD-10 (version 2016): Localization-related (focal) (partial) symptomatic epilepsy and epileptic syndromes with simple partial seizures

In this regard, obviously it is seen that “with simple partial seizures” part is not included in the Turkish version. Since I was not 100% sure whether I should use definition without “with simple partial seizures” or not, I emailed to the physician who wrote that discharge summary and who was the principle doctor of the patient and asked about this issue. After the doctor had approved that I should use the definition in English as it was defined online, I added “with simple partial seizures” into the target text.

In this regard, having competency in linguistic and textual competence in the source language and the target language, obviously help translators to write more accurate medical translations. Similar to a technical writer, in order to produce a target text with desired communicative function, translators use not only a source text but also make use of various sources. Because possessing the linguistic and textual competences does not mean that you have already know all correspondences in target language for each source text. The main point is that firstly linguistic and textual competence in the source language will help translators adequately understand the message. Meanwhile, having linguistic and textual competence in the target language will help translators achieve the fluency in the target text by being selective if different sources are needed to be used to craft competently written translations. Nevertheless, the above examined examples have shown that there might be cases when it is required to consult with the medical professionals in order to attain the optimal translation.

3.3.5.3. Competence in Research, Information Acquisition, and Processing

Having competence in research, information acquisition, and processing is another requirements that is stated in the ISO 17100:2015:

*Competence in research, information acquisition, and processing: the ability to efficiently acquire the additional linguistic and specialized knowledge necessary to understand the source language content and to produce the target language content. Research competence also requires experience in the use of research tools and the ability to develop suitable strategies for the efficient use of the information sources available.*⁵⁴

Up to now, I have presented some examples, in the discussion of which I mentioned about some translation problems, which were partially solved by means of research competence and the translator's ability to reach the right information. In this section, the role of research competence and ability to reach to the right information will be more deeply discussed by examining the real example.

Medical science consists of many braches including algology, dentistry, cardiology, gastroenterology, neurology, oncology, urology and etc. Therefore, a medical translator may deal with texts related to different branches of medicine that consist of special terminology. Obviously, a translator cannot be expert in every subject of medicine. Neither, a medical professional has a competency in every branch of medicine too (for instance, a cardiologist is not competent in medical terms and vernaculars an ophthalmologist is used to describe a surgical procedure). Therefore, a translator needs to know how to find out the particular information which is required to craft a competently done target text. Below, I am going to show the role of the research competence and translator's ability to acquire a required knowledge by examining the translation journey of translating a sentence from an

54. http://www.eurocom.at:8080/vmapplicants/docs/Excerpt%20from%20ISO_17100_2015.pdf
Accessed September 12, 2017.

operative note of the right lower lobectomy⁵⁵ surgery which was written in the discharge summary by a thoracic surgeon:

(ST) Inferior pulmoner ligaman **serbestlendi**.

(TT) The inferior pulmonary ligament **was divided**.

First of all, when I was assigned to translate the operative note of the right lower lobectomy, I had never translated these kinds of notes before. Therefore, I had difficulty in crafting the target text. The sentence, presented above was the most challenging for me due to inability to apprehend what was meant by the word “serbestlendi” (literally it means “set free”) in the given context. Therefore, I started my journey in the pursuit of the answer. Firstly, I googled about this surgical procedure in Turkish with the hope that I could find some explanation about what it is meant by “setting free the inferior pulmonary ligament.” However, I ended up with nothing. Hereby, I sent an email to that surgeon who had written the operative note and asked in what sense the word “serbestlendi” was used and whether he knows the English correspondence of the word “serbestlendi” in the current context or not. Fortunately, the surgeon gave a prompt reply. He replied that I must use the word “divided” for the word “serbestlendi” because all books say so. I was very surprised with that answer. Therefore, I wanted to see those books. So, I went to the thoracic surgeon’s room where he showed me some books in which the word “divided” was used in the description of the right lower lobectomy. The extract of the operative note where the word “divided” was used is given below:

The inferior pulmonary ligament is **divided** by cautery up to the inferior pulmonary vein. The inferior ligament lymph nodes are excised, and the pleura is divided posteriorly up to the level of the takeoff of the right upper

55. Lobectomy is a surgery to remove one of the lobes of an organ (in this operative note, it is described about the surgical removal of the right lower lobe of the lung).

lobe bronchus and anteriorly up to the level of the middle lobe vein (Dienemann, Hoffmann & Detterbeck, 2015:176)

What's more, when I asked the surgeon about why instead of the word "divize etmek" (divide), the word "serbestlenmek" (set free) was used, he answered that his teachers are not in favor of the word "divize etmek" because it is not a Turkish term and it also may lead to the misinterpretation as in Turkish it also means "ikiye bölmek" (divide into two). Hereby, he said that that is why the word "serbestlendi" (set free) is used. Moreover, he said that sometimes the word "kesmek" (cut) is used instead of the word "serbestlenmek" (set free).

In this regard, collaborating with the writer of the source text can really quickly help in the pursuit of the required preliminary knowledge of the subject matter before the translation actually begins. Moreover, knowing which keywords are to be used while googling, can also really ease the way of how the information is acquired. For example, if I had written the phrase "right lower lobectomy inferior pulmonary ligament" (name of the operation + specific keyword) without quotation marks in the search box of the search engine Google, I would have seen many resources about the same surgical procedure where it is said "the inferior pulmonary ligament is divided." Nevertheless, understanding that "serbestlendi" (set free) was used in the same meaning as "divided" needs time and requires the very good understanding of the procedure per se, the lack of knowledge of which can be eliminated with the help of the writer of the source text.

To conclude, it should be pointed out that surgical descriptions are not easy to comprehend by non-professionals as they are very descriptive and written using specific wording. Meanwhile, each surgeon has its own style of writing including using their own short forms, abbreviations and incorrect forms of medical terms and even misspelled forms. In fact, this is the case when the practical experience may help. For instance, attending the live surgery symposiums is useful for the medical translators as it can help them understand what is meant and write more accurate medical texts. In addition, while looking for a

solution on a specific translation problem, watching a similar surgical procedure online (for example, on YouTube or personal web sites of surgeons) before the translation of the operative notes on the similar topic is also may help write more superlative translations. Moreover, having the knowledge about the general scope of the procedure which is described in the operative note can also help to ask surgeons more competent questions.

Being a bicultural expert, a professional translator, who according to the ISO 17100:2015 must be competent in research, information acquisition and processing, knows how the required knowledge is to be acquired in an efficient way and also knows when and how to collaborate with doctors (writers of the source texts). In this regard, asking right questions to doctors and check/compare the suitability/compatibility of their information in the target language are one of the common tasks a medical translator may encounter with. In brief - be a research sniper and carry on!

3.3.5.4. Cultural Competence

Being linguistically competent in the source and target languages means that you are also competent in the culture of both systems because the language and culture are both interdependent and duality exists between them. You cannot explain what the culture is without touching upon the language through which the cultural transmission occurs from one generation to the next in a community. People are not born with the language. It is acquired in a culture with other people in a community which perceives the world in a different way and in fact, that perception varies from individual to individual even in the same community. In this regard, the complex relationship between language and culture exists. Meanwhile, since languages vary from each other's, cultures to which they belong also differ as they have different historical backgrounds with variety of factors including population movements, social values, religious customs and etc.

When it comes to translating medical texts, apart from working with the standardized text genres (medical research articles, papers and etc.) translators also may need to deal with the texts with the cultural elements including different levels of formality

and register, cultural differences in doctor-patient interactions and etc. Thereby, a medical translator should also be aware of the cross-cultural situations when culturally sensitive translation is required and be competent in dealing with challenges such translation may cause.

According to the ISO 17100:2015, the translator must possess the cultural competence:

Cultural competence: ability to make use of information on the behavioural standards, up-to-date terminology, value systems, and locale that characterize both source and target language cultures.⁵⁶

Let's see how cultural competency may help a translator in crafting the target text by examining the translation process of the following excerpt from the discharge summary of an international patient who came to Turkey to an urologist in pursuit of cure:

(ST) **Yakınması/ ikayeti** Ereksiyon kaybı, meni boşalırken ağrı

Hastalık Öyküsü/Hikayesi 2012 yılında üşheli ili ki sonrası olan ikayetler.

Muayene Bulguları Bilateral testisler normal kıvam ve cesamette, sol epididim muayenede hassas. Semen kültürü: Enterococ spp. üredi

(TT) **Chief Complain** Loss of erection, pain while discharging semen

History of Present Illness The complaints have been started after the patient had coitus outside of marriage in 2012.

56. http://www.eurocom.at:8080/vmapplicants/docs/Excerpt%20from%20ISO_17100_2015.pdf
Accessed September 12, 2017.

Physical Examination Findings Bilateral testicles are normal (consistency and size); tenderness during the physical examination in the left epididymis; semen culture: growth of *Enterococcus* spp.

To begin with, the above presented text is an excerpt from the discharge summary of the international patient who came to Turkey from Saudi Arabia. The patient has experienced the loss of erection and pain during discharging semen since he had sexual intercourse outside marriage in 2012. As the result, according to the performed examinations, he has become contaminated with the *Enterococcus* spp. bacteria, which according to the urologist cause the sexual dysfunction in the patient.

When it comes to the translation, I would draw your attention to the “Hastalık Öyküsü/Hikayesi” (History of Present Illness) section. Here it is said: “2012 yılında üpheli ili ki sonrası olan ikayetler”. The literal translation of this statement is “the complaints were started after the suspicious relationship in 2012”. However, the intended meaning is that the patient had sexual intercourse outside the marriage in 2012, as the result of which the complaints were started. In this regard, we are vis-à-vis with the implicitly expressed source text that was written as the response of culturally conditioned perception of the Turkish physician towards the information that was provided by the patient via an interpreter. After being aware of such situation, it is time to craft the target text. Taking into consideration the value systems of both patient and community to which he belongs (Saudi Arabia), I decided not to use the phrase “sexual intercourse” explicitly. Instead, I used the word “coitus” which is the medical term (understood generally by the professionals) that means that the patient had the actual act of joining with a woman in sex.

In this context, as a “bicultural expert”- translator must obviously possess cultural competence in order to attain the competently written translations that function effectively in cross-cultural situations.

3.3.5.5. Technical Competence

To begin with, before there was such a thing as advanced technology, translators worked only with the pen, papers and paper-based resources (e.g. dictionaries, educational books on subject matter and etc.). However today, no professional translator can work without a computer. Nowadays, technology has dramatically changed the way translators perform their duties and in fact, the way the whole translation industry works. Today, instead of pen, papers and paper-based resources translators use computers, computer-assisted translation (CAT) tools, translation memories and glossaries. At another side, the reality is dominant by the time pressure. The high speed in accomplishment many tasks is in demand today. Work providers are concentrating on high productivity, cost efficiency and competitiveness. Therefore, translators have to find solutions quickly for completing given tasks faster and at the same time achieve efficiency and satisfaction from the side of the clients. In this regard, it is expected from translators among the other competencies to be competent in technology-related knowledge needed to meet those expectations.

Meanwhile, according to ISO 17100:2015, the translator must possess the technical competence:

Technical competence: the knowledge, abilities, and skills required to perform the technical tasks in the translation process by employing technical resources including the tools and IT systems that support the whole translation process.⁵⁷

In order to concretize these expectations, let's see on a real example how the technical competence can help translators in doing their tasks efficiently.

One day, I was given a discharge summary to translate. It was 31 pages long and I had to use the glossary that was provided by the client (hospital). Moreover, I was given only two hours to complete my translation because the patient was in hurry not to miss his flight. Meanwhile, the discharge summary was partly translated by my colleague before;

57. http://www.eurocom.at:8080/vmapplicants/docs/Excerpt%20from%20ISO_17100_2015.pdf
Accessed September 14, 2017.

however, in order to find out which sentences were translated, I have to read both source and target texts comparatively, which requires a lot of time and effort.

On the other hand, in order to facilitate and speed up the translation process and meet the expectations of the client, being competent in using one of the CAT tools was definitely one of the main prerequisites. I used SDL Trados Studio 2015 as the CAT tool, to which I added the glossary and our local translation memory (TM), in which previously translated segments of the discharge summary were saved by my colleague. Eventually, thanks to the CAT tool and TM, I spent only 35 minutes to translate 31 pages long discharge summary.

Technological advances boost the demand for the translation services and therefore trigger the workload of translation industry because languages play an important role as transmitters. Meanwhile, competency requirements of translators are changing within the time. Hence, working as a technical translator (e.g. translators of medical texts, legal texts, financial texts and etc.) has become more and more challenging. From the example discussed above, it is understood that the computer-literacy, mainly competency in using the CAT tools software and effective use of terminology are the must in order to survive while meeting the demands of the work providers and clients. Therefore, professional translators are required to keep up with technological advances designed to ease the fulfillment of the translation tasks.

3.3.5.6. Domain Competence

Last, but not least, “domain competence” is the last professional competence of translators, which is stated in the ISO 17100:2015:

Domain competence: the ability to understand content produced in the source language and to reproduce it in the target language using the appropriate style and terminology.⁵⁸

What is written is not what is meant: be careful! There are many cases when medical practitioners write in a such way that only who is familiar with the context per se can understand what is actually meant by what was written. For example, most of the time, physicians write “deltoid” instead of “deltoid muscle”, “carotid” instead of “carotid artery” or “vagus” instead of “vagus nerve”. Therefore, it is not a surprise that the ISO 17100:2015 standard counts the subject-matter knowledge of translators as an important variable, which definitely should be taken into consideration because it affects the quality of the target text.

Medical professionals use their own short forms of words instead of the standard ones. As the result, even their colleagues may experience difficulty in understanding them. Thus, it can be said that being only a linguist is not enough to comprehend what is meant in the source text and then to reproduce competently written target text. In this regard, what happens if a translator understands only the language, but not the ideas? Let’s look at the following example:

(ST) **Muayene Bulguları** servikal pvks ++; sırtta gergin bantlar ++; nd yok, slrt 70

(TT) **Physical Examination Findings** cervical paravertebral muscle spasm ++; trigger points on the back ++; no neurological deficits; Straight Leg Raise Test: 70

This is an excerpt from a discharge summary of a patient who visited a specialist from the department of Physical Medicine and Rehabilitation due to experiencing pain in the neck. If we look at the “Muayene Bulguları” (Physical Examination Findings) section, we can see some phrases and abbreviations which were specified by the physician after the patient had been physically examined. If a translator has the lack of subject-matter

58. http://www.eurocom.at:8080/vmaplicants/docs/Excerpt%20from%20ISO_17100_2015.pdf
Accessed September 14, 2017.

knowledge, it will be difficult to deal with those writings. Let's examine them one by one. Firstly, I would draw your attention to the phrase "sırtta gergin bantlar" the literal English translation of which is "tight bands on the back" (if only words are translated, not ideas). However, after asking the physician (writer of the source text) about what was actually meant she quickly answered me that the English correspondence of the phrase "sırtta gergin bantlar" is "trigger points on the back". In this regard, there are two kinds of translations: competently and incompetently (translation of words not ideas) done. Secondly, I was also experiencing some problems with finding these Turkish abbreviations too: "pvks" and "nd". Therefore, I asked the writer of the source text (subject matter expert) what these abbreviations mean in Turkish. Afterwards, I learnt that "pvks" means "paravertebral kas spazmi" (paravertebral muscle spasm) and "nd" means "nörolojik defisit" (neurological deficit). In this context, it is clearly how the subject-matter knowledge eases the translation process and contributes to competently written translation. Therefore, it is understood why private sector today usually looks for translators who are specialized in one particular field, rather than ones who claim that s/he works with all types of texts.

Moreover, it is important to point out that inability to understand the medical content on a particular area of expertise produced in the source language is peculiar not only to translators but also medical professionals themselves. Let's examine the example below:

(ST) CCC tamamlandı (...). Daha sonra **VES** ile **bag olu turulup** G L (21.OD) implante edildi. (...). **EFK** yapıldı.

(TT) **Circumlinear capsulorhexis** was completed. **After injection of viscoelastics**, the IOL (with 21.0 D base power) implantation was performed. (...). **Endolaser photocoagulation** was performed.

This is an excerpt from the operative note (vitreo-retinal surgery, phacoemulsification and intraocular lens implantation) written by an ophthalmologist. I was given this operative note to translate into English. And I had no ideas about what those

abbreviations and words (written bold) meant in Turkish. I emailed to the principal physician of the patient who is a specialist in Plastic and Reconstructive Surgery and asked him questions related to these unknown to me abbreviations and words. However, he answered that he does not know too and suggested to me to contact with someone from the department of Ophthalmology. Afterwards, I sent an email to an ophthalmologist (not to a writer of the source but to any ophthalmologist who could me answer because by whom the source text had been written was unknown) and learnt answers to all my questions. I was very surprised when I learnt that in the phrase “VES ile bag olu turulup”, the word “bag” was and the English word and not a Turkish word “ba ” (connection). The ophthalmologist pointed out that there should be a Turkish word “kese” instead of the word “bag”. Moreover, the ophthalmologist also pointed that for better comprehension of a target reader the phrase “Daha sonra VES ile bag olu turulup” can be translated in a sense “After injection of viscoelastics”.

In this regard, it is understood that what is written is not what is meant and even medical professionals do not have the sufficient subject-matter knowledge about all medical fields. When it is necessary, they ask for the help of the specialists of other areas of medicine. Likewise, even though the medical translator may possess all these six professional competencies, listed above in the ISO 17100:2015, there may be some cases when a translator might have the difficulty in understanding the context, which does not make him/her incompetent translator. In fact, it deserves pointing out that apart from listing specifications related to professional competencies of the translators, the ISO 17100:2015 Quality Standard specifies competences of revisers, reviewers and project managers. This means that quality of the target text content is conditioned not only by translators but also by the revisers, reviewers, project managers and etc. Moreover, in fact, according to the ISO 17100:2015, the target text delivered by the translator must be revised by the reviser who “shall examine the target language content against the source language content for any

errors and other issues, and its suitability for purpose.”⁵⁹ In this regard, according to the Quality Standard, the required quality of the target text is not guaranteed if it is not subjected to the revision by the second person.

To conclude, working background knowledge of narrow fields definitely allows translators to write better medical translations. And as time goes by, s/he will gradually expertise his/her knowledge towards different topics related to medicine. Nevertheless, what is important is that the competent translator must know when, to whom and how to seek for the help in order to attain the competently written translation.

59. http://www.eurocom.at:8080/vmapplicants/docs/Excerpt%20from%20ISO_17100_2015.pdf. Accessed September 20, 2017.

4. CONCLUSION

State of the Art Re-Evaluated

Many people in Turkey assume or believe that people who speak at least two languages can produce competent translations. As it had been discussed throughout the thesis, language competency (e.g. having excellent skills in scientific language as the language of medicine) in working languages is for sure one of the musts that a competent translator has to possess. However, in order to produce expert translations, there are many other skills, previously discussed in the thesis, which are needed to be acquired. Professional translators are not born - they are trained and are the fruit of hardworking days.

There are *ad hoc* solutions (e.g. how exactly the common sense, reasoning and parallel texts should be used) for every assignment that the competent translator of medical texts will have to know. She or he will have to be familiar with genres of the texts with which s/he is working for the adequate understanding of the message and not to miss out the functional equivalence of the target text by simply following source text conventions. In other words, genre competency eases the way translators make conceptual distinctions and organize ideas. I would suggest that acquiring competence in medical genres during learning medical translation is very useful and by doing so, beginners in translation of medical texts will have the opportunity to develop their communicative and textual competence.

Throughout the examination of the discharge summary (see section 3.2), it was clearly seen how having competency in translating, which consists of variety of sub-competencies, help translators produce accurately written translations. In other words, the ability of knowing how to translate (what are your rights, what or when you can or cannot do, why you do or not do, when you must ask for help or not to ask and etc.) is a key point in achieving medical translations that are competently written and therefore will not mislead anybody. Hence, obviously, any medical document must be translated only by a competent translator (expert) who knows which and in what kind situation strategies are applied for the particular assignment and who knows how to solve problems related to

translation in a very effective manner in order to prevent any negative consequences for the patient or medical professional that might be arisen due to incompetently done translation.

Moreover, most of the time, while the source text is written by an author (physician, nurse, radiologist and so forth), s/he does not actually keep in mind the probability that his/her text will be translated into another language. Therefore, written by them discharge summaries may include for example, a three-week hospital stay of the patient only in one paragraph with lots of shorthands which only professionals can comprehend. Hence, the source text can be full of problems with which a translator may face while crafting the target language. In this regard, it must be said that if the author of the source text was aware that his/her text is going to be translated into another language, by writing in a more precise and clear way (e.g. writing in a language using which they can best express themselves) s/he could prevent at least some of the translation problems and by doing so, help the medical translator to write more accurate target text in a shorter time.

Meanwhile, a single translator's work should be seen as one stage of the whole medical translation process. Let's assume that every translation work is considered as "project". Likewise, treating patient also can be considered as "project". If we say "project" – it means that not only one person is involved in the successful accomplishment of the project. For example a successful kidney transplant surgery itself does not only depend on one surgeon. Instead, the whole organ transplantation surgeon team is involved during the surgical procedure. In fact, there are preoperative and postoperative procedures which are done by other specialists. Likewise, there are pre-translation and post-translation processes involved in the translation project. For example, before surgical procedure, an anaesthesiologist evaluates the patient to whom an anaesthesiology will be done before any surgical intervention. Hence, the success of any treatment (project) depends not only on the patient's compliance towards the physicians' recommendations but also on the collaborative work of different medical specialists.

Let's think about situation when doctors request lots of tests and examinations before treating the patient and saying actually what his/her diagnosis is. In fact, doctors cannot tell the precise diagnosis without examining the patient or without at least check

standard analyses such as blood analysis, urine analysis and so forth. Likewise, medical translators cannot know all the medical terms of both ST text and TT and in fact, do not have to. Meanwhile, language is not a static thing, it develops - it is alive. In fact, doctors and medical translators follow the same way, digging up for a solution (e.g. translators look for the appropriate terminology, doctors for treatment solutions which could be suitable for a patient). Moreover, both medical professionals and medical translators are lifelong learners because neither doctors nor medical translators cannot 100% know everything about medicine and each patient with a particular disease and each translation assignment should ultimately be approached on an individual basis.

What's more, most of the time people expect from translators that they can translate anything for a short period of time without thinking that the translator is not a machine which holds all language pairs for each situation in his or her head. However, when it comes to doctors, nobody questions that when you visit a doctor for a particular complain he or she does not actually 100% know how to solve your particular problem related to your concerns without medical examination first. Moreover, I am sure that many people once in their life witnessed or heard when a doctor said: "Let's try this medication. Use it for 6 months and come again for the control. If it does not help, we will try another medicine." Obviously, doctors cannot 100% know exactly what will help you to get rid of your disease. They constantly try and at the same time learn new things related to their subject matter. My aim is not to examine the competency related to the medical profession itself. I would only point out, that there are some professions which you cannot just learn by heart and do it automatically according to a certain template. The professions like physician and medical translator are an example of two of such a profession. Therefore, the awareness towards the complexity of the medical translation as the profession should be raised. Meanwhile, we should be more patient and show more positive attitude when we request translations of medical texts, just as we are patient when doctors tell us to use a medication for 6 months or request from us many tests and analyses before telling us the diagnosis.

In addition, it is worth pointing out that most of the time doctors do not decide

themselves when it comes to precise diagnosis or treatment. They collaborated with other specialists from different medical departments. For example, medical oncologists collaborate with different branches and they discuss about patient in the oncology council before planning the treatment especially when it comes to treating or proposing treatment to patients with advanced cancers. Therefore, the success of the accurate diagnosis or treatment does not only depend on the doctor himself. It is firstly the team work, each step of which if is properly done. Likewise, as it was clearly seen throughout the thesis, competently done medical translation is the result of first of all, having sufficient degree of translation competency, which includes the successful application of linguistic and textual competence, research and information acquisition competence, cultural competence, technical competence and domain competence from the side of the translator and good collaboration from each side (e.g. medical professionals, interpreters, colleagues, revisers, project managers and etc.).

Nevertheless, my working experience at the hospital has shown that being a medical translator does not involve only one task - to translate. When the time comes, you are a terminologist, reviser of source and target texts, writer, proof reader, communication expert and project manager. Therefore, most of the time, the translator alone is made responsible for the final output – target text.

In this context, medical translators should at least be trained in terms of the competencies specified in the ISO 17100:2015 (see section 3.2.4). However, it deserves pointing out that before designing a curriculum for teaching medical translation, a comprehensive translation market research in the scope of medical translation in Turkey should be done in order to identify what qualifications and skills medical translators must have.

I hope I managed to show some specifics and implications of such a profession as “medical translator”, which I believe will be useful in the design of a curriculum for teaching medical translation.

Last but not least, I would finish my thesis with the famous words of Steve Jobs⁶⁰:
“Stay Hungry. Stay Foolish.”



60. Steve Jobs was an American inventor, designer and entrepreneur who was the co-founder, chief executive and chairman of Apple Computer.

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APPENDIX

1) Examples of discharge summaries originally written in English

<http://www.physionet.org/physiobank/database/odb/discharg.htm>

<http://wp.sbcounty.gov/dbh/wp-content/uploads/2016/07/DISCHARGE-SUMMARY.pdf>

https://www.paramounttpa.com/Home/Download/Standard_Discharge_Card.pdf

http://training.theicd10solution.com/pdf/016262_PMCB.pdf

<https://www.ithaca.edu/hshp/depts/slpa/docs/studentresources/clinicalpracticum/templates/dischsumtemplate/>

2) Examples of discharge summaries originally written in Turkish

I

EP KR Z

ADI SOYADI : ALTAHIR SAID HUSAIN ALZAWI

YA /C NS YET : 69/E

PROTOKOL NUMARASI : 765234

YATI TAR H : 19 A ustos 2011

ÇIKI TAR H : 29 Eylül 2011

KAYET : Halsizlik, ate , lökopeni.

H KAYES / HASTANEYE YATI NEDEN : Halsizlik, ate yakınmaları aralıklı olan hastanın yapılan tetkiklerinde lökosit sayımı 2.000 mm^3 olarak bulunmu . Hemoglobin de eri 12.3 gr/dL, trombosit sayımı $164.000/\text{mm}^3$ bulunmu . Hasta sa PCA infarktı ve sa hemisferde milimetrik infarktlar nedeniyle Coumadin tedavisi kullanmaktadır. Hastaya bisitopeni etyolojisi ara tırlmak amacıyla 17 A ustos 2011 tarihinde kemik ili i biyopsisi yapıldı. Kemik ili i biyopsi örne inin de erlendirilmesi akut lösemi ile uyumlu olarak raporlandı. Hasta tedavi amacıyla yatırıldı.

ÖZGEÇM : PCA infarktı. Hepatit B. leus.

Kullandı ı ilaçlar: Coumadin.

SOYGEÇM : Özellik yok.

F Z K MUAYENE BULGULARI: uur açık, soluk görünümde. Akci er ve kalp muayenesinde özellik yok. Batın rahat. Organomegali ve lenfadenomegali izlenmedi.

LABORATUVAR: 28 Eylül 2011: Lökosit: 0.89 K/uL, Nötrofil oranı: % 31.5, Hb:11 g/dL, Hct: % 31.9, MCV: 87.9, Trombosit: $159.000/\text{mm}^3$, CRP: 37.2 mg/L, Klorür: 102 mmol/L, Kreatinin: 0.4 mg/dL, Potasyum: 3.5 mmol/L, Sodyum: 133 mmol/L, BUN: 8.9 mg/dL, Üre:19 mg/dL.

20 Eylül 2011: Lökosit: 1.2 K/uL, Nötrofil oranı: % 44.1, Hb: 8.7 g/dL, Hct: % 25.2, MCV: 87.8, Trombosit: $121.000/\text{mm}^3$, CRP: 64.5 mg/L, Klorür: 106 mmol/L, Kreatinin: 0.4 mg/dL, Potasyum: 3.9 mmol/L, Sodyum: 142 mmol/L, BUN: 22 mg/ dL, Üre: 47 mg/dL, aPPT: 26 saniye, D-dimer:> 5 ug/mL, Fibrinojen: 4.6 g/L, PT: 12.4 saniye, Protrombin aktivitesi: % 74.6, INR: 1.13.

15 Eylül 2011: Lökosit: 2.910/mm³, Nötrofil: % 61.5, Hb: 10.4 g/dL, Hct: % 29.6, MCV: 85.1 fL, Trombosit: 63.000/mm³, aPTT: 29 sn, PT: 12.3 sn, INR: 1.12, CRP: 30 mg/L, Klorür: 105 mmol/L, Kreatinin: 0.5 mg/dL, Potasyum: 3.6 mmol/L, Sodyum: 137 mmol/L, BUN: 15.4 mg/dL, Üre: 33 mg/dL, D-dimer: > 5 ug/mL, Fibrinojen: 3.7 g/L.

19 A ustos 2011: Lökosit: 1.590/mm³, Nötrofil: % 41.5, Hb: 9.5 g/dL, Hct: % 28.6, MCV: 89.7 fL, Trombosit: 62.000/mm³, aPTT: 27 sn, PT: 18 sn, INR: 1.56, Anti HBs: 132.13 mIU/mL, ALT: 62 U/L, Albumin: 4.3 g/dL, AST: 28 U/L, CRP: 8 mg/L, Glukoz: 119 mg/dL, Kalsiyum: 9.6 mg/dL, Klorun 105 mmol/L, Kreatinin: 0.6 mg/dL, LDH: 275 U/L, Magnezyum: 2.13 mg/dL, Potasyum: 4 mmol/L, Prealbumin: 20.7 mg/dL, Sodyum: 139 mmol/L, BUN: 15 mg/dL, Üre: 32 mg/dL, ESR 1.saat: 21 mm, ESR 2.saat: 48 mm.

Patoloji Raporu (20 Eylül 2011): Beyin; Temporal lob, lobektomi: Subakut kortikal infarkt (vasküler ensefalomalasi) [h pertensif ensefalopati ile uyumlu bulgular].

ICD-O: C71.0

Patoloji Raporu (23 A ustos 2011): Kemik ili i; Biyopsi ve Aspirasyon: Akut promiyelositik lösemi.

Not: Materyalde morfolojik bulgularla akut promiyelositik lösemi-hipergranüler varyant dü ünülmü tür. Materyale genetik tanı merkezinde uygulanan incelemede t(15;17) saptanmı tır.

ICD-O: M9866/3-C92.4

Akım Sitometri Raporu (Acibadem Labmed-17 A ustos 2011): Kemik ili i örne inden yapılan analizde tüm hücrelerin yakla ık % 45'ini olu turan ve aberan CD56 eksprese eden (CD13⁺ heterojen, CD13⁺ homojen, CD117⁺CD71⁺CD34^{dim}HLA - DR⁻CD16⁻ CD11b-CD15⁺, CD64⁺MPO⁺) blast hücre popülasyonu saptanmı tır. mmünfenotipik bulgular AML ön tanısını desteklemektedir. AML sınıflandırılması için sitogenetik, morfolojik ve klinik bulgular ile birlikte de erlendirilmesi uygundur.

Genetik nceleme Raporu (22 A ustos 2011):

Sonuç: nuc ish (PMLx3), (RARAx3) (PML con RARA x2) [96/200]

nuc ish (PMLx2), (RARAx2) (PML con RARA x1) [22/200]

nuc ish (PMLx2), (RARAx2) [82/200]

Açıklama: Kemik ili i aspirasyon örne inden kültür yapılmadan incelenen 200 interfaz çekirde inin 96 tanesinde (% 48) PML / RARA t(15;17) translokasyonuna özgü tipik çift füzyonla ve 22 tanesinde (% 11) atipik tek füzyonlu hibridizasyon görünümü saptanmı tır (Pozitif).

Beyin BT (22 Eylül 2011): Sağ frontotemporo-parietal geni kraniektomi defekti, komu cilt/ciltaltında post-op. defektleri ve beyin parankiminin defektten ciltaltına doğru bir miktar protrüzyonu. Sağ serebral hemisferde önceki inceleme ile benzer boyutlardaki MCA enfarkt alanında hemorajik transformasyon miktarında artı, orta hattaki shift etkisi ve unkal herniasyon görünümünde regresyon (orta hatta shift yaklaşık 9 mm). Lateral ventrikül lümenlerinde hemorajik mayi ve tentoryum sağ yarısı komulu unda ince sıvama tarzında subdural hemoraji.

Beyin BT (17 Eylül 2011): Bulgular: Değerlendirme 11.09.2011 tarihli inceleme ile karşılaştırılabilir olarak yapılmıştır. Sağ serebral hemisfer MCA postlentikülostriat sulama sahasında izlenen ve hemorajik transformasyon gösteren geni enfarkt alanı ve çevresindeki ödem sahasına ait hipodens alan boyutları hafif artmış, medialde talamusa ve internal kapsül posterior bacağına doğru uzanım göstermiştir. Sağ lateral ventriküldeki kompresyon ve orta hattaki shiftin etkisi artmıştır ve shift 14-15 mm civarında ölçülmüştür. Temporal lob unkusunun inferomedialde doğru uzanım göstererek sağ serebral pediküle kompresyonda bulunduğu izlenmektedir (unkal herniasyon). Enfarkt alanında giral tarzda izlenen hemorajik transformasyon miktarında belirgin bir artı izlenmemiştir. Sol lateral ventrikül kompartman boyutlarında önceki incelemeye göre hafif artı mevcuttur. Serebral sulkuslar sükunetli olup tariflenen alanlar haricinde beyin parankimi dansite dağınıklığı korunmuştur. Önceki incelemelere göre ilave fark saptanmamıştır.

Beyin BT (11 Eylül 2011): Sağ serebral hemisferde MCA post-lentikülostriat sulama sahasına uyandıran ve hemorajik transformasyon gösteren subakut dönemde geni enfarkt alanı ve orta hatta 8-9 mm sola subfalsiyen shift.

Kranial MRG ve MR anjiyografi (21 Eylül 2011): Sağ temporo-frontoparietal MCA dalı ve posterior border-zone sulama sahasına uyandıran kortikosubkortikal akut enfarkt alanı. Sağ temporo-okspital loblar medialinde PCA dalı sulama sahasına uyandıran kronik enfarkt alanı. Bilateral serebral ak maddelerde küçük damar hastalığı ile uyumlu birkaç kronik iskemik/gliotik odak. Sağ MCA bifurkasyon düzeyinde ve sağ PCA P2 segment düzeyinde kritik stenoz. Serebral arterlerde atherosklerotik minimal kontur düzensizlikleri.

TANI (LAR): Akut promyelositer lösemi.

AMEL YAT/ LEM: Kraniotomi, temporal lobektomi, duroplasti (20 Eylül 2011). Kemik iliği biyopsisi (26 Eylül 2011).

KLİNİK SEYİR ve LAÇLAR: Bisitopeni etyolojisi araştırılmak üzere tarafımıza başvuran hastanın özgeçmişinde sağ PCA infarktı ve sol hemisferde minimal infarktlar bulunduğu, bu nedenle Coumadin tedavisi altında izlenmekte olduğu öğrenildi. Hastanın uzamı ate etyolojisinin araştırılması nedeniyle bir dizi merkezdeki Romatoloji bölümü tarafından tetkiklerinin yapıldığı; ancak belirgin romatolojik düdüdürececek bulgu saptanmadığı öğrenildi (Hastanın Faktör V Leiden ve protrombin gen mutasyonu negatifti. ANA testi pozitif olarak bulunmuştu). Hastanın 16 Ağustos 2011 tarihinde trombosit sayısı $79.000/\text{mm}^3$, lökosit sayısı $1.400/\text{mm}^3$, nötrofil $600/\text{mm}^3$,

hemoglobin 11.1 g/dL, Hct % 33, MCV 92 fL olarak bulundu. Hastanın kemik iliği biyopsisi, aspirat, akım sitometri ve sitogenetik incelemesi sonucunda hasta akut promyelositer lösemi olarak değerlendirildi. t(15;17) pozitif olarak bulundu. Hastaya akut promyelositer lösemi (AIDA) protokolünün uygulanması kararı verildi (*Kaynak: 2010 116: 3171-3179. Front line treatment of acute promyelocytic leukemia with AIDA induction followed by risk-adapted consolidation for adults younger than 61 years: results of the AIDA-2000 trial of the GIMEMA Group. Francesco Lo-Coco, et al. and for the Italian GIMEMA Cooperative Group*).

Söz konusu yayına göre tedavisi Vesanoïd 45 mg/m² 45 gün süreyle, darubicin 12 mg/m² 2-4-6-8.günlerde olmak üzere düzenlendi. Hastanın kemoterapi öncesinde ekokardiyografisinde aort ve mitral kapakta dejeneratif değişiklikler mevcuttu. Hafif aort ve mitral yetmezlik, sol ventrikül grade I diastolik disfonksiyonu mevcuttu. EF: % 60 olarak bulundu. Hastanın sol hemiparezisi gelişti. Kranial MR'de sağ temporofrontoparietal MCA dalı ve posterior sulama sahasına uyan kortikosubkortikal akut infarkt alanı izlendi. Geçirilmiş sağ MCA infarktı nedeniyle Coumadinize olan hastanın Coumadin tedavisi kemoterapisi öncesi kesilmi ve profilaktik Clexane tedavisi başlandı. Hasta profilaktik Clexane altında enfarkt geçirdi. Yakın takip amacıyla Genel Yoğun Bakım Ünitesine transfer edildi. Nöroloji bölümü ile konsülte edildi (Dr. Bülent Kahyao lu). Hastanın halen kullanmakta olduğu Clexane tedavisi 2x0.3 ml subkütan olarak düzenlendi. Ateşi olan hasta Enfeksiyon Hastalıkları bölümü ile konsülte edildi (Dr. Ergönül). Hastaya Avelox tedavisi başlandı. Hemokültürlerinde üremesi olmadı. Genel Yoğun Bakım Ünitesinde genel durumu göreceli olarak stabil olan hasta 22 Ağustos 2011 tarihinde yeniden servis takibine alındı. Yutma güçlüğü olan hastaya nazogastrik tüp takılarak beslenmesi sağlandı. Hasta Nöroloji bölümünün önerileri ile fizik tedavi ve rehabilitasyon programına alındı. Konu ma terapisi başlandı. (Dr. Çerezci) Fizik tedavi ve konu ma terapisi sonrasında hasta nörolojik açıdan stabil olarak izlendi. Yutma refleksi düzelen hastanın nazogastrik tüpü çekildi. Avelox tedavisi 10 güne tamamlandı ve kesildi. Oral beslenmesi yeniden başlandı. 31 Ağustos 2011 tarihinde yeniden ateşi olan hastaya Tazocin başlandı. Ateş içinde mukozit plakları olan hasta Enfeksiyon Hastalıkları ve Dermatoloji bölümleri ile konsülte edildi. 31 Ağustos 2011 tarihinde tedaviye Triflucan eklendi. 11 Eylül 2011 tarihinde baygınlık, presenkop, bilinç kaybı yakınmaları olan hastanın kranial BT'sinde sağ serebral hemisferde MCA post lentikülostriat sulama sahasına uyan ve hemorajik transformasyon gösteren subakut dönemde geni enfarkt alanı, orta hatta 8-9 mm sola subfalsiyon shift izlendi. Hastanın enfarkt nedeniyle kullanmakta olduğu Clexane tedavisine ara verildi. Hastaya trombosit desteği sağlandı. Trombosit sayısı 50.000/mm³ üzerinde olduğu dönemlerde Clexane 0.4 ml subkutan yapılmaya devam edildi. Hastanın 17 Eylül 2011 tarihinde hastanın yeniden uykuya geçmesi arttı. Hasta güçlükle uyandırılır hale geldi. Tomografisinde intrakranial yaygın ödem ve hemorajik transformasyon gözlemlendi. Uyku hali belirginleşen ve giderek koma geçiren hasta Beyin cerrahisi bölümü ile de

konsülte edildi (Dr. Ali Çetin Sarıo lu). Hastaya trombosit deste i altında 20 Eylül 2011 tarihinde sa prontotemporoparietal osteoplastik kraniotomi uygulandı. Temporal anterior lobektomi yapıldı ve duroplasti ile operasyon sonlandırıldı. Hasta postoperatif dönemde Genel Yo un Bakım Ünitesi'nde takip edildi. Vital bulguları stabil olan hastanın durumu stabil olduktan sonra 23 Eylül 2011 tarihinde yeniden servis takibine alındı. 24 Eylül 2011 tarihinden itibaren hastanın ate i yükseldi. Profilaktik olarak kullanmakta oldu u Avelox tedavisine Tazocin eklendi. Hastanın alınan bir hemokültüründe gram pozitif üremesi oldu u ö renildi (antibiyogram sonucu beklenmektedir). Hasta Enfeksiyon Hastalıkları bölümüyle yeniden konsülte edildi ve hastaya Meronem, Targocid tedavisi ba landı. Hastaya antiepileptik olarak Epdantoin ba lanmı tı; ancak Epdantoin tedavisi altında hastanın lökopenisinin arttı ı izlendi. Bunun üzerine Epdantoin kesildi. Yerine Kepra ba landı.

ndüksiyon tedavisinin 37.gününde (26 Eylül 2011) lökosit sayımı $900/\text{mm}^3$, nötrofil sayısı $300/\text{mm}^3$, trombosit sayımı $74.000/\text{mm}^3$, hemogloblin de eri 10.5 g/dL olarak izlendi. Hastanın kemik ili i biyopsisi yapıldı. Akım sitometrisinde % 5 civarında blast popülasyon mevcudiyetinin sürdü ü ö renildi. Hastaya 0.15 mg/kg dozunda Trisenox tedavisinin ba lanması kararla tırıldı (söz konusu tedavi aile ilacı temin etti i zaman ba lanacak). Hasta yakınlarının iste i ile sosyo-ekonomik ko ullarının geçerli oldu u bir hastanede tedavisini devam ettirmek üzere taburcu edildi.

TABURCU OLDU U SIRADA DURUMU: Haliyle.

ÖNER LEN TEDAV / TABURCU LAÇLARI:

- Fucidin pomad 3x1 haricen dudaklara,
- Kepra 500 mg tb. 2x1 p.o,
- Dupfalac 30 ml süsp. 1x1 p.o,
- Vesanoid 40 mg tb. sabah, 30 mg ak am,
- Pantpas 40 mg flakon 2x1 IV,
- Targocid 400 mg flakon 1x1 IV (tedavinin 4. günleri)
- Meronem 1 flakon 3x1 IV (tedavinin 4. günleri)

- Oliclinomel N7 1000 ml 100 ml/saat IV.

ZLEM ÖNER LER : Hasta yakınlarının iste iyle tedavisi sosyo-ekonomik ko ullarının geçerli i oldu u bir dı merkezde sürdürmek üzere taburcu edildi.

II

Epikriz Raporu

Hasta Numarası: 2725 8765	Şube: Acibađem Hst. Kayseri
Hasta Adı Soyadı: PARIVASH LAMANE	Rapor No: 2514368786
Yaş / Cinsiyet: 52 Yıl - 3 Ay / Kadın	Onay Tarihi: 09-10-2015 15:30
Kurum: Sosyal Güvenlik Kurumu	Servis: Yoğun Bakım
	Doktor: Dr. Hicran Karaca

Yatış - Taburculuk Tarihi	31-08-2015 - 30-09-2015
Yakınma / Oykü	Şikayeti: Tirodi CA nedeniyle tedavi gören hasta 8 gün Niğde Devlet Hastanesinde yatmış. Ellerde ve ayaklarda ödem, karın ağrısı ve beslenememe nedeniyle getirildi.
Oz/Soy Geçmiş	Özür/Ölüm Durumu: Yok Hipertansiyon (Hastada): Evet Kan ve Kan Trans.: Hayır Alkol Kullanımı: Belirtilmedi Sigara Kullanımı: Belirtilmedi Sürekli kullandığı ilaçlar: Madde Kullanımı: Belirtilmedi Ameliyat Geçmiş: Var
Fizik Muayene	TA:158/109mmHg.NB:93/dk, ateş:36,8 , genel durum orta, kaşektik, sol kol ve ayaklar ödemli, şuur açık, ışık refleksi +/+, pupiller izokorik, koopere, oryante, kalp ritmik normokardik, akciğer sesleri doğal, karın muayenesinde epigastrik hassasiyet mevcut, defans yok, rebound yok.
Yatan Hasta Değerlendirme	Genito Uriner Sistem: Patolojik bulgu saptanamadı Deri: Patolojik bulgu saptanamadı Solunum Sistemi: Patolojik bulgu saptanamadı Nörolojik Sistem: Patolojik bulgu saptanamadı Kas/İskelet Sistemi: Patolojik bulgu saptanamadı Baş/Boyun: Patolojik bulgu saptanamadı Sindirim Sistemi: Patolojik bulgu saptanamadı Özel Not: Kardiyovasküler Sistem: Patolojik bulgu saptanamadı Değerlendirme Tarihi: 15.28
Radyolojik Tetkikler	
Klinik İzlem	03-09-2015 09:49 Dr. Hicran Karaca Sönmezer 2. basamak GYBH. genel durumu 01-09-2015 10:56 Dr. Hicran Karaca Sönmezer 2. basamak GYBH. genel durumu orta, şuur açık, vitalleri stabil, T- maske ile solunumu desteklenmekte, ateşi yok, idrar çıkışı iyi, defekasyon mevcut, sakrumda ki yarası için plastik cerrahi konsültasyonu istendi, magnezyum kalsiyum albumin potasyum düşük replase edilecek.- 01-09-2015 23:13 Dr. Hicran Karaca Sönmezer 2. bas YB hast, şuur açık, koopere, Trakeostomiden T maske ile takipte, vitalleri iyi, medikal tedavisi devam ediyor.- 02-09-2015 09:39 Dr. Hicran Karaca Sönmezer 2. basamak GYBH. genel durumu orta, şuur açık, hemodinami ve vital bulgular stabil, T- maske ile soluyor, ateşi yok, idrar çıkışı iyi, defekasyon mevcut, magnezyum kalsiyum, potasyum düşük replase edilecek. sakrumdaki yarası thiociline ile pansuman yapıyor.- 02-09-2015 19:11 Dr. Hicran Karaca Sönmezer 2. basamak GYBH. genel durumu orta, şuur açık, hemodinami ve vital bulgular stabil, T- maske ile soluyor, ateşi yok, idrar çıkışı iyi, defekasyon mevcut, magnezyum kalsiyum, potasyum düşük replase edildi. dekübit ülserleri nedeniyle 2 saatte bir pozisyon değişikliği yapılıyor.-

III

		Epikriz	
Adı Soyadı T.C.	FATIMA CHALFI	H.No/P.No	: 1447421 / 4770023
Kimlik No D.		Kurum	: YURTDIŐI KURUMSUZ HASTA
Tarihü/Cinsiyet Ev	05.08.1952 / K	Bölüm	: Ortopedi ve Travmatoloji
Tel.	(534) 312-16-35	Doktor	: Doç. Dr. MEHMET GÜL
Cep Tel.	5318927249	Rapor Tarihi	: 14.10.2017 09:21:50
Adres	Cezayir	Kabul Tarihi	: 10.10.2017
		Taburcu Tarihi	:

Yakınması/Őikayeti SAĞ DİZ AĞRISI, DİZ AĞRISI

Hastalık Öyküsü/Hikayesi UZUN ZAMAN

Soygeçmiş ÖZL YOK, ÖZL YOK

Alerji Yok,Yok,Yok

Alışkanlıklar Yok,Yok,Yok

İlaçlar Yok,Yok,Yok

Geçirdiđi Operasyonlar Yok,Yok,Yok

Muayene Bulguları sağ DİZ HİPERFLEKSİYONLA AĞRILI MC MURRAY MEDİALDE ↔ APLEY TESTİ ↔

sağ diz anteromedialde palpasyonla ağrılı 1x1 cmlik kitle sinovit

Endikasyon (Ek10-C) tdp, MR + RV +FTR SAĞ DİZ MR: sağ DİZ HİPERFLEKSİYONLA AĞRILI MC MURRAY MEDİALDE ↔ APLEY TESTİ ↔

sağ diz anteromedialde palpasyonla ağrılı 1x1 cmlik kitle sinovit

Tedavi Bakım Planı hastaya nsaid ted + nemolix + öneriler + kök hücre ted önerildi

Kontrol Notu dejeneratif zeminde menisküs yırtıkları mevcut hastaya nsaid ted + nemolix + öneriler + kök hücre ted önerildi

Reçete

EDOLAR FORT 400 MG 10 FILM TB.: 2 / 1,00 Ağızdan(Oral)

PARAFON 300 MG.20 TB.: 2 / 1,00 Ağızdan(Oral)

SULIDİN JEL 30 GR.: 2 / 1,00 Cilt üzerine(Epidermal)

Tanımlar

Ön Tanı (M17.0) Primer gonartroz, bilateral Ön Tanı (S83.2) Menisküs yırtığı, şimdiki

Kesin Tanı (R22.4) Alt ekstremitenin lokalize şişme, kitle ve yumrusu

Önerilen Kontrol Tarihi Yok

CURRICULUM VITAE			
Adı, Soyadı	Svetlana		Filatova
Doğum Yeri ve Yılı	Tashkent / Özbekistan		1985
Bildiği Yabancı Diller	İngilizce, Rusça, Türkçe		Fransızca
Okuma Düzeyi	Çok iyi		Orta
Eğitim Durumu	Başlama - Bitirme Yılı		Kurum Adı
Lise	1999	2001	Tashkent Gymnasium No:51 (Rus Lisesi)
Lisans	2009	2014	Marmara Üniversitesi Mütercim-Tercümanlık (İngilizce)
Yüksek Lisans	2014	2017	29 Mayıs Üniversitesi Çeviribilim (İngilizce)
Doktora			
Çalıştığı Kurum/lar	Başlama - Ayrılma Yılı		Çalışılan Kurumun Adı
1. Tıbbi Çevirmen/ Editör (İngilizce, Rusça, Türkçe)	2015	-	Medipol Mega Üniversite Hastanesi
2.			
3.			
Üye Olduğu Bilimsel ve Mesleki Kuruluşlar			
Katıldığı Proje ve Toplantılar	<p>1. "tekom Türkiye: From Past to Present", tekom Türkiye Etkinliği. Yıldız Teknik Üniversitesi, İstanbul, Mart 27, 2014</p> <p>2. V. Uluslararası Karşılaştırmalı Edebiyat Kongresi. Mersin Üniversitesi. Mersin, Türkiye, 2014</p> <p>3. B2B (Bench to Bedside) <i>Prostate Cancer Meeting</i>. Medipol Mega Üniversite Hastanesi. İstanbul, Türkiye, Eylül 3, 2016</p> <p>4. Canlı Cerrahi Sempozyumu. <i>Robotic Renal Transplantation and Renal Surgery</i>. İstanbul Bakırköy Dr. Sadi Konuk Training and Research Hospital. İstanbul, Türkiye, Eylül 30-Ekim 1, 2016</p>		
Yayımlar:	<p><u>Çeviriler:</u></p> <p>1. <i>Sarıç Öykü</i> Aylık Edebiyat Dergisi. L.N. Tolstoy. <i>Orman Meyveleri</i>. İstanbul, Mayıs 2013</p>		

	<p>2. <i>Medipol Sa lıcakla Sa lık Dergisi</i>. İstanbul: Ege basım Ltd. ti. İkbahar 2016, p. 92-95</p> <p>3. <i>Medipol Sa lıcakla Sa lık Dergisi</i>. İstanbul: Ege basım Ltd. ti. Yaz 2016, p. 92-95</p> <p>4. <i>Medipol Sa lıcakla Sa lık Dergisi</i>. İstanbul: Ege basım Ltd. ti. Sonbahar 2016, p. 92-95</p> <p>5. <i>Medipol Sa lıcakla Sa lık Dergisi</i>. İstanbul: Ege basım Ltd. ti. K1 2016, p. 92-95</p> <p>6. <i>Medipol Sa lıcakla Sa lık Dergisi</i>. İstanbul: Ege basım Ltd. ti. İkbahar 2017, p. 92-95</p> <p>7. <i>Medipol Sa lıcakla Sa lık Dergisi</i>. İstanbul: Ege basım Ltd. ti. Yaz 2017, p. 92-95</p> <p>8. <i>Medipol Sa lıcakla Sa lık Dergisi</i>. İstanbul: Ege basım Ltd. ti. Sonbahar 2017, p. 92-95</p> <p><u>Sundu u Bildiriler</u></p> <p>ERTURK, S., BAYDAN, E. B (2014). <i>Ma enka'nın Yolculu u</i>. V. Uluslararası Kar ıla tırmalı Edebiyat Kongresi. Mersin, Türkiye</p>
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	<p>Tarih 13.12.2017</p> <p>mza</p> <p>Adı Soyadı Svetlana Filatova</p>

